InBetween

By SuperNova Nerds

Story

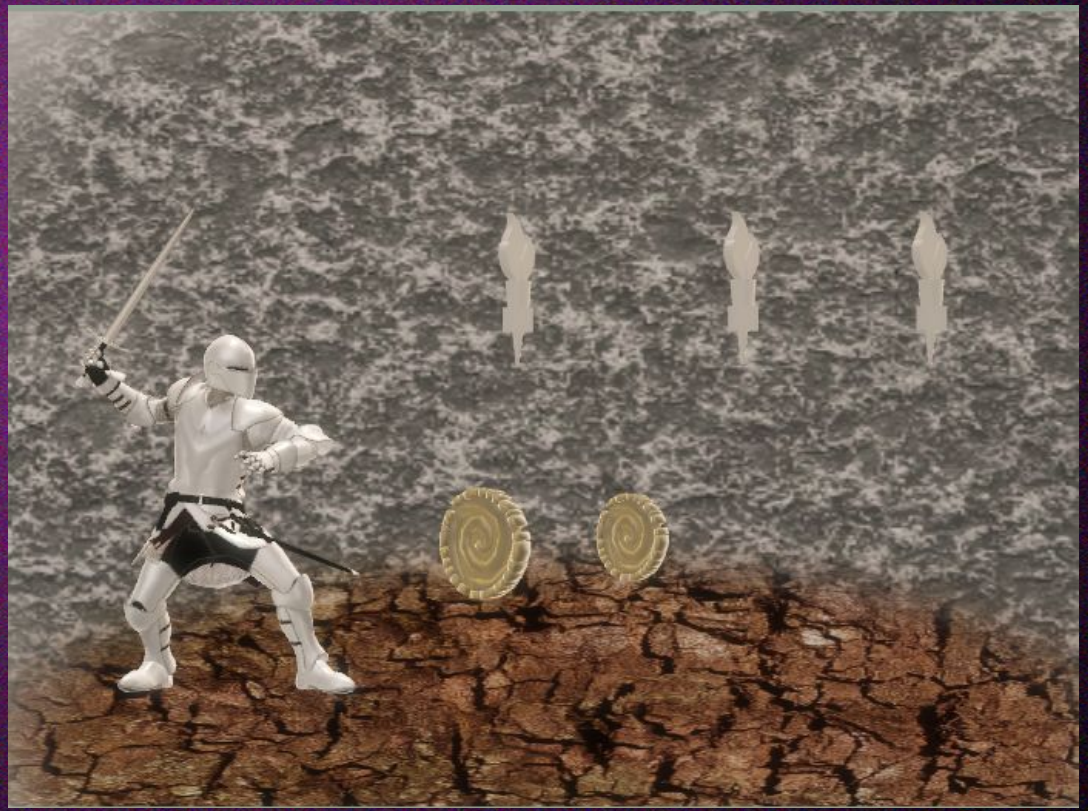
You were once a knight, a proud knight, now living in purgatory after being killed in battle. Your worries have gone from defending your kingdom, to now fighting for your own salvation! Will you be able to escape your fate or will you succumb to the monsters around you? Your eternal destination depends on it...

Your goal is to journey through purgatory, slay terrifying monsters, find powerful upgrades, and defeat the final boss.

Meet the team!

Storyboard - Player

Player wakes up in a mysterious location, starting the game in the spawn room. The Player finds themselves able to move, interact, and attack at any chance they desire. Player goes on to move around the environment and interacts with the area and its enemies. The Player finds themselves gaining XP and coins by defeating enemies. The shop proves plentiful when trading these coins for wares and eventually the Player will proceed to Boss room and attempt to beat it. If the Hero Fails, they restart in the mysterious location, and if they beat the boss, they continue on to greater things.



Storyboard - Level Generation

Action: The knight will interact with the door and the world will generate a new room for the player to explore in

Note: The Spawn room & Generated Rooms will be the first thing the player will notice while playing the game as the rooms are randomly generated. The actions of this are interacting with doors and spawning in to fight enemies!

Braydyn

Storyboard - Enemies

Player fights enemies as they progress through the game. Each room yields a more difficult monster than the last. The player needs to get stronger if they're going to survive.

Dialogue: "Die spider!"

Storyboard - Leveling

You've learned the more enemies you slay, the stronger you get. Gain experience, level up, and increase your stats. The Gods award you powerful upgrades to choose from, your weapons get stronger, and your armor gets tougher.

UI Dialogue: "Choose an Upgrade!"

Storyboard - Shop

As the player continues throughout the game, they stumble upon a shop level. Within such is an item shop providing the ability to upgrade their gear due to its wide array of weapons, armors, potions, and even artifacts to choose from. However, none of these items come for free, as each of them cost a fair amount of coins. Despite their price, these items provided needed upgrades for the player progress forward.

Storyboard

Boss Fight

Action:

