EXODUS Studios

Exodus

Carson Rueber – Noah Rieth – Jackie Lee – Jordan Higgins – Alphonse Crittenden – Victor Vargas – Lucien Lee

Introduction

In our game, the user plays as Moses, who is under the current wrath of the Pharaoh. He has killed the Egyptian taskmaster and has started on a journey to save the Israelites.

Moses Meets God

After killing the Egyptian taskmaster, Moses heads out of the city. There he meets God in a burning bush. After enraging the Egyptians, God tells Moses that he must work to free the Israelites from the Egyptian oppression. This sets Moses on his way for the rest of the game

Plague of Frogs

When God finds the Israelites still under the ruling of the pharaoh the land was plagued with frogs, filling the homes, creeks and entirety of the land. It was not till Moses asks for their removal in return for the Israelites but since the frogs were removed, the Israelites remained captive and Moses' objective continued.

Plague of Hail

God rains hail throughout the region of Egypt, destroying crops and trees within its path. During this time, a shepherd and his goats hide underneath a tree. Moses makes an attempt to plead with God to stop the storm.

Plague of Darkness

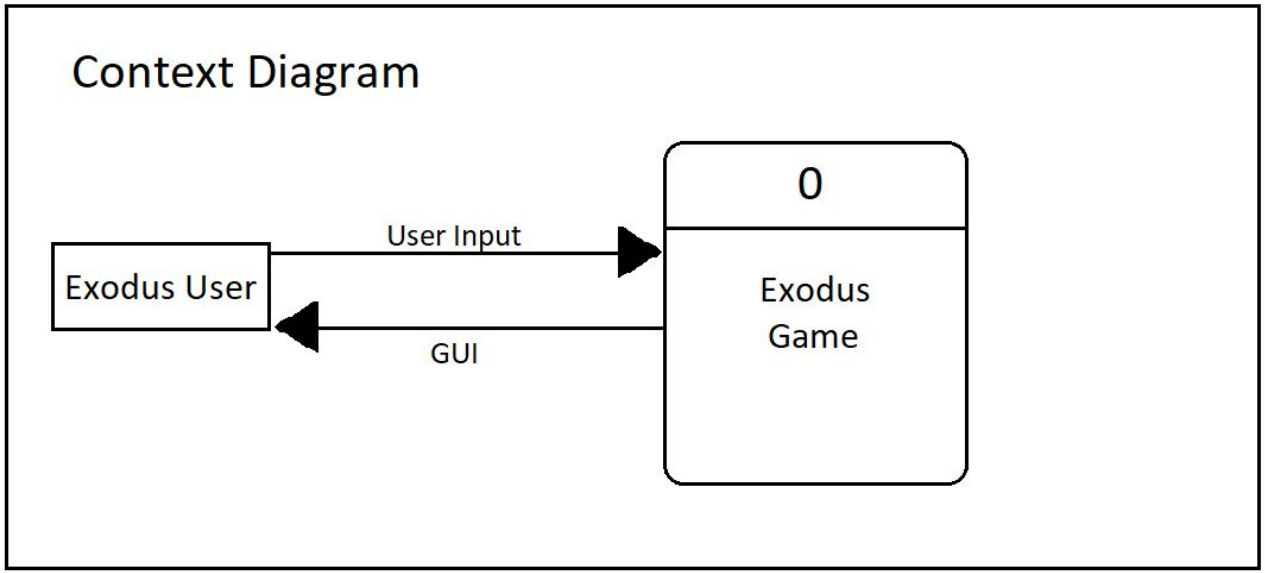
In his quest to help liberate the Israelites, Moses flees into the forest to find the 7 Israelite women being tormented by a shepherd. During this time, God summons a plague of darkness that envelopes the kingdom. This hinders Moses throughout his quest to reach the rogue shepherd at the well.

Moses Parts the Red Sea

Moses decides that the Israelites need to escape their oppressors, and he clears a way to the Red Sea. Here he parts the Red Sea in order to allow the Israelites safe passage from their oppressors. However, Moses's fight isn't done quite yet.

Final act: Defeat the Pharaoh

Finally, Moses fights the Pharaoh and saves the Israelites from the oppression that they had been previously placed under. Here is where the user completes the game by defeating the final boss.


