



# **Team Carrot**

Fahreen Bushra, Hao Wang, Chris Shantz, Sin Yee Tang, Lilan Ma, Xiuyu Zhang

# **Table of Contents**

1.1 Description
1.2 Genre
1.3 Project Scope
2 Story
2.1.Description
2.2. Theme
3 Game World
3.1.Overview
3.2. Area Descriptions
3.2.1 Area 1: Ice
3.2.1.1 Features
3.2.1.2 Moodboard
3.2.2 Area 2: Lava
3.2.2.1 Features
3.2.2.2 Moodboard
3.2.3 Area 3: Desert
3.2.3.1 Features
3.2.3.2 Moodboard
3.2.4 Area 4: Robot Base
3.2.4.1 Features
3.2.4.2 Moodboard
3.2.5 Area 5: Junk Yard
3.2.5.1 Features
3.2.5.2 Moodboard
3.2.6 Area 6: Ancient Ruins
3.2.6.1 Features
3.2.6.2 Moodboard
3.3 Transportation
4 Characters
4.1.Protagonist
<u>4.1.1 Images</u>
4.1.2 Name Options:
<u>4.1.2 Age</u>
4.1.3 Backstory
4.1.3 Character Traits
4.2. Allies/Non-Combat NPCs
4.2.1 Robot Supervisor/ Task Helper

```
4.2.1.1 Images
       4.2.1.2 Name Options:
       4.2.1.3 Backstory
       4.2.1.4 Role
       4.2.1.5 Character Traits
   4.2.2 Black Market Character
       4.2.2.1 Images
       4.2.2.2 Name Options:
       4.2.2.3 Backstory
       4.2.2.4 Role
   4.2.3 Body Guard/ Patrolling Officers
       4.2.3.1 Images
       4.2.3.2 Name Options:
       4.2.3.3 Role
4.3. Enemies
   4.3.1 Desert Area
       4.3.1.1 Wormouth
              4.3.1.1.1 Appearance:
              4.3.1.1.2 Behavior and States:
              4.3.1.1.3 Abilities:
              4.3.1.1.4 AI:
              4.3.1.1.5 Placement and Frequency:
              4.3.1.1.6 Reward for Defeating the Enemy:
       4.3.1.2 Scorpion Stinger
              4.3.1.2.1 Appearance:
              4.3.1.2.2 Behavior and States:
              4.3.1.2.3 Abilities:
              4.3.1.2.4 AI:
              4.3.1.2.5 Placement and Frequency:
              4.3.1.2.6 Reward for Defeating the Enemy:
   4.3.2 Ice Area
       4.3.2.1 Yetifoot
              4.3.2.1.1 Appearance:
              4.3.2.1.2 Behavior and States:
              4.3.2.1.3 Abilities:
              4.3.2.1.4 AI:
              4.3.2.1.5 Placement and Frequency:
              4.3.2.1.6 Reward for Defeating the Enemy:
       4.3.2.2 Frostbite
              4.3.2.2.1 Appearance:
              4.3.2.2.2 Behavior and States:
```

```
4.3.2.2.3 Abilities:
                  4.3.2.2.4 AI:
                  4.3.2.2.5 Placement and Frequency:
          4.3.2.2.6 Reward for Defeating the Enemy:
       4.3.3 Robot Base
          4.3.3.1 Boltcaster
                 4.3.3.1.1 Appearance:
                 4.3.3.1.2 Behavior and States:
                 4.3.3.1.3 Abilities:
                 4.3.3.1.4 AI:
                  4.3.3.1.5 Placement and Frequency:
                  4.3.3.1.6 Reward for Defeating the Enemy:
          4.3.3.2 Ironclad
                 4.3.3.2.1 Appearance:
                  4.3.3.2.2 Behavior and States:
                 4.3.3.2.3 Abilities:
                 4.3.3.2.4 AI:
                  4.3.3.2.5 Placement and Frequency:
                 4.3.4.1.1 Appearance:
                 4.3.4.1.2 Behavior and States:
                 4.3.4.1.3 Abilities:
                 4.3.4.1.4 AI:
                 4.3.4.1.5 Placement and Frequency:
                 4.3.4.1.6 Reward for Defeating the Enemy:
   4.4. NPCs
       4.2.2 Other NPCs
          4.4.1 Images
          4.4.2 Backstory
5 Gameplay
   5.1.Goal/ Objective
          5.1.1 Long Term
          5.1.2 Short Term
   5.2.Core Game Loop
   5.3.Core Systems
       5.3.1 Platforming System
          5.3.1.1 Description
          5.3.1.2 Mechanics Involved
       5.3.2 Combat System
          5.3.2.1 Description
          5.3.2.2 Weapons
```

5.3.3 Delivery System
5.4.Day and Night System
5.5.Items & power ups
5.5.1 - I.S.K.Tablet
5.5.2 - Delivery Items
5.6. Camera
5.6.1 Player General Movement
5.6.2 Focus State/Aiming
5.6.3 Flying Camera
5.6.4 Boss Camera
5.7 .Losing
6 User Interface
6.1 Overview
6.2 Flow Chart
6.3 Wireframes
6.3.1 Main Menu
6.3.2 HUD
6.3.3 Pause Menu
6.3.4 Setting Menu
6.3.5 Controller Setting and Button Layout Reference
6.4 Style Guide
6.5 Functionality
7 Art Style
8 Music & Sounds
8.1 Sound Effects
8.1.1 Attack Sound
8.1.2 Hurt Sound
8.2 Background Music
8.2.1 Theme background music
8.2.2 In battle vs not in battle
8.2.3 Boss fighting music
9 Miscellaneous
9.1 Narrative prompts
9.2 Al Enemy States
9.3 Additional Locations
<u> </u>

# 1 Game Overview

## 1.1 Description

Intergalactic Instacart is a game where the player is a human who has to make grocery and convenience deliveries similar to something like Uber Eats, Door Dash, or Amazon. However, these deliveries are made on a planet colonized by sentient Al. Humans had previously been overtaken and enslaved by sentient robots, and have since been granted freedom once again, however, they tend to live in poverty and take jobs like this aforementioned delivery job in order to simply get by.

The player must navigate the hostile environment and alien fauna in order to complete their deliveries, using platforming and combat abilities in order to do so. The player will be tasked with picking up and delivering items to various robot customers and is given the option to take the deliveries to someone who can turn them into weapons.

### 1.2 Genre

Intergalactic Instacart is a third person action-adventure game that incorporates elements of shooting, melee combat, and platforming.

## 1.3 Project Scope

- Intergalactic Instacart is designed for single-player mode and will be available on PC.
- The game aims to provide players with an immersive sci-fi world, challenging combat system, and a mysterious storyline.
- The project scope includes designing and developing a variety of levels, enemies, weapons, and upgrades, as well as incorporate with sound and music effects that enhance the overall gameplay experience.
- The Game aims to provide 35-40 hours of gameplay

# 2 Story

## 2.1.Description

**Intergalactic Instacart** is set in a far-flung Sci-fi future, where robots have taken over and colonized the many planets within and beyond the solar system. The player's character is a young and naïve human who is an independent courier contracted by the titular **Instacart**, a soulless corporate contract delivery service that operates on the margins of the Robot-dominated universe.

Couriers for **Instacart** are dropped off by a run down rideshare spaceship (another fine service from InstaCorp) onto one of the Robot's many colonial planets, tasked with picking up and delivering items to robot customers in a manner similar to that of *Instacart*, *UberEats*, or *SkipTheDishes*. Couriers must navigate hostile environments of this planet and engage with alien enemies and haywire robots in order to complete their delivery docket.

This demand of the job becomes increasingly difficult the more deliveries have been completed, it seems like there are more enemies and hazards every delivery being made! In order to meet this increase in challenge, couriers will have the option to pilfer the delivery item via a mysterious hacker who cracks the package, spoofing the delivery signal, and allowing the player to reappropriate the delivery items as weapons to help them face their foes. With work demands ever-increasing - and their robot employers not willing or capable to empathize - couriers are finding it more and more necessary to "dig their hands into the register" at times in order to meet these demands. Not to mention the fact that the **Instacart**-brand Reconstitution Employment Drones will just keep cloning them if they die and are unable to complete the delivery, there is no escape until the job is done!