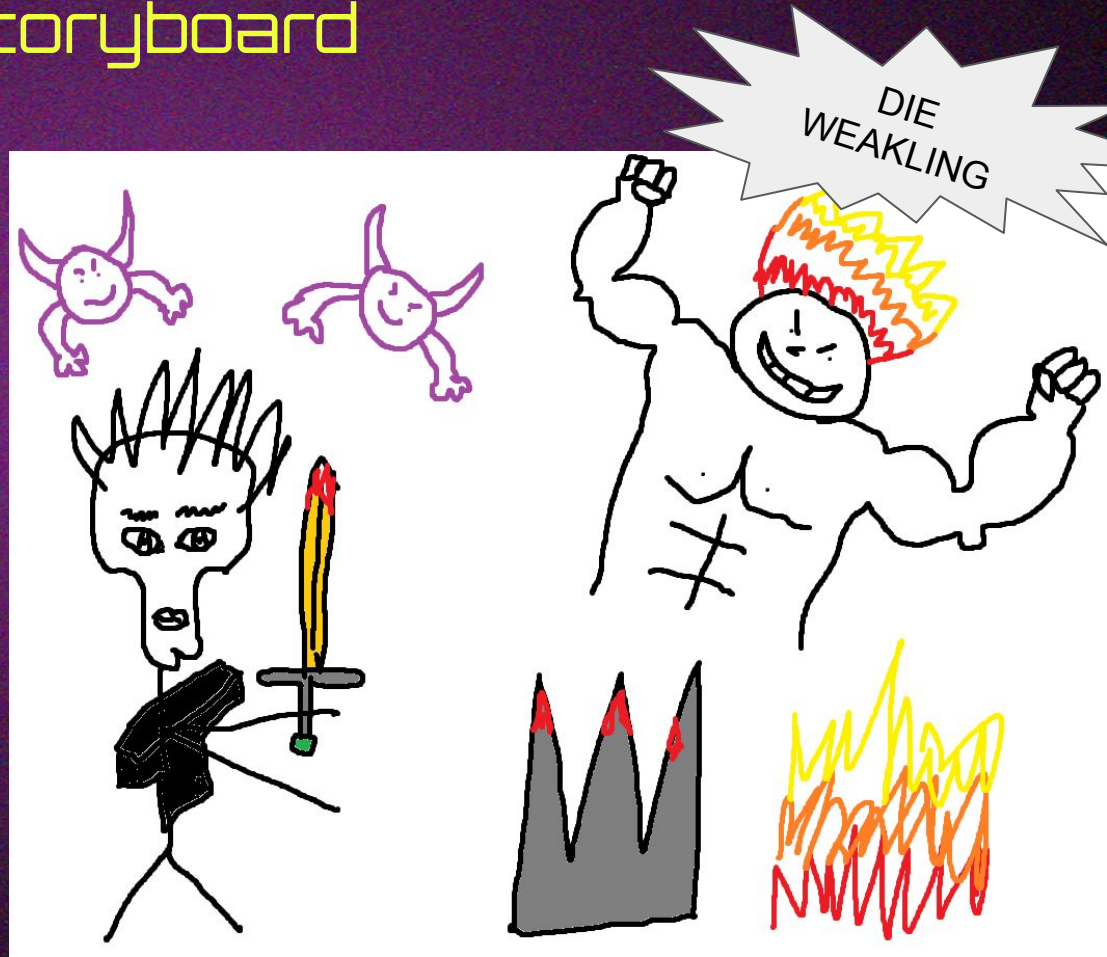
Player fights the boss and its minions while dodging fire and spikes. When the player kills the boss, they are sent to the win screen.

Dialogue:

BOSS: “Die weakling!”

Notes:

Epic copyrighted music plays in the background 🔥



Storyboard: Victory Screen

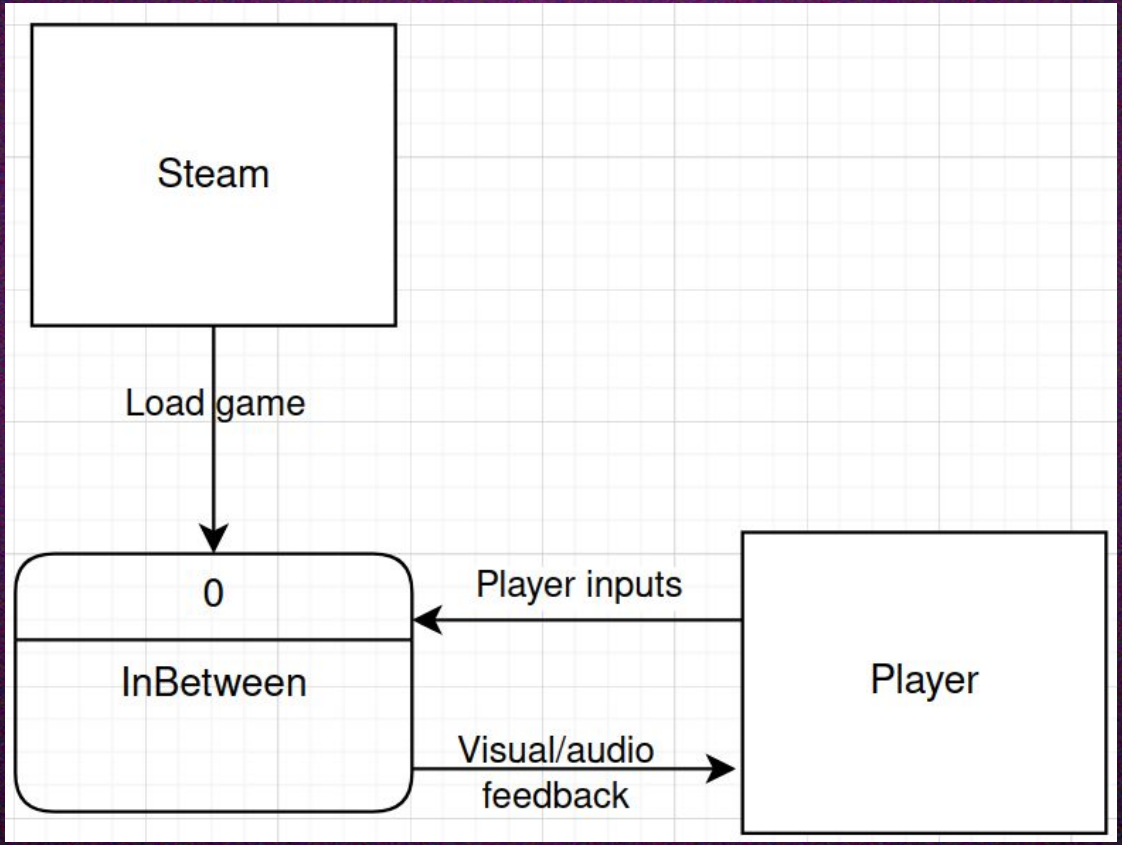
Win Screen

Action: After defeating the boss, the game transitions to the **Win Screen**. Displays a **victory animation** of the player, accompanied by **reward notifications**. Options to either **proceed to the next level** or **replay** the boss fight.

