



# Greener Pastures

Grow Your Magical Community

Greener Team  
Game Design Studio  
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# General

Overall game description, greater details of the project.

## Description

A casual-leaning **farm simulator with magic**. Players manage their farm as a community of magic-users. Plants support the magic, magic supports the farm, customizing your farm, trading and strategic planning is encouraged. Solo play available, online multiplayer encouraged.

## Lore

Lore and narrative to support the themes, characters, game world and the overall goals of the player.

**Magic is the source of life, and life is the source of magic.** These words are ingrained into the mind of every biomancer who lives above the clouds of Empyrea. Using the power of magic, they grow fantastical plants and crops on their sky islands to channel forth the arcane.

And when the time is right, the biomancer returns their island to the Genesis Tree. Allowing it to grow its magic roots and **spread more life into the world** below. But even with such a sacred duty, the biomancers find ways to have fun and mischief in their utopic lives among the skies.

## The Genesis Tree

The Genesis Tree serves as **the platform for all activity in the game**. From the ground, the Genesis Tree draws the magical resource known as Arcana. Large tracts of land are taken from the surface and rise up as floating islands for player characters to use as their farmland and wizard toward location. Each floating island has a purpose to use plants and magic to enrich this tract of land with Arcana, so that it can return to the surface and provide nutrients to the Genesis Tree again. Players are given new floating islands to tend, as greener pastures.

## Arcana

Arcana is a **magical currency in the game**, and player characters are serving a purpose in the game world by cultivating Arcana from sunlight and other natural resources, as well as their magical practice. The Arcana players earn is to serve the Genesis Tree on behalf of all the community of biomancers. Gaining Arcana represents general progress in the game for a player character.

## Theme

- Grow your magical community
- Plant magic with friends
- Nurturing
- Planning
- Building
- Trading

## Genre / Category

- Casual Resource Management
- Multiplayer Building Simulator
- 3D, Third-Person
- PC, Game Controller or Keyboard+Mouse

## Audience

- Achievers, Explorers, Socializers
- Interested in nature, magic and fantasy realized
- Interested in managing resources for optimal progress and discovery
- Casual, semi-social multiplayer experience
- Variety, customization, surprise and comedy accents

# Art

Visual communication, including models, images, animation and visual effects.

## Art Style

Art direction summary and clarification.

- Top down Isometric (like Stardew)
- Possibly 2.5D(This [link](#) has good ref). Either 3D characters in a 2D world or the other way around.
- Simple yet charming artstyle akin to Scribblenauts, Plucky Squire, Bear and Breakfast or Mineko's Night Market.
  - The goal is Cozy and Whimsy
- Building reusable asset packs which could then just be placed onto the world
  - Assets need to fit inside a specific grid
- Stick to warmer colors for nature(aka the farming side) and cooler colors for magic
- Shape language is rounded and exaggerated = pushing for friendly, community and nurturing themes

## Concept Art

*Examples of ideal art targets.*

For inspo please refer to the Art Google Drive folder [here](#)

2.5D mix examples for GAMEPLAY LOOK and FEEL:

[Soulbound](#): 2D pixel characters in a 3D world(also in a similar pixel looking style)

[Paper Mario](#): 2D flat characters in a 3D world

[Crimson Hollow](#): 3D characters in a 2D world (isometric view)

[A Knights Tail](#): 2D flat characters in a 3D world

[Knights And Bikes](#): 2D characters and BG elements in a 3D world (uses parallax)

[#BLUD](#): 2D in a 2D world

There is a fundamental **balance we will strike** between the amount of assets we can make (which provides potential variety) and the detail or complexity in the common art style. The camera features we would like should be a major factor to help us find this balance; and in general, the camera is easy to move, but it's the way the art serves the player that changes.

If we can get away with a very simple character style (perhaps one with only face right, and we flip it to face left), we spend more time on the variety of animations they do, more time on props, vfx and bg art.

Games with fun Art Styles:

[Ship of Fools](#) note

[Bear and Breakfast](#) note

For clarity of image, we find **a minimum of layers** is needed that includes an object or character filled with solid color, tone used to show shadow of itself (darker version of fill color, indicating depth), a hard black outline (assuming the fill or tone colors are not too dark). These three layers can be enough in most cases, with an additional highlight (white or very pale version of fill color) for a more shiny look. In terms of amount of work, that's 3-4 layers used for each static element (background or prop), or each frame of an animated element (character, prop or vfx).

It's the frames of animation that typically get overlooked, so we'll carefully analyze what our needs are via testing during the prototype phase.

During this analysis, we multiply layers (above) with elements (listed below; characters, props, vfx) and frames (animation sets, each with a number of frames per animated element). The result is a scope of art work.

## Character

Individually controlled living elements of the game.

### Player

Character builder in the beginning of the game. Will start out with basic customization which will then be expanded when you can buy/unlock more clothes and character features.



Start out with these basic features:

- Player Model: 2
- Skin Tone: 8 Colors
- Hair Colors: 8 Colors (Dark Grey, Dark Brown, Light Brown, Blonde, Ginger, Eggshell White,
- Main Color: 8 Colors
- Secondary Color: 8 Colors
- Accent Color: 8 Colors

### NPCs

Interactable NPCs include the shopkeeper and biomancers. These characters do NOT have to be human, because we are in a fantastical world, different races (think DnD races or anthro characters) are present.

## Environment

Game world visual descriptions and summary.

See **Static Screen Clickable Elements** feature (Design / Systems / Tertiary Systems) for details on intended hidden objects for every static 2D background art for static UI screens and environments. (menus, market, magic table, etc.)

Aesthetic for the game environment and world is Solar Punk meets magic. This would mean that technology is powered and derived from nature.

## World View

- Sky islands
- Big magic tree that connects everything together (think of the *Sword Of Mana* tree)
- Different islands with different types of biomes
- Variety of skyports and sky villages/towns surrounding the magic tree
  - Because we're up in the sky, architecture could have many wind turbines or wind elements to it.
- Your farm is one of the many uninhabited floating islands.
- Architecture: Gothic fantasy architecture meets whimsy.
  - Definitely look at artists like [Alexandre Diboine](#) (also check GDrive architecture folder for some of his work)
  - Whimsy meaning that some buildings could be heavily inspired from objects (eg. a grandfather clock or a turnip)

## Single Farm

- Players will always start off on a barren island
  - The only thing on the island is your house/magic lab
  - As you progress through the levels, you will be able to unlock islands with different terrains that will connect with your base farm (refer to Island Upgrades for further information)

## Island Market

- Markets are located on the biggest skyport
  - Many different merchants fly into this skyport to sell their goods
  - The skyport should feel like a lively market space
- Players will mainly interact with the market to BUY and SELL their goods
- Main player buy/sell interaction happens at Mr. Sells Alat's store

## Seasonal Markets

Depending on the season/event taking place, a floating island or a blimp may be docked near your island. These markets are ran by Mr. Sells Alat's cousins (Visually just Mr. Sells Alat but with different skin/fur).

Seasonal islands are themed; think *Halloween Island* instead of *Fall Island*. The blimps that come by should reflect the solarpunk magic aesthetic.

## Magic Lab

- A location on your farm island where you can go to craft your potions, curses and blessings.
- Plant Grafting also happens here
- Maybe connect this to your house OR have it like Animal Crossing where you can pocket your crafting table in your inventory so you don't have to keep going back into the house to craft something.

## UI

User-interface visual style and summary.

### World HUD

### Farm HUD

- Tool wheel + Satchel
- Map
- Time of day + Season

### Market HUD

There will be a full screen display when the player interacts with the Mr. Sells Alat, the shop keep; with the purchasing menu on one side and the shopkeeper on the other. If players would like to buy or sell a different kind of item (eg. plant related goods to critters), swap to the next store using the arrows on the top left/right. When the player switches stores, the shopkeep will literally just change outfits/hats to look like a different merchant.



### Magic Crafting Table HUD

When you enter and interact with your magic lab, a screen will appear which will show your inventory, your mixing pot and the recipe needed. Creating potions will be a small minigame; you will be able to draw items from your inventory and arrange it in the pot grid to fit all the ingredients inside. Once you're able to do so, you will be able to press the craft button.

Besides crafting potions, curses and blessings, players will also be able to create plant mutation breeding. Splicing the different plant parts and assembling them will be a minigame in the form of those dotlink like games, but instead of just colored tubes it will look like vines/roots.

## Menus

### Visualizations

With rounded UI elements

- Splash Menu

This is the primary launch point for this system, and includes a Start to Main Menu.

- Main Menu

This is a hub for Play, Game Selection, Profile Options and Credits. The Profile Popup appears here.

- Profile Login / New Profile Popup
- Game Selection Screen

The Game Options Popup appears here.

- Game Options / New Game Popup

- Profile Options Screen

Along with option controls, a Back to Main Menu

- Credits Screen

Along with credits display, a Back to Main Menu

- Escape Menu

A confirm popup with Quit to Main Menu and Cancel to return to game.

## Fonts

Aiming for something that feels like magic (think **Art Nouveau**) but also this isn't a game with a super serious art style so keep that in mind—think whimsy magic. Whimsy could mean adding spectacle (like a fancy twirl, or elements that feel like magic) or something more handwritten.

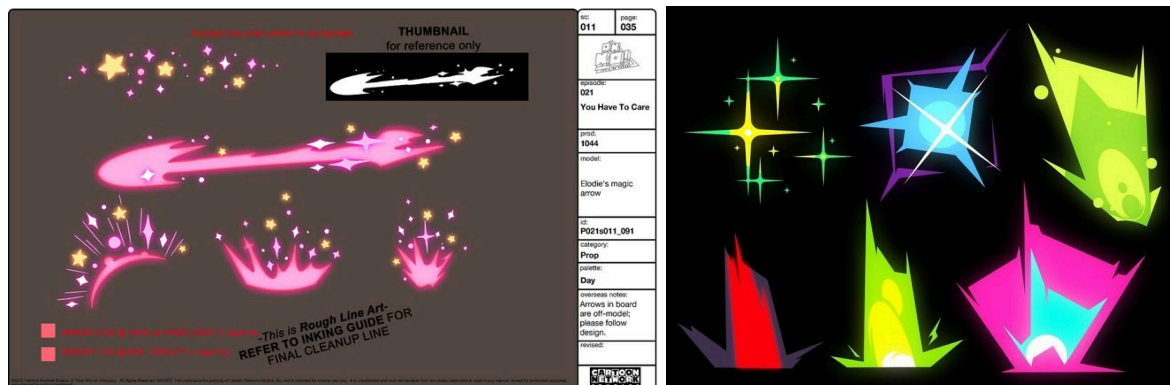
We use BRUSHSCI font for letters that the player receives in the mail. So far, all other fonts are Arial.

Refer to the Google Drive for more examples

## VFX

Stick to particle VFX! Animated VFX will be too complicated... unless?

If we could do hand drawn VFX, it should use simple shapes and have bright colors, NO realism:



# Audio

Sound presentation for players, music to suggest emotion, sound effects to support visuals.

As this is a magical farm, both 'magic' and 'farm' both evoke unique but standard sound effects.

A few examples of Magical Effects are

- Whooshes
- Bells
- Explosions
- Fire
- Electrical

A few examples of Farm Effects are

- Specific environmental
- Animal vocalizations
- Machinery

## Audio File Naming

### NAMING CONVENTION

Sound Element\_Category\_Sound

### EXAMPLE

*"BG\_Animal\_bird"*

## Music

Music tells the audience what to feel from moment to moment.

### Music Moods

- Whimsical
- Fantasy
- Upbeat

### Music Loops

- Farming Theme\_Spring\_Morning
- Farming Theme\_Spring\_Night

- Farming Theme\_Summer\_Morning
- Farming Theme\_Summer\_Night
- Farming Theme\_Fall\_Morning
- Farming Theme\_fall\_Night
- Farming Theme\_Winter\_Morning
- Farming Theme\_Winter\_Night
- Main Menu Theme

## Music Stings

- Music
- Music

## SFX

Sound effects support all visuals.

## Environment

Background sounds will be labeled with “BG”.

### Farm

- 

### Forest

- Birds
- Wind through trees/leaves
- Frogs
- Insects

### Weather

- Wind
- Rain
- Thunder

### Machinery

- Light traffic
- Construction
- Industrial workshop

### Character

- Jump

- Footsteps- 8
- Cast spell
- Greeting

## Prop

- Seed plant

## VFX

- 

## UI

- Menu Open
- Menu Close
- Button Select
- Inventory Open
- Save game

# Design

Progressive improvement of mechanics and systems that create and support the player experience

## Design Priorities

- Simplicity
- Easy to learn, hard to master
- Variety
- Comedy
- Cooperation / Competition
- Players want to plan and see results of their work
- Magic in the world explains fantastic results
- Have a range of slow-moving and fast-moving results
- Have a range of common and rare results
- Encourage nurturing
- Encourage connections (magic and plants, between friends, etc.)

## Player Onboarding

When a player begins a game **an onboarding routine is offered to the player**, to understand the basic premise, player controls and starting objectives that new players should know. A player should be able to intentionally skip this routine if they have experienced it already, but a new player should not be able to skip it accidentally.

### Onboarding Routine

The sequence of the onboarding presentation described here

### Onboarding System

The rules of the onboarding interaction detailed here

## Systems

Systems are sets of game rules that handle one distinct feature, including ways it communicates to other features.

### Core Systems

The primary systems act as a foundation for all systems of the game.

## Camera

Camera behavior includes movement like panning, craning and trucking, along with rotation like tilt. The **default camera behavior is a follow mode**, where the player character is kept roughly in the center of the screen, with a slight lag between character movement and the camera.

For special emphasis, the camera can disengage from follow mode to target medium, long or extra long shots, for **cinematic effect**. These modes continue to provide targets for the camera to hit with the same slight lag.

## Controls

Game controls include **both keyboard and mouse, and a gamepad**. Either of these two control input schemes will work.

### Keyboard and Mouse

Standard mouse cursor and mouse clicks will serve general purposes in menu elements. Mouse will additionally be used in-game for drag-and-drop control of game elements in specific modes, like magic crafting. Generally, the mouse is not used for gameplay otherwise.

Keyboard keys provide the standard game input, including press and hold controls the player character, like movement and player actions.

Keyboard **keys will be configurable** for player profiles, mapping keys to all player actions.

### Gamepad

Gamepad control for normal in-game player actions and movement will be standard and conform to convention.

In **menus, the gamepad** left joystick will change the currently selected menu control (causing it to highlight for the user), and the gamepad A button will be used to press or activate that menu control. If the currently selected control is changed beyond the limits, it will 'wrap around' to the other end of that control array.

### Control Mapping

Keyboard and mouse are default controls available for players. Players will be able to use standard game controllers throughout the game experience.

### *Player Actions*

These are actions that the player does while not in specific modes, such as magic crafting or market shopping.

- Moving (up, down, left, right)
- Work the land (till plot; from wild to dirt, from dirt to tilled, from uprooted to tilled)

- Plant seed
- Water plot
- Harvest plant
- Graft plant (two plant pieces put together to make whole plant, different plants)
- Uproot plant / dig plot
- Pick up item to player inventory
- Drop selected item from player inventory
- Change inventory selection (left or right)
- Cast magic spell (enter casting routine)
- Change view (go from follow mode to other view angles / distances)
- Display player controls list
- Display biomancer's almanac
- Escape to quit game

*Player Action Control Mapping*

| Player Control Action         | Gamepad Control       | Keyboard Control |
|-------------------------------|-----------------------|------------------|
| Up (move forward)             | Left Joystick Up      | W                |
| Down (move back)              | Left Joystick Down    | S                |
| Left (move left)              | Left Joystick Left    | A                |
| Right (move right)            | Left Joystick Right   | D                |
| A Button (work land, pick up) | A Button              | E                |
| B Button (water plot)         | B Button              | F                |
| C Button (harvest, drop)      | X Button              | C                |
| D Button (dig plot, uproot)   | Y Button              | V                |
| ___ (graft plant parts)       | ___                   | ___              |
| Left Bump (inv select left)   | Left Bump (Shoulder)  | [                |
| Right Bump (inv select right) | Right Bump (Shoulder) | ]                |
| Cast Magic (spell charge req) | Q                     | D Pad Press      |
| Change view (previous)        | D-Pad Up              | Wheel Mouse Up   |
| Change view (next)            | D-Pad Down            | Wheel Mouse Down |
| Display Controls List (hold)  | D-Pad Left (hold)     | Tab (hold)       |

|                           |                     |     |
|---------------------------|---------------------|-----|
| Display Almanac Popup     | D-Pad Right         | —   |
| Escape (esc popup toggle) | Start               | Esc |
| UI Selection Up           | Left Joystick Up    | n/a |
| UI Selection Down         | Left Joystick Down  | n/a |
| UI Selection Left         | Left Joystick Left  | n/a |
| UI Selection Right        | Left Joystick Right | n/a |
| UI Selection Activate     | A Button            | n/a |

### Player Character Movement

Player character movement is in relation to the locked camera angle, and is defined as up, down, left and right, on the controls, where “up” moves the character forward and away from the camera. The character movement is a slide along the ground plane. The player character speed is X units per second. The character will collide with solid obstacles and be prevented from moving into them, **appearing as expected**.