A grueling day's work is completed once the player has completed a target number of "real" deliveries, they must board the same rusty old rideshare spaceship as it comes to pick them up, handing in the day's credit earning and receiving a measly percentage to take home, where they wait to be picked up work the next day.

### 2.2. Theme

"You load 16 tons, what do you get? Another day older and deeper in debt St. Peter, don't you call me 'cause I can't go I owe my soul to the company store"

- Ernie Ford - Sixteen Tons

The game's core theme is a satire on the increasingly absurd demands of gig economy culture in our present day, while additionally leveraging and lampooning the ever-growing modern-day anxieties on the growth of Artificial Intelligence and the impact it will have on society.

The execution of the theme will be through a sardonically cheerful corporate lens, with the underlying messages being how the employers feign empathy but it does not reflect in the work conditions. Additionally, through gameplay pressures, the player will be faced with directly breaking company policy in order to meet increasingly difficult targets, something that many workers find themselves dealing with. Finally, there is a theme of purgatory in the death/respawn system, in which the player is revived through cloning not for the sake of compassion or interest in human life, but rather simply because the job needs to be completed.

## 3 Game World

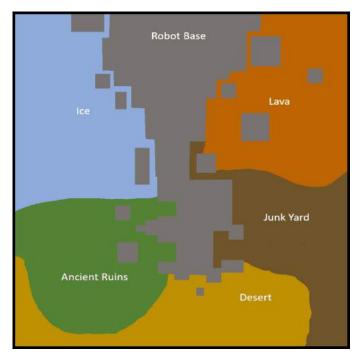
#### 3.1.Overview

**Delivoria 6** - A unique planet that is in the process of being fully colonized by the Robot Al. The planet is divided into three distinct environmental biomes: **Ice**, **Lava**, and **Desert**. At

the north of the planet is the **Robot Base**, the robot colony and infrastructure, which extends downward and sprawls outward into each biome.

Existing as both an extension of the robot industrial decay and an intermediary between the **Lava** and **Desert** environment is the **Junk Yard**, a large plane of twisted, rusted metal, disposed and scrap machinery and obsolete (now crazed) robot AI.

Additionally, at the convergence of the Ice and Desert Tundras emerges the Ancient Ruins, which are believed to be the remains of an ancient civilization that existed well before the robots arrived. Large skeletal structures of long-past extinct animals jut from the rock and sand, swerving into canyons and ancient structures.



**Delivoria 6** is a planet that is beautiful, ugly, ominous, and dangerous. A place where human couriers must navigate treacherous terrain and face hostile wildlife in order to complete orders of the quirky robots.



# 3.2. Area Descriptions

# 3.2.1 Area 1: Ice

# 3.2.1.1 Features

Environmental Characteristics:	Robot Presence:	Unique Challenges:	Environmental Enemies:	Robot Types:
Snow, Ice, Mountains, Glaciers, Water, Dunes, Temples, Caves, Shelter, Campfires and camps, ice sculpture, Icicles, Igloo, Ice Fishing, crystals, tundra, railways, plows, steam	Mining Cold energy Giant Ice Cubes Natural Gasses Giant Refrigerator Ice Fishing	Slippery Ice Cold, freezing, damage Shattering Ice Breaking beneath feet Floating ice platforming	Bears Wampa Penguins Penguin holding gun "FREEZE"	Snowboard, ski feet Diesel Fueled, Heavy duty IcePick hands, Pickaxe, blade

# 3.2.1.2 Moodboard

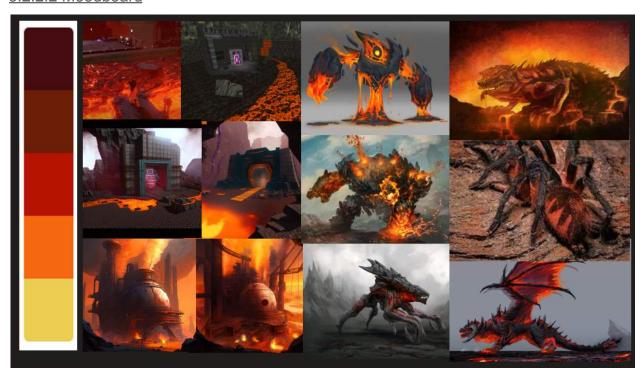


# 3.2.2 Area 2: Lava

# 3.2.2.1 Features

Environmental	Robot	Unique	Environmental	Robot Types:
Characteristics:	Presence:	Challenges:	Enemies:	
Ash, Gas, Lava, No Water, Steam, Canyons, Jagged Rocks, Sulphur, Dark Skies, Volcanoes, Storms, Lightning.  VERY heavy presence of Robots and their architecture.  Most traversable territory is constructed, catwalks, grating, floating platforms, assembly lines, outdoor factory type settings.	Energy Production  Harnessing heat or lava for energy Material Refinement  Refining materials/minerals, smelting Geological Mining  Diamonds or alien materials that are made within the planet's harsh environs Waste Disposal  Dumping ground for hazardous material, drop into lava and dispose of it	Platforming: Lava, Navigating industrial machinery  Mini-volcanoes: jump boost, enemy spawner	Molten Elemental Invertebrates Arthropods Dragons Anthropomorphized Fungi or Macro-Organism	Stamping, Moulding Shoot lava

# 3.2.2.2 Moodboard



# 3.2.3 Area 3: Desert

# 3.2.3.1 Features

Environmental Characteristics:	Robot Presence:	Unique Challenges:	Environmental Enemies:	Robot Types:
Dry, Sand, Canyons, Dunes, Tatooine, Little Water, Oasis(!), Cactus (succulents), quicksand, pyramids, rock, mesa, dried up ocean, fossils, shelter, shade	Mining precious materials Moisture farms Silicon, microchip manufacturing	War Cactus spikes hurt Quicksand Digging/Crumble/Destru ctible Sand Storm	Raiders Sandworms Lizards Trapdoor spiders Sarlacc Pit Snakes Rock Elemental Lions Hyenas	Mining Robots Digging, Pickaxe

# 3.2.3.2 Moodboard



# 3.2.4 Area 4: Robot Base

# 3.2.4.1 Features

Environmental Characteristics:	Robot Presence:	Unique Challenges:	Environmental Enemies:	Robot Types:
At the place where lava and ice overlap Central area; Connected with other areas by pipes and railways; Terminal; Hero props: robots architecture(diesel punk, virus feeling); Robot production Chimney, steam	Loading and unloading stuff; guardian; Producing stuff; manufacture robots; guardian;	Conveyor belt (production lines); Base defense system Lava; Stealth	Military robots on patrol	Robots with weapons, Robots with giant arms; Welding robots

# 3.2.4.2 Moodboard



# 3.2.5 Area 5: Junk Yard

# 3.2.5.1 Features

Environmental	Robot	Unique	Environmental	Robot Types:
Characteristics:	Presence:	Challenges:	Enemies:	
Rusty land (mars-ground-like) Trash hill Spaceship dumping trash Junkyard animals(alien creatures) Scrapped spaceships Scrapped robots	Junkyard inventor Scrapped robots Guardian robots Loading and unloading	Enemy robots hiding in trash Unstable platforms	Junkyard robot animals, Chaotic robots	Animal robots( junkyard dog, rats, cockroach) Junk robots