Dialogue: **Narrator**- "Congratulations! You've defeated the boss!"

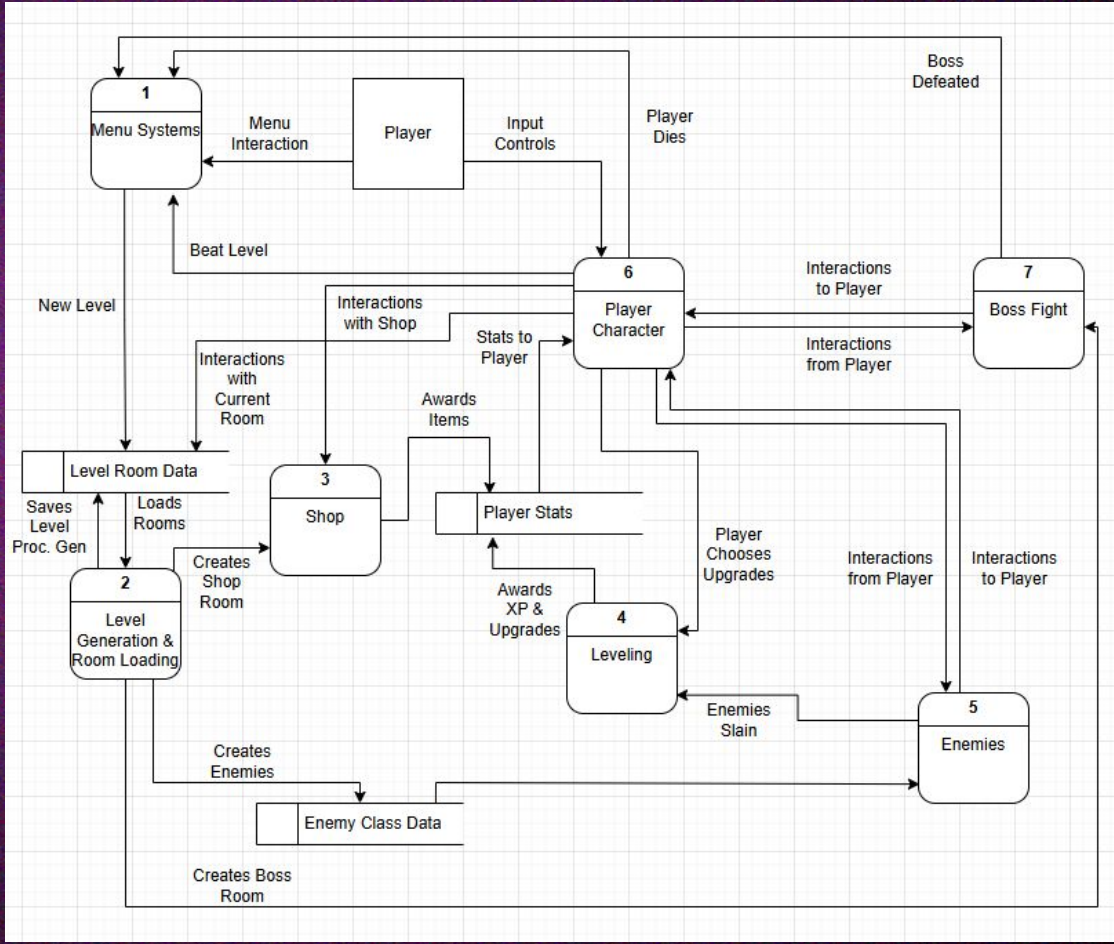
Notes: **Epic background music and visual effects.**