### Player Character Animation

Player appearance uses frame animation to indicate distinct actions visually. The animation states (frame lists per action) and number of frames per state **will be limited**, with use of as few frames as possible.

### Multiplayer System

The online multiplayer allows individual client applications to connect.

### Time

Time runs in realtime, but **accelerated at 60x** speed. Even if players are not playing a game, the game time continues to run 24 hrs/day. 1 sec real life time = 1 minute game time (24 minutes real life time for 24 hrs in game time)

Each month lasts 30 days, each year lasts 360 days. The **game begins on Mar 1 at noon**.

### Timestamps

A primary value called **global time progress is started when a game is initialized and driven by runtime** thereafter. We save game data in this format for reference upon data load. Various elements in the game need tracked time values, such as durations, cooldowns, and timers, where any significant real time between game runtime should be accounted for.

A timestamp is a format of time based on **global time progress plus the important scheduled duration** to track. When an element (magic spell book cooldown, magic cast duration) has an

important time schedule to track, we save a timestamp value representing current global time progress plus that scheduled duration. This is saved in data, and after loading game data, we unpack those important values, query the current global time progress to properly set the element's timer value. (in most cases, a significant real time between games will zero these out)

## Seasons

The seasons in the game world pass based on game time. Each season lasts 90 game days.

- Spring: Mar 1 - May 30
- Summer: Jun 1 - Aug 30
- Fall: Sep 1 - Nov 30
- Winter: Dec 1 - Feb 30

**Seasons set the base temperature and daylight hours** for the world, where day and night cycles vary that temperature. Plants will also be defined as able to grow easier in any of the four seasons, as seasonal vitality.

### *Spring/Fall*

Temperature: 68 degrees F, 20 degrees C

Day: 6am - 6pm (12 daylight hours)

Night: 6pm - 6am

### *Summer*

Temperature: 86 degrees F, 30 degrees C

Day: 5am - 7pm (14 daylight hours)

Night: 7pm - 5am

### *Winter*

Temperature: 50 degrees F, 10 degrees C

Day: 7am - 5pm (10 daylight hours)

Night: 5pm - 7am

## Weather

The **weather system is procedurally driven** via runtime and a seed timestamp from the initialization of the game. Time from then is run through Peril Noise with various algorithms to result in useful qualities we want players to experience as weather.

Wind has a simple direction, either left to right or right to left, and **left to right is a cool wind, while the other is a warm wind**. Based on direction and amount of wind, base temperature is adjusted. (up to 1 degree C)

**Cloud amount also affects base temperature**, lowering it with more clouds. (up to 2 degrees C)

## Secondary Systems

### Plant System

Plants grow in plots on a player's farm. Plants start as seed, and progress in growth until they have reached 100% growth and are ready to harvest. Plants need resources to grow, and these are conditions of their overall growth rate and health.

### Plant Components

#### *Plant*

A whole plant, which may be uprooted and held or dropped by a player as if any other loose item. A plant can be dropped into a plot in the Uprooted condition to be transplanted, and able to grow as normal in that plot.

#### *Fruit*

The part of the plant that is taken when harvested. The fruit can be sold at the market or used in Grafting.

#### *Seed*

A plant that has not grown at all, but may be planted in a plot to grow. Players can receive seeds of a plant when harvesting, according to the plant's Seed potential attribute.

#### *Stalk*

The part of the plant that remains in the plot after harvesting. The stalk may re-fruit if the plant type specifies that. (see Appendix: Master Plant List) A stalk can be dropped into a plot in the Uprooted condition to be transplanted, and able to grow as normal in that plot.

### Growth

Plants grow the moment they turn into a plant from a seed. They **continue to grow to a maximum amount**, at a grow rate, and maintain an overall plant quality.

#### *Growth Rate*

**50 seconds real time to grow fully as a baseline**, which varies on different factors like resources and seasonal vitality.

#### *Normal Plant*

**Normal plants need sunlight** to grow. (grow during day)

Sun, Water and Soil quality contribute 33% each to a plant's growth rate (vitality). Sun resource for plants is considered 100% with as little as 25% sun in the sky (4x sun available in sky, clamped to 100% for plant resource)

### *Dark plant*

**Dark plants need moonlight** to grow. (grow during night)

Water and Soil Quality contribute 50% each to dark plant growth rate (vitality). For dark plants, the sun plot value is inverted, such that the resulting sun used to determine plant vitality is (1-sun).

From there, the available moonlight will be used to adjust the dark plant vitality. Moonlight varies over the course of a month as a lunar cycle. (0-100% moonlight, peaking in the middle of the month, and changing as a sine wave during the month) Minimum resulting sun value for dark plants at the darkest night will be 1%.

### Plant Attributes

- Plant Type (name of plant)
- Dark Plant

Is this a dark plant that needs moonlight, otherwise it is a day plant that needs sunlight.

- Plant Rarity

Plant types can be Common, Uncommon, Rare, Special or Unique

- Growth Rate (%)

100% = the baseline growth rate of all plants, where Plant Type can configure this from there. (50% takes twice as long to grow, 200% grows twice as fast)

- Re-Fruit Type

Is this plant type able to continue to fruit after harvest? If so, the plant's growth is set back to 90% to re-fruit (without any further plant quality change).

- Vitality 0-100%

Vitality is the potential for this plant to grow. If the plant is already 100% grown this is zero.

Vitality is increased with available resources (sun, water and soil quality) and decreased with a lack of those resources. If zero, the plant will not grow, but any measure of vitality represents the plant's growth rate. (this means **plants need 67%+ of all resources to grow** further)

- Spring Vitality 0-100%

This is a multiplier to a plant type's ability to grow during the spring season. As this season approaches this multiplier effect is weighed more, as the season changes to the summer, the multiplier effect wanes.

- Summer Vitality 0-100%

This is a multiplier to a plant type's ability to grow during the summer season. As this season approaches this multiplier effect is weighed more, as the season changes to the fall, the multiplier effect wanes.

- Fall Vitality 0-100%

This is a multiplier to a plant type's ability to grow during the fall season. As this season approaches this multiplier effect is weighed more, as the season changes to the winter, the multiplier effect wanes.

- Winter Vitality 0-100%

This is a multiplier to a plant type's ability to grow during the winter season. As this season approaches this multiplier effect is weighed more, as the season changes to the spring, the multiplier effect wanes.

- Health 0-100%

Health is the overall health of the plant. Given the resources it needs (sun, water and soil quality), the plant health will increase. If starved of these resources (below 67%), the health will decrease. This allows a plant to survive the night and come back the next day. Continued abuse will reduce the health to zero, meaning the plant has died.

- Growth 0-100%

Growth is the plant maturity, from seed at 0% to fully formed and ready to harvest at 100%. Plants still growing require vitality in some measure, or will not grow.

- Quality 0-100%

Quality is the value of the plant as harvested once fully grown. Quality begins at zero and is contributed to during its growth, based on health. That is, if the plant's health was low during growth, the resulting quality will be lower. **Once a plant is fully grown, the quality is locked.**

- Harvest Amount

The number of fruit items dropped upon harvest. If more than one, this can vary +/- (amount/2), with a gaussian random distribution.

- Seed Potential 0-100%

The base chance that seed of this plant type will also be dropped upon harvesting this plant. If this potential is above 50%, this can vary to drop additional seed items at +/- ((potential-50)/20), with a gaussian random distribution. (example: 78% potential; -50=28%, /20=(rounded to) 2, so +/- 2 additional items dropped, so a 78% chance of seed drop, and if so, 1-3 seed items drop)

## Plant Grafting

Players can use the stalk of a plant and combine it with the fruit of another plant. This process combines all special properties of both plants, creating a more powerful plant. (see Appendix: Master Plant List)

## Plot System

### Farm Plot

A plot is a space on a farmland field, a container able to hold one plant. It has attributes that support plant growth, and has stages of transformation for use as farmland.

### Plot Stages

1. Wild (default)
2. Dirt

3. Tilled (able to be fertilized, able to be planted)
4. Planted (holds a plant in various stages)
5. Uprooted (a hole that must be filled to be Dirt again)

#### *Plot Attributes*

- Sun (0-100%)

The amount of sun is dependent on the day/night cycle. For plots, sun is considered to be at 100% with just 25% of daylight available. (4x, clamped to 100%) Clouds as managed by the weather system can also reduce sun values up to 50%.

- Water (0-100%)

The water in a plot needs to be added by either the player (watering) or by rain. Water in a plot is drained over time, such that a fully watered plot will drain in ~1.2 days.

- Soil Quality (0-100%)

Soil quality of the plot begins at 50% by default. Soil quality improves when the land is worked from wild to dirt, and again from dirt to tilled. (improved as a gaussian random distribution ~12.5%, 0-25%) Soil quality degrades when a plant exists in the plot and the rate of degradation is proportional to the growth of the plant.

Plots in an uprooted state appear as a hole, and if a fertilizer item is dropped on the plot, the fertilizer disappears and soil quality is improved. (improved as a gaussian random distribution ~50%, 0-100%) Plots in an uprooted state, and then worked again to dirt, do not improve soil quality, but working further from dirt to tilled does improve soil quality, as before.

#### *Magic*

*(see also Appendix C: Magic Vocabulary)*

The player's magic experience involves acquiring new recipes during level up, gathering and crafting ingredients that result in a new charge, which is stored in their spell book. Players are then free to use a charge ("to cast it") to get its effects, which exhausts that charge from their spell book. A cast, therefore, is a single charge that is used by the player, taking it from their spell book and putting it in the game world.

Different spells need different ingredients, components of crops, to craft. Players need to decide whether to save some crops for spell crafting, or sell crops to get gold.

#### *Spells*

A spell refers to the recipe of magic ingredients a player can craft to make an individual charge.

#### *Spell Orientation*

A spell can be oriented as positive or negative; a blessing or a curse. These may just be subjective qualities of a spell, rather than properties of the spell type data.

- Blessing

A blessing spell can be cast on farmland; helpful.

- Curse

A curse spell can be cast on farmland; harmful.

### Craft

Crafting refers to the crafting activity a player must do with ingredients prescribed in a spell recipe to result in a charge to be stored in their spell book. The more extra ingredients the player uses while crafting a charge, the more powerful the charge becomes.

### Cast

A cast refers to a single use of a spell charge, which is then exhausted. Using a charge begins a cooldown in the player's spell book, preventing that player from using another charge of that spell type until the cooldown timer has run down all the way.

Players may enter a casting routine if they have charges in their spell book. To enter a casting routine, players press Q on the keyboard or press the D pad on the gamepad.

casting routine includes:

1. suspend movement and actions from player, disable quit on escape
2. enable display player controls for selection / casting routine
3. allow player to cancel casting (D button down) (return movement and action control, disable display of player controls for casting routine, remove cast cursor if exists, present exiting cast mode, re-enable quit on escape)
4. present animation and effects of entering select mode
5. display spell book charge list, highlight current selection
6. allow player to change current selection among list
7. allow player to select the spell charge to cast, if has charge and not on cooldown
8. spawn cast cursor with AOE circle, based on spell data
9. allow player to navigate cursor (Up-Down-Left-Right)
10. present cursor as invalid if invalid location
11. allow player to perform casting action (A button down), if valid location
12. disallow player to cancel casting
13. present animation and effects of casting action
14. remove cast cursor
15. send cast data to cast manager via CastSpell(), removes spell charge
16. begin spell cooldown
17. disable display of player controls for selection / casting routine
18. present animation and effects of exiting cast mode (return movement and action control, re-enable quit on escape)

A cast begins a lifetime set by the spell type duration, and the cast lives on its own in the world for a duration. Once the lifetime of the cast is complete, the cast disappears from the world.

## Spell Library

In effect, each player has their own spell library, consisting of one grimoire and one spell book.

## Spell Book

A spell book is a container for spell charges the player has crafted. The spell book may contain any number of spell charges, or any variety of spell charges, up to a maximum limit for their spell book. A player's spell book increases the spell charge capacity during level-up. Once a player casts a spell charge, it is removed from the spell book.

## Grimoire

A grimoire is a reference to spell recipes the player can use to craft new spell charges. A player becomes aware of new spell recipes when they appear in the Grimoire during level-up. Once a player has spells available in the Grimoire, it is permanently available.

## Player Controls Listing

This is a listing of the available control for the player to play the game. When this appears, how it looks, what the player can do with it, and how they access it going forward is the question.

## Skill Tree

Players can go to Eden, spend Arcana and gain Skills. These skills are permanent and add a buff to the player.

***NOTE:** A skill tree is a connected structure. Each skill, beginning with root skills, is connected to a parent skill. While players may purchase a root skill anytime, others require the parent skill to be acquired already. So, **definitions of skills will include identifying the parent skill, or naming that a 'root skill'.** This way, root skills are initial steps up the skill tree, while more advanced skills will take the player more investment to acquire, higher up the skill tree. (parents unlock children)*

## Skill List

This is a list of skills the player can acquire by spending Arcana.

Skills are player character buffs, they improve what a player can normally do in the game. Separate from what gold or items or plants or magic can do for the player, skills are player character abilities that represent further customization of a player character, based on choice of the player. Skills change a player character's gameplay in unique ways to other game progress.

### Player Experience (XP)

- Players can gain XP by completing different actions such as harvesting, crafting spell charges, casting spells, grafting etc.
  - Different Tiers of crop provide different amounts of XP
  - Higher level spells provide more XP
- Player experience contributes to the content available in the Grimoire

### Player Achievements

- Breathing
- Walk
- Teleport
- Play Yo-Yo

### Player XP Awards

| PLAYER ACTION      | XP Award (Per Action) |
|--------------------|-----------------------|
| Use Teleporter     | 0                     |
| Pick Up Item       | 1                     |
| Drop Item          | 1                     |
| Work the Plot      | 2                     |
| Plant A Seed       | 5                     |
| Complete Tutorial  | 15                    |
| Harvest Plant      | 10                    |
| Sell To Shop       | 5                     |
| Buy From Shop      | 4                     |
| Water the Plot     | 3                     |
| Dig A Hole         | 4                     |
| Fertilize the Plot | 3                     |
| Pay Rent           | 50                    |
| Craft Magic Charge | 15                    |
| Cast Magic Spell   | 10                    |
| Graft Plant        | 9                     |
| Plant by Broadcast | 6                     |
| Transplant         | 7                     |

|                      |     |
|----------------------|-----|
| Find Mouse Clickable | 3   |
| Catch Gamepad Bug    | 3   |
| Holiday XP Bonus     | 100 |

## Tertiary Systems

### Inventory System

An inventory is a collection of item slots, able to hold one item each. Any item in the game must exist in an inventory. Even loose items in the world are defined as loose items with an inventory whose size is one slot. Items can be created, taken, stored and dropped.

#### Inventory Actions

##### *Create*

Creates an item by item type, to be immediately placed in an inventory. This is an item in data only.

##### *Take*

Takes an item out of the game world and into an inventory. Players have a personal inventory, and other storage have inventories..

##### *Store*

Storing an item transfers it from one inventory to another directly, without creating a loose item in the world.

##### *Drop*

Dropping an item refers to removing an item from an inventory, to be transferred to a loose item. An Item Spawn Manager tool can handle spawning the game object and placing the item data on it, before it is dropped into the world.

#### Item Properties

- Name
- Item Type
- Plant Type (default if not plant)
- Health (as in durability, or plant health)
- Size
- Quality
- Effects (see Effects System)

## Item Types

*Fertilizer*

A necessary part of gardening, the product of the compost bin, improves soil on plots

*Seed*

A base item type for all seeds, this plus plant type identify a specific seed

*Plant*

A base item type for all grown plants, this plus plant type identify a specific plant

*Stalk*

A base item type for all stalks, this plus plant type identify a specific stalk

*Fruit*

A base item type for all fruit, this plus plant type identify a specific fruit

*Rock*

A simple small rock

*Gold Coin*

A single gold coin, when picked up by a player it disappears, and gives one gold

*Gold Pouch*

A small sack of gold, when picked up disappears, and spawns multiple gold coins

*Package*

A mailed package, when picked up disappears, and spawns multiple items

*Letter*

A mailed letter, when picked up disappears, and pops-up an open letter to read

*Coupon*

A market coupon with a defined discount, as in 1%-100% off an item purchase. Once used to purchase an item, the coupon disappears.

*Scroll*

A paper roll held between two sticks, when picked up disappears, as if read, contains magic.



### Potion

A vial of liquid, when picked up disappears, as if drunk, contains magic.