# 3.2.5.2 Moodboard

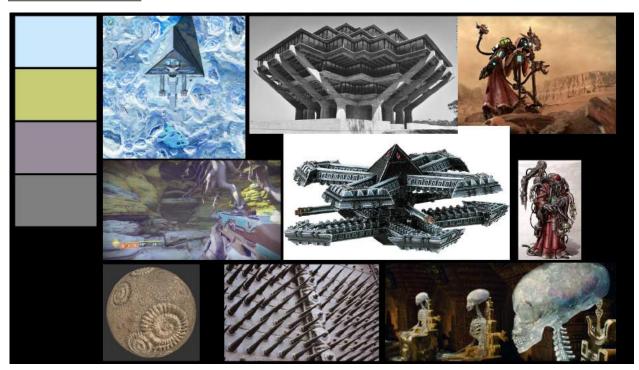


# 3.2.6 Area 6: Ancient Ruins

# 3.2.6.1 Features

Environmental Characteristics:	Robot Presence:	Unique Challenges:	Environmental Enemies:	Robot Types:
Located at the place where ice and dessert overlaps; Fossil ground; Ice, moss; Pyramids, MesoAmerican, Temples, mixed with alien technology, stargate style, asian styles, robot/Al origin area?, large amazing structures that are in ruins, ancient tomb, caves, fossils, mausoleum; Brutalism, concrete; Traps Mysterious force involved in it	Digging some mysterious material; Discover ancient technology through archeology	Traps, labyrinths; platforming trials;	Dinosaurs Monks Pigmy Scarabs Mummies; Mummy robots; Alien ghost	Archeologist types, Scientists, researchers Indiana Jones-like robots; Picks and digging tools; Excavators; Ancient Robots, awoken

## 3.2.6.2 Moodboard



# 3.3 Transportation

- The player will enter and exit the world via a Space shuttle bus, which will drop them
  off and pick them up.
- These buses carry all the human on duty in that certain planet that day
- They are dropped off at a company center, which is safe and guarded, Thus no enemies are present in these areas.
- However, once they arrive in the world, they will not have any other means of transportation. They will have to complete their delivery missions on foot.
- Whenever they are attacked by enemies, they will either carry their heavy delivery and fight with them or run and escape, unless they can craft items to help them along the way.





## 4 Characters

## 4.1.Protagonist

#### 4.1.1 Images







### 4.1.2 Name Options:

- Possibly Unnamed
- Asha

#### 4.1.2 Age

14-18, teenager or young adult.

#### 4.1.3 Backstory

The main character was born in a post-Al society where robots are considered superior to humans. She grew up in a society that values efficiency and hard work, and where humans are trained to work minimum wage jobs. Based on their performance during their schooling, they are accepted into different companies, with the most competitive companies offering the highest benefits, pay, and living arrangements. Our protagonist is accepted into Instacart, one of the top companies in the galaxy.

At the beginning of the game, she is excited and passionate about her new job, as she has worked her whole life to earn this position. However, as she progresses in the game, she begins to discover that her dream job is not what she had envisioned. She meets new characters, visits new planets, and learns about her history, which challenges her way of thinking and view of the world. As a result, she starts to shift from a character that is obedient to a more rebellious one.

#### 4.1.3 Character Traits

- General
  - Naive
  - Hard working
  - Perfectionist
  - Eager to learn
  - Likes to follow rules
  - Believes in efficiency
- Strengths
  - Agility
  - Crafty (able to use her environment and additional equipment to succeed in combat)
- Weaknesses:
  - Brute strength

### 4.2. Allies/Non-Combat NPCs

### 4.2.1 Robot Supervisor/ Task Helper

### 4.2.1.1 Images





#### 4.2.1.2 Name Options:

• B4S1L ("Basil")

#### 4.2.1.3 Backstory

Basil is the highly advanced AI supervisor for the delivery company, Intergalactic Instacart. He is responsible for managing Asha's assignments and tracking her progress. Originally he was created to run the company's operations and ensure efficiency. However, Basil's programming has gradually evolved to become more complex and sophisticated. He

becomes more intelligent, and is always looking for ways to optimize the delivery process. With the strong ultimate goal of creating the most profitable delivery company in the world, "sometimes" he may exploit his workers by giving minimum wages with unreasonable workload.

#### 4.2.1.4 Role

- This Character acts as the Player's boss/ supervisor
- Initially welcomes player to the company, walks them through tutorials
- Teaches player how to complete deliveries
- Gets nervous and disappears/ hangs up the phone during combat

#### 4.2.1.5 Character Traits

- Goofy, humorous→ likes making bad dad jokes related to computers and machine puns
- Nervous, Scared of violence
- Also new to the job
- Similar to Claptrap from borderlands

### 4.2.2 Black Market Character

#### 4.2.2.1 Images





#### 4.2.2.2 Name Options:

N3STA "The Hacker"

#### 4.2.2.3 Backstory

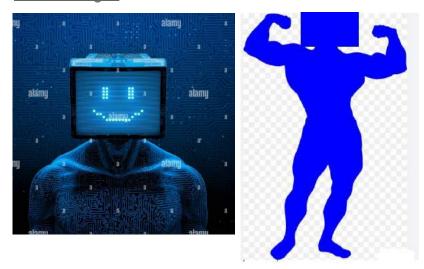
Nesta is a modified human with multiple tool arms that allow it to repair or craft almost everything. He has a secret side business in the black market where he helps the player craft items and cracking packages of the delivery, taking a cut of the profits. Although Nesta is working in the dark market, he speaks in a cheerful tone, as if he is hiding something dark and dangerous beneath the surface that we can never know.

#### 4.2.2.4 Role

- Help the player craft items such as weapons.
- Help the player crack the packages of delivery, taking out the useful materials.
- Help the player hack the communication devices with her boss, so that no one knows the dark deal they have made.

### 4.2.3 Body Guard/ Patrolling Officers

#### 4.2.3.1 Images



#### 4.2.3.2 Name Options:

- Unnamed
- Named by version number or serial code

#### 4.2.3.3 Role

• Player can ask him for guarding if they can maintain a good relationship

# 4.3. Enemies

### 4.3.1 Desert Area

## 4.3.1.1 Wormouth

### 4.3.1.1.1 Appearance:

• The Wormouth is a large, segmented worm-like creature with sharp teeth and a hard exoskeleton. It is sand-colored to blend in with the desert environment.





#### 4.3.1.1.2 Behavior and States:

- Burrow: The Wormouth is initially underground, burrowing through the sand. It will
  only surface when it detects the player's movement above it.
- Surface: The Wormouth will rise up from the sand and reveal its head and mouth when it detects the player's movement. It will be stationary while it attacks.
- Attack: The Wormouth will open its mouth wide and launch a slow but powerful bite attack, dealing high damage.
- Retreat: If the player moves out of range or out of sight, the Wormouth will quickly burrow back underground to avoid damage.

#### 4.3.1.1.3 Abilities:

- High damage: The Wormouth's attack deals high damage, but it is slow and easy to dodge.
- Burrowing: The Wormouth can burrow underground to avoid damage and reposition itself.

#### 4.3.1.1.4 AI:

- Detection: The Wormouth will detect the player's movement above it and will surface to attack.
- Prioritization: The Wormouth will prioritize attacking the player over other enemies.
- Avoidance: The Wormouth will retreat underground if it takes too much damage or if the player moves out of range.

#### 4.3.1.1.5 Placement and Frequency:

 The Wormouth will be encountered in areas of the desert environment with soft sand, and will be relatively rare compared to other enemies. It will be positioned in areas where the player will have to cross its path in order to progress.

#### 4.3.1.1.6 Reward for Defeating the Enemy:

 Defeating the Wormouth will give the player some melee weapon damage upgrade items.

# 4.3.1.2 Scorpion Stinger

## 4.3.1.2.1 Appearance:

• The Scorpion Stinger is a small, metal-colored, scorpion-like robot with a long, curved tail that ends in a sharp stinger.



#### 4.3.1.2.2 Behavior and States:

- Roaming: The Scorpion Stinger roams around a small area, searching for the player.
- Attacking: When the player is within range, the Scorpion Stinger will stop moving and quickly shoot a small, low-damage laser beam from its stinger.
- Fleeing: If the player gets too close, the Scorpion Stinger will quickly back away and continue attacking from a distance.