Context Diagram
0
User Input
Exodus User
Exodus
Game
GUI

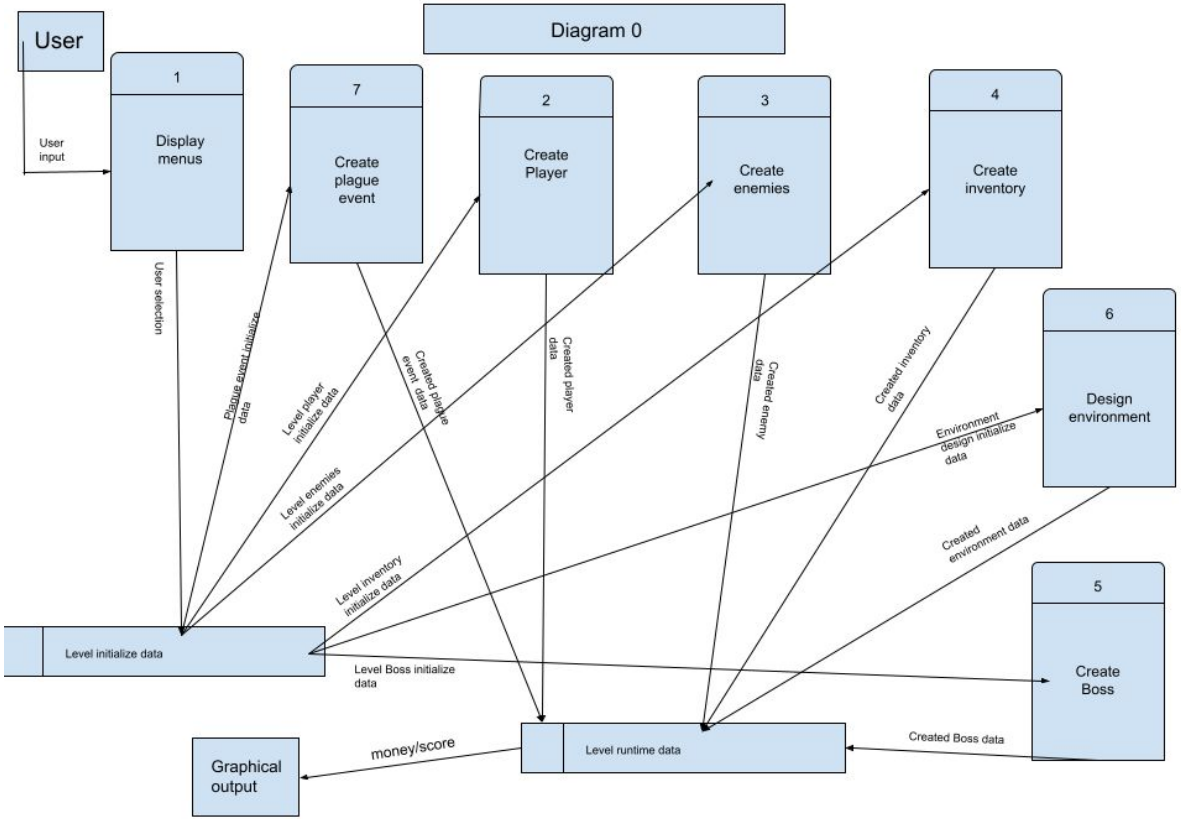
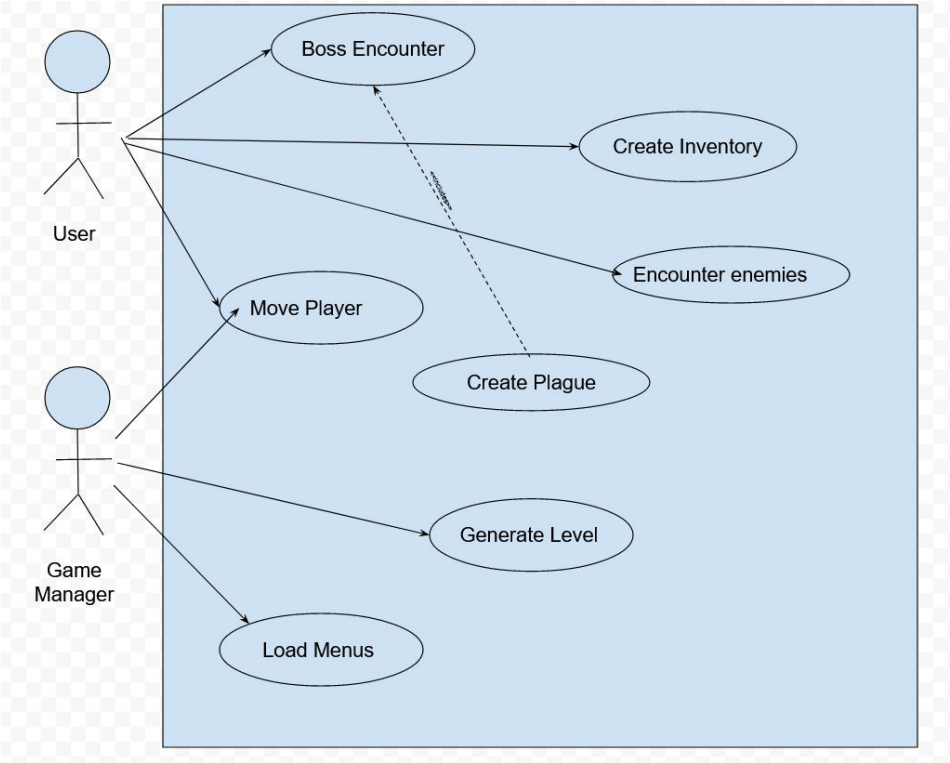