### Item Shapes

For crafting spell charges at the magic table, each ingredient is an item, and each item has a particular shape to work into the cauldron grid puzzle. Each item shape conforms to a 3x3 grid of squares, each square either on or off.

See [📖 Craft Shape Library](#)

### Post Office System

This is not a building or location, and we never see delivery of items. But, each player island is equipped with a mailbox prop. The post office system delivers packages and letters to this mailbox for the player to pick up and open.

### Packages

The packages are primarily meant for market deliveries (where a shopping spree might overload a player's inventory), the purchases can be automatically delivered to the player's mailbox on their island. See above; when packages are picked up, they disappear and spawn all the contained items.

The post office system include a calendar of scheduled packages, similar to scheduled messages (see below)

### Letters

The letters are primarily meant as reminders for new players about game rules, conditions and tips. Letters that appear at a player's mailbox can be picked up, at which point they disappear, and a popup appears as an open letter with the message the player can read.

The post office system includes a calendar of scheduled messages to be sent to all players on particular days of the year, by specifying the day, month, sender and message. This is used primarily for new player reminders, but can be used for holiday greetings, and other notifications and encouragement.

Letters that are not picked up are still available to read in future game sessions, as the data of the letter is saved as part of the game.

Eden, in particular, has special new player messages she is guaranteed to send to players each day for a week, or any of the first seven days the player is playing. These messages are designed to offer helpful reminders, tips, hints and instructions on gameplay basics.

Potentially, players could have a writing desk, and compose letters to other players, using the same system.

## Market

The market is a 3D building located on the central island. It is used by players to purchase and sell items. Players enter, select items to buy from a menu list, or sell from their inventory, and either attempt to buy (if player has enough gold), or sell their item for gold. Players acquire XP for both buying and selling items at the market. (see XP / Leveling)

### Current Rule Set

- At game start,
  - Initialize market menu list (all items)
- While player at the market location,
  - Pause
  - Determine menu items locked based on player level (hide locked)
  - Market UI becomes visible
- While the market UI is visible
  - List of market items visible
  - Main market controls for visible (E to Buy, F to Sell)
  - When player presses E,
    - Buy menu opened
    - Controls change (E to Buy, V to Exit)
    - Player movement locked
    - If player presses V,
      - Buy menu closed
      - Return main market control display
      - Player movement unlocked
    - If player presses W or S, selection of current menu item changes (+/-)
      - Item selection clamped to list min and max
      - If item selection goes beyond top or bottom of display, shift (scroll) display of menu items to keep current item displayed
    - If player presses E to buy current item
      - Check for player gold  $\geq$  item purchase price
        - If not enough, flash red (2s) and disallow purchase
        - If enough,
          - Subtract gold from player in price amount
          - Give item to player inventory
            - If not enough room in inventory, drop item next to market
          - (Give XP)
  - When player presses F,
    - Sell menu opened

- Controls change (E to Sell, V to Exit)
- Player movement locked
- All displayed item values decrease by 1 (profit margin)
- If player presses V,
  - Sell menu closed
  - Return main market control display
  - Player movement unlocked
- Check player current inventory selection
  - Shift market menu list to display matching item and value
  - Clamp menu list at top and bottom
  - Display matching item at bottom of display if locked items follow
- If player presses E
  - Check matching menu item exists
    - If so,
      - take current inventory selection item from player
      - give player gold in value amount
      - (Give XP)
    - If not,
      - \* currently: silently fail purchase, no feedback \*
- If player steps off the market location
  - Pause
  - Market UI disappears

#### *Issues with Current Rule Set*

- Market menu list is static (aside from plant types unlocked by level, but no seasonal items, sales, daily specials, etc.)
- Market menu only includes fertilizer, and seed and fruit plant items
- Market menu only includes common and uncommon plant varieties
- Silent fail if selling item in player inventory does not exist in market menu list
- Control keys and navigation terrible, clumsy, easy to misclick controls
- Menu list long and hard to navigate quickly

#### Revision Market Rule Set

- When player enters market building, market UI pops up
  -

#### Compost Bin

A feature prop available on all floating islands is a compost bin. Compost bins **accept any plant items and return fertilizer** items.

Any plant item can be deposited in the compost bin, including seed, fruit, stalk or whole plant. Plant items dropped into the bin disappear and count toward a compost amount.

The items accumulate this amount in the bin to 'cook'. After a cooking time, at a cook rate of 10 seconds, a single fertilizer is produced as a loose item from the bin. When a fertilizer is produced, the amount of compost in the bin is reduced, and cooking is reset.

Here are the added values of compost amount per plant item:

- Seed adds 0.1
- Fruit adds 0.381
- Stalk adds 0.618
- Plant adds 1

Once the compost amount reaches 1 or more, and the cooking time is done, fertilizer is produced as noted above. A compost bin can hold and cook an unlimited amount of compost.

### Static Screen Clickable Elements

Note that this feature only appears **if the local player does not have gamepad** enabled.

Dedicated visual elements will be used in each static screen, like menus, interface backgrounds, etc. These elements can be anything, should be a hidden element for the player to discover, and should blend in seamlessly with the artwork.

When the player clicks on this element (a button rectangle shape is defined for each element), the visual changes, to move one top layer and reveal the space on the background beneath. We can pan this element, make it fade out, etc. We can provide visual effects upon clicking this element. We can provide player resources upon clicking this element, like XP, gold, etc.

The goal should be to reward a player who explores the background of static screens with their mouse clicks, and they get visual feedback and resources.

### Static Screen Firefly Catch

Note that this feature **only appears if the local player has the gamepad** enabled.

This feature appears only occasionally, but can appear on each static screen, like menus, interface backgrounds, etc. A firefly or entity that looks like a fairy light flies from off screen, meanders around in wavy irregular motions that are unpredictable.

An icon will appear in the corner of the menu to indicate a glass jar can be used with the START button on the gamepad. When the player presses START, their normal gamepad controls are suspended, and a glass jar entity appears in the middle of the screen, and the player is able to move it around with the left joystick.

Moving the glass jar in close proximity to the firefly will catch the firefly in the jar. Sparkly effects punctuate the moment, as the jar with firefly is centered on the screen. A reward is given to the player, similar to those given via Static Screen Clickable Elements, with text and audio feedback.

### Poor Player Detection and Recovery (a.k.a. Gold Fairy)

If the player manages to lose all gold, all valuable items and have their farm in an unworkable state with no way to make gold, a detection routine in the game manager activates a gold fairy to help the player recover.

Similar to the firefly fairy, the gold fairy flutters and sparkles as she makes her way to the poor player's island, goes to the middle of their farm, and will fly around waiting until the player approaches. At that time, the gold fairy will drop a number of gold coins (enough to buy market items), and then fly away again.

This routine starts a 6 minute (6 game hour) timer before the detection and recovery routine is re-enabled.

### Effects Systems

Effects are labels for **modular rules to apply on elements of the game**. Effects can be added or removed, and their effects are cumulative.

**Any number of effects can exist on one element**, however, only one effect of any given type can be added to an element, adding another of the same type will be ignored.

*Note: This is different from the practical effect of magic casts, in which the same type cast can actually be applied multiple times over. Magic casts use the effect system to implement the magic rules, but the magic cast system handles individual casts as if living things in the game world that apply effects on birth, remove effects upon expiration. This allows 'stacking' of cast effects.*

Different **game elements have discrete lists of available effect types**. A plant has plant effects, an island has island effects, player characters have player effects, etc.

The game elements with available effects are

- Players
- Islands
- Farms
- Plots
- Plants
- Structures
- Items

## Progression Levels

The player begins on a farm with 10 units of farmland, basic magic flower seeds and 50 gold.

## Magic Progression

When at a magic table during magic crafting, **a player's level determines how big the cauldron grid is**, where larger grids are able to hold larger item ingredient shapes for more advanced spell charge crafting. The minimum size of the cauldron grid is 2x2, and a player's level / 10 determines any additional size, up to 5x5 at level 30+.

## Arcana

Another type of currency for players to spend on the Skill Tree. Acquired by player leveling up.

~~At the end of each Month, after rent is paid off, players gain~~

- ~~● Arcana (to spend on skill tree, and extra Island Perks)~~
- ~~● Island Perks (a list of 3, choose 1)~~
- ~~● The rest of the money after paying rent~~

## ~~Tutorial~~

- ~~● Teaches new players how the game works.~~
- ~~● Last for 1 in-game week~~

## ~~Month 1-N~~

- ~~● Rent due the end of every month (in-game time)~~
- ~~● Rent increases every level~~

## Island Perk

At the end of each month, the Travelling Salesman (formally known as the Taxman) will appear at the Market and sell Island Perks. These Perks can be bought with Gold. Some Perks are purely cosmetic, some can help players improve their gameplay.

- When the player reaches Level 1, the Traveling Salesman will come by their island, and gift the player a Magical Cauldron (by selling them the Cauldron at 9999 0 Gold "as a house warming gift"). The player gets to look at what he has in store.
- Extra Perks can be purchased with Arcana

## Perk List

This is a list of perks that help players improve their gameplay. Acquired at the end of each Month.

## *Island Expansion*

- Critter Slot upgrade, +1 slot
- New Plot +1

### Critters

- Can choose to upgrade an existing critter instead of getting a new one
- Each island has 1 Critter slot, each slot allowing 1 Critter to work within that island.
- Water Helper
  - Assign a 2x2 area to it, it will take care of the watering task in that area.
  - Water plot when plot water < 50%
  - For each level gained, + 2x2 area.
- Fertilizing Helper
  - Assign a 2x2 area to it, it will take care of the fertilizing task in that area.
  - When the plot is Uprooted, and soil quality <50%, take Fertilizer from compost, drop in hole.
  - For each level gained, + 2x2 area

## Menu / Game Flow

### 1. Splash Menu

This is the primary launch point for this system, and includes a Start to Main Menu.

### 2. Main Menu

This is a hub for Play, Game Selection, Profile Options and Credits. The Profile Popup appears here.

### 3. Profile Login / New Profile Popup

### 4. Game Selection Screen

The Game Options Popup appears here.

### 5. Game Options / New Game Popup

### 6. Profile Options Screen

Along with option controls, a Back to Main Menu

### 7. Credits Screen

Along with credits display, a Back to Main Menu

### 8. Escape Menu

A confirm popup with Quit to Main Menu and Cancel to return to game.

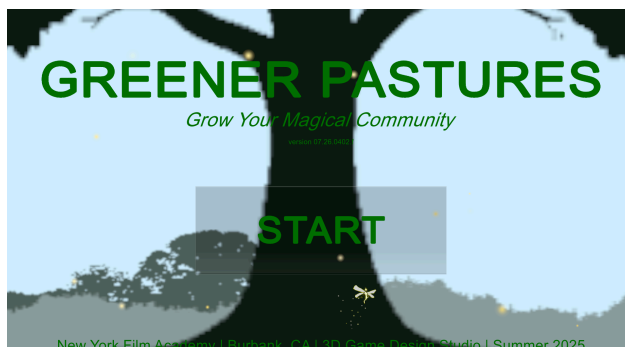
## Menu Screens

Descriptions and details for the systems of each screen.

See the feature Static Screen Clickable Elements above. All static screen images should be composed with at least one element like this in mind.

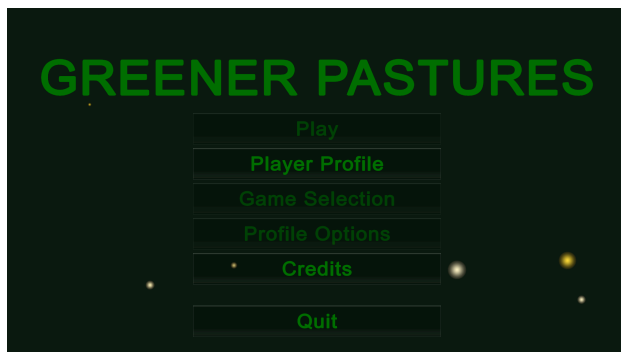
### Splash

The initial view seen by players when the game application is launched.



First screen shown to the player

- Game Logo
- Transitions to main menu
- Player rises above treeline after pressing “Start”



## Main Menu

The main menu allows players to start the game, access settings, join or host the game, (if host) the multiplayer feature.

This is a **hub** for Play, Game Selection, Profile Options and Credits. The Profile Popup

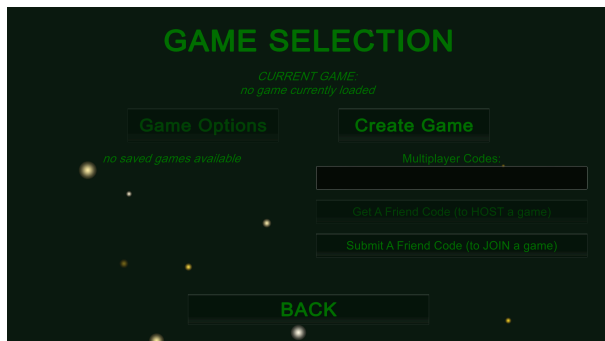
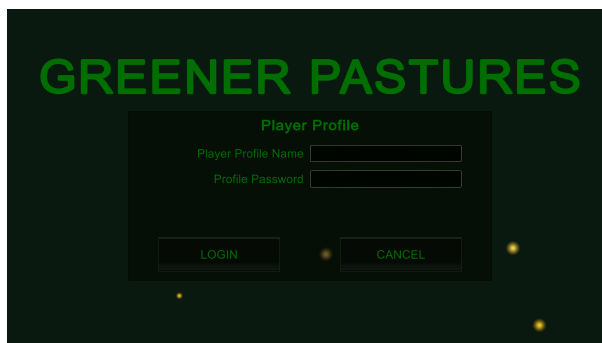
appears here.

- Play (enabled when profile and game are selected)
- Game Selection
- Profile Options
- Credits
- Quit
- [toggle] Profile Popup (login or new profile)

## Profile Login / New Profile Popup

This confirm popup includes a text field for user name and another for password. There are buttons for Login, Create or Cancel.

Login checks username and password local data for a match to allow profile activation for this session. Create asks to confirm the password (storing, clearing and prompting re-entry), to make a new profile if the confirmation password matches, else it clears all fields. Cancel toggles the popup off.



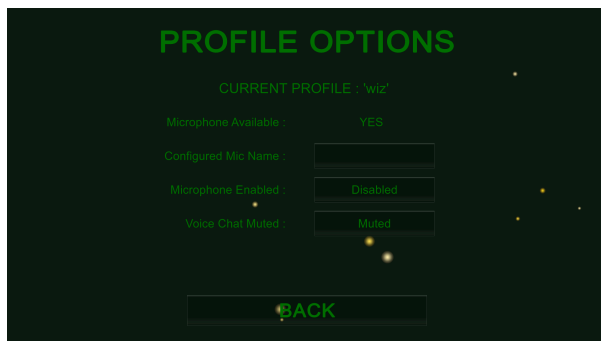
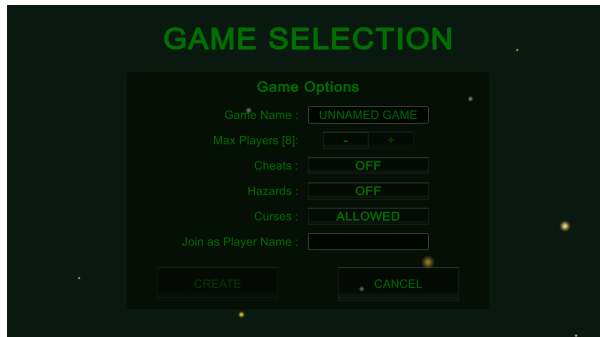
## Game Selection

This allows the player to select from available game save slots associated with the profile as logged in. The slots appear as buttons with save game details like name and a timestamp. This also includes a New Game button.

## Game Options / New Game Popup

This confirm popup displays controls for all game options, controls are greyed out for those controls that can only be configured on new game creation. Along with those controls, there are buttons for Ok, Create and Cancel.

Ok accepts the current game option configurations (and if Create was pressed, the result is a new game data structure in a new game save slot), Create un-greys all controls for configuration, Cancel toggles the popup off.



## Profile Options

This includes the profile options controls, a list of profile Statistics, plus a Back button to return to Main Menu. If launched from Escape Popup, this same interface appears to replace it and be a popup within the game scene, and the Back button toggles back to Escape Popup.

## Statistics

A display of statistics of the active player profile in this save game data. This will be placed on a separate tab on the Profile Options, the two tabs will be labeled "Options" and "Statistics".

## Credits Screen

The development team credits listing, highlighting the people who worked on this game.

This displays game credits, dev team, music credits, etc., plus a Back button to return to Main Menu.



## Escape Popup (in-game)

This popup is available in-game with the escape key or gamepad start, which toggle this popup.

- Quit (to Main Menu)
- Profile Options
- Cancel

## Characters

Characters in the game represent players and NPCs, including enemies.