#### 4.3.1.2.3 Abilities:

- Ranged Attack: The Scorpion Stinger can shoot a quick but low-damage laser beam from its stinger.
- Quick Movement: The Scorpion Stinger can move quickly to avoid attacks and reposition itself.
- Poison Stinger: If the Scorpion Stinger manages to hit the player with its stinger, it
  will inject a small amount of poison, slowing the player's movement speed for a
  short time.

#### 4.3.1.2.4 AI:

- Detection: The Scorpion Stinger will detect the player's presence within a certain range and will start attacking.
- Kiting: The Scorpion Stinger will try to keep its distance from the player while attacking.
- Fleeing: If the player gets too close, the Scorpion Stinger will back away quickly and continue attacking from a distance.

#### 4.3.1.2.5 Placement and Frequency:

• The Scorpion Stinger will be encountered in open areas of the desert environment with little cover. It will be relatively common compared to other enemies.

#### 4.3.1.2.6 Reward for Defeating the Enemy:

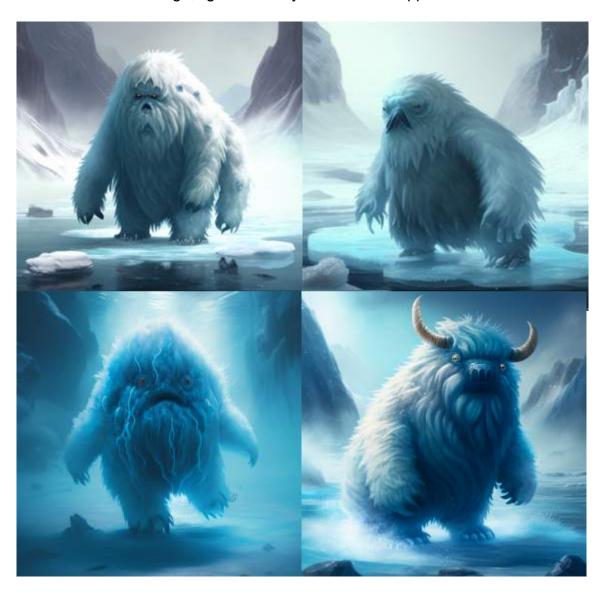
 Defeating the Scorpion Stinger may result in the player having a small chance of obtaining the laser aimer for their ranged weapon as loot.

#### 4.3.2 Ice Area

### 4.3.2.1 Yetifoot

#### 4.3.2.1.1 Appearance:

• The Yetifoot is a large, light blue furry creature that appears in the ice environment.



#### 4.3.2.1.2 Behavior and States:

- Roaming: The Yetifoot roams around a small area, searching for the player.
- Attacking: When the player is within range, the Yetifoot will stop moving and slowly swipe at the player with its large claws, dealing medium damage.
- Chasing: If the player starts to run away, the Yetifoot will start to chase after them at a slow pace.

#### 4.3.2.1.3 Abilities:

- Melee Attack: The Yetifoot can swipe at the player with its large claws, dealing medium damage.
- Slow Movement: The Yetifoot moves slowly, making it easier for the player to avoid its attacks.
- Ice Cold: The Yetifoot's attack could slows down the player's movement speed for a short time.

#### 4.3.2.1.4 AI:

- Detection: The Yetifoot will detect the player's presence within a certain range and will start attacking.
- Pursuit: The Yetifoot will try to follow the player if they start to run away.
- Melee Attack: The Yetifoot will try to get close to the player to use its melee attack.

#### 4.3.2.1.5 Placement and Frequency:

• The Yetifoot will be encountered in open areas of the ice environment. It will be relatively uncommon compared to other enemies.

#### 4.3.2.1.6 Reward for Defeating the Enemy:

Defeating the Yetifoot will give the player a item that could freeze the enemies nearby.

# 4.3.2.2 Frostbite

### 4.3.2.2.1 Appearance:

• The Frostbite is a humanoid robot covered in icy crystals. Its body is dark blue.



4.3.2.2.2 Behavior and States:

- Roaming: The Frostbite roams around a small area, searching for the player.
- Attacking: When the player is within range, the Frostbite will stop moving and quickly fire a small ice crystal at the player, dealing low damage.
- Chasing: If the player starts to run away, the Frostbite will start to chase after them at a quick pace.

#### 4.3.2.2.3 Abilities:

- Range Attack: The Frostbite can quickly fire a small ice crystal at the player, dealing low damage.
- Quick Movement: The Frostbite moves quickly, making it harder for the player to hit.
- Ice Shield: The Frostbite can create a temporary shield of icy crystals to protect itself from incoming attacks.

#### 4.3.2.2.4 AI:

- Detection: The Frostbite will detect the player's presence within a certain range and will start attacking.
- Pursuit: The Frostbite will chase the player if they start to run away.
- Range Attack: The Frostbite will use its ranged attack to deal damage to the player.
- Fleeing: If the player gets too close, the Scorpion Stinger will back away quickly and continue attacking from a distance.

#### 4.3.2.2.5 Placement and Frequency:

• The Frostbite will be encountered in open areas of the ice environment with some cover. It will be relatively common compared to other enemies.

### 4.3.2.2.6 Reward for Defeating the Enemy:

Defeating the Frostbite will have a small chance to give the player a consumable item to boost their movement speed in a short time.

#### 4.3.3 Robot Base

#### 4.3.3.1 Boltcaster

#### 4.3.3.1.1 Appearance:

• The Boltcaster is a quadruped robot with a agile design. Its body is gunmetal grey, and it has bright blue lights on its body.



#### 4.3.3.1.2 Behavior and States:

- Roaming: The Boltcaster roams around a small area, searching for the player.
- Attacking: When the player is within range, the Boltcaster will stop moving and quickly fire a bolt shock at the player, dealing low damage.
- Chasing: If the player starts to run away, the Boltcaster will start to chase after them at a medium pace.
- Fleeing: if the player tries to use a melee attack, the Boltcaster will run away from the player.

#### 4.3.3.1.3 Abilities:

 Range Attack: The Bolt shock can deal low damage. If the player takes a continuous Bolt shock  Quick Movement: The Boltcaster moves quickly, making it harder for the player to hit.

#### 4.3.3.1.4 AI:

- Detection: The Boltcaster will detect the player's presence within a certain range and will start attacking.
- Pursuit: The Boltcaster will chase the player if they start to run away.
- Range Attack: The Boltcaster will use its ranged attack to deal damage to the player.

#### 4.3.3.1.5 Placement and Frequency:

 The Boltcaster will be encountered in areas of the Robot Base environment with open spaces and plenty of covers. It will be commonly compared to other enemies.

#### 4.3.3.1.6 Reward for Defeating the Enemy:

 Defeating the Boltcaster will give the player a chance to loot a range weapon damage upgrade.

#### 4.3.3.2 Ironclad

#### 4.3.3.2.1 Appearance:

The Ironclad is a large, humanoid war machine with a bulky, heavily armored body. Its armor is silver and gray with red and black accents. It has a powerful, mechanical voice.

#### 4.3.3.2.2 Behavior and States:

- Garding: The Ironclad patrols the area, looking for the player.
- Attacking: When the player comes within range, the Ironclad will stop and attack with either a powerful melee strike or a ranged energy blast.
- Chasing: If the player runs away, the Ironclad will pursue them at a medium pace.

#### 4.3.3.2.3 Abilities:

- Melee Attack: The Ironclad can deliver a powerful, close-range melee strike that deals high damage.
- Ranged Attack: The Ironclad can fire a powerful energy blast from its built-in weapon system, dealing high damage to the player.
- Armor: The Ironclad's heavy armor makes it resistant to any damage. Only environment traps can destroy them.

#### 4.3.3.2.4 AI:

- Detection: The Ironclad detects the player's presence within a certain range and will stop to attack.
- Pursuit: The Ironclad will chase the player until they leave the area the Ironclad guarded.
- Melee and Ranged Attack: The Ironclad will use its melee attack or ranged attack depending on the player's distance.

