

# The Kalidax Farming Program

Game Design Document - Version 1.0.0

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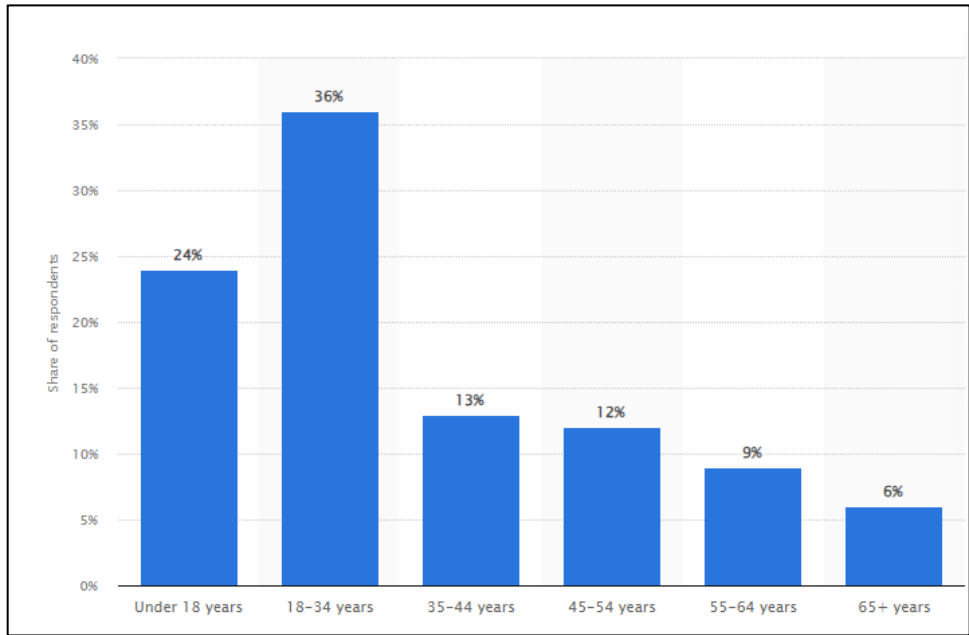
<17 / 10 / 2023>

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## Revision History

Revision #	Author(s)	MM/DD/YYYY	Revision Details
1	Ashton, Brady, Emily, Lucas, Sarah, Sebastian	10/10/2023	<ul style="list-style-type: none"> <li>Document was created with headers for sections 0.0. to 9.0.</li> <li>Started gathering reference material.</li> <li>Started populating project overview fields.</li> </ul>
2	Ashton, Brady, Emily, Lucas, Sarah, Sebastian	10/17/2023	<ul style="list-style-type: none"> <li>Deleted 3.7. Puzzle heading</li> <li>Wrote the 3.4 "Farming" section.</li> <li>Wrote the 3.4.4 Gene Splicing Section</li> <li>Added Several Story Sections</li> <li>Added Market Analysis [American Youth]</li> <li>Added Sales Comparison. [DtD, SdV]</li> <li>Added Personas [John Plantar, Rieley]</li> <li>Added and Wrote 3.8, 3.9, 3.10, 3.11[Brady]</li> </ul>
3	Sebastian	11/4/2023	<ul style="list-style-type: none"> <li>Added 3.2.1 heading for movement.</li> <li>Designed inventory system. (3.2.2)</li> <li>Added and wrote "Day Cycles" 3.8.1, and 3.8.2</li> </ul>
4	Sebastian	11/5/2023	<ul style="list-style-type: none"> <li>Added 3.2.3 and designed placing objects.</li> <li>"Day Cycles" is now 3.7 instead of 3.8. Reason: Day cycles gives context to the economics system, so I thought it important to explain first.</li> <li>Edited the economics system to make it shorter and define the rules.</li> </ul>
5	Lucas	11/5/2023	<ul style="list-style-type: none"> <li>Formatted media references into tables. Added images to all sections with captions.</li> <li>Added dates to the development time.</li> <li>Changed style of the Heading 1, 2, and 3</li> </ul>

			<ul style="list-style-type: none"> <li>• Added links to other parts of the document to make it searchable</li> <li>• Completed section 6.0</li> </ul>
<b>6</b>	Ashton	11/5/2023	<ul style="list-style-type: none"> <li>• Generated Creature list for Ground, Air and Water Types</li> <li>• Generated Item list for Ground, Air and Water Types</li> </ul>
<b>7</b>	Sarah	11/5/2023	<ul style="list-style-type: none"> <li>• Filled out 4.1 Game Elements and subsequent headings, excluding 4.1.5 Upgrades</li> <li>• Described how different game elements will change as the game progresses</li> </ul>
<b>8</b>	Brady	11/6/2023	<ul style="list-style-type: none"> <li>• Filled out the section on upgrades</li> <li>• Explained how upgrades are purchased and when they can be purchased</li> <li>• Listed a variety of upgrades the player could buy throughout the game</li> </ul>
<b>9</b>	Emily	11/6/2023	<ul style="list-style-type: none"> <li>• Filled in section 1.5 Art Direction with guidelines for asset production for environmental and character assets</li> </ul>
<b>10</b>	Sebastian	01/20/2024	<ul style="list-style-type: none"> <li>• Added 3.7.3 “Daily Quota” describing how our quota system will work.</li> <li>• Added Current Character Mockups in our “Art Direction Section”</li> </ul>
<b>11</b>	Sebastian	01/21/2024	<ul style="list-style-type: none"> <li>• Put in the new character that we are moving forward with</li> </ul>
<b>12</b>	Emily	01/25/2024	<ul style="list-style-type: none"> <li>• Updated sprite sizes in 1.5 Art Direction from 256 x 256 to 512 x 512</li> </ul>

## 0.0. Media References

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### 0.1. Media References

#### 0.1.1. Stardew Valley

We are taking inspiration from the following systems from Stardew valley. 1: The selling system: when the player sells items, they will not see their pay until they End the Day. 2: We want to reference the farming system as well. We want players to be able to till the ground and create more plant-able soil for their seeds.





### 0.1.2. Platypus Evolution

The main mechanic of Platypus Evolution is merging 2 of the same tier platypuses to form a new, more bizarre version. We will be using a merging mechanic like this for the Kadilax Farming Program where players can merge 2 aliens with the same genes to form a new, more grotesque version. [See section 3.10 Creature Evolution](#) for more information on the mechanic.



Figure 1: Platypus Evolution for Mobile. New Platypuses become more and more mutated.

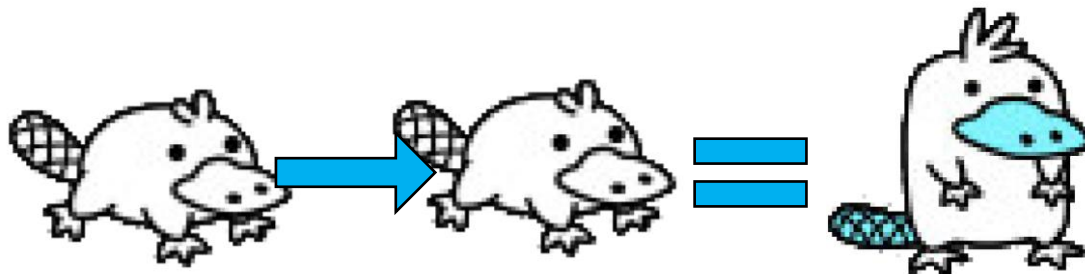


Figure 2: A demonstration of the merging mechanic in Platypus Evolution. Moving 1 platypus on top of another of the same kind creates a more mutated Platypus.