Context Diagram

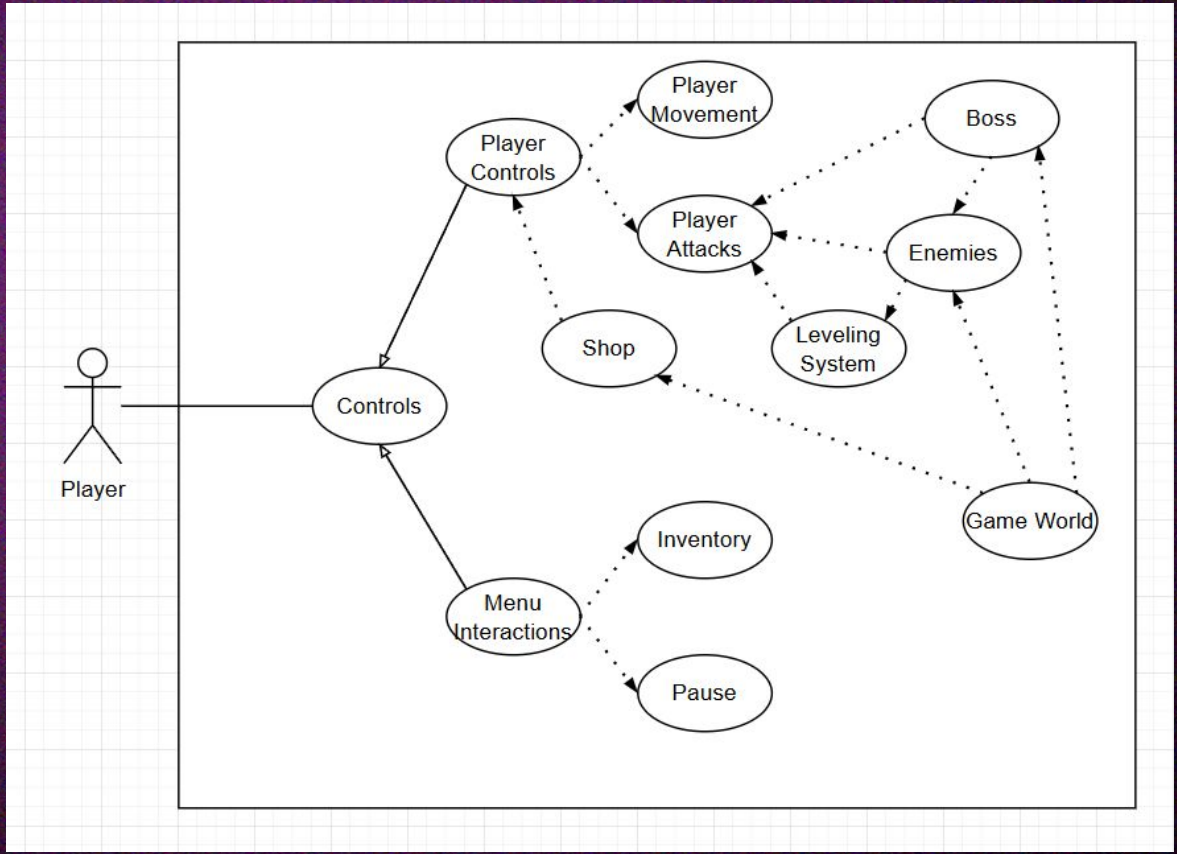


Level 0 Diagram

1 - Uday
2 - Braydyn
3 - Dax
4 - Zach
5 - Gabriel
6 - Liam
7 - Tavin



Global Use Case

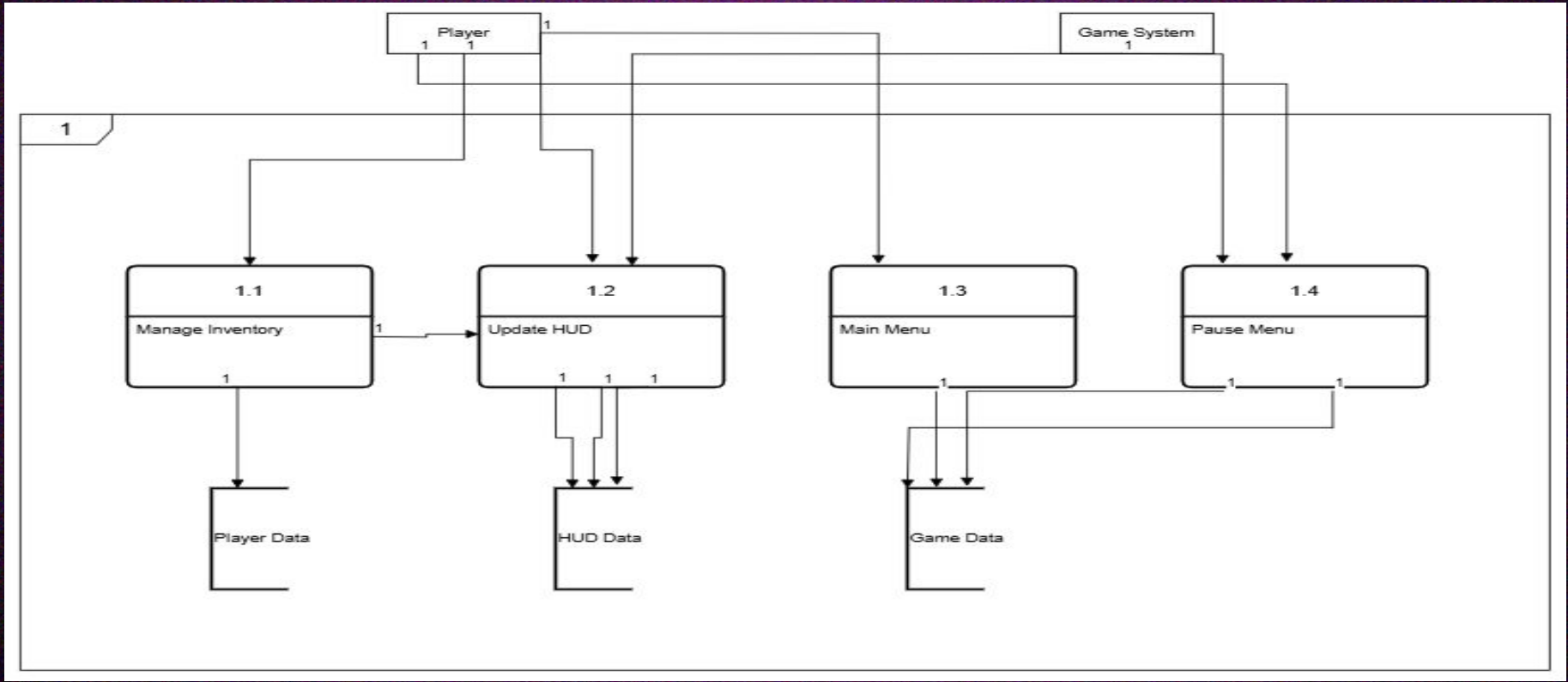


Subsystem 1: Inventory/HUD system and Menus

In the game, ‘In-Between’,I am responsible for the **Inventory System, HUD, Main Menu, and Pause Menu**. The **Inventory System** allows players to manage collected items, equip weapons, and use consumables, while the **HUD** provides real-time updates on health, equipped items, and stats. The **Main Menu** serves as the starting point, offering options like starting a game, adjusting settings, or exiting. The **Pause Menu** allows players to temporarily halt gameplay, access settings, or quit. These features ensure a smooth and immersive player experience.