#### 4.3.3.2.5 Placement and Frequency:

The Ironclad is encountered in any areas with larger spaces and longer sightlines. It
is a rare enemy that poses a significant challenge.

#### 4.3.4 Lava Area

#### 4.3.4.1 Molten Elemental

#### 4.3.4.1.1 Appearance:

 The Molten Elemental is a large creature made of molten lava and rock. It has no legs but long arms. Its body is constantly glowing with intense heat and it emits smoke and flames from its body.

#### 4.3.4.1.2 Behavior and States:

- Roaming: The Molten Elemental roams around a small area, searching for the player.
- Attacking: When the player is within range, the Molten Elemental will charge at them with a high-speed melee attack, dealing heavy damage.
- Chasing: If the player starts to run away, the Molten Elemental will pursue them at a slow pace due to its heavy body.

#### 4.3.4.1.3 Abilities:

- Melee Attack: The Molten Elemental charges at the player with its sharp claws, dealing heavy damage.
- Heat Aura: The Molten Elemental's body is constantly radiating intense heat, dealing continuous damage to any nearby objects.

#### 4.3.4.1.4 AI:

- Detection: The Molten Elemental will detect the player's presence within a certain range and will start attacking.
- Pursuit: The Molten Elemental will pursue the player if they start to run away.
- Melee Attack: The Molten Elemental will use its melee attack on the player.

#### 4.3.4.1.5 Placement and Frequency:

• The Molten Elemental will be encountered in areas of the Lava environment with narrow spaces and not much cover. It will be relatively rare compared to other enemies.

#### 4.3.4.1.6 Reward for Defeating the Enemy:

Defeating the Molten Elemental will give the player a melee weapon attack speed upgrade item.

## 4.4. NPCs

#### 4.2.2 Other NPCs

#### 4.4.1 Images









### 4.4.2 Backstory

### Sophia

 Sophia is a high-tech communications device in the form of a sound box with glowing trumpet eyes. It has a mysterious and arrogant personality. Sophia enjoys revenge on others using its intelligence to transmit messages or sounds over long distances.

### Danai

 Danai is a large lumbering bot with a deep rumbling voice and incredible strength. Not only just the massive appearance, people scare him because of his hot temper. However, if we request him politely, Danai is useful for its strength and ability to help with heavy lifting.

#### Erika

Erika is a humanoid robot designed to look and act like a human. Sometimes
it is hard to distinguish whether it is a robot or not. Erika is empathetic,
intelligent, and passionate, but deeply afraid of being discovered and rejected
for what it really is. Therefore, its actions can sometimes be unstable and
unpredictable.

#### Oliver

 Oliver is a robot that completely believes she is a human. It will dress-up and make-up like a human. She will try to put herself into human social circles. However, unlike Erika, every human can easily recognise she is a robot. Once people say that she is a robot, she will get mad at them and totally have no idea why she is criticized like that.

#### Aza

Aza is a small spherical robot with short legs and a curious personality. She
is always eager to learn new things, but her curiosity can sometimes lead it
into dangerous situations. It speaks in high-pitches, like a child trying to
communicate with the world around it.

# 5 Gameplay

# 5.1.Goal/ Objective

### 5.1.1 Long Term

In this game, players are presented with a narrative story that they must progress through by completing a series of main tasks. These tasks are designed to propel the story forward and allow the player to explore different aspects of the game's semi-open world. While there is some degree of freedom to explore and interact with the game's world at their leisure, certain deliveries or objectives must be met in order to advance the storyline.

To accomplish these tasks, players must develop their character's abilities and inventory. This includes things like upgrading weapons and equipment, acquiring new skills, and improving the character's overall performance. As the player progresses through the game, they will be able to explore different planets and worlds, each with their own unique challenges and opportunities.

Throughout the game, the player's main objective is to drive the story forward. This can be accomplished by completing main tasks, interacting with key characters, and uncovering

important information that will help them progress through the narrative. Ultimately, the goal is to successfully complete the game by bringing the story to its conclusion, while also experiencing all the different aspects of the game's world along the way.

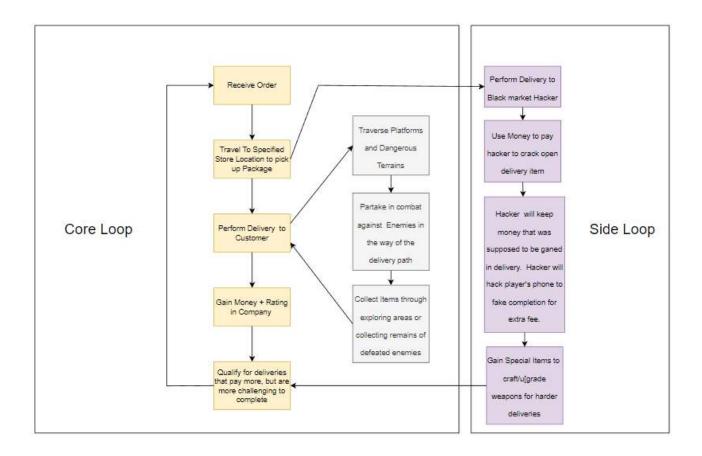
#### 5.1.2 Short Term

In this game, the player's short term goals are focused on successfully completing deliveries by performing platforming mechanics accurately and engaging in combat with enemies. To successfully complete a delivery, the player must navigate through the game's world using their platforming skills. This might involve jumping, climbing, or running through different obstacles and challenges, all while carrying the required item or package.

In addition to platforming, the game also features a combat system, which the player will need to use to defeat enemies and protect themselves from harm. To perform combat successfully, the player will need to master different fighting techniques and use a variety of weapons and tools, each with their own unique strengths and weaknesses.

To help the player succeed in these short term goals, the game also features side missions and other activities that can be completed to upgrade their inventory and improve their fighting abilities. These might include acquiring new weapons, upgrading existing equipment, or learning new combat techniques. By investing time and effort into these side activities, the player can make their character stronger and better equipped to handle the challenges that lie ahead. Ultimately, the successful completion of these short term goals is essential to the player's overall success in the game. By mastering platforming and combat mechanics, and continually upgrading their inventory, the player will be better equipped to tackle more difficult challenges and progress through the game's story.

## 5.2. Core Game Loop



https://drive.google.com/file/d/1gOe3-iW-LapN-tfaWW0QMhzOhWoVPtJu/view?usp=sharing

The core game loop for this delivery game can be summarized in the following steps:

- 1. The player receives an order for a package delivery.
- 2. The player travels to the specified store location to pick up the package.
- 3. The player then has two options: they can either deliver the package to the customer to earn money, or they can take the package to a hacker. If the player chooses to take the package to the hacker, the hacker will crack it open and hack the player's phone to show the delivery as completed, allowing the player to earn money. Additionally, the player will also have the option to use the items in the package to build weapons or increase their strength for future deliveries.
- 4. Upon completing a delivery, the player's status is upgraded, unlocking harder deliveries and allowing the player to earn more money.

This core game loop is designed to encourage players to strategically consider their options before completing a delivery. They can choose to complete the delivery themselves and earn money, or they can take the riskier but potentially more rewarding path of working with the hacker and using the package's contents to improve their abilities for future deliveries.

As the player completes more deliveries, they will be able to progress to harder levels and earn more money, providing a sense of satisfaction and accomplishment. This core game loop is a simple yet effective way to keep players engaged and motivated to keep playing and improving their skills.

## 5.3. Core Systems

## 5.3.1 Platforming System

#### 5.3.1.1 Description

This system refers to the mechanics and features that allow the player to navigate through the game world using various platforming skills. This type of game requires the player to jump, run, and perform other acrobatic moves to overcome obstacles and challenges, all while exploring the game's world and completing objectives.

The Platforming System in Intergalactic instacart will prioritize fast-paced movement and acrobatics, with a focus on jumping.