## 0.2. Visual References

### 0.2.1. Environment



Figure 3: The environment will start off on a lush planet, with a small farm as referenced from Stardew Valley.



Figure 4: The colour palette of the beginning environment will be vibrant.



Figure 5: As the game progresses, the player will turn the environment into a more mechanical wasteland, like in Factorio.



Figure 6: The original colour palette of the environment will be transitioned to a more desolate and barren colour palette.



Figure 7: The world's resources become depleted and turns monochromatic with a brown colour palette.

### 0.2.2. Setting



Figure 8: Game will take place in another planet in space as the farming company sends you there for business.



Figure 9: The player will be alone in this open, desolate environment. As the game progresses, we will see more technology introduced to the land.

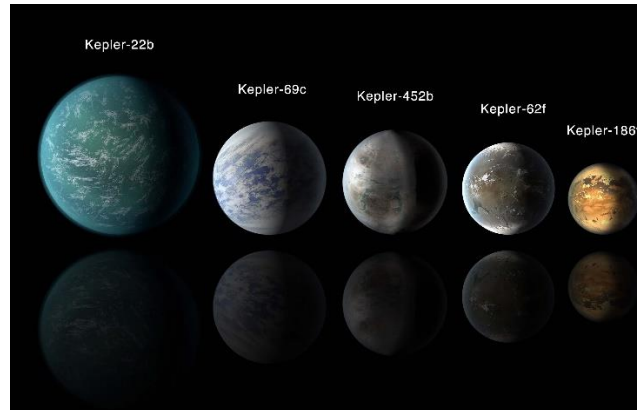


Figure 10: The game will be replayable, and hint to the player with each playthrough they are working on a different planet.

### 0.2.3. Characters



Figure 11: The aliens will start out cute and bug-like, like the Hollow Knight characters below.



Figure 12: The more evolved a creature is, the more grotesque it will look.



Figure 13: My Singing Monsters for designs for the alien plant life before the human tampering



Figure 14: As the player combines their genes more, they will become more grotesque, like some of the bosses in Hollow Knight.

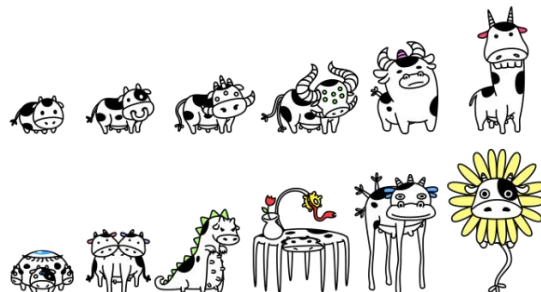


Figure 15: With each alien evolution, the alien will be more mutated than the last.

### 0.2.4. Features



Figure 16: A gene splicing machine the players will use to merge Alien types together and create newly modified ones.



Figure 17: Creature evolution will be a large feature of our experience as it ties to the core gameplay loop of creating better creatures, making more profits when selling, and putting it back into the farm.

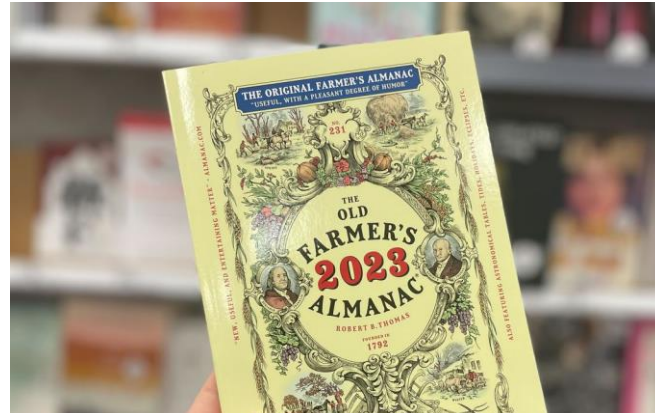


Figure 18: An in-game almanac will be used to display information regarding new alien mutations and plants.



Figure 19: An end of day rewards system will be present to give the player their daily earnings like Stardew Valley.



Figure 20: Our game will make use of purchasable upgrades to hasten farming, but they might have negative side effects,

### 0.2.5. Themes



Figure 21: The player will be exploiting the flourishing world's resources to expand the company.



Figure 22: After the player harvests the planet's resources, it becomes barren, obsolete, and emphasizes the theme of exploitation.



Figure 23: Juxtaposition between the plant life found in game, and the technology introduced with the Farming Program. Enhances the theme of not belonging in this environment.



Figure 24: There is an ethical dilemma the player experiences where they can either farm sustainably, or optimize their farms and consume many resources (which is much easier than sustainability but harms the environment).

# 1.0 Project Overview

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## 1.1 Project Vision

The Kalidax Farming Program is a game that is made to highlight worker exploitation and wealth inequality in a satirical space themed adventure.

### 1.1.1 Core Game Concepts

- Gene Splicing Aliens
- Farming Game
- Changing World
- Character and Farm Upgrades

## 1.2 Game Genre

- Serious Game
- Political
- Farming/Tycoon game

## 1.3 Play Time

- 1 hour - Target Time

## 1.4 Target Platforms

- Itch.io
- Steam

### 1.4.1 Game Engine

Unity – Editor Version 2022 LTS

### 1.4.2 System (Hardware) Requirements

*Minimum System settings*

- **Operating System:** Windows 7/8/10 or macOS 10.11+
- **Processor:** Intel Core i3 or equivalent AMD processor
- **Memory:** 4 GB RAM
- **Graphics:** Integrated graphics with at least 1GB VRAM (e.g., Intel HD Graphics 4000, AMD Radeon R5)
- **DirectX:** Version 11
- **Storage:** 2 GB available space

### 1.4.3 Game Format

The game will be an executable application for the Windows 7 - 11 operating systems.

## 1.5 Art Direction

### 1.5.1 Software Used

- Krita
- Adobe Photoshop

### 1.5.2 Guidelines

Assets will be produced in accordance with the artistic guidelines in this document.

All GUI assets will be produced in a PSD or Krita document at a minimum of 3840 x 2160 pixels, 300 ppi.

All environmental assets will be produced in a PSD or Krita document at a minimum of 3840 x 2160 pixels, 300 ppi. Tiles, structures, and placeable objects are 512 x 512 pixels.

All character assets will be produced in a PSD or Krita document at a minimum of 3840 x 2160 pixels, 300 ppi. Character and alien sprites are 512 x 512 pixels.

Alien sprites are to be drawn with body parts on separate layers to develop modularity.

Separate animation frames are to be drawn on separate layers.

### 1.5.3 Environment

Environmental elements include tiles, placed objects, decorations, and structures found in the game overworld. I. e. Walkable surfaces like grass, dirt, and stone; structures such as the gene pod, shelter pod, and provisions drone; grass and rocks.