### Players

These characters represent the player in the game world.

#### Player Movement

Players move using WASD keys, as up-down-left-right, or in combinations of those.

#### Player Actions

##### Interact

Talk to NPCs, and buy and sell with the market.

##### Harvest

Collect resources and things that are fully grown.

##### Plant

##### Sow Seeds

##### Craft Magic

Craft your spell book charges at the Magic Table

##### Water

#### Special Abilities

##### Cast Spells

Players have the ability to cast magic spells, if they have a spell and spell charges in their spell book. Once a casting routine is invoked, the player selects from their spell book and targets the cast to a location in the world. They cast the spell, one spell charge is removed from their spell book, and the player is returned to normal gameplay. After that, the cast manager handles the lifetime and effects of the spell cast.

## NPCs

Non-Player Characters in the game are any character not controlled by a player, including ambient creatures, people and monsters.

## NPC Helper Critter

### A.I. Behavior

Will only do action if the player instructs the critter to do so. If not, they will remain inside the "Critter Hut". They will stop working+sleep at night(8pm) and are awake+ready to work at 6am

### NPC Actions

May help you with your farming tasks including watering your plants, harvesting fruits/flowers and handling pests.

### Special Abilities

n/a

## NPC Shopkeep

### A.I. Behavior

Is stationary in their market. Will have an idle mode which will beckon the players to their market.

### NPC Actions

Will buy and sell your goods

### Special Abilities

n/a

## Environment

The game world player characters live in.

### Environment Overview

Players work on a farm of their own, in a world of individual farms. These farms progress as the player works the farmland from wild pasture to tilled field to harvest-ready crops, and so on.

### Game World

The game world includes multiple farm islands, one for each player.

All locations of the game world are affected by the procedural time systems, weather systems and seasons.

## World Phases

All farm islands are subject to changes in the game world. Each world dynamic has individual effects on farms.

## Weather States

- Sunny
- Cloudy
- Rainy
- Foggy
- Snowy

## Seasons

- Spring
- Summer
- Fall
- Winter

## Farm Islands

A single farm includes a main space for a field and a tower for the player character.

## Wizard Tower

The tower on an island shows a single door, and from the outside, appears to only show enough a very small amount of room, but inside, appears as a much larger space

Inside, the wizard tower includes a magic table (change magic lab), a storage chest, a desk

## Island Market

A market is available for all players in the form of a solarpunk flying ship, separate from their farm island, to buy and sell farm stuff. The player can freely teleport to and from the market through a teleporter inside their personal tower.

## Magic Table

A space that is seen when in the wizard tower and at the magic table, each player has this magic space to work their individual magic.

At the magic table, the player finds a grimoire book open, and next to the table is the magic cauldron. These two visual props inside the wizard tower will be represented by 3D art props, and then when engaged, with 2D background art in the magic crafting system, one screen for grimoire and one for cauldron.

## Farm Progression

Players will work to progress their farmland by buying and crafting plants, then planting them on your farmland. Mature plants once harvested will reset the plant growth and drop a valuable item that can be sold or used in crafting recipes.

### Stage 1

When creating a new island, the player can choose 1 of three different island layouts. Each layout will have the same amount of farmland. Once chosen, the player will spawn in front of their new personal tower on the island. The farm plots will have no seeds planted and will start out dry.

The player is given 50 gold and 1 basic seed to start.

## Farm Dynamics

Along with general farm progression, farmlands can change due to individual dynamics caused by various means.

### Hazards

Hazards are world elements that impede normal play, potentially causing harmful effects.

#### Hail

##### *Description*

Raining ice blocks. Happens regionally.

##### *Effect*

- Creating ice patches where the hail hits. Icy patches can be cleared with extra work, or wait till the sun comes out. Otherwise players can't sow.
- Has a chance of freezing crops. Once the crop is frozen, it needs to be defrosted or the crop will die.

#### Hurricanes

##### *Description*

Strong wind and rain, happens regionally, slowly travels with the direction of the wind, moving from island to island.

##### *Effect*

- Crops have a chance of being blown away by the wind.
- Has a chance of creating Flash flood, if not dealt with in time, crops would rot.

- Has a chance of creating Lightning, damaging an area where it hits and scorching the land. Scorched land needs to be restored otherwise nothing can grow on it.

## Drought

### *Description*

Due to the lack of rain, players will experience water shortage. Happens regionally.

### *Effect*

- The interval of how long the crops need to be watered becomes shorter.
- Certain crops that need less water can thrive, growing faster.

## Locust Plague

### *Description*

A cloud of hungry locusts travelling through the map.

### *Effect*

- Crops got eaten by the locusts cloud, production ↓ 40%

## Rat

### *Description*

A family of rats occupying the land, eating away your crop.

### *Effect*

- Crops got eaten by the rats, production ↓ 20%
- Can only be taken care of through pest control methods
  - Rat poison
  - Spell
  - Critter

## Events

Events are time-based, dynamics that begin based on conditions and end after a duration or as a result of a condition being reached. Once an effect is active, rules can be applied to normal dynamics of the whole game world, or to individual islands, or to individual player characters.

## Harvest Festival

### *Cause*

Entering the last month of Fall

*Effect*

- All crop productivity ↑ 15%-25%
- Random crop cultivation spell cost ↓ 10%

## Winter Festival

*Cause*

Entering the last month of Winter

*Effect*

- All crop productivity ↓ 15%-25%
  - Except for crops favoring cold weather, productivity ↑ 10%
- Chance of Snowy weather

## Story

Lore and narrative to support the themes, characters, game world and the overall goals of the player.

As a **newly appointed biomancer**, the player is tasked with cultivating sky islands rich with arcana. They will grow crops and plants of all kinds while enhancing and expanding their island. Once the crops are ready, they can sell them at the market or use them to cast spells.

**Magic brings life** to the islands, and a biomancer is skilled at utilizing magic for whatever may be required. Casting blessings upon the land or commanding the weather itself. No matter the task, a biomancer is up for the job. But they won't be alone in their enchanting endeavors across the skies.

For biomancers, the skies can be lonely when you have nobody to soar them with. So they tend to stick together, for community or for competition. Biomancers can use the power of teleportation to bring their sky islands closer together. Allowing for quick leaps between the islands. When working together, biomancers bless each other's islands and bring about miracles with their combined power. But some biomancers prefer to mess with each other, cursing others' islands or summoning nefarious creatures on them. Either course of action saturates the sky islands with arcana, so **everything is fair game**.

## Characters / NPC's

### Magister Eden

#### Summary

Also known as "The Garden Keeper", Magister Eden is currently the head of the biomancers in Emphyrea and a proud member of the Mystic Magistrate. She has a kind personality, often helping newcomer biomancers adjust to their life in the skies. But while she enjoys working with the other biomancers, sometimes she feels like she's teaching children as many newcomers often blow things up or fling curses around. Still, Eden loves being a biomancer and wouldn't trade her current profession for the world.

#### Description

Magister Eden is a rabbit with white fur carrying around a staff covered in vines and flowers.

### Magister Taxes

#### Summary

The ever calm, ever collected, and ever punctual taxman of Emphyrea. Magister Taxes is a simple man who does what he's told when he's told without exceptions. And he expects everybody else to do the same. Despite the flair of his appearance, he isn't the greedy gold collector most expect him to be.

#### Description

Magister Taxes is a tall and lanky tiger man with a few golden accessories adorning his features.

### Mr. Salesalot

#### Summary

Ah yes, the prized merchant of the Skyport. Mr. Salesalot is a very cunning businessman with an eye for excellent deals and rare materials. He may not know as much as Magister Eden about plants, but he certainly knows their market value better than her. Yet, as greedy as Mr. Salesalot comes across as he never takes advantage of his customers, always offering fair deals. Well, mostly fair. Everybody's gotta make a living after all.

#### Description

Mr. Salesalot is a big fluffy cat with orange poofy fur. He wears a wide assortment of hats for whatever merchant stall he's selling from at the time.

## Magister Shady

### Summary

How did he join the Mystic Magistrate? Nobody knows. What is he doing here? Casting curses and gambling. Will he ever tell anybody his real name? Probably not. So for now, we just call him Magister Shady.

### Description

A (hyrax/bat/raccoon/ferret) with a mischievous grin and a trench coat filled with cursed scrolls.

### Cinematics / Slide Shows

Cinematics include any camera-related sequences.

The first-run includes an introductory tutorial sequence that also handles player customization.

# Programming

The game code to run game rules, and systems that present the gameplay for each aspect.

## Standards

- **Well named** data, methods, structures and classes
- **Well documented** code in comments and in documentation
- **Consistency** in formatting and techniques
- **Separation** of data, system and tools where it makes sense for maintainability
- **Flexibility** for design changes, tuning and polish opportunities
- **Rigor** in planning, development, testing and bug fixing

## Research

Re-using techniques and methods from existing sources, particularly our own previous development.

## Extensions

Leaving open opportunities for future development that take features or systems further.

## Architecture

A high level format to construct systems as game features.

## Data

Data that the system needs to operate on. Data structure and classes.

## Game

Highest level data includes settings, stats and foundation for players to join.

## World

Time, seasons and calendar, procedural weather.

## Island

Island metrics, structure and props, teleporter nodes. Islands, structures and props can all have effects applied.

## Loose Item

Any items not in an inventory, including their metrics. Loose items can have effects applied

## Spell Casts

Individual casted spells in a location and persisting for a 'lifetime'.

## Player

Player data includes individual actions achieved, stats and metrics. Players can have effects applied.

## Farm

Farm land is just a series of plots. Farms can have effects applied.

## *Plot / Plant*

Individual plot and plant metrics. Both plots and plants can have effects applied.

## Inventory

Items and inventory as collections of items for storage and transfer. Items within inventory can have effects applied.

## Magic

Players have magic libraries that include a grimoire and spell book. The grimoire holds spell recipes they have unlocked, while the spell book holds spell charges they have crafted and may cast at will.

## NPC

NPC metrics

## System

The common methods to operate on data. Static public methods available for wide use.

## Save Data Management

Save data includes two main parts: non-game and game data. Non-game data includes a user roster with login and password for multiple accounts on the same machine. Once logged in the user may create new games, or select from games they have previously saved locally. Once a game is selected (save game to host, or remote game to join) their play button is enabled.

Note: Remote players of net games who join do not save game data. The host owns game data, and will necessarily 'kick off' all remote players if they quit, to avoid data conflicts.

Save game data is on the local computer to be loaded for different sessions. All components that make up a game, except for background set pieces seen in the level, are loaded into the game scene from data.

Game data includes:

- Game high-level data (stats, options)
- World data (time, calendar, weather)
- Island data (structures, props, teleport nodes)
- Loose item data (items not in an inventory)
- Cast data (magic spells that persist for a 'lifetime' at locations)
- Player data (options, island ownership, farms, inventory, magic)

If a first-run is detected (new game), a default set of data for each of these components is configured, and based on the introductory game tutorial sequence.

### Random System

Utility functions available to provide various distribution of random values: Flat, Weighted or Gaussian

### Effect System

The effect system is an added component to multiple game elements (players, islands, items, plants, etc.) whereby a definition of various effect types for that element are applied and removed in a modular way, as a series.

Only one effect type can apply to a single game element, but as a series (array) they can be mixed and matched in any combination. (for purposes of replication, we may limit effect number)

The result is the flexible application of arbitrary rules to various game elements for the purposes of magic spells or other special cases needed for unique gameplay.

### Cheat Code System

Typed cheat codes provide non-player controls for debugging and testing purposes.

### Time System

Management of the apparent passage of time in the game. (note that actual game time scale remains 100%) This system also manages days, months, seasons, temperature and day/night cycles.

### Weather System

Management of a procedural weather system resulting in wind and/or clouds. These results feed back to the Time System to adjust temperature.

### Player System

Management of player controls and player character movement, actions and animations.

### Camera System

Management of the client game camera to follow the player character or be used in light cinematics.

### Plot / Plant Systems

Management of data for farm plots and their plants.

### Inventory System

Management of loose items in the game world, and items within various inventory when not in the game world.

### Multiplayer System

All features relating to multiple users playing as player characters in the same game world.

#### Hosting

A player can start a server by loading up a save file, then going to the multiplayer menu and pressing Start Server. A unique room code will be created for the host to share with their friends to join. A server can host a maximum of 4 players at a time. Before hosting, the player's farm will be saved.

#### Joining

Players will be able to join other players through a code that is given to them from the host. To join, load up a save file, then go to the multiplayer menu, enter the code and press join. An alert will appear notifying the player that their farm will be saved before they join the server. If the player accepts, the farm will save and the player will start joining the server. On the server, a new farm will be created for the player that joined and their data will be loaded onto that farm.

#### Leaving

Players can leave a server at any time through the multiplayer menu by pressing Leave. Upon leaving or disconnecting from the server for any reason, the leaving player's farm will save once again to their local computer. The player will return to the main menu once leaving the server.

### Player Chatting

Players can use text chat while in a server to communicate with other players. Open up text chat by pressing the / key. Speech bubbles can also appear above the player's heads for a period of time with the chat message.

### Sharing Resources

Players can send resources like plants, spells and money to other players at any time by either going to the post office (one at each farm) or carrying the resources on themselves and passing them directly to the other player once close enough.

Q:

The post office will allow players to quickly send large amounts of resources in bulk if the player cannot carry all the resources they want to share at once. If a package is received, the player will be notified with a UI popup saying "<sender> has sent you a package!"

If the player leaves while a package is being transported to or from their farm, the delivery will be canceled and the resources will be returned to the person who sent the delivery.

### Removing Players

The host can kick players from the server through the multiplayer menu by pressing the kick button beside the player on the player list.

### World Synchronization

The current state of the day/night cycle will always match that of the host's. This goes for seasons and weather as well. Once a player joins, all environment states on their farm will immediately be replaced by the host's current environment state.

### Whitelisting Players

In a menu, players can choose who can affect their farmland by planting seeds or modifying decorations.

### Tools

Game Object tools used directly in scenes for access to other game objects. Configurable tools for other developers, from artists to level designers.

# Production

The management of goals, time, tasks and people to finish the project on time, within scope and taking all opportunities possible.

## Production Priorities

- Farm First
  - This is the core of the game, where additions can be built
- Magic mechanics built to support farming and community connections
- Multiplayer systems can be an extension of solo wizard farming gameplay
- Find modular solutions, can be used again, can be easily modified or combined
- Find simple solutions, easier to produce, easy to understand, easy to use
- Playtest early and often, everyone playtests to get in touch with the play experience
- Call out problems early, encourage solutions
- Ask for help as soon as you need it, speed and iteration over planning and perfection

## Team List

Tia

Esther

Grayson

Huch

Ellington

Gustavo

Li-Ai

(Glenn)

## Team Roles

### Art

1. Tia
2. Grayson
3. Li-Ai
4. (Glenn)

### Audio

1. Huch

## Design

All students participate in design tasks and efforts.

## Systems

1. (Glenn)
2. Gustavo
3. Esther

## Level / Interface Layout

1. Tia
2. Li-Ai
3. Ellington
4. Grayson

## Plant Organization

1. Ellington
2. Grayson

## Programming

1. (Glenn)
2. Gustavo
3. Esther

## Game Controller System

1. (Glenn)

## Save System with Sync

1. (Glenn)

## Player Stats System

1. (Glenn)

## Online Multiplayer System

1. Gustavo

## Animation System

1. (Glenn)

## Audio System

1. (Glenn)

## Production

1. (Glenn)
2. Grayson
3. All students will participate in assigning themselves tasks, by priority
4. All students will 'own' features, be responsible for success, recruit help

## Prioritized Feature List

- Menu System (splash, main, options, etc.)
- Audio System (music loop/x-fade, sfx play/loop)
- Save System (data architecture, distributed per farm/player, multiplayer save sync)
- Online Multiplayer System (any client acts as server if first, client triggers save sync)
- Player Stats System (recording stats, available to increment or display)
- World View Art
- Single Farmland Art
- Market Location Art
- Magic Lab Location Art
- Menu UI Art
- HUD UI Art
- Environment Dynamics Art (animation states, animation frames)
- Character Art (animation states, animation frames)
- Prop Art (animation states, animation frames)
- Plant Art (animation states, animation frames)
- Magic Art (animation states, animation frames)
- Additional VFX Art (animation states, animation frames)
- World System (generalized rules, progression) (like day/night, season, creating pasture)
- Plant System (generalized rules, progression)
- Farm System (generalized rules, progression)
- Market System (generalized rules, progression)
- Magic System (generalized rules, progression)
- Player Movement System (from input controls, rules, signals to other systems)
- Player Action System (from input controls, rules, signals to other systems)
- NPCs Systems (generalized rules, progression)
- Animation System (anim states, configurable for looping, timing, frames)
- Music Sourcing and Development (loops or stings)
- SFX Sourcing and Development (per action, per event, per animation, ambient loops)
- Screenshot Sharing System (generalized rules, progression)
- Multiplayer Comms System (generalized rules, progression)



## Milestone Timeline

### Concept

Weeks 1-3

### Prototype

Weeks 4-6

Milestone in Week 6

### Alpha

Weeks 7-9

Milestone in Week 9

### Beta

Weeks 10-12

Milestone in Week 12

### Final

Weeks 13-15

Milestone in Week 14

## Appendix A : Audio Asset List

This list to be gathered, as bullet points, then prioritized, as a numbered list. The idea is to provide a list for our audio features, based on the needs of various other features of the game. From there, a master can be combined. And, that master prioritized list can be 'cut off' to focus only on the higher priority needs of our audio.