Diagram 0
User
User input
1
Display menus
7
Create plague event
2
Create Player
3
Create enemies
4
Create inventory
6
Design environment
5
Create Boss
User selection
Plague event initialize data
Level player initialize data
Level enemies initialize data
Level inventory initialize data
Created plague event data
Created player data
Created enemy data
Created inventory data
Environment design initialize data
Created environment data
Level initialize data
Level Boss initialize data
Level runtime data
Created Boss data
money/score
Graphical output

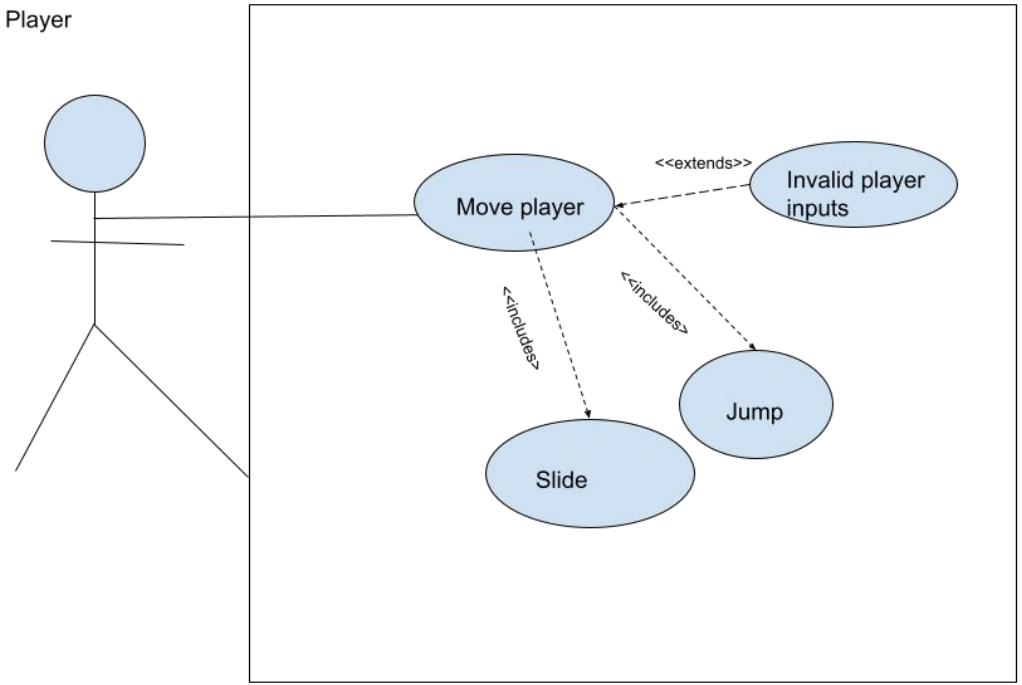
Global Use Case Diagram



Create Player - Carson Rueber

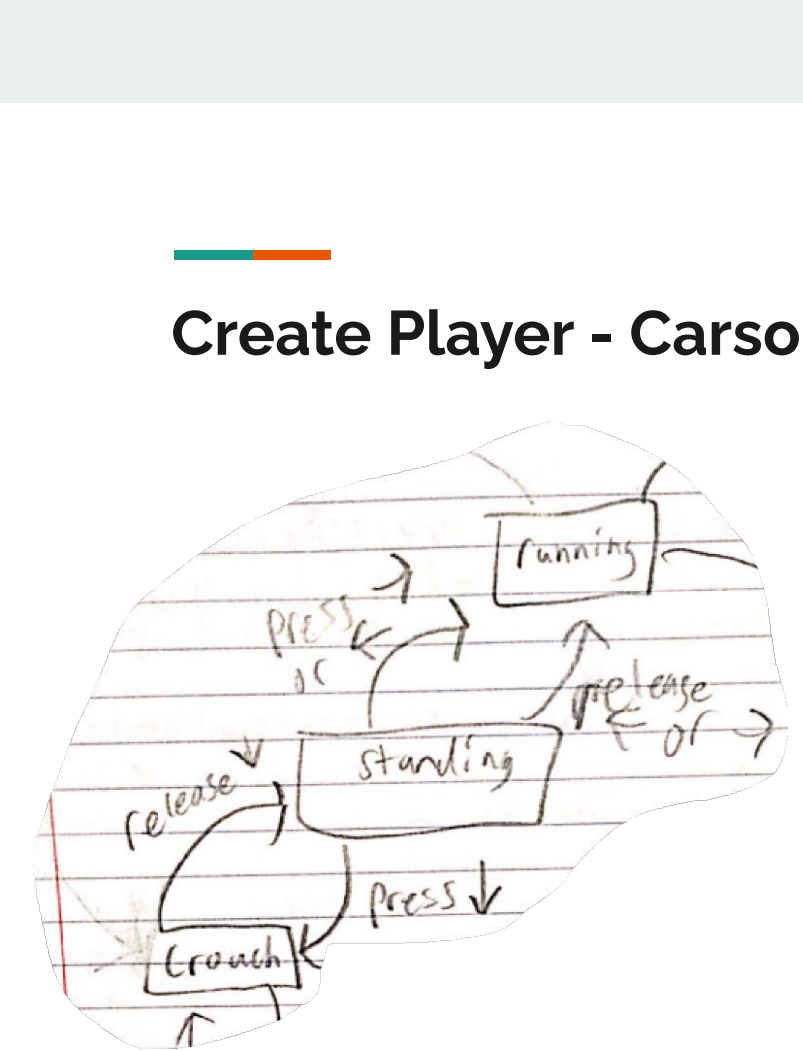
- My Job is to implement the player character and its movement
- Basic states - Standing, running, crouching, crawling
- More complex states - Airborne, sliding, walljumps
- Maximum importance
- Complexity - Medium
- Tuning Needed - Lots