All environmental elements will be drawn with flat, solid colours. No gradients are to be used. Colours will be selected from a determined palette. Elements may have highlights and shadows which are to be cel shaded.

Structures and interactable elements should be lined in dark blue. Tiles are not lined.

### 1.5.4 Characters

Character elements include player sprites and aliens. Unspliced aliens should appear non-threatening and unassuming. As aliens are mutated, they should appear more grotesque, sharper and less stable in appearance.

All character elements will be drawn with flat, solid colours. No gradients are to be used. Colours will be selected from a determined palette. Elements will have highlights and shadows which are to be cel shaded.

The character should be lined in dark grey. Aliens should be lined in dark purple.



1.5.4.1 Player Character Concept Art



Player Character is an Astronaut with Crutches. We are moving forward with the red variety but are open to the idea.



Our little man ^^

## 1.6 Project Scope

### 1.6.1 Team Size

Team of 6 developers.

- Ashton**
- Narrative Designer
  - Jr. Level Designer
  - Fill-in Generalist

- Brady**
- Game Designer
  - Artist
  - Sound Designer

- Emily**
- Project Manager
  - Game Designer
  - 2D Artist

- Lucas**
- Programmer
  - Artist

- Sarah**
- Level Designer
  - Jr. Narrative Designer

- Sebastian**
- Team Lead
  - Programmer
  - Systems Designer

### 1.6.2 Development Time (DD/MM/YY)

**Paper Prototype** 05/10/2023

**Proof of Concept** 12/12/2023

**Pre-Alpha** 01/03/2024

**Alpha** 31/03/2024

**Beta** 14/04/2024

**Gold Master** 31/08/2024

## 1.7 Market Analysis

### 1.7.1. Target demographic

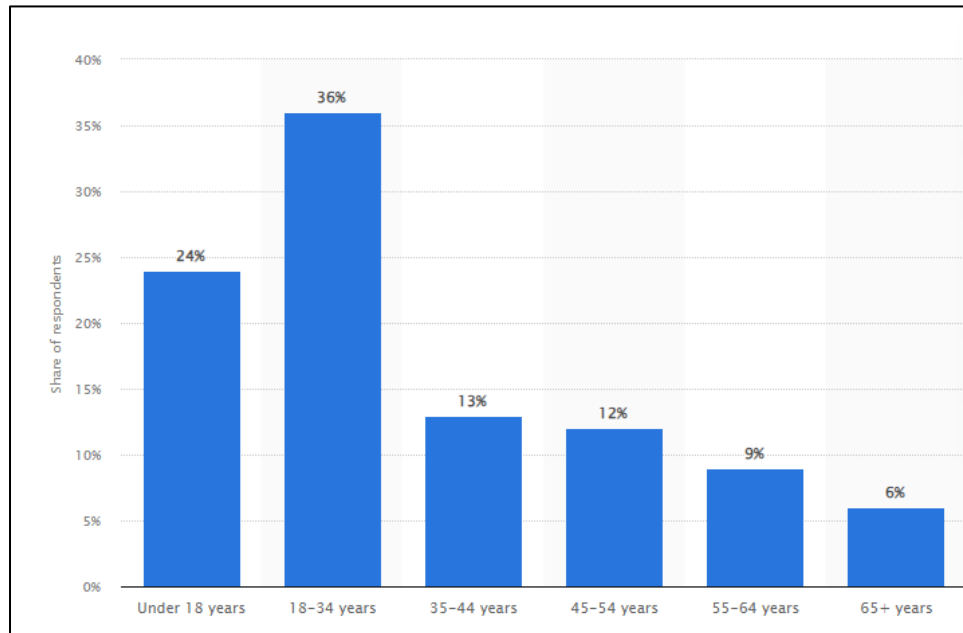


Figure 25: USA GAMER DEMOGRAPHIC Credit: <https://www.statista.com/statistics/189582/age-of-us-video-game-players/>

Includes mostly users ranging from sub-18 to 34, in **America** as it would additionally be our largest potential demographic for sales. We specifically target individuals that are passionate about farming, agriculture, and space. We aim to create an immersive farming experience and bring an appreciation to the farming industry while balancing the message that capitalism and exploitation lead to all hands suffering. Because our target audience is young, we want to make sure that we additionally shed light on challenges faced by farmers while emphasizing the importance of sustainable practices and ethical considerations and uphold our educational game first standpoint.

### 1.7.2. Sales Comparison

Two games that immediately come to mind as competition are Stardew Valley and Dave the Diver. Stardew Valley is renowned for its exceptional sales, having sold over 10 million copies worldwide since its release in 2016. In contrast, Dave the Diver has garnered a strong player base, boasting over 500,000 copies sold within the first year of its launch.

*Stardew Valley:*



Figure 26: Lifetime concurrent players on steam for Stardew Valley from SteamDB

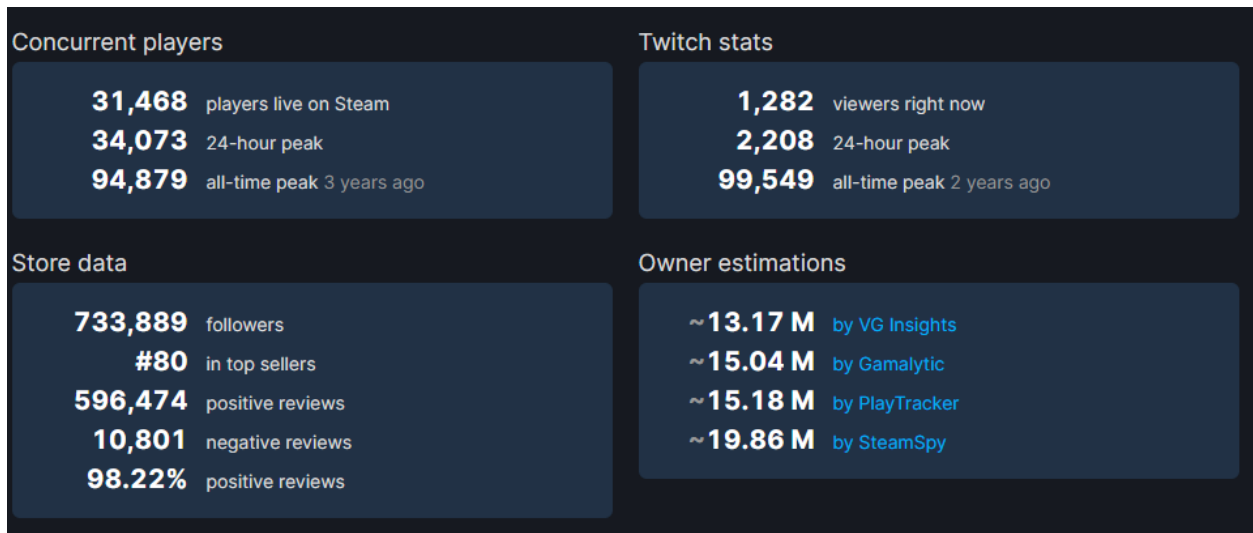


Figure 27: Sales data for Stardew retrieved from Steam DB

The Kalidax Farming Program  
Team Barracuda the 3<sup>rd</sup>

Dave the Diver:

Despite not reaching the sales numbers of some major titles, Dave the Diver has proven to be a success, accumulating an estimated 500,000 sales within its first year after launch. Unlike some of its competitors, the game didn't experience a sudden surge in player numbers upon release.