### Environment Sound

- Morning Ambient\_Bird/Outdoor
- Wind
- Night Ambient\_Crickets
- Weather\_Rain
- Weather\_Thunderstorm
- Sun/Moon Rising/Setting

### Character Sound

- Player Pickup-
- Player Character Grunts/Emotes
  -
- Shopkeeper Greeting
  -

### Prop Sound

- Wave Wand
- Hoe Tilling
- Shovel Digging
- Seeding

### UI Sound

- Open/Close Pause Menu
- Open/Close Inventory

### FX Sound

- Sparkle(from waving wand)
- Explosion Poof (Failed Potion)
- Bubbling cauldron

- Inventory Select
- Craft Successful
- Craft Fail
- Save

## Menu and Credits Sound

- Open/Close Pause Menu
- If mini-game - achievements?
- SFX from SoundSnap.com

## Appendix B : Uncategorized Notes

### Plant Grafting Tertiary System

Players can take the stem of a plant and a fruit or flower of another plant to breed a new mutation. Players will play a minigame that will determine if they are successful or not; the minigame will resemble dotlink games. If the player succeeds, this new plant will be added onto their plant encyclopedia

### Lunar Cycles

While the sun is a constant year round, the moon can be a) displayed in sky, and b) change over the course of each month; from new moon (totally dark moonlight) to full moon (100% moonlight) and back, in a sine wave. The peak can be in the middle of each month, day 15.

If we display the moon (see at moonset), we would want a full circle of the moon, and waxing and waning cycles as well as a dark circle for the new moon.

### Seasonal Market Items

Mr. Sells Alat will start selling the seeds for the next season in the last week of the current season.

### Star Constellation Activity

Nighttime stargazing can be a player activity that results in some magic resource benefit. Connecting star points with a point-and-click input, can be built up to match a constellation formation the player is asked to find in the star field. (it is there and hidden with the starfield)

### Achievements

The achievement system is organized into broad categories—such as **Connoisseur** and **Green Thumb**—each representing a different facet of gameplay. Within each category are multiple sub-categories, which define specific achievement tracks. Each sub-category features three progression ranks: **Bronze**, **Silver**, and **Gold**, with each rank requiring players to meet increasingly challenging goals. Upon reaching a new rank within a sub-category, players are rewarded with valuable resources such as experience points, gold, or arcana, along with a unique **title** that reflects their progress. Achieving **Gold rank in all sub-categories within a category** grants the player a special **trophy item**—a decorative piece of island décor that celebrates their mastery. These trophies are **purely aesthetic** and offer no gameplay

advantages or buffs, ensuring that recognition is earned purely through dedication and skill rather than performance enhancement.

## Title

**Titles** are customizable honors that consist of two components: an **adjective** and a **noun** (e.g., *Gallant Forager* or *Mischievous Alchemist*). Players can **mix and match** any unlocked adjective with any unlocked noun to create a personalized title that appears above their character. These title components are **earned by progressing through achievement sub-categories**—with new adjectives or nouns unlocked at different ranks (e.g., Bronze, Silver, Gold). This system allows players to showcase their accomplishments while expressing personality and playstyle through creative title combinations.

### Achievement List + Rewards:

1. Connoisseur - Hot air balloon attached to your island
  - a. "A Whole Seed Bank"
    - i. Bronze - Acquired x types of seeds
    - ii. Silver - Acquired y types of seeds
    - iii. Gold - Having acquired all 50 different types of seeds
  - b. "Petting Zoo"
    - i. Bronze - Acquired x types of helper critters
    - ii. Silver - Acquired y types of helper critters
    - iii. Gold - Acquired all types of helper critters
  - c. "The Decorcerer"
    - i. Bronze - Own x amount of island decoration
    - ii. Silver - Own y amount of island decoration
    - iii. Gold - Own z amount of island decoration
  - d. "Wardrobe Wanderer"
    - i. Bronze - Own x amount of player character customization piece
    - ii. Silver - Own y amount of player character customization piece
    - iii. Gold - Own z amount of player character customization piece
2. Green Thumb - Rose Fountain
  - a. "Hoe No You Didn't"
    - i. Bronze - Worked the plot x times
    - ii. Silver - Worked the plot y times
    - iii. Gold - Worked the plot z times
  - b. "Branch Manager"
    - i. Bronze - Grafted x times
    - ii. Silver - Grafted y times
    - iii. Gold - Grafted z times
  - c. "Crop Conjurer"
    - i. Bronze - Harvested x times
    - ii. Silver - Harvested y times

- iii. Gold - Harvested z times
  - d. "Dung and Done"
    - i. Bronze - Fertilized x times
    - ii. Silver - Fertilized y times
    - iii. Gold - Fertilized z times
- 3. You're a Wizard Berry! - Magic Spirits (Blue glowing particle system emitting from your tower)
  - a. "Abracada-bravo!"
    - i. Bronze - Collect x amount of spell recipes
    - ii. Silver - Collect y amount of spell recipes
    - iii. Gold - Collect z amount of spell recipes
  - b. "Spellsmith" (1 charge crafted counts as 1 time)
    - i. Bronze - Crafted spell charge x times
    - ii. Silver - Crafted spell charge y times
    - iii. Gold - Crafted spell charge z times
  - c. "Castaway" (1 cast counts as 1 time)
    - i. Bronze - Casted x amount of charges
    - ii. Silver - Casted y amount of charges
    - iii. Gold - Casted z amount of charges
  - d. "Friendly Firestarter" (1 cast counts as 1 time)
    - i. Bronze - Casted x amount of Curse charges
    - ii. Silver - Casted y amount of Curse charges
    - iii. Gold - Casted z amount of Curse charges
  - e. "Born to Be Green"
    - i. Bronze - Acquire x amount of skills from the Genesis Tree
    - ii. Silver - Acquire y amount of skills from the Genesis Tree
    - iii. Gold - Acquire z amount of skills from the Genesis Tree
- 4. Entrepreneur - Statue of the Grand Biomancer
  - a. "Fur-midable Foreman"
    - i. Bronze - Have x amount of critters working on the farmland
    - ii. Silver - Have y amount of critters working on the farmland
    - iii. Gold - Have z amount of critters working on the farmland
  - b. "Cloud Nine Construction"
    - i. Bronze - Have x amount of Island perks
    - ii. Silver - Have y amount of Island perks
    - iii. Gold - Have z amount of Island perks
- 5. Gold Digger - Rainbow to gold pot?
  - a. "I Cast Cha-Ching"
    - i. Bronze - Earn x amount of gold in total
    - ii. Silver - Earn y amount of gold in total
    - iii. Gold - Earn z amount of gold in total
  - b. "Make It Rain"
    - i. Bronze - Spend x amount of gold in total

- ii. Silver - Spend y amount of gold in total
- iii. Gold - Spend z amount of gold in total

Seasonal Decoration List:

- 1. Fall
  - Maple Leaf
  - Scarecrow



- 2. Spring
  - Flower
  - Butterflies
  - Bee hives
  - Birds



- 3. Summer
  - Beach umbrella
  - Beach ball
  - Sandcastle
  - Beach chair
  - Palm tree
  - Flip-flop
  - Sunglasses

Fruit like, pineapple, coconut, mango, papayas, bananas



4. Winter  
Snowman  
Icicles  
Snow everywhere  
Frozen pond



5. Halloween  
Pumpkin  
Apple  
Witch hat  
Bats  
Skeleton



6. Christmas  
Christmas tree  
Gift boxes



7. Easter  
Egg baskets  
Easter egg  
Bunny



## Seasonal/Event Islands

On certain days of the year different seasonal/event islands will orbit nearby the player. These Islands are themed and carry special items that you cannot find in markets or at regular islands. Using those special items, you will be able to craft special decor at Mr. Sells Alat's market. Alongside the island, you will find a new market on a blimp which is run by Mr.Sells Alat's cousins. You will be able to buy goods that Mr.Sells Alat does not have in his inventory.

## Island List

### Beach Island

- Special items: different types of shells, seaweed, pearls, corals

- Craftables: Baby Pink Paint(allows you to change the color of your tower), Mermaid lamp, Seashell Archway

## Halloween Island

- Special items: Pumpkin, candy, Poison Apple, Spooky Bark
- Craftables: Orange Paint, Pumpkin Stack, Spooky Tree Archway

## Starfall Island

- Theme: A rare celestial alignment brings falling stars and magical night bloom.
- Special Items: Star Fragments, Moonflower, Cosmic Sand, Dream Fern
- Craftables: Star Lantern Mobile, Yellow/Blue Paint, Moon Mirror

## Halloween Island

- Theme: Big fungi planet
- Special Items: Puffshroom, Fairy Ring Spores, Bioglow Cap, Mossy Root
- Craftables: Mushroom Stool Set, Sporelight Lamp, Moss Paint

## Fairy Island

- Theme: A dreamlike, bioluminescent glade inhabited by elusive fairies. The entire island pulses with soft light and floral scents. Arrives briefly during early summer twilight. (think fairy fountain from Zelda)
- Special Items: Fairy Wings, Glow Pollen, Thimblebell Flowers, Whisper Bark
- Craftables: Fairy lights, Red/Orange Paint, Bioluminescent Pond, Glow Tree Arch

## Appendix C : Magic Spell List

For each spell definition, we need:

- Name
- Description
- Duration (cast lasts for this long before expiring)
- Cast AOE Range: (the radius effect from cast target in the world; 1 = one plot width)
- Cooldown (spell book needs this time before this type can be cast again)
- Ingredient list (list of item types to use in crafting charges in spell book)

### Level 1

#### Fast Grow I

- Make the plant grow faster for one day. (+33%)
- Duration: 1 day
- Cooldown: 3 Hrs in game time
- Cast AOE Range: 1x1
- Casting component: 1 Fertilizer, 1 Corn Stalk

#### Summon Water I

- Water a plot that stays hydrated for one day.
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 1x1
- Casting component: 1 Carrot Fruit, 1 Seed (any)

#### Soiled It I

- Increase the quality of the soil for one day. (+50%)
- Duration: instant, applied to plots ~~1 day~~
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 4 Fertilizer

#### Mirror Mirror

- Change your appearance (gender, theme color, accent color)
- Duration: none/forever
- Cooldown: 1 day
- Cast AOE Range: self
- Casting component: 1 Tomato Stalk, 1 Seed (Any)

## Mini Firework (TBD)

## Level 2

### Bless I

- Make plants immune to all hazards for one day.
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 1 Lotus Fruit, 1 Sunflower Stalk

### Daylight I

- Summon sunlight for a plot for one day.
- Duration: 1 day
- Cooldown: 3 Hrs in game time
- Cast AOE Range: 1x1
- Casting component: 1 Sunflower Stalk, 1 Marigold Stalk

### Gilded Words I

- Make yourself charming, get a discount from all shop items. (-5%)
- Duration: 5 Hrs in game time
- Cooldown: 5 Hrs in game time
- Cast AOE Range: self
- Casting component: 2 Snowgrace Fruit, 1 Popcorn Stalk

### Seeding Echo I

- Guaranteed to get 1 seed when harvesting, having an increased chance of getting another. (+10%)
- Duration: For current growing plant, once harvested, spell wears off
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 2 Carrot Stalk, 1 Lemon Fruit

## Weed Curse (TBD)

### Color Trail I, Color Trail II, Color Trail III (primary, secondary, accent color)

- Leave a short color trail (3 plot long) wherever you go.
- Duration: effect- 1 day, trail- for 2 mins
- Cooldown: 5 Hrs in game time
- Cast AOE Range: self
- Casting component: 1 Moonflower Stalk, 1 Fertilizer, 1 Rock

## Level 3

### Malnutrition I

- Plants' growth speed decreases for one day. (-50%)
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 1 Chrystalia Fruit, 1 Eclipse Flower Stalk, 1 Apple Seed

### Prosperous I

- Have a chance of harvesting x2 from each plant. (+25%)
- Duration: 1 day
- Cooldown: 5 Hr in game time
- Cast AOE Range: 2x2
- Casting component: 1 Underbloom Fruit, 1 Rose Stalk, 2 Fertilizer

### The Great Harvest

- Harvest all plots at once, plots that are still growing ignore this effect. Fruits that are harvested will drop to the ground.
- Duration: none
- Cooldown: 3 Hr in game time
- Cast AOE Range: 3x3
- Casting component: 1 Pumpkin Stalk, 1 Orange Fruit, 1 Corn Fruit

### Fast Grow II

- Make plants grow faster for one day. (+67%)
- Duration: 1 day
- Cooldown: 3 Hr in game time
- Cast AOE Range: 2x2

- Casting component: 1 Fertilizer, 1 Corn Stalk, 1 Popcorn Fruit

### Splurn (based on player customization)

- Change the color of your magic tower!
- Duration: forever
- Cooldown: 1 day
- Cast target: a tower
- Casting component: 1 Apple Fruit, 1 Lotus Stalk

### Broadcasting, plant all (TBD)

## Level 4

### Lesion I

- Curse plots and decrease harvest quality. (-25%)
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 1 Magnolia Fruit, 1 Myosotis Stalk, 1 Tomato Plant

### The Reaper

- Dig up all plots, stalks/growing plants drop on the ground.
- Duration: none
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 3x3
- Casting component: 1 Water Lily Stalk/Plant, 1 Snowgrace Stalk, 1 Poppy Plant

### Swiftiness

- Your movement speed increases. (x1.5 speed)
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: self
- Casting component: 1 Magnolia Stalk, 1 Sunflower Fruit, 1 Chrystalia Stalk

### Light Work

- You farm faster. (x2 progress rate)
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: self

- Casting component: 1 Marigold Fruit, 1 Eclipse Flower Fruit, 1 Carrot Plant

## Summon Water II

- Waters an area that stays hydrated for one day.
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 1 Pumpkin Fruit, 1 Carrot Fruit, 1 Chrystalia Plant

## Starbloom Burst

- (Cosmetic) Having fireworks straight above the cast, it'll remain stationary.
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 4x4
- Casting component: 1 Underbloom Stalk, 1 Corn Plant, 2 Rose Fruit

## Remove Spell (TBD)

## Level 5

### Eclipse I

- Obscure sunlight from plots for one day.
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 1 Nightshade Stalk, 1 Crystal Rose Plant, 1 Hollowbloom Stalk/Plant, 1 Pumpkin Plant

### Golden Thumb I

- Bless plots and increase harvest quality. (+25%)
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 1 Mysteria Stalk/Plant, 1 Coconut Stalk/Plant, 1 Myosotis Fruit, 1 Tomato Fruit

## Gilded Words II

- Make yourself charming, get a discount from all shop items. (-15%)
- Duration: 5 Hrs in game time
- Cooldown: 12 Hrs in game time
- Cast AOE Range: self
- Casting component: 2 Snowgrace Fruit, 1 Frost Lily Fruit, 1 Mandrake Stalk, 1 Myosotis Plant

## Dull Earth I

- Curse the plots and make soil quality drop for one day. (-50%)
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 1 Banana Fruit, 1 Yarrow Fruit, 1 Nightshade Plant, 1 Marigold Plant

## Fog of War I

- Summon a semi-translucent cloud, obscuring sight.
- Duration: 12 Hrs in game time
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 1 Golden Apple Fruit, 1 Mandrake Fruit, 1 Mysteria Fruit, 1 Snowgrace Plant

## Soiled It II

- ~~Increase the quality of the soil.~~ Maximize the quality of the soil. (100%) ~~(+50%)~~
- Duration: none, directly added to soil quality
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 3x3
- Casting component: 1 Banana Stalk/Plant, 1 Nightshade Fruit, 1 Lotus Stalk, 2 Fertilizer

## Blessed Spring I

- Make plants re-fruit, plants that are already re-fruit types are not affected
- Duration: 12 Hrs in game time
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component: 1 Crystal Rose Stalk, 1 Yarrow Plant, 1 Popcorn Plant, 1 Lemon Stalk/Plant

Cash In (TBD)

## Level 6

### ~~Crop Tag~~ (X)

- Mark a plant as “yours” even when planted on someone else’s field, when someone else harvest “your” plant, the fruit (and seed, if generated) will be mailed to you
- Duration: till the end of the plant’s life cycle
- Cooldown: 10 Hrs in game time
- Cast AOE Range: 1
- Casting component:

### Prosperous II

- Have a chance of harvesting x2 from each plant. (+50%)
- Duration: 12 Hrs in game time
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component:

### Malnutrition II

- Plants’ growth speed decreases for one day. (-50%)
- Duration: 1 day
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 3x3
- Casting component:

### Bless II

- Make plants immune to all hazards.
- Duration: 3 days
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 3x3
- Casting component:

Copy lose item (TBD)

Work all plots (TBD)

Till all plots (TBD)

## Level 7

### ~~Shared Harvest~~ (X)

- Link your harvest to another player's plot, anything they harvest you get a copy, send to you through mail. (can cast on player's own plot, get the copy through mail)
- Duration: 1 day
- Cooldown: 1 day
- Cast AOE Range: 3
- Casting component:

### Daylight II

- Summon sunlight for an area of plots.
- Duration: 2 days
- Cooldown: 5 Hrs in game time
- Cast AOE Range: 2x2
- Casting component:

### Rabbit Hole

- Put your friend on timeout, they won't be able to do anything for one day.
- Duration: 1 day
- Cooldown: 12 Hrs in game time
- Cast AOE Range: other player
- Casting component: COSTLY

Name Changing Spell (TBD, maybe as a scroll)

Increase fruit quality (harvested, loose) (TBD)

## Appendix D : Plants Master List

### Rarity: Common

#### Corn

- Description: Looks pretty corny to me!
- Dark Plant: No
- Rarity: Common
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 125%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

#### Tomato

- Description: Very useful bad joke repellent.
- Dark Plant: No
- Rarity: Common
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 125%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

#### Carrot

- Description: Be careful, one of these could be a rabbit hole trap!
- Dark Plant: No
- Rarity: Common
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 100%, Winter 100%
- Re-Fruit Type: No
- Growth Rate: 125%
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

## Poppy

- Description: Despite Magister Eden's best efforts, beginner biomancers are constantly trying to use these for explosion spells.
- Dark Plant: No
- Rarity: Common
- Seasonal Vitalities: Spring 75%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 50%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

## Rose

- Description: They're shockingly flame resistant and are often used in fire spells. For some reason, while burning, they give off a sweet scent.
- Dark Plant: No
- Rarity: Common
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 100%, Winter 75%
- Growth Rate: 50%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

## Sunflower

- Description: Filled with the might of the sun! For some reason, a few biomancers often call these Superflowers, much to Magister Eden's confusion.
- Dark Plant: No
- Rarity: Common
- Seasonal Vitalities: Spring 75%, Summer 100%, Fall 75%, Winter 25%
- Growth Rate: 25%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

## Moonflower

- Description: Filled with the might of the moon! Which is technically the might of the sun, but don't bring that up in front of Magister Shady.

- Dark Plant: Yes
- Rarity: Common
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 100%, Winter 100%
- Growth Rate: 25%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

## Apple

- Description: Land dwellers eat these to ward off doctors. It's a strange tradition that Magisters have been studying for years.
- Dark Plant: No
- Rarity: Common
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 20%
- Re-Fruit Type: Yes
- Harvest Amount: 3
- Seed Potential: 50%
- Graft Requirements: NA

## Orange

- Description: If you keep them in the sun too long, these plants are said to change into an entirely different fruit. This has been proven false, but some biomancers try it anyway.
- Dark Plant: No
- Rarity: Common
- Seasonal Vitalities: Spring 75%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 20%
- Re-Fruit Type: Yes
- Harvest Amount: 3
- Seed Potential: 50%
- Graft Requirements: NA

## Lemon

- Description: This nefarious plant has the power to turn the face of any who eats it inside out, and shockingly, it's not even magical!
- Dark Plant: No
- Rarity: Common
- Seasonal Vitalities: Spring 75%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 20%
- Re-Fruit Type: Yes

- Harvest Amount: 3
- Seed Potential: 50%
- Graft Requirements: NA

## Rarity: Uncommon

### Lotus

- Description: A plant that blooms beautifully and glows with Arcana. An ancient biomancer brought this flower from another world.
- Dark Plant: No
- Rarity: Uncommon
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 50%, Winter 50%
- Growth Rate: 75%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

### Marigold

- Description: The gold flower of the celestial trio. It's been used in many get rich quick schemes because many amateur biomancers think it's made of actual gold.
- Dark Plant: No
- Rarity: Uncommon
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 75%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

### Magnolia

- Description: The black flower of the celestial trio. Nobody really knows where it came from and everybody is too scared of learning the answer to find out.
- Dark Plant: Yes
- Rarity: Uncommon
- Seasonal Vitalities: Spring 100%, Summer 75%, Fall 100%, Winter 50%
- Growth Rate: 50%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 60%

- Graft Requirements: NA

## Myosotis

- Description: The blue flower of the celestial trio. These are often used in mourning ceremonies to honor passing biomancers and dying lands.
- Dark Plant: Yes
- Rarity: Uncommon
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 100%, Winter 100%
- Growth Rate: 20%
- Re-Fruit Type: No
- Harvest Amount: 3
- Seed Potential: 80%
- Graft Requirements: NA

## Chrystalia

- Description: A sacred flower once found at the peak of a mountain so high it rose above the skies of Empyrea! Not really, a biomancer got bored and made a flower out of glass. But the other idea was much cooler, right?
- Dark Plant: No
- Rarity: Uncommon
- Seasonal Vitalities: Spring 80%, Summer 50%, Fall 100%, Winter 80%
- Growth Rate: 80%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 70%
- Graft Requirements: NA

## Pumpkin

- Description: A big orange plant with a face on it. A lot of biomancers enjoy hollowing these out and using them as decorations. Some, however, swear the plants whisper to them in the dark.
- Dark Plant: Yes
- Rarity: Uncommon
- Seasonal Vitalities: Spring 75%, Summer 75%, Fall 100%, Winter 50%
- Growth Rate: 75%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 70%
- Graft Requirements: NA

## Underbloom

- Description: Plants from a darker world. They look strikingly similar to sunflowers yet are far darker and only grow in the dark. Their use in curses has earned them a negative reputation.
- Dark Plant: Yes
- Rarity: Uncommon
- Seasonal Vitalities: Spring 50%, Summer 50%, Fall 75%, Winter 100%
- Growth Rate: 100%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

## Water Lily

- Description: Named after a magister of the past, these plants are easy to grow in water and make excellent dye. Growing these for a significant other has become a popular practice in Empyrea.
- Dark Plant: No
- Rarity: Uncommon
- Seasonal Vitalities: Spring 100%, Summer 75%, Fall 50%, Winter 75%
- Growth Rate: 50%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: NA

## Snowgrace

- Description: These flowers look similar to snowflakes and grow in great amounts. Unlike snowflakes, every one of them looks the same. However, they all have different magic patterns, so they're still close enough.
- Dark Plant: Yes
- Rarity: Uncommon
- Seasonal Vitalities: Spring 50%, Summer 25%, Fall 50%, Winter 100%
- Growth Rate: 100%
- Re-Fruit Type: No
- Harvest Amount: 3
- Seed Potential: 50%
- Graft Requirements: NA

## Popcorn

- Description: Delicious popcorn on the cob. One brave biomancer from many years ago decided to magically create this tasty treat. Other biomancers worshipped them as a deity for a few days for their achievement.
- Dark Plant: No
- Rarity: Uncommon
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 75%
- Re-Fruit Type: No
- Harvest Amount: 3
- Seed Potential: 70%
- Graft Requirements: Corn and Poppy

## Eclipse Flower

- Description: Flowers of night and day,
- Dark Plant: No
- Rarity: Uncommon
- Seasonal Vitalities: Spring 50%, Summer 100%, Fall 50%, Winter 100%
- Growth Rate: 75%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: Sunflower and Moonflower
- Special Effect: Also has Sun during the night

## Rarity: Rare

## Golden Apple

- Description:
- Dark Plant: No
- Rarity: Rare
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 75%
- Re-Fruit Type: yes
- Harvest Amount: 2
- Seed Potential: 50%
- Graft Requirements: Apple and Marigold

## Hollowbloom

- Description:
- Dark Plant: Yes
- Rarity: Uncommon
- Seasonal Vitalities: Spring 75%, Summer 100%, Fall 100%, Winter 75%
- Growth Rate: 80%
- Re-Fruit Type: yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: Underbloom and Pumpkin

## Mandrake

- Description:
- Dark Plant: No
- Rarity: Rare
- Seasonal Vitalities: Spring 100%, Summer 75%, Fall 100%, Winter 50%
- Growth Rate: 25%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 80%
- Graft Requirements: NA

## Frost Lily

- Description:
- Dark Plant: Yes
- Rarity: Rare
- Seasonal Vitalities: Spring 50%, Summer 25%, Fall 75%, Winter 100%
- Growth Rate: 72%
- Re-Fruit Type: yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: Water Lily and Snowgrace

## Banana

- Description:
- Dark Plant: No
- Rarity: Rare
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 50%

- Re-Fruit Type: yes
- Harvest Amount: 3
- Seed Potential: 50%
- Graft Requirements: NA

## Coconut

- Description:
- Dark Plant: No
- Rarity: Rare
- Seasonal Vitalities: Spring 100%, Summer 100%, Fall 50%, Winter 50%
- Growth Rate: 75%
- Re-Fruit Type: yes
- Harvest Amount: 2
- Seed Potential: 50%
- Graft Requirements: NA

## Mysteria

- Description:
- Dark Plant: No
- Rarity: Rare
- Seasonal Vitalities: Spring 75%, Summer 75%, Fall 75%, Winter 75%
- Growth Rate: 75%
- Re-Fruit Type: yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: Any combination of Marigold, Magnolia, and/or Myosotis

## Nightshade

- Description:
- Dark Plant: yes
- Rarity: Rare
- Seasonal Vitalities: Spring 75%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 40%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 65%
- Graft Requirements: NA

## Crystal Rose

- Description:

- Dark Plant: No
- Rarity: Rare
- Seasonal Vitalities: Spring 80%, Summer 70%, Fall 60%, Winter 50%
- Growth Rate: 65%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 70%
- Graft Requirements: Rose and Chrystalia

## Yarrow

- Description:
- Dark Plant: No
- Rarity: Rare
- Seasonal Vitalities: Spring 100%, Summer 75%, Fall 75%, Winter 50%
- Growth Rate: 80%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 65%
- Graft Requirements: NA

## Rarity: Special

### Dragonroot

- Description:
- Dark Plant: No
- Rarity: Special
- Seasonal Vitalities: Spring 75%, Summer 100%, Fall 100%, Winter 50%
- Growth Rate: 35%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 60%
- Graft Requirements: Mandrake and any other Rare Plant

### Winter Rose

- Description:
- Dark Plant: Yes
- Rarity: Special
- Seasonal Vitalities: Spring 75%, Summer 25%, Fall 50%, Winter 100%
- Growth Rate: 35%
- Re-Fruit Type: Yes

- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: Frost Lily and Crystal Rose

### Fleur-De-Lis

- Description:
- Dark Plant: No
- Rarity: Special
- Seasonal Vitalities: Spring 75%, Summer 100%, Fall 75%, Winter 50%
- Growth Rate: 30%
- Re-Fruit Type: No
- Harvest Amount: 2
- Seed Potential: 80%
- Graft Requirements: NA

### Tropicus

- Description:
- Dark Plant: No
- Rarity: Special
- Seasonal Vitalities: Spring 90%, Summer 100%, Fall 70%, Winter 50%
- Growth Rate: 25%
- Re-Fruit Type: Yes
- Harvest Amount: 3
- Seed Potential: 50%
- Graft Requirements: Banana and Coconut

### Mourning Nyx

- Description:
- Dark Plant: Yes
- Rarity: Special
- Seasonal Vitalities: Spring 25%, Summer 25%, Fall 100%, Winter 50%
- Growth Rate: 20%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 60%
- Graft Requirements: Eclipse Flower and Nightshade

### Blast Apple

- Description:
- Dark Plant: No

- Rarity: Special
- Seasonal Vitalities: Spring 100%, Summer 75%, Fall 50%, Winter 25%
- Growth Rate: 20%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 60%
- Graft Requirements: Popcorn and Golden Apple

### Pixie Plumeria

- Description:
- Dark Plant: No
- Rarity: Special
- Seasonal Vitalities: Spring 100%, Summer 75%, Fall 100%, Winter 50%
- Growth Rate: 20%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 65%
- Graft Requirements: NA

### Fae Foxglove

- Description:
- Dark Plant: Yes
- Rarity: Special
- Seasonal Vitalities: Spring 100%, Summer 90%, Fall 100%, Winter 30%
- Growth Rate: 20%
- Re-Fruit Type: No
- Harvest Amount: 1
- Seed Potential: 65%
- Graft Requirements: NA

### Druid's Lotus

- Description:
- Dark Plant: No
- Rarity: Special
- Seasonal Vitalities: Spring 75%, Summer 75%, Fall 75%, Winter 75%
- Growth Rate: 30%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 80%
- Graft Requirements: Mysteria and Lotus

## Splat Berry

- Description:
- Dark Plant: No
- Rarity: Special
- Seasonal Vitalities: Spring 80%, Summer 65%, Fall 80%, Winter 65%
- Growth Rate: 35%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: Tomato and Pumpkin

## Rarity: Unique

### Jazzmyne

- Description: tbd
- Dark Plant: No
- Rarity: Unique
- Seasonal Vitalities: Spring 61.8%, Summer 100%, Fall 61.8%, Winter 38.1%
- Growth Rate: 38.1%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: tbd

### Mashroom

- Description: tbd
- Dark Plant: Yes
- Rarity: Unique
- Seasonal Vitalities: Spring 61.8%, Summer 100%, Fall 61.8%, Winter 38.1%
- Growth Rate: 38.1%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: tbd

### Herbal Pert

- Description: tbd
- Dark Plant: No
- Rarity: Unique

- Seasonal Vitalities: Spring 61.8%, Summer 100%, Fall 61.8%, Winter 38.1%
- Growth Rate: 38.1%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: tbd

### Firefly Trap

- Description: tbd
- Dark Plant: Yes
- Rarity: Unique
- Seasonal Vitalities: Spring 61.8%, Summer 100%, Fall 61.8%, Winter 38.1%
- Growth Rate: 38.1%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: tbd

### Betting Hedge

- Description: tbd
- Dark Plant: No
- Rarity: Unique
- Seasonal Vitalities: Spring 61.8%, Summer 100%, Fall 61.8%, Winter 38.1%
- Growth Rate: 38.1%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: tbd

### Bawn Sigh

- Description: tbd
- Dark Plant: No
- Rarity: Unique
- Seasonal Vitalities: Spring 61.8%, Summer 100%, Fall 61.8%, Winter 38.1%
- Growth Rate: 38.1%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: tbd

## Willow Wisp

- Description: tbd
- Dark Plant: Yes
- Rarity: Unique
- Seasonal Vitalities: Spring 61.8%, Summer 100%, Fall 61.8%, Winter 38.1%
- Growth Rate: 38.1%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: tbd

## Walking Stick

- Description: tbd
- Dark Plant: No
- Rarity: Unique
- Seasonal Vitalities: Spring 61.8%, Summer 100%, Fall 61.8%, Winter 38.1%
- Growth Rate: 38.1%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: tbd

## Genesis Sapling

- Description: tbd
- Dark Plant: No
- Rarity: Unique
- Seasonal Vitalities: Spring 61.8%, Summer 100%, Fall 61.8%, Winter 38.1%
- Growth Rate: 38.1%
- Re-Fruit Type: Yes
- Harvest Amount: 1
- Seed Potential: 50%
- Graft Requirements: tbd

## Appendix E : Market Price List

### Price for Plants (Rarity: Common)

| Plant Type | Buy  |       | Sell |       |
|------------|------|-------|------|-------|
|            | Seed | Fruit | Seed | Fruit |
| Corn       | 3    | 7     | 2    | 6     |
| Tomato     | 4    | 9     | 3    | 8     |
| Carrot     | 5    | 11    | 4    | 10    |
| Poppy      | 5    | 11    | 4    | 10    |
| Rose       | 5    | 11    | 4    | 10    |
| Sunflower  | 5    | 11    | 4    | 10    |
| Moonflower | 5    | 11    | 4    | 10    |
| Apple      | 5    | 11    | 4    | 10    |
| Orange     | 5    | 11    | 4    | 10    |
| Lemon      | 5    | 11    | 4    | 10    |