Uday

Level 1 Diagram: Inventory/HUD System; Main menu and Pause Menu



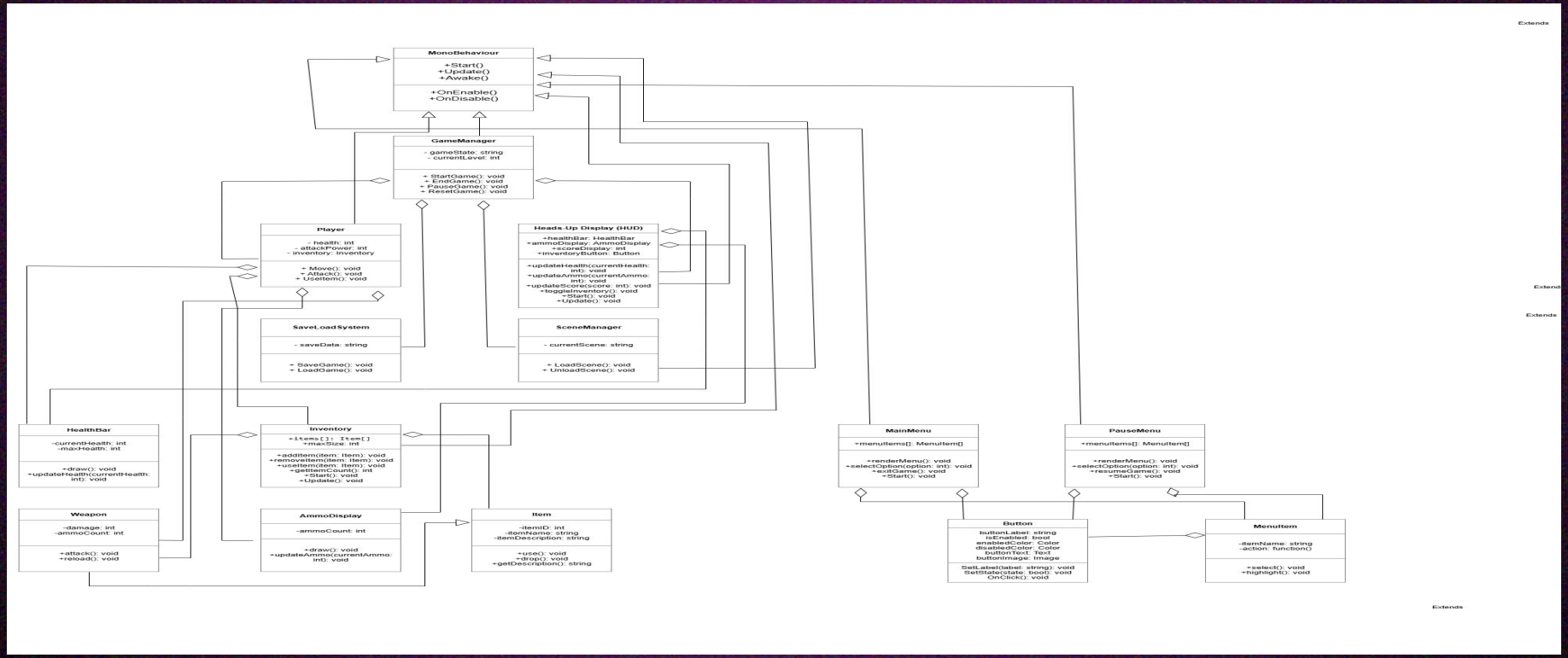
Uday

Why the inventory/HUD system and Main and Pause Menu are high priority features?

The **Inventory System, HUD, Main Menu, and Pause Menu** are **high-priority features** in *InBetween* because they are integral to the overall gameplay experience. The **Inventory System** and **HUD** directly impact how players interact with the game by allowing them to manage items, track health, and see relevant stats in real-time. Without these systems, players would struggle to progress effectively. The **Main Menu** and **Pause Menu** are essential for providing players with access to game settings, starting a new game, or taking breaks. These features are foundational to ensuring a smooth, intuitive, and enjoyable gameplay experience, making them essential for the game's success.