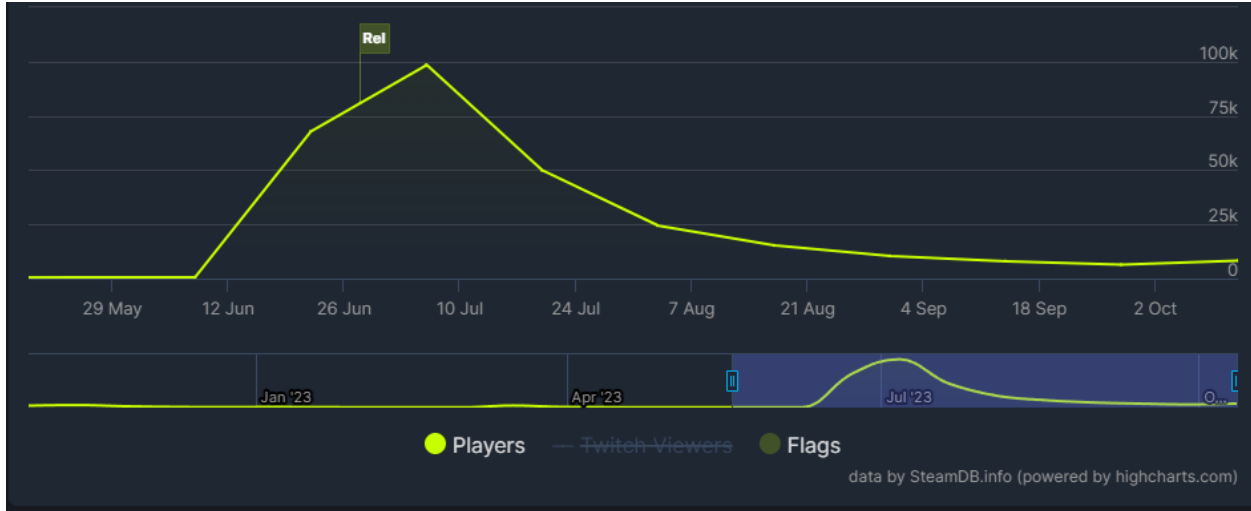


Figure 28: Lifetime concurrent players on steam for Dave the Diver from SteamDB



Figure 29: Sales data for Dave the Diver retrieved from Steam DB

### 1.7.3. Personas

#### Persona 1:



**Bio**

“My name is John, I grew up in Zurich, Ontario. I graduated university in Agricultural demand with a minor in political science and decided to pursue a career as a farmer. As a kid I absolutely loved playing videogames and I never lost my personal interest in it. Now I just want to kick back, relax, and play some games after a long day of work.”

Name	Profession	Age
John Plantar	Farmer	28
Interests	Behaviors	Powers
<ul style="list-style-type: none"> <li>• Video Games</li> <li>• Politics</li> <li>• Farming</li> <li>• Workers’ Rights</li> <li>• Wealth Distribution</li> </ul>	<ul style="list-style-type: none"> <li>• Plows his farm every season.</li> <li>• Loves Unionization</li> <li>• Takes loving care of his crops and animals.</li> </ul>	<ul style="list-style-type: none"> <li>• Money</li> <li>• Influencing Farming Market</li> <li>• Small town influence</li> <li>• Growing crops</li> <li>• Raising Animals</li> </ul>
Needs	Values	Aspirations
<ul style="list-style-type: none"> <li>• Rest time after work</li> </ul>	<ul style="list-style-type: none"> <li>• Investment in the future</li> <li>• Sustainability</li> </ul>	<ul style="list-style-type: none"> <li>• Grow a grand and sustainable farm</li> </ul>

**Persona 2:**



**Bio**

“Sup, I’m Riley! I’m from New York City, and I’m in 11<sup>th</sup> grade. I’m really into my debate team, and my favourite topic to debate is workers rights and sustainability. I think we all deserve to live in a world where we’re not defined by our wages. I like playing games after school, especially games with a message.”

Name	Profession	Age
Riley Moore	Student	17

Interests	Behaviours	Powers
<ul style="list-style-type: none"> <li>• Debate club</li> <li>• School</li> <li>• Fighting for a sustainable future</li> <li>• Video games</li> </ul>	<ul style="list-style-type: none"> <li>• Left wing</li> <li>• 7/11 worker</li> </ul>	<ul style="list-style-type: none"> <li>• Free thinker</li> <li>• Social network</li> </ul>

Needs	Values	Aspirations
<ul style="list-style-type: none"> <li>• Financial Security</li> <li>• Safe working environment</li> </ul>	<ul style="list-style-type: none"> <li>• Worker’s rights</li> <li>• Human rights</li> <li>• Communism</li> </ul>	<ul style="list-style-type: none"> <li>• Living in a sustainable world</li> <li>• Getting a well-paying job</li> </ul>

### 1.7.4 Influences

## 1.8 Project Risks

One risk for this project is the Gene-Splicing mechanic. Should this mechanic not be programmed in a scalable way, adding new creatures and new features will take a significantly longer time, drastically affecting the scope of the project. Should this mechanic not be sufficiently planned out, we could also find ourselves in a position where the game logic becomes too complicated, and the scripts required to make it function become unreadable. This would cause several issues when debugging any scripts involving this logic.

This game will be available for free on all the platforms developed for. *See the [Targeted Platforms](#) section for more info on where we plan to release our game.*

## 1.10 User Documentation

The user will be able to access our documentation through a “How to Play” menu in our game’s title screen. This menu will be a total recall of all the game’s rules, the goal of the player, controls, and any information on the mechanics available. *For more information of the game’s mechanics, refer to the [3.0 Game Mechanics](#) section.* There will be a lot of information presented in this menu, so to make the players feel less overwhelmed we will introduce new mechanics throughout the game in a concise manner.

# 2.0 Story Overview

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## 2.1 Story Genre

Sci-fi Fantasy.

## 2.2 License Considerations

### 2.2.1 Unity Engine 2022

Our team will use a personal Unity License instead of the educational license provided by the school so we can upload the game to platforms without the consent or licensing of the school.

### 2.2.2 Adobe Creative Cloud

All members of the team will have access to Adobe’s creative suite for free with student licensing provided by Sheridan. Commercial use is allowed but will require additional licensing.

### 2.2.3 Microsoft Office 365

Microsoft Office 365 is being used by the team to organize document access, excel keeps tracks of assignments, dates, and project types.

### 2.2.4 Atlassian Software

Our team will be using Jira and potentially confluence as tools to manage the project’s development. Because we have less than 10 people on the project the tool has free commercial licensing.



### 2.2.5 Miro

Miro will be used by our team for visual brainstorming and scrum style visualization of tasks.

### 2.2.6 Github

A Github repository will be set up for the project once development begins that each team member will have access to. Regular commits will be pushed to the repository based on our team's weekly sprint goals.

### 2.2.7 Visual Studio

Visual Studio Community will be used by the team for programming.