## Price for Plants (Rarity: Uncommon)

| Plant Type     | Buy  |       | Sell |       |
|----------------|------|-------|------|-------|
|                | Seed | Fruit | Seed | Fruit |
| Lotus          | 7    | 16    | 6    | 15    |
| Marigold       | 6    | 15    | 5    | 14    |
| Magnolia       | 5    | 11    | 4    | 10    |
| Myosotis       | 8    | 17    | 6    | 15    |
| Chrystalia     | 7    | 17    | 5    | 15    |
| Pumpkin        | 7    | 16    | 6    | 15    |
| Underbloom     | 7    | 15    | 6    | 14    |
| Water Lily     | 8    | 15    | 5    | 12    |
| Snowgrace      | 7    | 15    | 6    | 14    |
| Popcorn        | 7    | 15    | 6    | 14    |
| Eclipse Flower | 6    | 17    | 4    | 16    |

## Price for Plants (Rarity: Rare)

| Plant Type   | Buy  |       | Sell |       |
|--------------|------|-------|------|-------|
|              | Seed | Fruit | Seed | Fruit |
| Golden Apple | 9    | 21    | 8    | 19    |
| Hollowbloom  | 6    | 15    | 5    | 14    |
| Mandrake     | 10   | 21    | 8    | 18    |
| Frost Lily   | 10   | 21    | 9    | 20    |
| Banana       | 9    | 23    | 8    | 19    |
| Coconut      | 9    | 22    | 8    | 21    |
| Mysteria     | 9    | 22    | 8    | 21    |
| Nightshade   | 10   | 23    | 9    | 21    |
| Crystal Rose | 10   | 22    | 9    | 21    |
| Yarrow       | 9    | 23    | 8    | 19    |

## Price for Plants (Rarity: Special)

| Plant Type     | Buy  |       | Sell |       |
|----------------|------|-------|------|-------|
|                | Seed | Fruit | Seed | Fruit |
| Dragonroot     | 15   | 32    | 12   | 30    |
| Winter Rose    | 15   | 32    | 12   | 30    |
| Fleur-De-Lis   | 14   | 32    | 11   | 31    |
| Tropicus       | 14   | 32    | 11   | 31    |
| Mourning Nyx   | 14   | 34    | 11   | 31    |
| Blast Apple    | 16   | 33    | 11   | 30    |
| Pixie Plumeria | 16   | 33    | 13   | 31    |
| Fae Foxglove   | 15   | 32    | 11   | 31    |
| Druid's Lotus  | 15   | 33    | 13   | 31    |
| Splat Berry    | 18   | 40    | 16   | 35    |

## Appendix F: Biomancer's Almanac

### Lore

Title: The Genesis Tree

Category: Lore

Subtitle: The Source of All Life and Magic

Description: The great Genesis Tree, from where all magic in the world flows to and from. Nobody knows where it came from or how it grew into the towering plant it is today. Regardless, it is the sacred duty of the Biomancers to ensure the growth of the Genesis Tree continues to remain eternal.

Details:

- Mythology
- History

Title: The Mystic Magistrate

Category: Lore

Subtitle: Council of Supreme Biomancers

Description: Guardians of the Genesis Tree, overseers of all biomancers, and the most responsible magic users you can find in Empyrea. The Mystic Magistrate watches over all biomancers and provides them guidance when necessary. You can always rely on them to help whenever you're feeling lost.

Details:

- History
- Guidance

Title: Arcana

Category: Lore

Subtitle: Our Magical Currency

Description: Biomancers are serving a purpose for the Genesis Tree by cultivating Arcana from sunlight, other natural resources and their magical practice. The Arcana each biomancer earns strengthens the Genesis Tree, and in turn, our community. With Arcana, a biomancer becomes more skilled and gains advanced abilities.

Details:

- Mythology
- Arcana Skills

### People

Title: Magister Eden

Category: People

Subtitle: Magister of Gardens

Description: The most knowledgeable of the three Mystic Magistrate members, Magister Eden is a very kindhearted lady. Her knowledge of the plants that can be found in Empyrea is staggering. She enjoys helping new biomancers adjust to their positions and grants them an island to begin their life in Empyrea as well.

Details:

- Magistrate
- Biomancers
- Plants

Title: Magister Salesman

Category: People

Subtitle: Magister of Arcana

Description: The ever punctual Magister Salesman. Magister Salesman is in charge of sending islands to the Genesis Tree when they are deemed refined of all their magic. He said once before that what he loves most is the smiles on his customers' faces when they see their new island.

Details:

- Magistrate
- Merchant
- Island Upgrades

Title: Magister Shady

Category: People

Subtitle: Magister of Curses

Description: The Magister with perhaps the most mystery surrounding him out of them all. Magister Shady usually stays out of the way, watching Empyrea's activities from a distance. Every now and then he'll take interest in a biomancer and offer them some rather unique curses. For a price of course, much to Magister Eden's dismay.

Details:

- Magistrate
- Curses

Title: Mr. Sells Alat

Category: People

Subtitle: The Most Successful Sale-Cat

Description: The best merchant through all the skies of Empyrea. Perhaps even the greatest merchant in the entire world, or so he'll try to get you to believe. Mr. Salesalot is a longstanding member of Empyrea's community of biomancers. Though he isn't one himself, he sells all the things necessary to Biomancer life. Just don't question why he wears different hats at different stalls and you'll get along great.

Details:

- Merchant
- Market

## Places

Title: Emyrea

Category: Places

Subtitle: The Biomancer Skies

Description: Rather than a single designated area, Emyrea is the general name for the airspace belonging to the Biomancers. It stretches far beyond the horizon yet is never out of reach. Here, you've made your home and will continue to grow it as a member of the Emyrea community.

Details:

- The Skies
- Biomancers

Title: The Skyport

Category: Places

Subtitle: The Central Marketplace

Description: Where most of the activity in Emyrea occurs. The Skyport is where biomancers come to converse amongst each other, purchase goods from the market, and other important daily activities. If you ever need something, the Skyport is where you can find it.

Details:

- The Skies
- Market

## Item

Title: Seed

Category: Item

Subtitle: A small package for big things

Description: All seeds appear similar before growing into their own. One may pick up seed to try and identify it. Otherwise, it may have to be grown to identify the plant variety.

Details:

- Plant
- Growing
- Crafting

Title: Plant

Category: Item

Subtitle: A singular piece of life

Description: A grown plant from seed. Plants may be harvested for their fruit, and some plants will continue to grow, to re-fruit. Most plants need sunlight, but some (Dark Plants) need

moonlight. All plants need water and good soil quality to grow healthy. Healthy plants produce better harvested fruit quality.

Details:

- Plant
- Harvesting
- Crafting

Title: Stalk

Category: Item

Subtitle: Supportive structure

Description: A stalk is left over after a plant is harvested, but plants that re-fruit do not have left-over stalks. A stalk will continue to drain soil quality and water from a plot after harvesting. A stalk in a plot can be grafted to a fruit of another plant, creating a new, more rare, plant type.

Details:

- Plant
- Grafting
- Crafting

Title: Fruit

Category: Item

Subtitle: Flowering beauty and bounty

Description: A fruit or flower is the product of a harvested plant. Quality of a fruit translates to a higher value when selling at the market. A fruit in hand can be grafted to a stalk of another plant, creating a new, more rare, plant type.

Details:

- Plant
- Grafting
- Selling
- Crafting

Title: Fertilizer

Category: Item

Subtitle: Grounding element

Description: A necessary part of gardening, the product of the compost bin after 'cooking' plant material. It improves soil quality dramatically when placed in plots that have been uprooted.

Details:

- Compost
- Soil Quality
- Crafting

Title: Rock

Category: Item

Subtitle: Simple and solid

Description: A small rock. 'Funny thing is, sometimes it's there and sometimes it isn't.

Details:

- Crafting
- Secret life

Title: Gold Coin

Category: Item

Subtitle: All that glitters

Description: A single gold piece, and the basis for currency at the market and with island upgrades. Gold may be spent on goods at the market or with the traveling salesman, or you may bet gold on chicken races near the market. There are other means to acquire gold coins.

Details:

- Currency
- Market
- Island upgrades

Title: Gold Pouch

Category: Item

Subtitle: Hold the purse strings

Description: A gold pouch appears when many gold coins are dropped at once. Picking up a gold pouch immediately transfers all the gold within to your purse.

Details:

- Currency
- Market
- Island upgrades
- Consumable

Title: Package

Category: Item

Subtitle: Special delivery

Description: Packages hold many items, and when picking up a package, all the items within appear. If you purchase more items at the market than your inventory can hold, the market will deliver a package to your mailbox with those items inside.

Details:

- Mail
- Consumable

Title: Letter

Category: Item

Subtitle: Greetings and well wishes

Description: Letters are small personal messages to you from others. They often contain helpful ideas or reminders.

Details:

- Mail
- Consumable

Title: Coupon

Category: Item

Subtitle: Valuable discount

Description: A coupon can be held while purchasing at the market for a discount on that item. The amount of discount can be as high as 100%. Upon buying an item at the market, the coupon is exchanged for that item.

Details:

- Market
- Trade

Title: Scroll

Category: Item

Subtitle: Magical powerup

Description: A magic scroll contains a single spell charge, to be transferred directly to your spell book without having to craft. You read the scroll by picking it up. Upon reading the scroll, the charge is added to your spell book and the scroll disappears.

Details:

- Magic
- Spell Charge
- Consumable

Title: Potion

Category: Item

Subtitle: Counter cooldowns

Description: A magic potion clears spell cooldowns. Grey potions will clear one spell charge at random within your spell book. White potions will clear all spell charges in your spell book. You drink the potion by picking it up. Upon drinking the potion, it will disappear.

Details:

- Magic
- Spell Cooldown
- Consumable

## Farm

Title: Plots of Land

Category: Farm

Subtitle: Foundation for growth

Description: A square of ground that is able to hold a plant for growing, harvesting and grafting. Plots of land begin as wild, and must be worked to be tilled and ready for planting. Digging a hole in the plot uproots plants and allows fertilizer to be dropped in.

## Details:

- Planting
- Harvesting
- Grafting

Title: Working the Land

Category: Farm

Subtitle: Good work pays off

Description: Plots are able to be worked from wild to dirt, to tilled and planted, and after harvest, to be uprooted, so it can be cycled back to dirt and tilled again. Working the land improves the soil quality. Neglecting a plot with a plant or stalk in it will drain plot resources.

## Details:

- Tilling
- Digging
- Enriching

Title: Sun and Moon

Category: Farm

Subtitle: Light of day and night

Description: A key resource for plants is light. Most plants need sunlight to grow, but some (Dark Plants) need moonlight. While sunlight is available during each day, moonlight can be much dimmer during the new moon in the middle of each month. All light is dimmed with clouds.

## Details:

- Resource
- Plants
- Dark Plants
- Moon Phases

Title: Water

Category: Farm

Subtitle: Source of growth

Description: Plants need water to grow as well. When watering a plot, it will immediately be full, but begin to drain. A plot with a plant in it will drain water faster. Rain will automatically add to each plot's water resource.

## Details:

- Resource
- Plants
- Watering

Title: Soil

Category: Farm

Subtitle: Rich nutrients make rich farms

Description: Soil quality is improved by working the land or adding fertilizer to a plot that has been uprooted. Fertilizer improves the soil quality dramatically. Soil quality is drained over time when a plot has a growing plant in it.

Details:

- Resource
- Plants
- Fertilizer

Title: Planting

Category: Farm

Subtitle: Begin at the beginning

Description: Seeds can be planted manually by holding them and working the land when the plot is tilled. Seeds can also be planted by broadcasting, dropping them on tilled plots.

Details:

- Seed
- Plants
- Working the Land

Title: Harvesting

Category: Farm

Subtitle: What you sow

Description: Taking the fruit or flower of a fully grown plant produces a harvest. The quality of the harvested fruit is dependent on the conditions the plant grew under before harvest. To maximize harvest quality, biomancers care for the plant by maintaining its necessary resources, like sun, water and soil quality.

Details:

- Plants
- Fruit
- Stalk

Title: Transplanting

Category: Farm

Subtitle: Moving day

Description: By digging up a plot with a plant, you extract the plant and leave a hole in the plot. The uprooted plant can be moved to another plot with a hole, and dropped into the hole. The plant will continue to grow in its new plot. Biomancers also use this technique to fertilize a plot with a re-fruiting plant.

Details:

- Plants
- Digging
- Enriching

Title: Grafting

Category: Farm

Subtitle: More than the sum

Description: A biomancer may combine the stalk of one plant and the fruit of another to form a more rare plant variety, but the two must be compatible. To graft, the biomancer holds a fruit and approaches a stalk that is currently growing in a plot. The resulting new plant will then grow.

Details:

- Stalk
- Fruit

## Plants

Title: Corn

Category: Plants

Subtitle: Common Plant

Description: Looks pretty corny to me!

Details:

Title: Tomato

Category: Plants

Subtitle: Common Plant

Description: Very useful bad joke repellent.

Details:

Title: Carrot

Category: Plants

Subtitle: Common Plant

Description: Be careful, one of these could be a rabbit hole trap!

Details:

Title: Poppy

Category: Plants

Subtitle: Common Plant

Description: Despite Magister Eden's best efforts, beginner biomancers are constantly trying to use these for explosion spells.

Details:

Title: Rose

Category: Plants

Subtitle: Common Plant

Description: They're shockingly flame resistant and are often used in fire spells. For some reason, while burning, they give off a sweet scent.

Details:

Title: Sunflower

Category: Plants

Subtitle: Common Plant

Description: Filled with the might of the sun! For some reason, a few biomancers often call these Superflowers.

Details:

Title: Moonflower

Category: Plants

Subtitle: Common Plant

Description: Filled with the might of the moon! Which is technically the might of the sun, but don't bring that up in front of Magister Shady.

Details:

- Dark Plant

Title: Apple

Category: Plants

Subtitle: Common Plant

Description: Land dwellers eat these to ward off doctors. It's a strange tradition that Magisters have been studying for years.

Details:

- Re-fruit

Title: Orange

Category: Plants

Subtitle: Common Plant

Description: If you keep them in the sun too long, these plants are said to change into an entirely different fruit. This has been proven false, but some biomancers try it anyway.

Details:

- Re-fruit

Title: Lemon

Category: Plants

Subtitle: Common Plant

Description: This nefarious plant has the power to turn the face of any who eats it inside out. And shockingly, it's not even magical!

Details:

- Re-fruit

Title: Lotus

Category: Plants

Subtitle: Uncommon Plant

Description: A plant that blooms beautifully and glows with Arcana. An ancient biomancer brought this flower from another world.

Details:

Title: Marigold

Category: Plants

Subtitle: Uncommon Plant

Description: The gold flower of the celestial trio. It's been used in many get rich quick schemes because many amateur biomancers think it's made of actual gold.

Details:

Title: Magnolia

Category: Plants

Subtitle: Uncommon Plant

Description: The black flower of the celestial trio. Nobody really knows where it came from and everybody is too scared of learning the answer to find out.

Details:

- Dark Plant

Title: Myosotis

Category: Plants

Subtitle: Uncommon Plant

Description: The blue flower of the celestial trio. These are often used in mourning ceremonies to honor passing biomancers and dying lands.

Details:

- Dark Plant

Title: Chrystalia

Category: Plants

Subtitle: Uncommon Plant

Description: A sacred flower once found at the peak of a mountain so high it rose above the skies of Empyrea! Not really, a biomancer got bored and made a flower out of glass. But the other idea was much cooler, right?

Details:

Title: Pumpkin

Category: Plants

Subtitle: Uncommon Plant

Description: A big orange plant with a face on it. A lot of biomancers enjoy hollowing these out and using them as decorations. Some, however, swear the plants whisper to them in the dark.

Details:

- Dark Plant
- Re-fruit

Title: Underbloom

Category: Plants

Subtitle: Uncommon Plant

Description: Plants from a darker world. They look strikingly similar to sunflowers yet are far darker and only grow in the dark. Their use in curses has earned them a negative reputation.

Details:

- Dark Plant

Title: Water Lily

Category: Plants

Subtitle: Uncommon Plant

Description: Named after a magister of the past, these plants are easy to grow in water and make excellent dye. Growing these for a significant other has become a popular practice in Empyrea.

Details:

- Re-fruit

Title: Snowgrace

Category: Plants

Subtitle: Uncommon Plant

Description: These flowers look similar to snowflakes and grow in great amounts. Unlike snowflakes, every one of them looks the same. However, they all have different magic patterns, so they're still close enough.

Details:

- Dark Plant

Title: Popcorn

Category: Plants

Subtitle: Uncommon Plant

Description: Delicious popcorn on the cob. One brave biomancer from many years ago decided to magically create this tasty treat. Other biomancers worshipped them as a deity for a few days for their achievement.

Details:

- Grafted
- Corn
- Poppy

Title: Eclipse Flower

Category: Plants

Subtitle: Uncommon Plant

Description: Flowers of night and day, glowing brightly like an eclipse. Each flower reflects a different type of eclipse depending on the time of day.