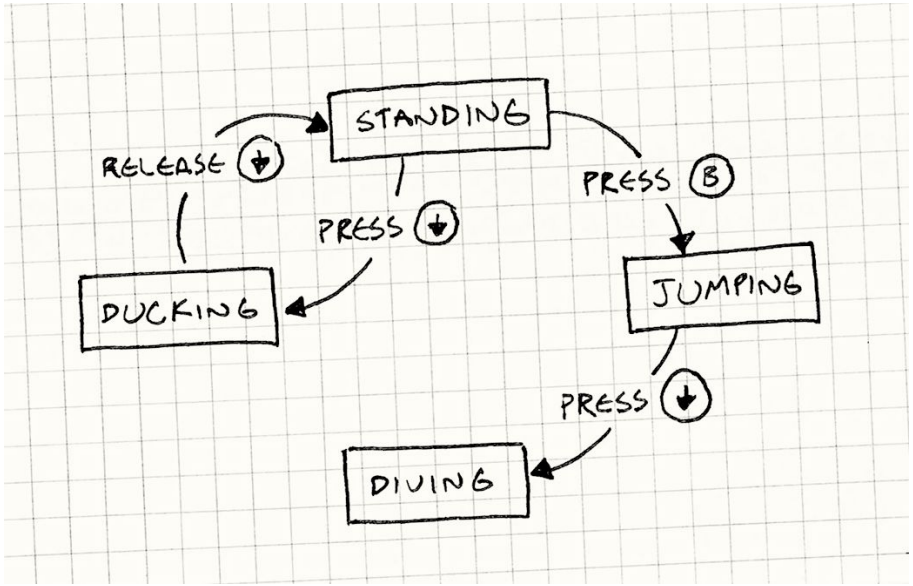
Create Player - Carson Rueber



Carson Rueber

Create Player - Carson Rueber

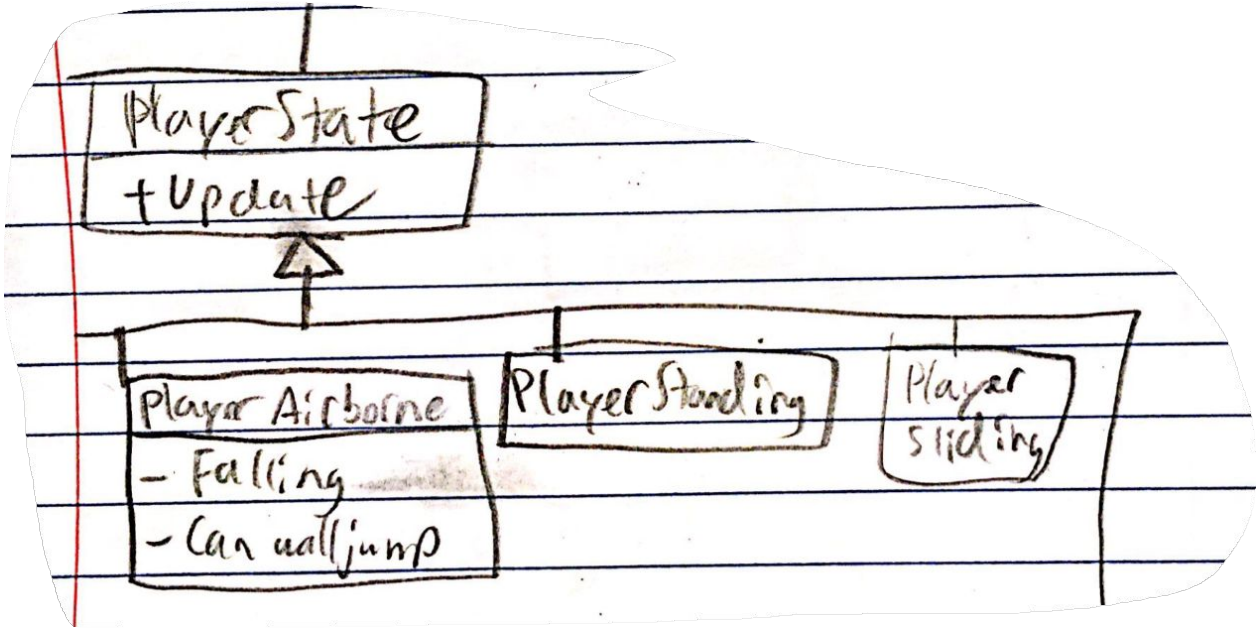




https://gameprogrammingpatterns.com/state.html

Carson Rueber

Create Player - Carson Rueber

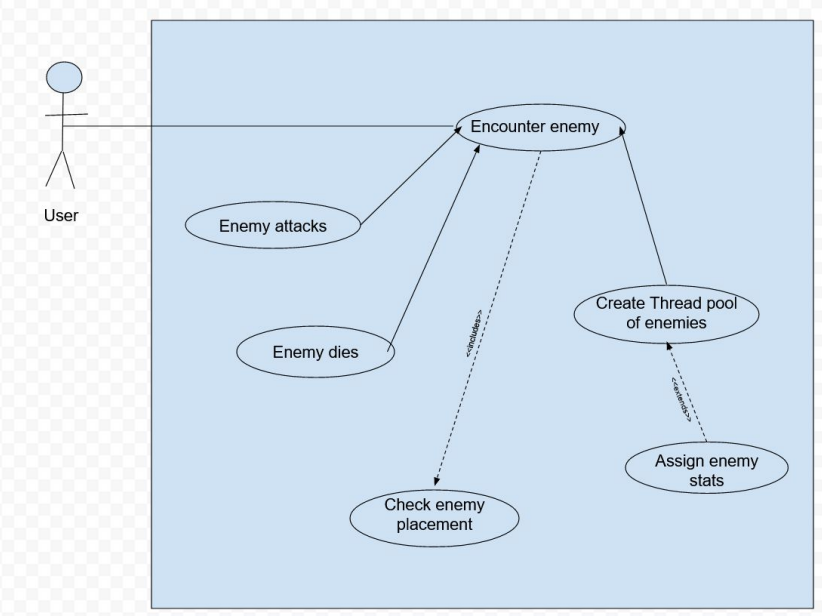


Carson Rueber

Enemy Encounters - Lucien Lee

- The role of my feature is to design the basic enemies that the player will be running into during the game.
- This feature is medium priority, as the game will still function without the addition of enemies into the game. However without the enemies the game will be extremely easy and very boring.
- For this feature of the game I will be constructing a thread pool of potential enemies so that the level has a better load time and the game doesn't have to pause to reload.
- This feature will be one of the more complex features as the thread pool of enemies will have to be designed and the AI scripts will have to be made so the NPC's know when to move and how to attack.