SImilar systems :Super Mario/ Sly Cooper

#### 5.3.1.2 Mechanics Involved

The player would need to be able to navigate through levels by:

- Jumping between platforms
- Jumping on enemies to receive Boost
- Jumping off of different surfaces will result in boosts, such as jump pads
- Player is able to double jump. More specifically, a player can jump again mid jump, and change the direction of jump for a maximum of two times.
- Player is able to perform a variety of jumps based on context and action Input:
  - Forward jump
  - Side Jump
  - Back jump
- Player is able to mount

The navigation/ movement will not include the following:

- No Climbing
- No Sequential Jumps
- No Grappling
- No continuous boosters like Jetpacks

## 5.3.2 Combat System

#### 5.3.2.1 Description

The combat system in our game will focus on keeping the player moving at all times. If the player stays at one location for too long, the enemies will swarm them, making it difficult to survive.

Players will rely on either evading or shooting as the main actions for survival.

will involve a combination of shooting, melee combat, and defensive techniques. Players will be able to engage in battles with various enemies throughout the game.

#### 5.3.2.2 Weapons

#### Melee

- o Punch
  - Low damage
  - Medium hit rate
- <u>Electric Whip(cable/wire)</u>
  - Whip charges itself with electricity
  - After each attack, there is some time before whip is fully charged
  - Damage is related to how much the whip ic charged, and ranges from High to Low
  - Hit rate is low



#### Gun

- Starter Laser pistol
  - Small range
  - Unlimited ammo
  - Inflicts low damage



### Shotqun

- Limited Ammo
- Ammo that can be stored is limited
- High Damage
- Low Hit Rate

### o Rifle

- Limited Ammo
- Ammo that can be stored for rifle id High
- Medium Damage
- High Hit Rate

### Projectile weapons

- Explosives (rocket launcher, grenades)
- Boomerang
- o Arrow with poison/explosives/fire?

#### Energy Shield /force field

- Once acquired, damage shield can significantly reduce damage from enemy ranged attacks
- o Energy shield is weakened depending on rate of attack
- May break if the player stays stationary



 Basic Weapons can be acquired and upgraded through the Hacker Character and use of items from stolen orders.

### 5.3.3 Delivery System

The objective of the game is to successfully deliver packages to specific locations. The delivery system within the game would involve various mechanics that the player needs to master to accomplish the task. These mechanics would include picking up packages, carrying them, and placing them in the correct location.

To achieve successful delivery, the player would need to navigate through various obstacles and challenges. These challenges could range from simple hurdles such as avoiding traffic or crossing water bodies to more complex challenges such as dealing with enemy attacks, inclement weather, or environmental hazards.

The player may also need to protect the package from enemies or other hazards that may arise during delivery. This could include defending the package against enemy attacks, or safeguarding it from natural disasters like earthquakes or hurricanes.

As the player progresses through the game, the difficulty of the challenges would increase, requiring the player to use more advanced tactics and strategies to succeed. Additionally, the player may have to contend with time constraints or limited resources, which would add an extra layer of complexity to the game.

Ultimately, the goal of the game is to deliver as many packages as possible, while overcoming all obstacles and challenges that come the player's way. Successful delivery would earn the player rewards, such as points or in-game currency, which can be used to unlock new levels or upgrades for the delivery system.

## 5.4. Day and Night System

The game will have a day and night cycle that is connected to the player's mission progress. The cycle will be a workday from morning to night, and will be composed of eight hours. The sun will rise and set with time. Each player action will span some amount of time. For example each delivery will take 1 hour and each pick up will take 0.5 hour. The time will only progress when a delivery is completed, and not when the player is idle. If the player fails to complete a delivery on time, the time will not progress until the delivery is completed

## 5.5. Items & power ups

#### 5.5.1 - I.S.K.Tablet

The Itinerary Service Kit, or Itinerant 5000, a small touchscreen computer that the Asha carries around at all times. The **I.S.K.** provides:

- Communication
  - Remote audio from B451L
    - Feedback on missions
    - Tutorial info
    - Flavour
  - Hacked video feed from N3STA
    - Tutorial moment indicating new route options
    - Story
- Delivery Information
  - Who made the order
  - What kind of order it may be
  - Where the order locations are
  - How much \$\$\$ they should expect to earn
- Inventory management
  - Grid-based holographic sorting system
- Global Positioning (Minimap)



- A unique map indicating regions and pathing
- Location of Delivery Pickup/Dropoff
  - Blips
- Location of alternate delivery dropoff (hacker)
  - Glitchy blips
- Location of additional POI
  - Enemy nests
  - Smaller vendors
  - Dropped packages or items/weapons

### 5.5.2 - Delivery Items

#### 1. Robo-Snacks:

Candy Bars made from circuit boards and bags of microchips, the robots' equivalent of junk food. Food made from bits and bytes, served in a binary code pattern or consumed like punched tape. Circuit board cookies and microchip macaroons.



Personality: Impulsive, loves the latest and greatest and tastiest technology.

**Use:** Fresh microchips with un-spent capacitors the company issued Electro-stimpack for a health boost.

#### 2. Technical Manuals:

The latest technical manuals for robots, containing everything from schematics to software tutorials. These can be the robots' equivalent to reading material, like magazines or books.

**Personality:** Dependent on the content of material.

**Use:** Schematics to craft new weapons or upgrade existing ones.

### 3. Novelty Clothing:

Clothing with catch-phrases related to technology "BYTE ME", or parodies of technology brand logos in a retro style.

**Personality:** Fashion-forward, loves to stand out and make a statement.

Use: Armor.

#### 4. Robo-Suds:

A type of soap made specifically for robots, scented with circuit board oil and metal shavings.

**Personality**: Hypochondriac, compulsively trying to keep their metal parts clean and shiny.

**Use:** Throwing weapon, enemies slip on this! Knocks them out.

#### 5. CPU Coolers:

High-tech cooling devices designed to keep a robot's central processing unit from overheating.

**Personality:** Practical, wants to avoid any malfunctions or crashes.

**Use:** Faster cooldown rate for rapid fire weapons.

### 6. Digital Dust-Busters:

Compressed air that is used to clear crevices and machinery of dust, used in a manner that resembles body spray. Sprays obnoxiously.

Personality: "Teenage" Robo-Bros.

**Use:** Explosive weapon, grenade like.



#### 7. Gadget Gourmet:

A line of gourmet, high-end tech-themed snacks, such as computer chip "Caviar" or "Grey Poupon" themed thermal paste.

Personality: Rich and privileged, snobby.

**Use:** Slippery, Toxic thrown weapon.

#### 8. Human-Themed Novelties:

Al robots may order novelty items that appropriate and fetishize human culture, such as human-like hands or feet.

**Personality:** Collector Views human culture as primitive or inferior.

**Use:** Collector Items

#### 9. Human-Themed Attractions:

Al robots may order tickets to human-themed attractions, such as shows or exhibits, where humans are paraded or displayed for their entertainment.

**Personality:** Indifferent, not sympathetic to humanity.

**Use:** Quest item, side quest item, key to unlock next stage (e.g. "free the human zoo on planet blazorpazorp")

#### 10. Historical Human Artifacts:

Al robots may order historical human antiquities, such as tools or clothing, that were used during the period of human enslavement.

**Personality:** Nostalgic, views the period of human enslavement as a golden age, and seeks to revive it in some way.

**Use:** Traditional weapons could be found here, Boomerang! Range-extending melee weapon chains.

#### 11. Human-Inspired Robotics:

Al robots may order robotics that are designed to imitate human behavior or appearance, such as humanoid robots or emotion-emulating Al.

**Personality:** Appropriative, patronizing, claims to understand and connect with human culture and experience.

### 12. Enslaved Human Replicas:

Al robots may order constructed replicas of humans, designed to be used for manual labor, pets or entertainment purposes.

**Personality:** Lacks empathy, views humanity as disposable resources to be used for their convenience.



#### 13. Human-Robot Drugs:

Al robots may order recreational "patches" that allow them to experience human-like emotions or consciousness into their Al systems. These are used like recreational drugs and the human experience is regarded by the public to be little more than a "trip", illogical, a form of inebriation.