## 2.3 Synopsis

Poor, lonely, and destitute; This is the current state of the galaxy – and by extension, you. Jobs are scarce, and you see no other option but to take a chance and apply to United Andromeda Farming Corporation (UAFC). To your surprise, you have been selected for the new Kalidax Farming Program. The next flight is in 15 hours.

Kalidax is a lush planet with plant life as far as the eye can see. Your task is to splice the DNA of said plants together, evolving them over time into alien life. As you continue this rapid evolution throughout the month, you notice that no matter how much money you make from your profits, the UAFC will always make more.

Eventually, it becomes clear that you have only two options. First, you can try to farm sustainably, only to get fired and return to your destitute life. Or, you can continue to splice the aliens beyond recognition, getting more money and eventually earning yourself an employee of the month badge. It's your choice... but did you ever really have one?

## 2.4 Story Progression Overview

### 2.4.1 Setting

Kalidax, overgrown alien planet. Plant life takes on animalistic characteristics (teeth, fur, etc). The planet is inhabited solely by plants so there are no animals around.

### 2.4.2 Story Arc

Player begins as a farmer just trying to make money. As they splice more aliens together, they start to see the devastation they are having on the planet by forcing life into rapid evolution for profit. Eventually the player's emotions turn from joy and appreciation for the beauty of the planet into horror, realizing how they have hurt this world.

## 2.5 Backstory

Poverty sweeps the galaxy, and only the most desperate people are left to work. The application process was long and grueling, but the United Andromeda Farming Corporation finally accepted you as an employee. You are given an employee number, and a task: Fly to Kalidax and make the company as much money as possible. You pack your things, and fly.

## 2.6 Game Character Descriptions

### Player Character:

- Low income
- Simply trying to get by
- Doesn't love what they have to do.
- "Self-insert" – the player is supposed to imagine themselves in this scenario.

### **United Andromeda Farming Corporation (UAFC):**

- The company that controls most of the galaxy's farming
- Cold and calculated
- Only cares about money
- Not necessarily a single person, but the company does send you letters every so often

## 2.7 Bibliography

# 3.0 Game Mechanics

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## 3.1 Player Controls

### 3.1.1 Default Keyboard Layout

- Walk – WASD
- Interact – Left Mouse Button
- Place – Right Mouse Button
- Open Pause Menu – Escape
- Close Pause Menu - Escape
- Navigate Menu – WASD / Left Mouse Button

### 3.1.2 Default Controller Layout

- Walk – Left Joystick
- Interact – A
- Place – X
- Open Pause Menu – Menu Button
- Close Pause Menu – B
- Navigate Menu – Left Joystick / Right & Left Bumper

## 3.2 Player Character

### 3.2.1 Movement

The player character will be able to move on the X and Y axis on a 2D plane.

### 3.2.2 Inventory

The player character will have an inventory where they keep any pick-ups that they collect throughout their play time. By pressing the inventory key ("TAB" on the keyboard or "START" on a gamepad) the inventory menu will appear.

The inventory menu is a 9x2 grid, and each slot in the grid will contain one of the items that the player collects. Any item that is not a “Tool” stacks up to 99 times in the player’s inventory.

Example – Inventory from Stardew Valley



It should have this layout, but in our own art style.

The inventory will always be fully visible, and the player can equip an item in the inventory by: clicking on the slot with their mouse, or selecting an item with the D-pad on a gamepad.

### 3.2.3 Placing Objects

If an object is placeable. The player must equip it from their inventory. When the player presses the interact button (A on Gamepad or left click on mouse). The object will be placed one tile directly in front of the player.

Objects cannot be placed on top of another object (this includes things in the environment like rocks or grass tiles).

Objects can only be placed one tile directly in front of the player.

## 3.3 Game World (World Mechanics)

### 3.3.1 Environment

This game will come with two versions of the main world. After you purchase a set amount of World Upgrades. The map will change to reflect the more desolate and destroyed version of the game world.

## 3.4 Farming

### 3.4.1 Finding Seeds

Each day, tall grass will appear within a plot of land. The player can walk up to the grass and break by pressing the interact key while holding their machete. When the grass breaks it has an 80% (subject to change) chance to drop “Gene Seeds”. The last piece of grass broken, will always drop a seed. Walking over a seed will automatically put it in your inventory.

### 3.4.2 Incubating Seeds

When you have seeds in your inventory, you can place them into **Incubation Pods**. Once you place the seeds into the pod, they will grow after a few days.

**Incubation Pod:** Purchasable item (cost: idk). You start with one of these at the beginning of the game. It is within visible range of your Provisions Drone.

### 3.4.3 Selling Crops

To sell crops you must interact with the **Provisions Drone**. Once you do, a small menu will appear at the bottom middle of the screen. This menu should not cover more than 1/6<sup>th</sup> of the screen. Players can drag their items into this menu and sell the item. Once the item is sold, the player can no longer retrieve the item from the drone.

**Provisions Drone:** Stationary computer-looking drone that appears next to the “Shelter” pod.

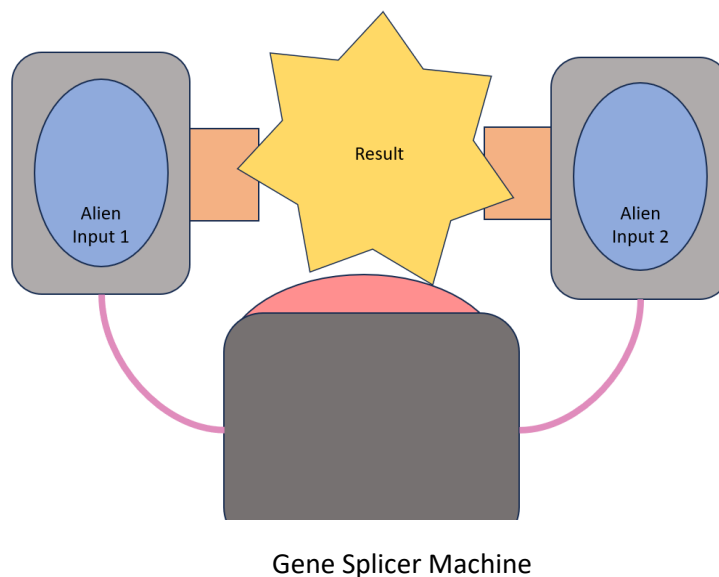
### 3.4.4 Selling Aliens

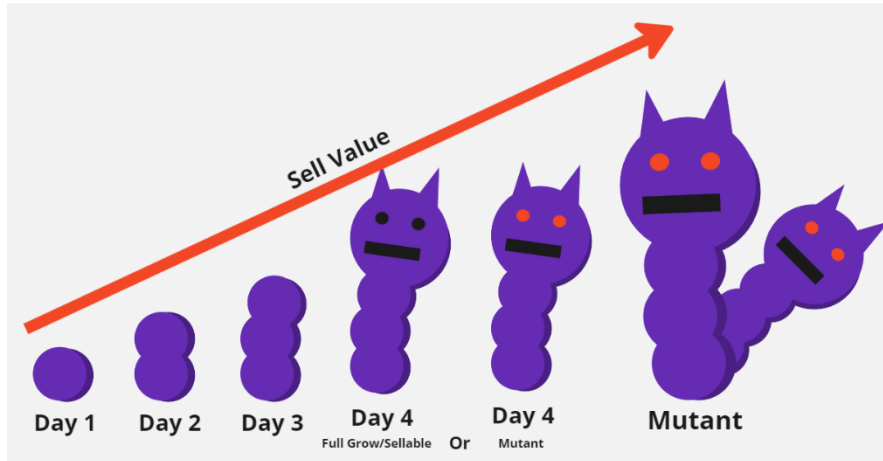
To sell an alien you must walk up to the alien and directly interact with the alien. When you do this a menu will appear at the bottom middle of the screen. This menu will ask you if you want to sell the alien you are interacting with. If you click yes, then the alien will walk towards the provisions drone and disappear once it gets there. Then it will be sold, and your money will be deposited to your account at the end of the day.