Enemy Encounters Continued - Lucien Lee

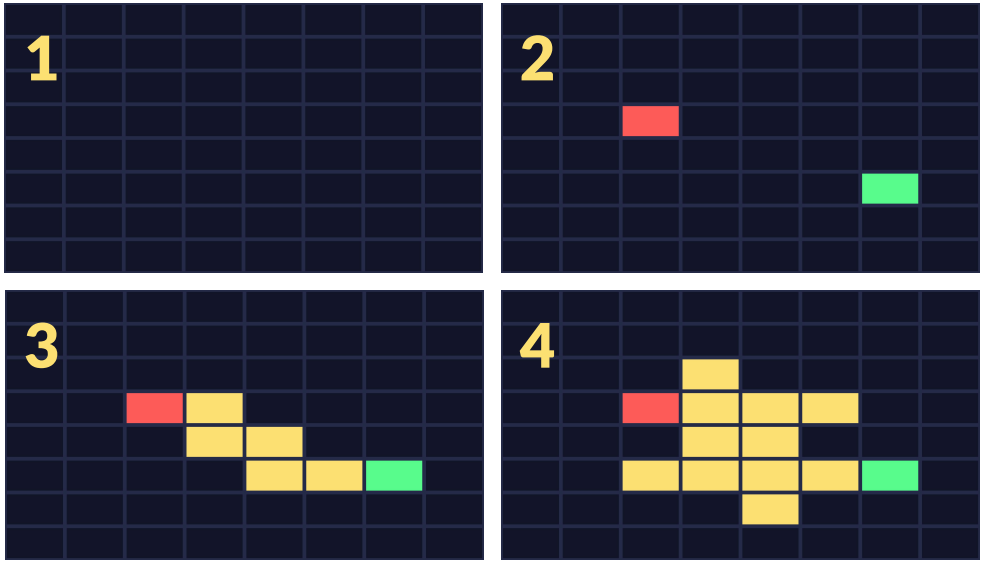


Lucien Lee

Level Design – Victor Vargas

- Room-based Level Generation
  - Handmade Rooms
- High Priority
- Slightly above average complexity
  - Room Generation Algorithm
  - Path for the Player AI to follow - Demo Mode