## Details:

- Grafted
- Sunflower
- Moonflower

Title: Golden Apple

Category: Plants

Subtitle: Rare Plant

Description: An apple that gleams as if it were made of gold. And technically, they are! These apples contain real gold in them, yet are still edible and taste delicious. Quite the expensive snack.

## Details:

- Grafted
- Apple
- Marigold

Title: Hollowbloom

Category: Plants

Subtitle: Rare Plant

Description: These flowers are completely hollow and dark inside. Yet, when touched, they feel soft and almost squishy. This is because the shadows inside the flower's hollow spaces become tangible. This has baffled biomancers for ages.

## Details:

- Dark Plant
- Grafted
- Underbloom
- Pumpkin

Title: Mandrake

Category: Plants

Subtitle: Rare Plant

Description: A legendary plant of old. Well, not quite. These plants were called mystical for looking like humans and all sorts of stories began circulating around them. But they aren't actually that magical, just a bit hard to find.

## Details:

Title: Frost Lily

Category: Plants

Subtitle: Rare Plant

Description: An evolved species of the Lily flower line that's cold as ice. Touching one with your tongue will cause it to stick, so be careful when messing with one. These plants glimmer brightly in the light.

## Details:

- Re-fruit
- Grafted
- Water Lily
- Snowgrace

Title: Banana

Category: Plants

Subtitle: Rare Plant

Description: A classic and tasty treat that many biomancers love to enjoy. Bananas are very healthy and recommended to be eaten as a morning snack. But be careful to not let them become cursed, or they'll wreck havoc on your stomach.

Details:

- Re-fruit

Title: Coconut

Category: Plants

Subtitle: Rare Plant

Description: An incredibly hard fruit that contains tons of magic inside. Biomancers have discovered that putting more magic into one and throwing it can cause it to violently explode. Perfect for pranks. (Note from Magister Eden. "Do NOT use these as a prank!")

Details:

- Re-fruit

Title: Mysteria

Category: Plants

Subtitle: Rare Plant

Description: The mysterious Mysteria, which come in a multitude of mesmerizing and mystical colors so magical they might make many marvel at their majesty.

Details:

- Re-fruit
- Grafted
- Marigold
- Magnolia or Myosotis

Title: Nightshade

Category: Plants

Subtitle: Rare Plant

Description: Dangerous and magical plants that contain a magic poison. Anybody who ingests one is unable to use magic for a while, so it's recommended that only experienced biomancers handle them. Thankfully, most biomancers are immune to the poison thanks to the Genesis Tree's blessings.

Details:

- Dark Plant

Title: Crystal Rose

Category: Plants

Subtitle: Rare Plant

Description: A rose that has come into contact with a certain type of magic. It is still being researched what this special magic is, but its effect on the rose is evident. The entire inner structure of the rose crystalizes and is yet still able to grow as a plant. This special magic can be found in Chrystalia plants, so biomancers use the two for research.

Details:

- Grafted
- Rose
- Chrystalia

Title: Yarrow

Category: Plants

Subtitle: Rare Plant

Description: An intriguing plant, not for its appearance but because of its special magic. Yarrow plants are said to be able to heal anything with their special magic. So far this has proven true, but Magister Shady has taken on the task of finding this plant's limits.

Details:

Title: Dragonroot

Category: Plants

Subtitle: Special Plant

Description: This root is said to be born at the same time as a dragon. In truth, they just look like a dragon curled up in sleep, but the story has become so popular that the plant is celebrated on Dragon Day. Maybe that itself is a form of magic.

Details:

- Grafted
- Mandrake
- Any rare fruit

Title: Winter Rose

Category: Plants

Subtitle: Special Plant

Description: Containing the beauty and mysticism of winter itself, these special roses are the masterpiece of the late Magister Lily. She once said that they are a tribute to the comfort one can find in the cold.

Details:

- Dark Plant
- Re-fruit
- Grafted
- Frost Lily, Crystal Rose

Title: Fleur-De-Lis

Category: Plants

Subtitle: Special Plant

Description: A rather strange plant that was once used as the symbol of an ancient nation. Many biomancers theorize that it was created by the biomancers of that era, so they may forever be immortalized in the world.

Details:

Title: Tropicus

Category: Plants

Subtitle: Special Plant

Description: A favorite for many biomancers, this special fruit is used as edible decorations in the summer for their incredible resilience to heat. There was once an overflow of these in the market because everybody wanted to grow them. Now, they are actually quite rare to find.

Details:

- Re-fruit
- Grafted
- Orange, Banana
- Coconut, Lemon

Title: Mourning Nyx

Category: Plants

Subtitle: Special Plant

Description: Despite its name, the Mourning Nyx does not inherently cause sorrow or demise. Rather, it's an incredible ingredient in making curses, so the curses it is used to make are responsible for the tears of hundreds of biomancers.

Details:

- Dark Plant
- Grafted
- Eclipse Flower
- Hollowbloom

Title: Blast Apple

Category: Plants

Subtitle: Special Plant

Description: An explosive apple. That's pretty much it. Handle with absolute care!

Details:

- Re-fruit
- Grafted
- Popcorn
- Golden Apple

Title: Pixie Plumeria

Category: Plants

Subtitle: Special Plant

Description: These plants are called as such because they are so popular among the pixie community. They are used for almost everything. Decoration, consumption, medicine, and even magic conduction. A plant of all trades indeed.

Details:

Title: Fae Foxglove

Category: Plants

Subtitle: Special Plant

Description: A royal plant that was first cultivated by the royal fae of old. They don't actually do much, but are very nice to look at and can be used in some spells as ingredients.

Details:

- Dark Plant

Title: Druid's Lotus

Category: Plants

Subtitle: Special Plant

Description: These plants are very popular among biomancers because they can be grown in almost any conditions. They are said to contain the resilience of the forest itself.

Details:

- Re-fruit
- Grafted
- Mysteria
- Lotus

Title: Splat Berry

Category: Plants

Subtitle: Special Plant

Description: Younger biomancers used to love throwing these around because they burst and spread a very thin layer of magical juice. However, this juice is incredibly sticky, so it's a pain to get off of anything without magic.

Details:

- Re-fruit
- Grafted
- Tomato
- Pumpkin

Title: Jazzmyne

Category: Plants

Subtitle: Unique Plant

Description: These plants are unexpected, but unstoppable. They just keep surprising us.

Details:

- Re-fruit
- Blue Notes

Title: Mashroom

Category: Plants

Subtitle: Unique Plant

Description: This grand fungus springs from the remains of an old stump to dominate the forest nights.

Details:

- Dark Plant
- King of the Fungi

Title: Herbal Pert

Category: Plants

Subtitle: Unique Plant

Description: This one-of-a-kind plant has a way of making us move.

Details:

- Trumpet Flower

Title: Firefly Trap

Category: Plants

Subtitle: Unique Plant

Description: Inviting and open until it is not. This plant harvests more than just the flower.

Details:

- Dark Plant
- Re-fruit
- Fairy

Title: Betting Hedge

Category: Plants

Subtitle: Unique Plant

Description: This plant is timeless and mesmerizing. It may be difficult to walk away from it.

Details:

- Re-fruit
- Black
- Red

Title: Bawn Sigh

Category: Plants

Subtitle: Unique Plant

Description: There is a subtle punishment about this plant. Guard against it.

Details:

- Small
- Wall

Title: Willow Wisp

Category: Plants

Subtitle: Unique Plant

Description: It comes once in a blue moon, and when you see it, you know it was special.

Details:

- Dark Plant
- Glow-in-the-dark

Title: Walking Stick

Category: Plants

Subtitle: Unique Plant

Description: This plant grows a face and eyes that seem to follow you. A wise biomancer once enchanted their staff to become this form plant. Its magical fruit is very valuable.

Details:

- Re-fruit
- Scroll

Title: Genesis Sapling

Category: Plants

Subtitle: Unique Plant

Description: Renewal is a part of life, and so it is with the Genesis Tree. If you are lucky enough to witness the birth of a Genesis Sapling, consider yourself blessed.

Details:

- Sprout

## Magic

Title: Crafting Magic Spells

Category: Magic

Subtitle: Biomancer skills

Description: A biomancer uses magic to enrich the world, from their farm to the community around them. Every biomancer uses their spell library and crafting table, found in their wizard tower. To craft magic spells involves collection of ingredients and careful thinking.

Details:

- Magic Spells
- Crafting

Title: The Grimoire

Category: Magic

Subtitle: The book of knowledge

Description: When biomancers need to craft new spells, they consult the Grimoire, their collection of spell recipes. As one gains experience, the Grimoire will fill with new recipes. One needs to follow the recipes in order to craft its spell charge.

Details:

- Magic Spells
- Crafting

Title: Spell Recipes

Category: Magic

Subtitle: Quality ingredients

Description: Each spell requires special ingredients, carefully selected and brought to the crafting table. Specific types of ingredients are listed in each spell recipe. Once a biomancer has the ingredients in hand, the spell may be crafted using the Magic Cauldron.

Details:

- Crafting
- Ingredients

Title: The Magic Cauldron

Category: Magic

Subtitle: Bubble, bubble

Description: Ingredients for spells must be combined in unique ways for the spell charge to be created. The Magic Cauldron has the necessary heat and magic to place all the ingredients in the order required. Once all ingredients are in, a spell charge can be crafted.

Details:

- Crafting
- Ingredients
- Spell Charges

Title: The Magic Book

Category: Magic

Subtitle: Personal spell storage

Description: Every biomancer carries with them a Magic Book, a collection of the spell charges they have crafted. Every charge in the spell book represents a single magical cast the biomancer can invoke as long as that spell type is not on cooldown.

Details:

- Magic Casting
- Spell Charges

Title: Spell Charges

Category: Magic

Subtitle: One can never have too many

Description: The crafting of magic creates a spell charge that is stored in the biomancer's Magic Book. The biomancer may cast the spell at any time. Once cast, the charge is spent and that spell type will be on cooldown.

Details:

- Magic Casting
- Spell Cooldowns
- Scrolls

Title: Casting Magic Spells

Category: Magic

Subtitle: Abracadabra and hocus pocus

Description: When a biomancer opens their Magic Book, and they read a spell charge from it, they are able to cast the spell out into the world. Their ability to direct the spell cast to any point means they can control what plot, plant, person or object is affected by the spell.

Details:

- Spell Book
- Spell Charges
- Spell Cooldowns

Title: Spell Casts

Category: Magic

Subtitle: Magical life

Description: After a spell is cast, it lives in the world on its own. Some spells are instant, while others last a very long time. Some spells are even permanent. When a spell cast expires, its effect is undone.

Details:

- Magic Casting

Title: Spell Cooldowns

Category: Magic

Subtitle: Gather your strength

Description: After a biomancer has cast a spell of a particular type, it is unavailable for a time, while the biomancer regains their strength. This cooldown time can be different for each spell. A cooldown can be eliminated with a potion.

Details:

- Magic Casting
- Spell Book
- Potions

Title: Plot Spells

Category: Magic

Subtitle: Enchanted ground

Description: Spells that affect plots are able to increase soil quality, to keep the ground saturated with water, or even to shine sunlight upon it through a portal. Some spells are able to work the land, harvest or uproot plots.

Details:

- Magic Spells
- Magic Casting

Title: Plant Spells

Category: Magic

Subtitle: Charmed life

Description: Plant magic includes the ability to force plants to grow faster or slower, to cause their harvest quality to be greater or lesser, or even to cause a plant to produce more fruit. Some spells can force plants to re-fruit or guarantee seeds will also drop with harvest.

Details:

- Magic Spells
- Magic Casting

Title: People Spells

Category: Magic

Subtitle: There's something about you

Description: Care must be taken when casting spells on others. Typically, a spell designed to affect people is used by the biomancer on themselves. These spells include the ability to change appearance, leave a color trail or shine a light overhead.

Details:

- Magic Spells
- Magic Casting

Title: Place Spells

Category: Magic

Subtitle: Sacred structure

Description: Rare magic can affect larger structures, and often this comes in the form of cosmetic decoration for more festive times. These spells include displays in the sky and changing the color of a biomancer's tower.

Details:

- Magic Spells
- Magic Casting

Title: Item Spells

Category: Magic

Subtitle: Transformation and evolution

Description: A biomancer will commonly use magic to affect items that need attention. Some spells can gather plant material and deposit it into the compost bin, or gather harvest items and transport them to market.

Details:

- Magic Spells
- Magic Casting

Title: Active Magic Skills

Category: Magic

Subtitle: Biomancer cantrips

Description: Some advanced Arcana skills include active magic. These act like spells in a biomancer's Magic Book, but their charges are never depleted and they have no cooldown time.

Details:

- Arcana Skills
- Magic Casting

## Event

Title: Morning

Category: Event

Subtitle: Rise and shine

Description: When the sun rises on the horizon, the start of a new day is at hand. The morning time may include special events for those keen enough to listen. It is the time when one may have a sense that a wild plant is growing nearby.

Details:

- Dawn

Title: Noon

Category: Event

Subtitle: Heat of the day

Description: Most biomancers find this time of day to be the most productive. It is also the time of day when the traveling salesman pays a visit, but only on the first of each month.

Details:

- Day

Title: Mail Delivery

Category: Event

Subtitle: Neither snow, nor rain,...

Description: A biomancer's mailbox springs to life at this time of day, and you may be lucky enough to receive well wishes and greetings in the form of letters or even care packages.

Remember to check your mailbox every day.

Details:

- Package
- Letter

Title: Evening

Category: Event

Subtitle: Pretty sunsets

Description: As the sun goes down and day turns to night, one may be lucky enough to get a visit to their farm from the seed fairy. At this time of day, it is common for winds to blow.

Details:

- Dusk

Title: Midnight

Category: Event

Subtitle: The dark of night

Description: In the middle of the night, while no one is watching, some things move that normally do not move. Also, there is a rare chance of a farm visit from the gold fairy. The market will also change their daily specials at the stroke of midnight.

Details:

- Night

Title: Daily

Category: Event

Subtitle: Every day is a new beginning

Description: To make the most of each day, a biomancer surveys the bounty of the land, takes note of the opportunities at the market, and follows their intuition. A biomancer finds their way each day by deciding to start and not deciding to stop.

Details:

- Market
- Visitors

Title: Weather

Category: Event

Subtitle: Unpredictable

Description: Some days and nights are clear and calm. Others are filled with blustering winds or covered with dark clouds and sheets of rain. Some biomancers enjoy the variable weather, even when it is dramatic. Others prefer to find activities indoors, like at the chicken races, crafting magic or just cozying up to a warm fireplace.

Details:

- Wind
- Clouds
- Rain

Title: New Moon

Category: Event

Subtitle: Extra dark

Description: The moon can be full and bright, lighting up the night sky and shining lots of moonlight on dark plants. But, in the middle of each month, the moon is covered in shadow and shines almost no moonlight at all. Dark plants grow very slowly during the new moon.

Details:

- Market
- Moon Phases
- Dark Plant

Title: Monthly

Category: Event

Subtitle: Mark your calendar

Description: Each month brings a full moon, a new moon and a fresh new set of days to work with. In a single month, a biomancer can get a lot done, and amass quite a lot of gold. On the first day of each month, the traveling salesman comes to visit at noon.

Details:

- Island Upgrades
- Full Moon
- Dark Plant

Title: Seasons

Category: Event

Subtitle: Turn, turn, turn

Description: Some plants grow better at night, or during the day. Some plants grow better during particular seasons. As the seasons change, the weather may get warmer or cooler, and your plants will change as well. The market is likely to offer specials based on season.

Details:

- Plants
- Market

## Secret

Title: No Stone Unturned

Category: Secret

Subtitle: The secret life of rocks

Description: This rock is just a rock. Or, is it? Wasn't this rock over there? Wait, there's another rock. Where did that other rock go? Maybe this rock will make a good pet.

Details:

- Rock
- Midnight

Title: Poor Biomancer

Category: Secret

Subtitle: A small helping hand

Description: Accidents happen. It's okay, and we can grow from setbacks as easily as we grow any other time. When one needs help, they need only look to those who enjoy helping others.

Details:

- Fairy
- Gold

Title: Uniquely Yours

Category: Secret

Subtitle: More rare than rare

Description: The unique mysteries in life are endless. Wonder springs everywhere, if one simply looks for it. Enjoy the rarest of gifts, including that of enjoyment itself.

Details:

- Plants
- Unique

Title: Pumpkin Eater

Category: Secret

Subtitle: The secret of cheats

Description: Tsk, tsk, tsk.

Details:

- Cheat
- Codes

## Appendix G: Tax System

Taxes are due at the end of each month game time, players will receive notice through the mail box every week (like payment due soon...). Magister Taxes is the NPC who pops up on the player's island to ask for taxes. The Players must pay taxes to keep their farm running and unlock new features. Taxes will be charged in percentage based on how much the player earned that month.

Late Payment will cause an additional 20% penalty

Missed Payment will lost their island and will be refuse to BUY anything from Mr. Sells Alat's store