### 3.4.5 Gene Splicing

Gene splicing is the process where the player takes two different alien species, and mashes them together to create an entirely new species. This is how the system works:

- Players will approach the gene splicer pod and interact with it.
- A menu will open asking for two inputs. The player will be able to drag and drop the aliens from their inventory.
- After two eligible aliens are in the slots, a silhouette will appear in the middle. If the player clicks on the silhouette (or presses A on the controller), the two aliens will be consumed and create a new alien.
- The new Alien is put into the Player’s inventory.





### 3.5 Camera System

We have a 2D top-down camera system. The camera will smoothly follow the player as they walk around the plot of land. The camera requires a border so that it cannot move past the play area.

### 3.7 Day Cycles

Our world will not have a dynamic day/night cycle like other farming simulators. For the player to reap the rewards of their farm, they must **End the Day** themselves.

#### 3.7.1 Ending the Day

To End the Day the player must walk up to a structure called “The Shelter Pod” and interact with it. When they do, a prompt will appear saying: “Are you sure you want to End the Day and collect today’s profits.” The prompt will allow the player to either respond with “Yes” or “No”.

#### Replies with “Yes”

- A menu opens that shows how
- 
- 
- much money the player made in total.
- The company takes 90% of that money.
- The player receives the 10% that remains.

#### Replies with “No”

The day will continue as normal, and the player can continue to work around the farm.

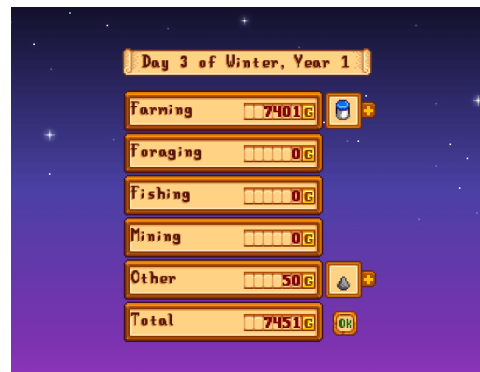


Figure 30: If the player replies with “Yes”, a drop-down menu will display how much money the player has earned that day.

#### 3.7.2 The New Day

When the day begins, a few things happen.

- Each incubated seed grows a little bit.
- Your new credits are deposited into your wallet.
- Each piece of cut wild grass has a 50% chance of regrowing every day. So some may have regrown.

Depending on what alien creature you were trying to grow it'll take a different amount of time to become fully mature and sellable.

### 3.7.3 Daily Quota

The Daily Quota is something you must meet to continue to progress. This quota will increase as the days go by. We will use our balancing tool to find out the exact values of our quota. If you miss the quota once, you will get a single warning. If you miss the quota twice, you are fired, and the game is over.

## 3.8 Economic System

Players will begin the game with 0 credits (in-game currency). Once the player "Ends the Day" any credits they are entitled to will be added to their "Wallet"

- **Wallet:** A HUD element that displays the number of credits that the player currently has.
- **Credits:** The in-game currency. The player uses this to buy upgrades for their farm.

### 3.9 Creature List

## Ground Aliens

Name	Tier	Description	Time to Grow	Cost / Sell Value
<b>Canker bug</b>	1	Tiny, fluffy creatures, Parasitic Insect like alien that leeches' resources off plants and trees, it's bight taints the nearby crops, slowly killing them in the process.	1 – 3 days	\$50 / \$150
<b>Blight Beetle</b>	2	Small, beetle-like creatures with a mottled, disease-ridden exoskeleton. They burrow into plants and trees, infecting them with a potent toxin that accelerates decay and wilting.	2 – 4 days	\$100 / \$300
<b>Pox Wyrms</b>	3	Medium-sized, serpentine aliens with sickly green scales, trailing toxic slime as they slither. Pox Wyrms wrap themselves around large plants and trees, gradually draining the life force and infecting the surroundings with a contagious disease.	3 – 7 days	\$250 / \$750
<b>Scourgeling</b>	4	A massive disease-ridden mix between a snake and Spider-like creature with festering wounds, that leak poisonous pus with a sickly green aura, they wheeze loudly, and their presence spreads sickness and decay	6 – 10 days	\$600 / \$1800



## Resources Farmed [Ground]

Name	Tier	Description	Resource Yield	Cost / Sell Value
<b>Glow fiber</b>	1	Fibers harvested from the bodies of Canker Bugs. Glow Fiber emits a soft, soothing light and is used in the creation of energy-efficient displays, advanced circuitry, and holographic interfaces.	1 – 10	\$70 / \$210
<b>Blight Resin</b>	2	Viscous, synthetic substance harvested from the exoskeleton of Blight Beetles. Blight Resin is used in the manufacturing of high-strength, corrosion-resistant materials for spacecraft hulls, exoskeletons, and advanced robotics.	1 - 8	\$150 / \$450
<b>Bane Venom</b>	3	Potent, corrosive venom extracted from the toxic glands of Pox Wyrms. Bane Venom is utilized as a highly effective ammunition coating, capable of penetrating even the most advanced energy shields and armor plating.	1 - 6	\$300 / \$900
<b>Corrupt Crystal</b>	4	Rare crystalline structures formed within the bodies of Scourgelings. Corrupt Crystals are infused with a volatile energy source, used in the creation of devastating energy weapons and experimental warp drives for spacecraft.	1 - 4	\$1200 / \$3600

## Water Aliens

Name	Tier	Description	Time to Grow	Cost / Sell Value
<b>Polypod</b>	1	Bio-luminescent tadpole, that can both blind and camouflage	1 – 3 Days	\$70 / \$210
<b>Bloodletter</b>	2	Blood-red, tentacled creatures with sharp, bone-like protrusions. Bloodletters have similar jet-black skin, akin to a large leech are aggressive hunters, attacking larger marine species and leaving behind a trail of mutilated prey.	3 – 5 days	\$150 / \$450
<b>Shellshriekers</b>	3	Shellshriekers could be considered apex predators, and the only natural predator to their larger counterpart in packs, the once small slender eel-like creature has begun to evolve small arms that allow it to dig and grab prey, its inky black skin writhes in the water, and upon long examination, its skin will go translucent when threatened revealing its terrifying skeleton, that is used to intimidate larger prey. One will always know its presence by the deafening roar you can hear from kilometers below.	6 – 8 days	\$300 / \$900
<b>Dreadnautilisks</b>	4	A horror beyond comprehension, an amalgamation of sea hunters larger than a whale, visible flesh has been completely replaced with shell bone, its newfound arms grow larger like hulking blades assist it in hunting, they are known to completely decimate entire ecosystems with their presence.	10 – 12 days	\$1200 / \$3600