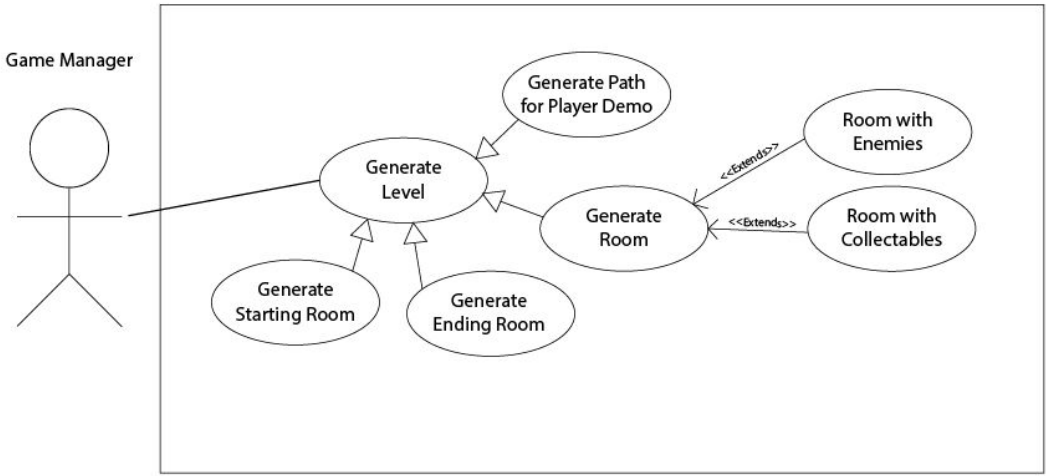
Level Generation Demo



Victor Vargas

Level Design Use Case

Victor Vargas

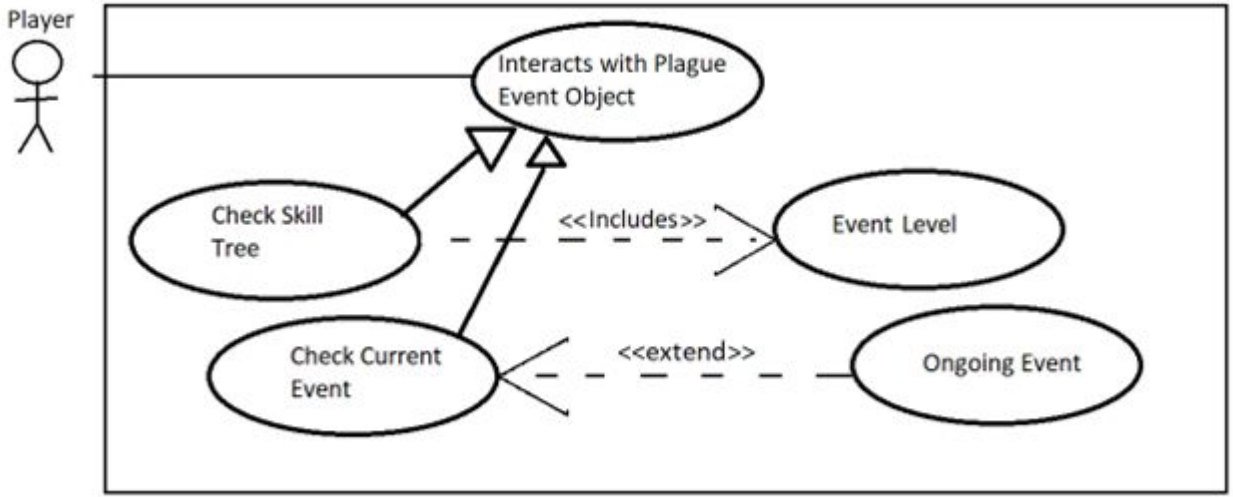


Plague Events – Noah Rieth

- My feature is managing the creation of plague events. Plague events alter regular gameplay via a variety of changes depending on the type of plague.
- Medium Priority
    - Game will run without them, but they are part of storyboard
- Medium complexity
    - I will have to make a prefab for each type of event, each with varying difficulty levels
    - Some events will be simpler than others e.g. Darkness vs. Frogs

Noah Rieth

Plague Events Use Case

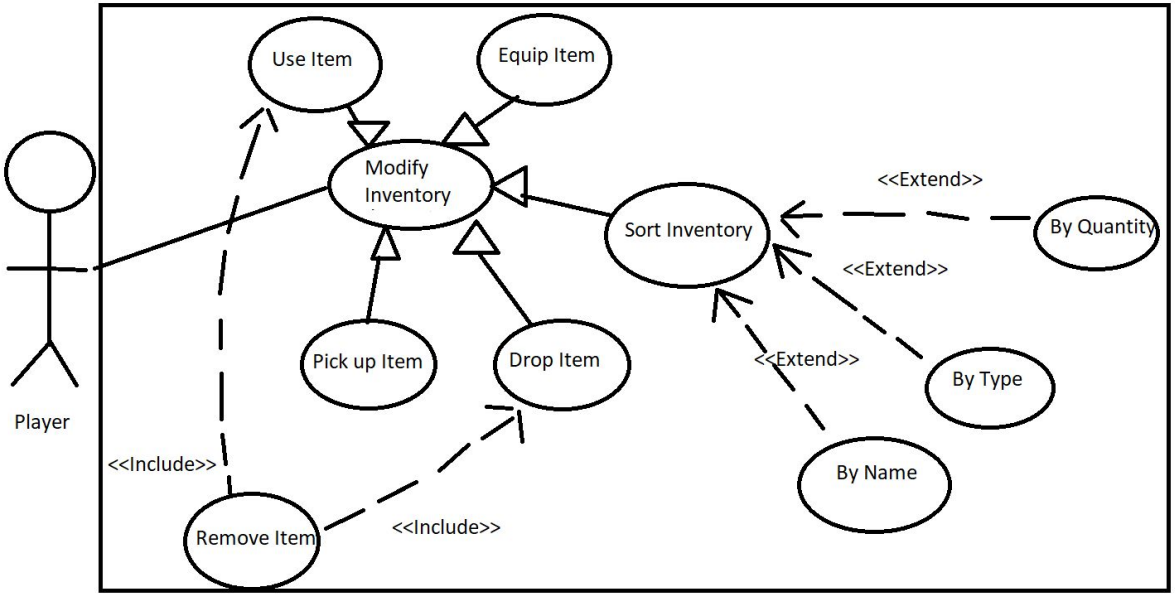


Create Inventory - Jackie Lee

- The role of my feature is to incorporate items that the player will be able to obtain throughout the game.
- My feature is low to medium priority but it adds depth to the gameplay and promotes exploration compared to a linear game
    - Adding accessories that can promote combat strength
    - Obtaining key items that relates to the story
    - Potions to restore health
- Currently, the difficulty would be about the same as others but can vary:
    - Incorporating accessory effects
    - Quick Use Inventory Slots (Can be seen and used from during combat)
    - Sorting Options
    - Overworld interactions with items