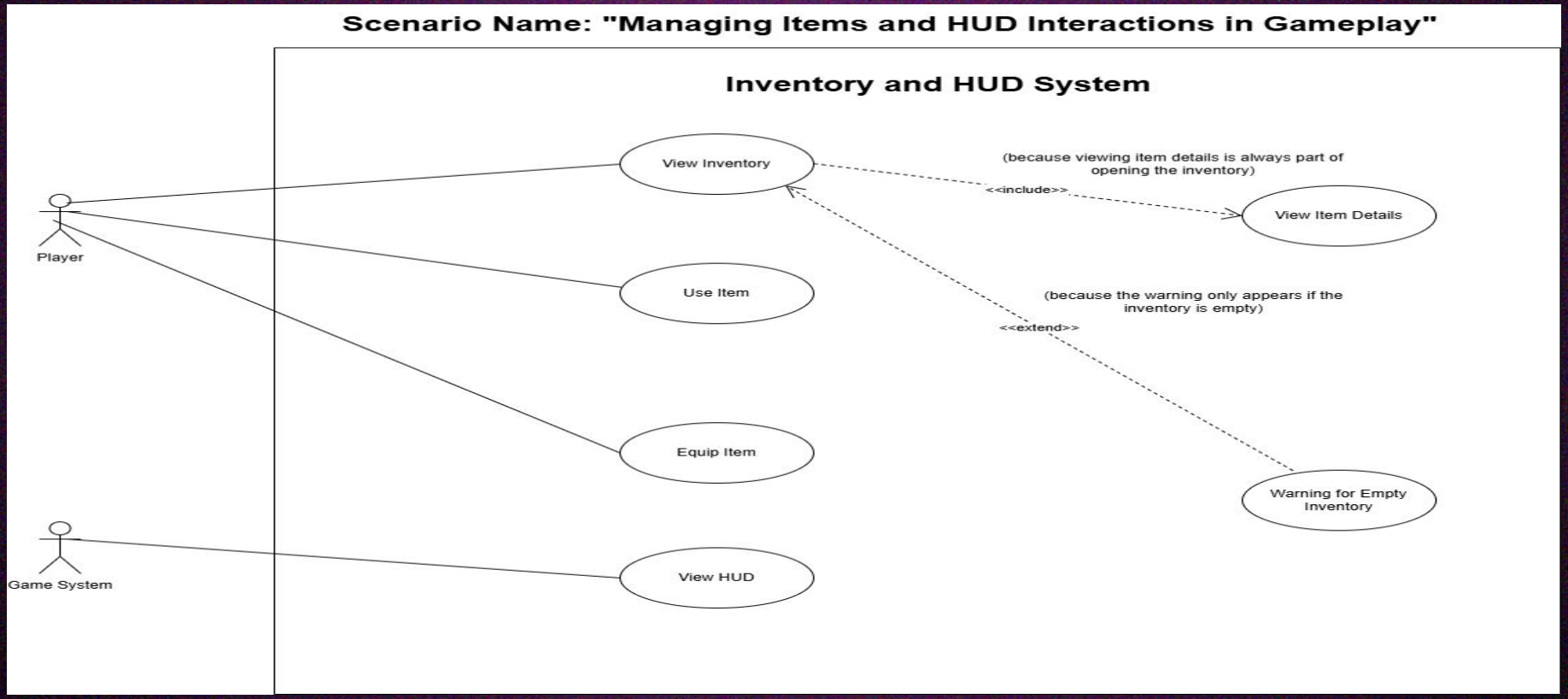
Uday

Class Diagram: Inventory/HUD; Main menu and Pause Menu



Uday

Use Case Diagram



Uday

Complexity Level for Inventory/HUD systems; Main and Pause Menu

The **Inventory System, HUD, Main Menu, and Pause Menu** are moderately complex features. The **Inventory System** needs to manage and update items, while the **HUD** displays real-time player stats. Both require smooth integration with the core gameplay. The **Main Menu** and **Pause Menu** involve user-friendly navigation, but are less complex. Overall, the complexity lies in ensuring these systems work seamlessly and provide a smooth, intuitive player experience.

Complexity Score: 7/10

Uday

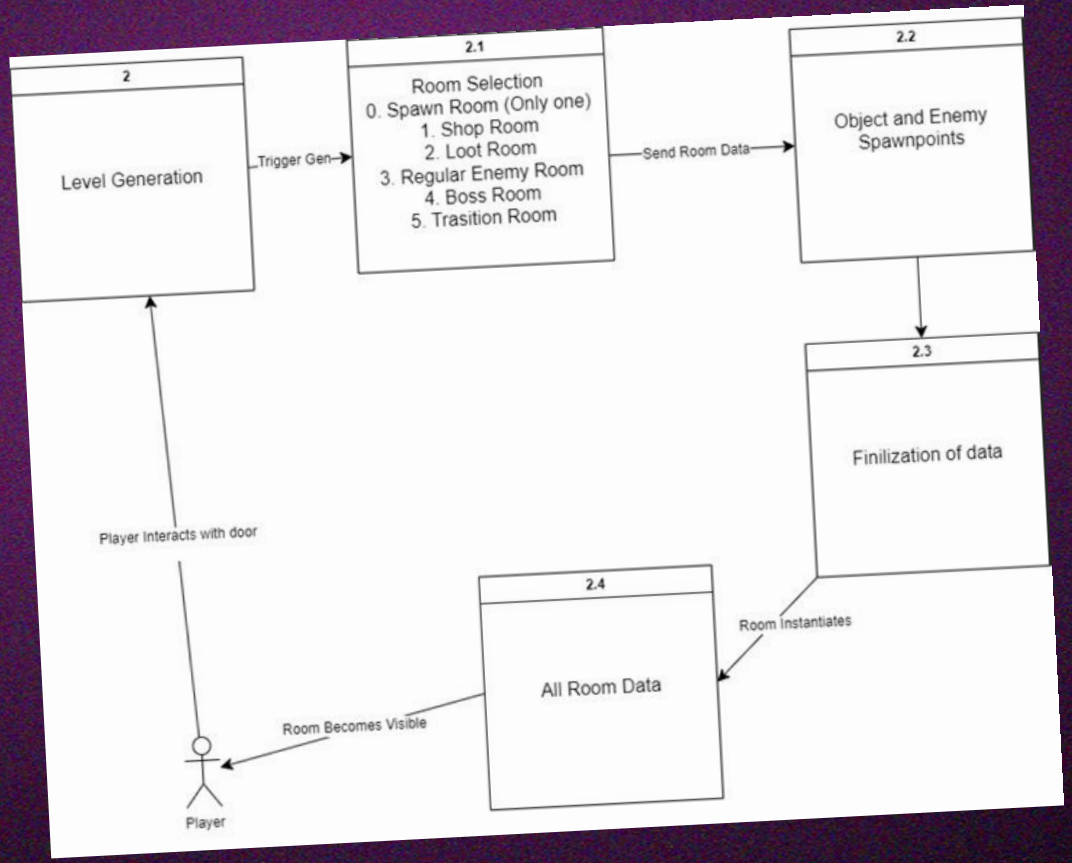
Subsystem 2: Level Generation

For my feature for the game InBetween I will be working on the pseudo-procedural level generation that stitches together pre-designed rooms in different patterns to form a dynamic level generation. Furthermore i will be designing all of the layouts of the rooms.