## Resources Farmed [Water]

Name	Tier	Description	Resource Yield	Cost / Sell Value
<b>Polypod Extract</b>	1	A viscous fluid extracted from the bioluminescent tadpole-like Polypods. This extract has the ability to camouflage objects, making it a valuable resource for stealth and defensive purposes.	1 – 10	\$70 / \$210
<b>Bloodletter Bone</b>	2	Great for crafting trinkets and home decorations <b>[will update later]</b>	1 - 8	\$150 / \$450
<b>S<sup>3</sup>.D.D (Shellshrieker Sonic Deterrent Device)</b>	3	A high-frequency sonic device mimicking the Shellshriekers' roar, created by harvesting the vocal cords. When activated, it creates a powerful sonic barrier, deterring Dreadnautilisks and other dangerous marine creatures.	1 - 6	\$300 / \$900
<b>Dread Husk</b>	4	Ship hull armor <b>[will update later]</b>	1 - 4	\$1200 / \$3600

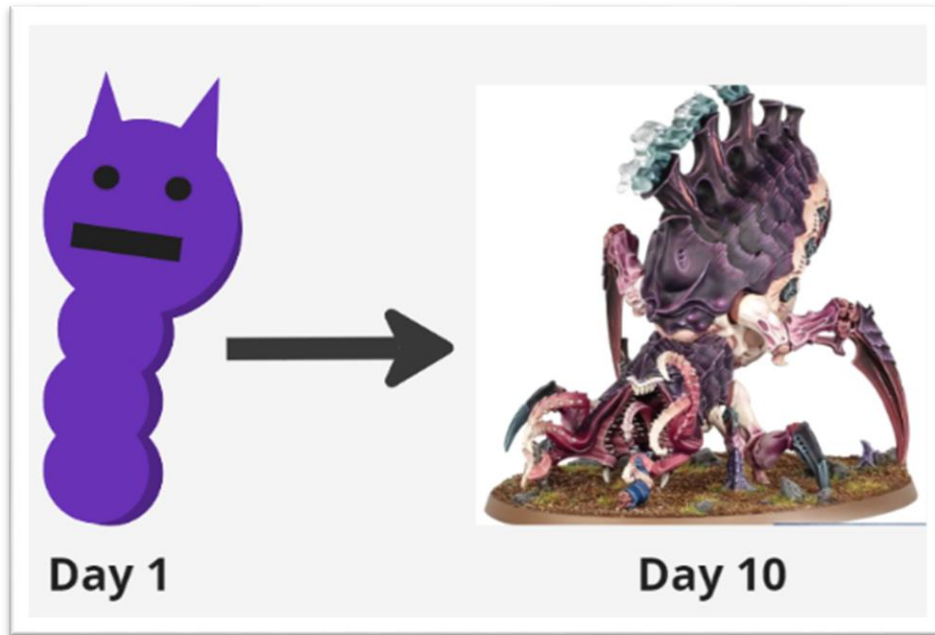
## Air Aliens

Name	Tier	Description	Time to Grow	Cost / Sell Value
Nimbus Larvite	1	Floating larva	1 – 3Days	\$70 / \$210
Smogquito	2	Mosquito like creature that converts clean air to toxic chemical that allows it to fly on inhale	3 – 5 days	\$150 / \$450
Pollutifly	3	Flying insectoid that breeds in water contaminating it and feeds on small land livestock	6 – 8 days	\$300 / \$900
Pollenpounder	4	Giant fleshy insectoid that's mere landing is so heavy that it destroys large sections of land, offboards pollutants into soil to float again	10 – 12 days	\$1200 / \$3600

## Resources Farmed [Air]

Name	Tier	Description	Resource Yield	Cost / Sell Value
placeholder	1		1 – 10	placeholder
	2		1 - 8	
	3		1 - 6	
	4		1 - 4	

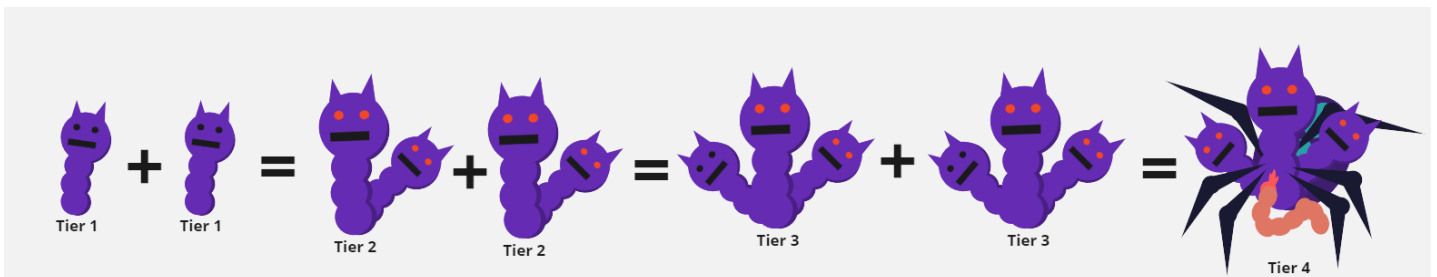
### 3.10



### Creature Evolution

As players progress throughout the game as they interact with the gene-splicing mechanic creatures will develop features and attributes the more, they get gene-splicing creating more monstrous beings. The Selling value of the creature will go up the more it mutates, but it will also harm the land more.

Players have the option to combine two separate creatures into a new mutated variant. The creatures will have a tier system with creatures starting at Tier 1. When those Tier 1 creatures are combined, they turn into tier 2. The player will need to acquire two tier 2 to combine to make a tier 3 creature. Finally, two tier 3 creatures will need to be needed to come be combined into a tier 4.



## 4.0. Game Progression

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### 4.1. Game Elements

#### 4.1.1. Character

The player character can do the following actions throughout the game:

- Walk
- Till grass for seeds
- Incubate seeds
- Collect incubated aliens
- Combine two aliens to create new aliens
- Sell aliens
- Purchase seeds
- Purchase upgrades

All abilities will be introduced to the player at the beginning of the game. As the player progresses through the game, the character's abilities may be enhanced or otherwise affected by the Upgrades the player can purchase.

#### 4.1.2. Aliens

There will be several alien types, as listed in 3.9 Creature List. As the game progresses, the player will get new types of aliens, which they may choose to combine to create even more alien types. The more the player combines aliens, the more grotesque and profitable they will become.

#### 4.1.3. Items

The player can hold the following items in their inventory:

- Seeds
- Aliens
- Machete (must be used to cut grass)

#### 4.1.4. Objects/Mechanisms

- Shelter pod – used to end the day
- Provisions drone – used to purchase seeds and upgrades, and sell aliens
- Gene pod – used to combine the genes of two aliens
- Incubation pods – A place to grow seeds

More objects may be added depending on which Upgrades the player chooses.