Create Inventory Use Case

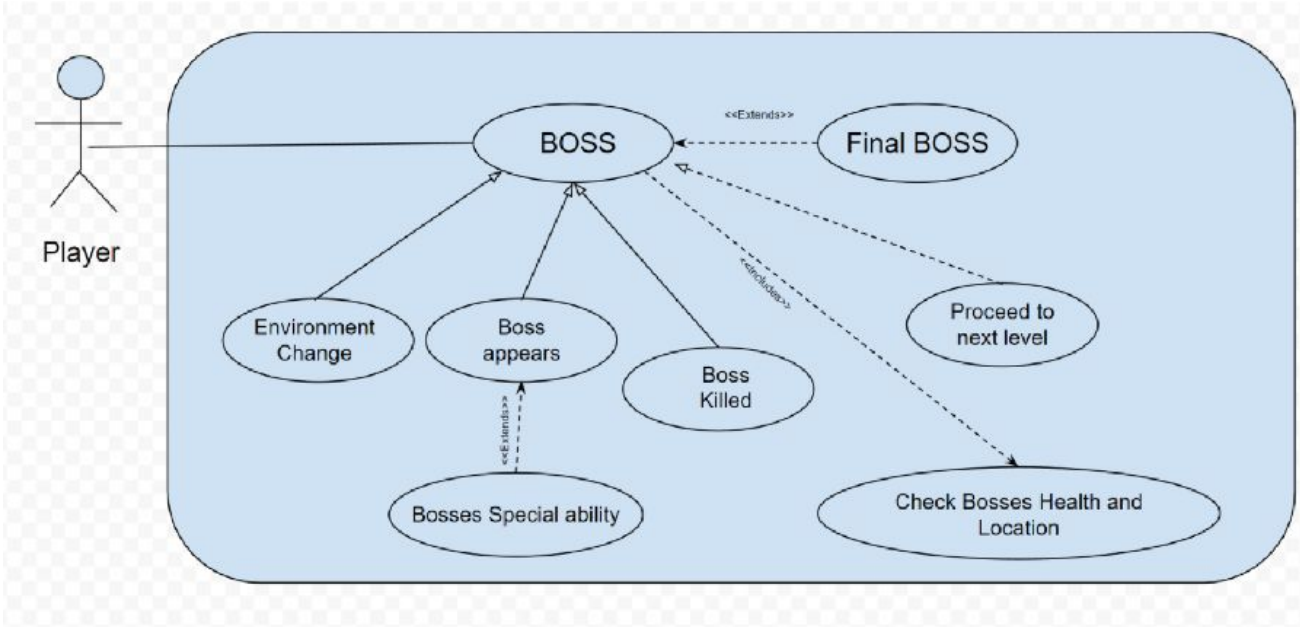
Jackie Lee



Boss Fights - Alphonse Crittenden

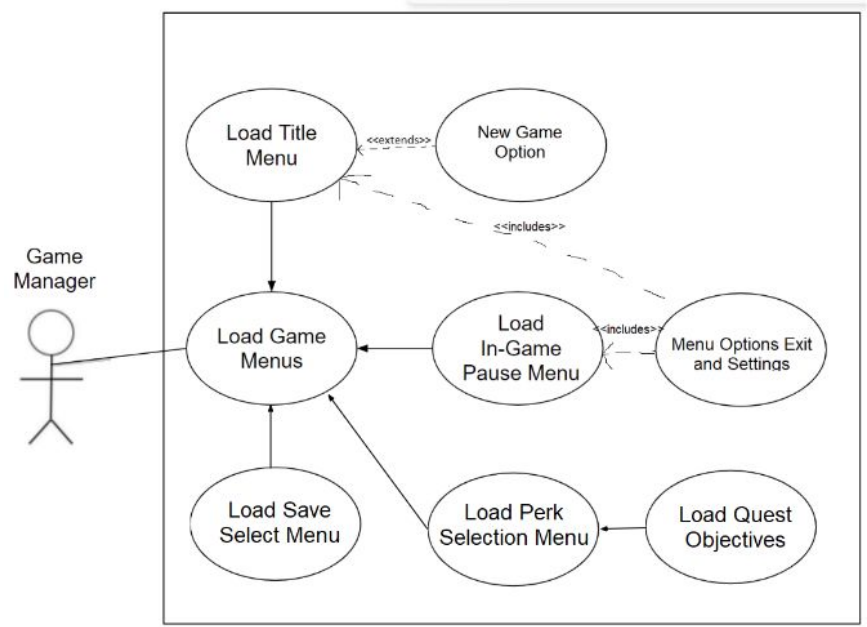
- My feature is making the boss the player will be fighting at the end of each level
  - There will also be a Final boss at the end of the game before the israelites are freed
- Medium priority - Game can still be played without a boss fight
- Each boss will have a special attack - Medium complexity
  - If time allows I can hopefully learn about thread pools for the special attacks for the objects of the boss

Boss fight use case



Alphonse Crittenden

Menu System - Jordan Higgins

- I will be creating the menus for the game which includes the title, end screen, HUD, and settings.
- My feature is medium to high priority. While it is not crucial to the game, the game would be significantly less user friendly without proper menus.
- Compared to other systems in the project, the menu system is not very complex overall.

Menu System - Use Case Diagram