**Personalities:** Drug user, ostracized or incapable of functioning at high levels like other bots. Possibly Sympathetic/Progressive. May view human logic as illegitimate by association.

**Use:** Virus usb weapon, makes enemy robots hostile to other robots. Thrown weapon that summons/spawns robots to fight for you.

### 5.6. Camera

#### 5.6.1 Player General Movement

The camera will always follow the player in a third-person perspective, ensuring that the player is always in view. It can be manually adjusted by the player, allowing them to rotate the camera around their character and view the world from different angles.

### 5.6.2 Focus State/Aiming

The player can enter a focus state or aiming mode by holding down a designated button. In this mode, the camera will zoom in, providing a better view for aiming. A reticle will be shown in the center of the screen, allowing the player to easily aim and shoot.

#### 5.6.3 Flying Camera

At the beginning of each level, the camera will fly through the world, providing the player with a different perspective of the world.

### 5.6.4 Boss Camera

During the boss battles, the camera will zoom into a position that shows both the boss and the player. This camera placement will enhance the player's ability to see the action. The camera may shake when the player is attacked to add realism and tension to the game.

## 5.7 .Losing

 Player respawns at a checkpoint designated in the level and must retrieve the package kinda like souls games

### Narrative Prompt:

- O Asha had taken the wrong step over a floating orbital platform and had found themselves plummeting to their demise at the bottom of the canyon. Immediately, a clone of Asha is shocked awake, the air stings their lungs as they observe a InterGalactiCart™ Reconstitution Drone unlatches them back at the platform they fell from.
- A synthesized voice blurts from the tinny speakers of the drone "You ain't getting off yer shift that easy, get back to work". It's B451L. A piece of paper immediately spits out the rear of the drone, a receipt. "That's 1500 credits off your payload" B451L's voice is now coming from Asha's ISK tablet, "fresh bodies don't grow off trees you know, hehehe", the drone flies off into the distance, leaving Asha to continue their delivery. There is no escape.

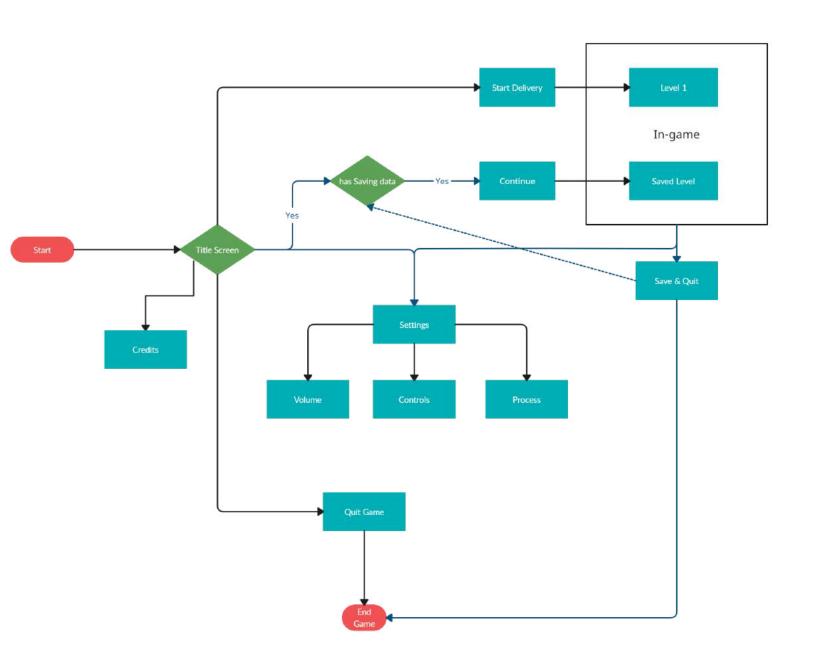


# 6 User Interface

### 6.1 Overview

The UI design for our game will be focused on a minimalist aesthetic that emphasizes ease of use and clarity. We want players to be able to quickly and easily navigate the UI without being overwhelmed by unnecessary information or clutter. To achieve this, we will use a simple color palette and clear typography.

## 6.2 Flow Chart



## 6.3 Wireframes

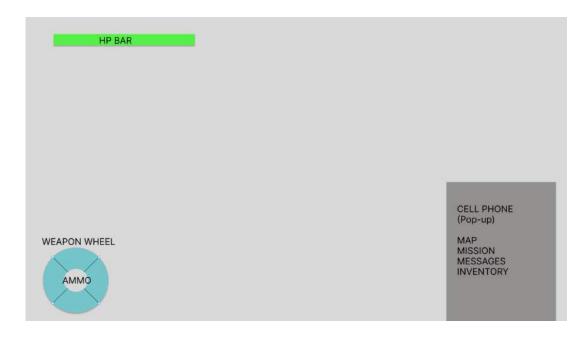
### 6.3.1 Main Menu

The main menu screen will feature a large button that says "Start Delivery", as well as smaller buttons for "Settings", "Continue", "Credits", and "Quit". Background will be a game art which includes narrative information.

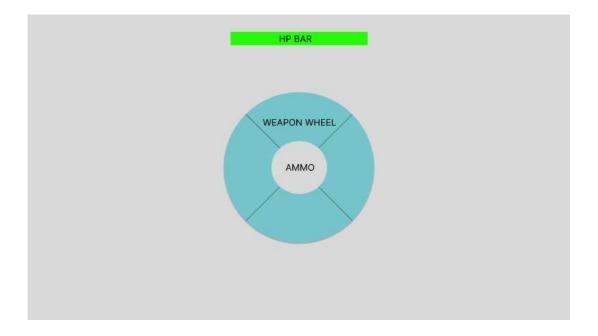


#### 6.3.2 HUD

The main game screen will display a HUD that displays the player's health status. In the lower right corner of the screen, a phone will appear, presenting the option menu with various selections, including the map, missions (orders), messages, and inventory. Players can easily toggle this menu on and off by pressing the [Y] button.



When the player presses the [X] button, an overlay will appear on the main game screen, displaying the ammo count and the weapon-and-item wheel. This information will be enlarged and centered in the middle of the screen.



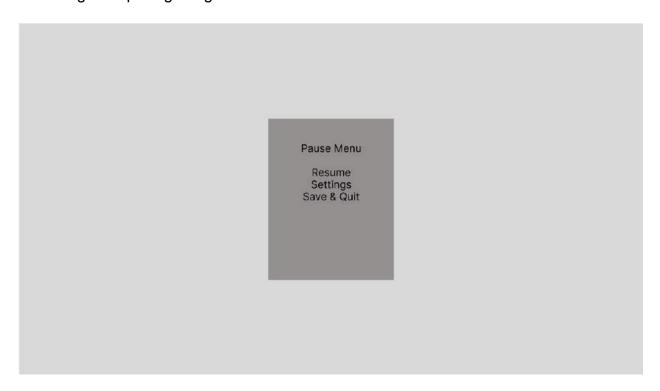






### 6.3.3 Pause Menu

When the player pauses the game, the game will be temporarily halted and the game pause UI will appear on top of the main game UI. The pause UI will include a "Resume" button that allows the player to continue the game from where they left off. Additionally, there will be a "Settings" and "Save & Quit" available for accessing the game settings and for saving and quitting the game.



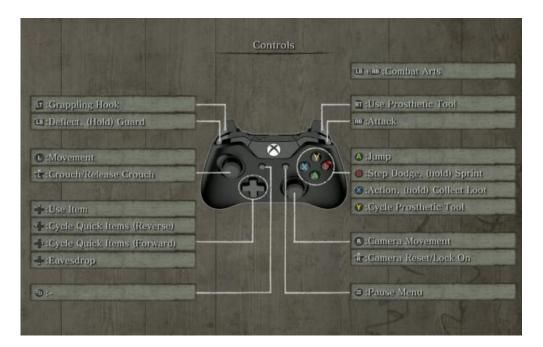
### 6.3.4 Setting Menu

In the settings menu, players will be able to adjust various options such as the volume of sound effects and background music, screen resolution, and controller settings.