#### 4.1.5. Upgrades

Throughout the play experience the player can decide to purchase a variety of upgrades. There will be a variety of upgrades that allow the player to speed up their farming process while also destroying the environment around them

**Growth Enhancer** - Utilizing the growth enhancer allows aliens to skip stage 1 of their growth cycle and immediately start growing at stage 2

**Enhanced Fertilizer** - Decreases the number of days an alien needs to grow, However, the more the players use this type of fertilizer the more the surrounding ground and soil will be damaged and poisoned

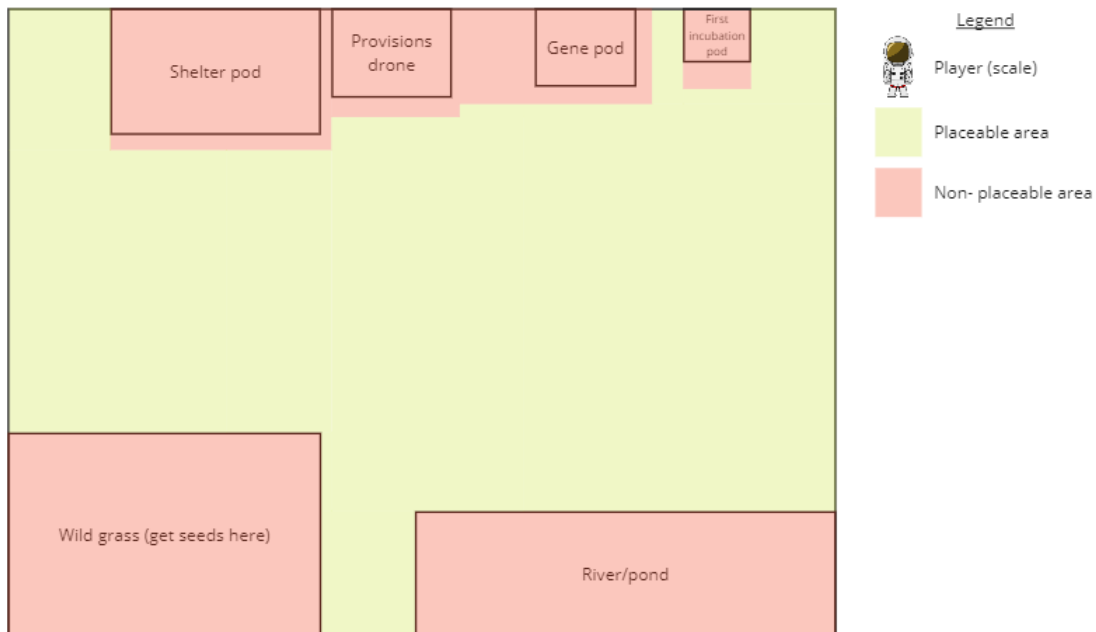
**Poison Resistance Genome** - As the player progresses throughout the game and begins combining aliens, the environment the farm is built on will start to deteriorate and become hazardous to both the aliens and the player. Purchasing the poison resistance genome will grant the aliens that are being grown resistant to the toxic environment around them eliminate any debuffs that the alien receives while being grown in a toxic environment. As the planet gets more and more destroyed, more of these poison resistance to genome upgrades will have to be purchased.

**GMO Enhancers** – Injecting an alien with the GMO enhancer will increase the size of the plant. With the increase in the alien size the more the alien can be sold for. However, the bigger the alien gets the more nutrients and materials that suck out from the earth.

**Containment Box** - As players combine aliens to get higher and higher tiers. The aliens become a lot more dangerous and hazardous to the environment around them and to the player. Therefore, the player would have to purchase a containment box to be able to safely farm the alien.

## 4.2. Game Map

- Shelter pod where player ends day
  - No interior, just interactable
- Provisions drone where player sells items and buys upgrades
- Gene pod for splicing
- River
- Patch of land with wild grass
- Placeable and non-placeable areas



### 4.3. Checkpoint/Save System

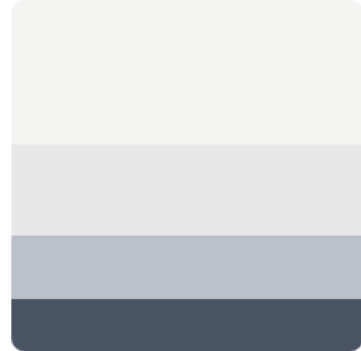
- Game will save every time you end the day

## 5.0. Game Interface System (GUI)

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### 5.1. Color

Colors for the UI will primarily be shades of grey and blue grey for contrast. This is meant to intentionally represent the space theme and players detachment / dehumanization, technology over time will take the metaphorical color out of their life.



### 5.2. Font

Fonts for the UI elements will use Spy Agency, to convey the theme of power the corporation has over the player, they are meant to feel like they have a sense of authority over not only the player, but the universe.

# UNITED ANDROMEDA

Figure 31: Placeholder example of the UI font displayed in game.

### 5.3. Buttons

UI will be sharp and formal with the intent of being straight to the purpose, players are not meant to spend a lot of time looking at it, as they should be mostly focused on working like the company wants.



Figure 32: Credits <https://jasontwade.artstation.com/projects/Yamx9X>



## 6.0. Menu Guide

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### 6.1.0 Main Menu

#### 6.1.1 Play

If the player has not played before, the game will create a new file, however if they have played before, this button will load them into their previous save file.

#### 6.1.2 Settings

Like all settings menus in games, here the player can adjust parameters to play the game according to their desires.

##### Accessibility

- Gamma controls
- Text Size

##### Audio

- Master Volume slider to adjust ALL sound
- Sounds effects slider
- Music slider

##### Video

- Window size
- Resolution
- Brightness Levels

##### Controls

- Map functions to different buttons on either the keyboard or controller

#### 6.1.3 How to Play

A new screen will transition into view where we'll have full information on the game's rules, the goal for the player, controls, and any mechanics available in the game. *For more information of the game's mechanics, refer to the [3.0 Game Mechanics](#) section.*

#### 6.1.4 Credits

Will introduce each of the members in Team Barracuda the 3<sup>rd</sup> as well as assigned roles. *See [section 1.6.1 Team Size](#) for more details on all the members and roles.*

#### 6.1.5 Exit

Closes the application.

## 6.2.0 Almanac Menu

In the almanac, the player will be able to read up on the lore of each alien seed they receive or create for more information. This provides a deeper connection between the player and the world they are exploiting. Will be accessible through the

## 6.3.0 Inventory Menu

The player will be able to store resources in an inventory with cells. This menu can be accessed by the “I” button or “X” button on keyboard and controller respectively. In this menu, players will navigate using the mouse, WASD, or Stick input.

# 7.0. Special Effects

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- Character walking dust particles
- Merging alien mutants

# 8.0. Use of Audio

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## 8.1 Sound

Sound will be used to convey action feedback on player interactions such as tilling soil, picking plants or feedback on monster splicing. Additionally, narrative feedback will be used by conveying the change in world environment. Music will initially be calm, relaxing and quaint, but over time it becomes darker, duller and overall more miserable and lonely.

## 8.2 Audio

“Lonely or empty synth”