Braydyn

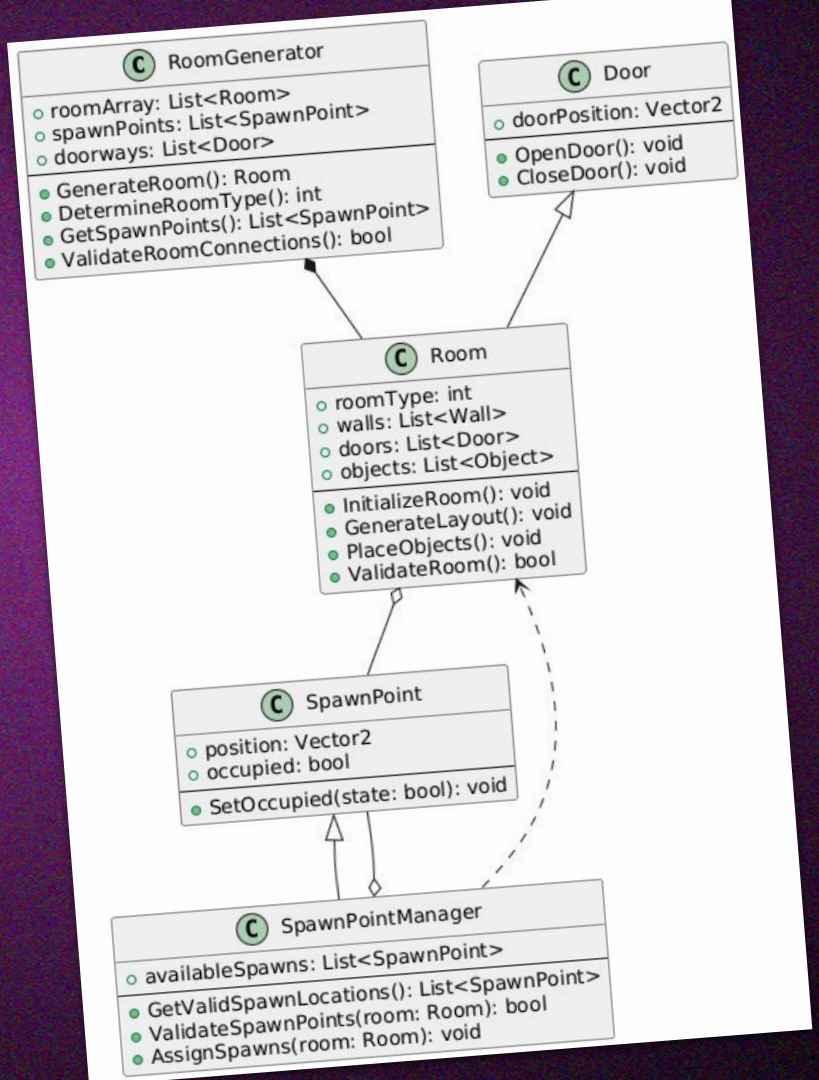
Level Generation Diagram

Level 1



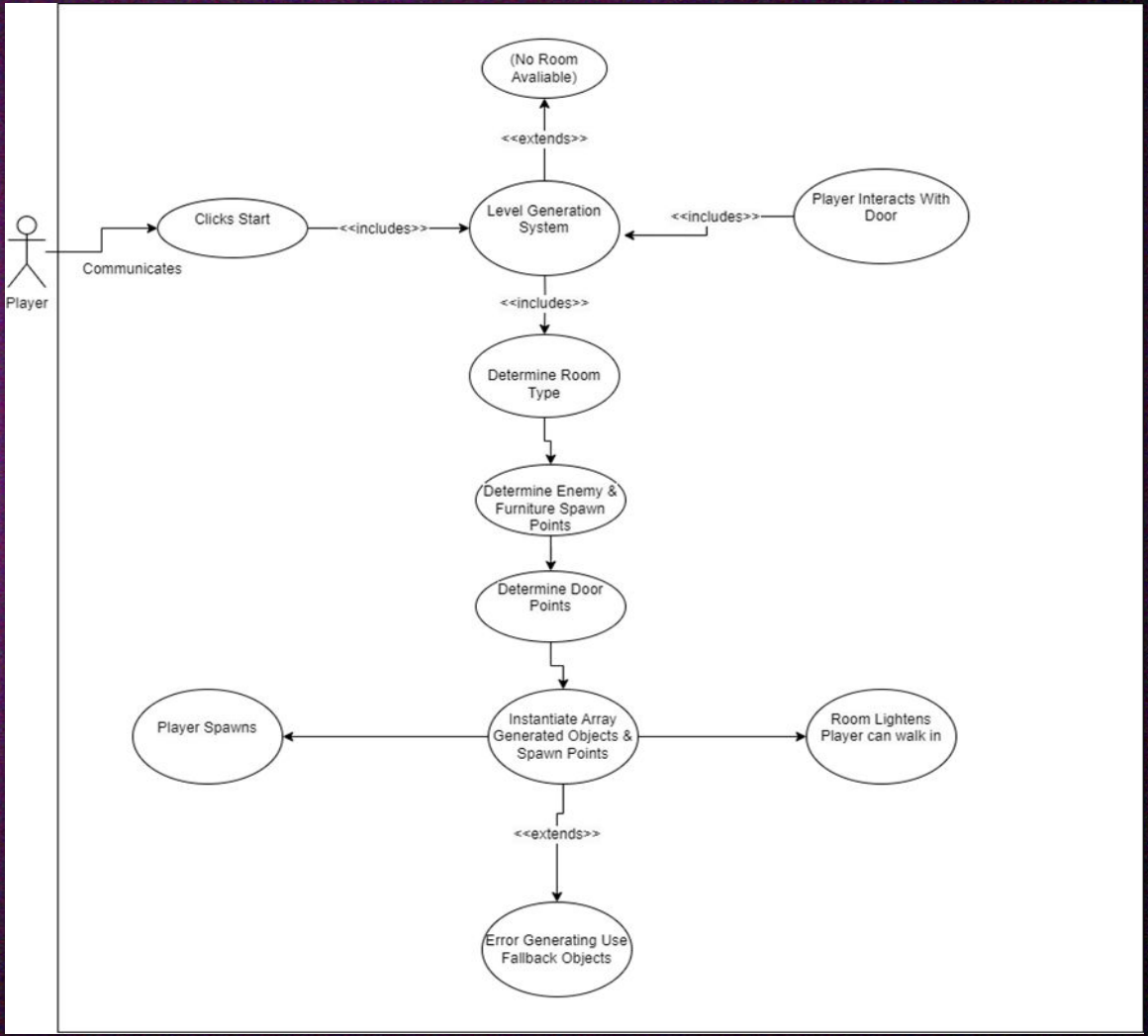
Braydyn

Class Diagram



Braydyn

Use Case Diagram



Braydyn

SubSystem 3: Shop System

For my part in InBetween, I am working on the shop system. As the player progresses throughout the game, they collect coins and will eventually stumble upon a shop level. Within this level, the player can purchase a number of weapons, armors, artifacts, and potions to help them continue through the game. However, not all items will be available to the player, as the shop will be filled with random items selected from an overall pool of items. Furthermore, the player can also sell items here for additional coins. With that