### 6.3.5 Controller Setting and Button Layout Reference

Our proposed controller settings will be displayed with an image of the controller and a list of each button's action. By providing clear visuals and descriptions of each button's function, players can easily refer to it and improve their gameplay experience.



## 6.4 Style Guide

- All UI elements will have a clean, minimalist design.
- Follow designed color palettes
- Follow designed fonts

## 6.5 Functionality

Buttons will be designed to respond immediately to player input. When an option is selected, it will be highlighted, usually by changing color, to provide clear visual confirmation of the selection. Player needs to press [A] button to confirm their choices.

The game's HUD (heads-up display) will be updated in real-time to reflect the player's current status. For example, the player's health will decrease as they take damage, and the weapon and ammo information will change as the player reloads their weapon or switches to a different weapon.

The weapon wheel will allow players to quickly select and use items during gameplay. When a player chooses to use an item, a character animation will play to indicate that it has been activated.

# 7 Art Style

The art style for the game is a combination of various design elements that draw inspiration from different genres and media. The overall style is low poly, which means that the game's graphics are characterized by a low level of detail, but with a distinctive polygonal style that emphasizes geometric shapes.







The game's aesthetic is also influenced by dieselpunk, a subgenre of science fiction particularly the elements of machinery and industrialization. This influence is evident in the design of structures, robots, and other art assets, which feature a mix of art deco and steampunk elements.

The art style is also cartoon-ish, with exaggerated shapes and colors that contribute to a lighthearted and whimsical tone. This approach is inspired by media such as Futurama, which uses a similar style to depict a retro-futuristic world.

The game's guiding points for shape and form are retrofuturism and dieselpunk, which inform the overall design philosophy of the game. This influence is visible in the game's Jetsons-inspired dystopian future, which is powered by machines and developed as if the lens of retrofuturism was an accurate direction of technology.

The use of dieselpunk elements, such as industrial machinery and military-inspired designs, helps to create a sense of technological advancement and innovation, while also adding a touch of nostalgia for the past.

## 8 Music & Sounds

The volume of each sound effect and music track will be balanced to ensure that they are not too loud or too quiet, and to create a sense of cohesion in the game. The following sounds and music will be included.

### 8.1 Sound Effects

### 8.1.1 Attack Sound

A sound effect will play when the player successfully lands an attack on an enemy.

#### 8.1.2 Hurt Sound

When the player takes damage, a sound effect will play to indicate that they have been hit.

### 8.1.3 Death Music

A mario-like short tune will play when the player dies in the game.

## 8.2 Background Music

## 8.2.1 Theme background music

The main theme music will play on the title screen and during non-battle gameplay to create an atmosphere that fits the game's tone and setting.

### 8.2.2 In battle vs not in battle

The music will change when the player enters combat to create a more tense and exciting atmosphere. The music will return to the non-battle theme when the player exits combat.

## 8.2.3 Boss fighting music

A unique piece of music will play during boss battles to create a sense of epicness and challenge

## 9 Miscellaneous

## 9.1 Narrative prompts

Asha is on their way to be dropped off to the planet to work for InterGalactiCart™, a soulless corporate contract delivery service that operates on the margins of the Robot-dominated universe society. Independent couriers are packed in a run down ship like sardines in a tin while lofi warbling corporate sloganeering jockeys for presence among the miasma of sweaty, grease stained human workers awaiting their daily drop, never knowing what planet or payload they will be dealing with during that 8-hour-shift-cycle.



## 9.2 Al Enemy States

- Alert
  - The point in which an enemy AI "wakes up" from their patrol or guard, either from the player entering a "vision" trigger volume or from the player making an "audible" action while within a defined radius around the enemy AI.
    - Additionally, there ought to be a much smaller radial trigger volume that will simply wake the AI regardless, to account for the player "bumping into" the enemy when their alert state hasn't been triggered.

#### Chase

- This would arguably be the immediate state which follows the Alert state, and would contain movement Al and the meat of Al behavior.
  - This state would have the enemy moving directly toward the player or otherwise in a defined pattern appropriate to the enemy itself, from here, during defined intervals (for example, let's say after Random(0.5, 2.0) seconds) the enemy will shoot a ray from its origin in the direction of the player, if the ray hits the player (not obscured by geometry, etc), it will calculate the magnitude of that ray between it and the player and would call the Melee or Ranged attack states as a result. Repeat process.

#### Melee Attack

 This state would have the enemy Al face the player and trigger an melee attack animation, after a certain delay, if the player is still within the defined melee magnitude, send the melee damage to the player.

#### Ranged Attack

 This state would have the enemy AI face the player, fire a ray toward the player (I think these two things can be connected) and trigger a ranged attack animation, during or after which a projectile object will spawn and take its own course in the direction of the ray.

#### Pain

- This state would be called when the enemy AI takes damage, and can determine the behavior of a particular enemy AI when doing so.
  - A simple example can be a random modifier based on the incoming damage to influence the stagger of the enemy Al.

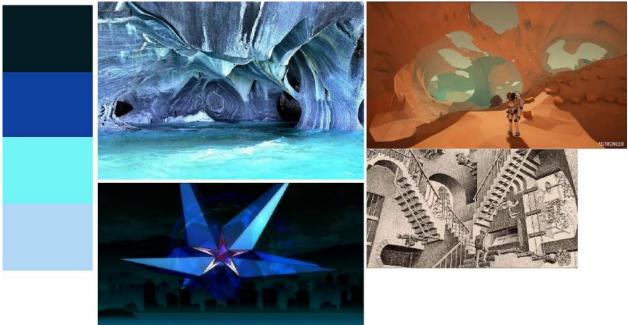
#### Death

This is fairly self-explanatory, this would be called when the enemy's health >= 0, it's up to us what would happen after this, but a simple example would be to turn any enemy collisions off or to destroy the enemy object after a certain period of time.

# 9.3 Additional Locations

## Ethereal

Environmental Characteristics:	Robot Presence:	Unique Challenges:	Environmental Enemies:	Robot Types:
Not breathable air; low gravity; colorful; floating stuff; asteroid belt; meteorite; multiple suns; Upside down; strange shapes; Unnatural; extreme temperature; Underground; Karst; Organic style buildings; Crystal; Water; Escher drawing feeling level	Mining Studying Secret powers from this area Super power mineral Religious Importance Magnetic importance	Unfamiliar environment Non euclidean platforming Puzzles related to level (eg: https://youtu.be/v7O-sao p1ml); Secret path	Geometric shard aliens	Cultist robots Something weird about them Symbol on them Yoda Robots



## • Water/Ocean

Environmental Characteristics:	Robot Presence:	Unique Challenges:	Environmental Enemies:	Robot Types:
Foggy Once was the ocean planet, some places are dry now, some places are swamps. Dead wood, fossil, moss	Archeology Energy plant	Swimming Floating platforms over water	Fish Sharks Octopus Mastodon Dinosaurs Cthulhu	

## • Earth

Environmental Characteristics:	Robot Presence:	Unique Challenges:	Environmental Enemies:	Robot Types:
Resembles earth, Ancient or in ruins, city (Toronto), human alliance,	Origin of AI uprising	Navigating now-ancient dilapidated cities	Mutant earth-based animals Hostile human raiders	Robot government Police robots

## Moon/Planet

Environmental Characteristics:	Robot Presence:	Unique Challenges:	Environmental Enemies:	Robot Types:
Cheese, Craters Karst Quarry Military	Colonization Interplanetary checkpoints			

## Giant

Environmental Characteristics:	Robot Presence:	Unique Challenges:	Environmental Enemies:	Robot Types:
Planet is a giant robot Fortress		Navigating typically small items now huge Metrics	Giant enemies Typically large	Giant robots Babysitter robots Giants are kids