being said, my goal is to create and program the shop level itself, all of the items within the shop, and the coin management system.

Dax

Priority - Shop System

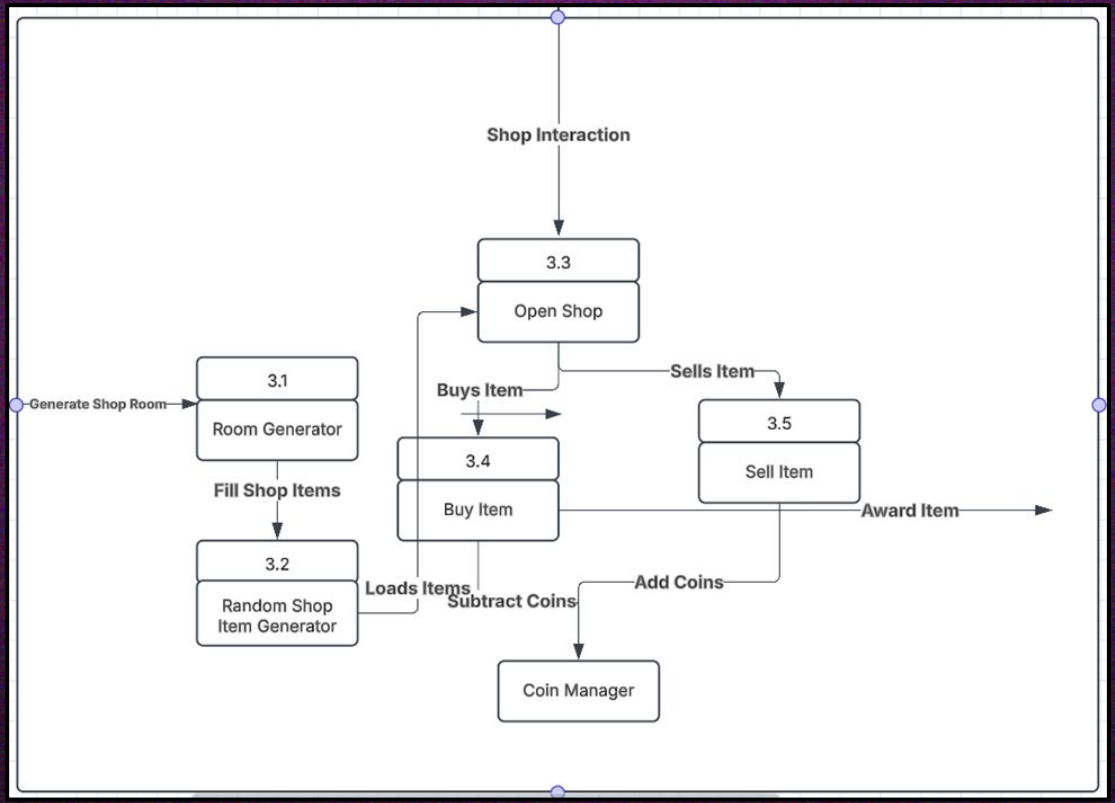
Priority level: 3

Although the shop system provides the player with unique weapons, armor, and other items, such is overall not a complete necessity. Without a shop system, the game could still be played; although, such would be both much harder and less fun. There would be no choices to be made in terms of selected gear and the player would be unable to upgrade their gear as the game progresses. Thus, a shops system still provides value in the form of expanding the game and offering the user a better experience.

Dax

Level 1 Diagram

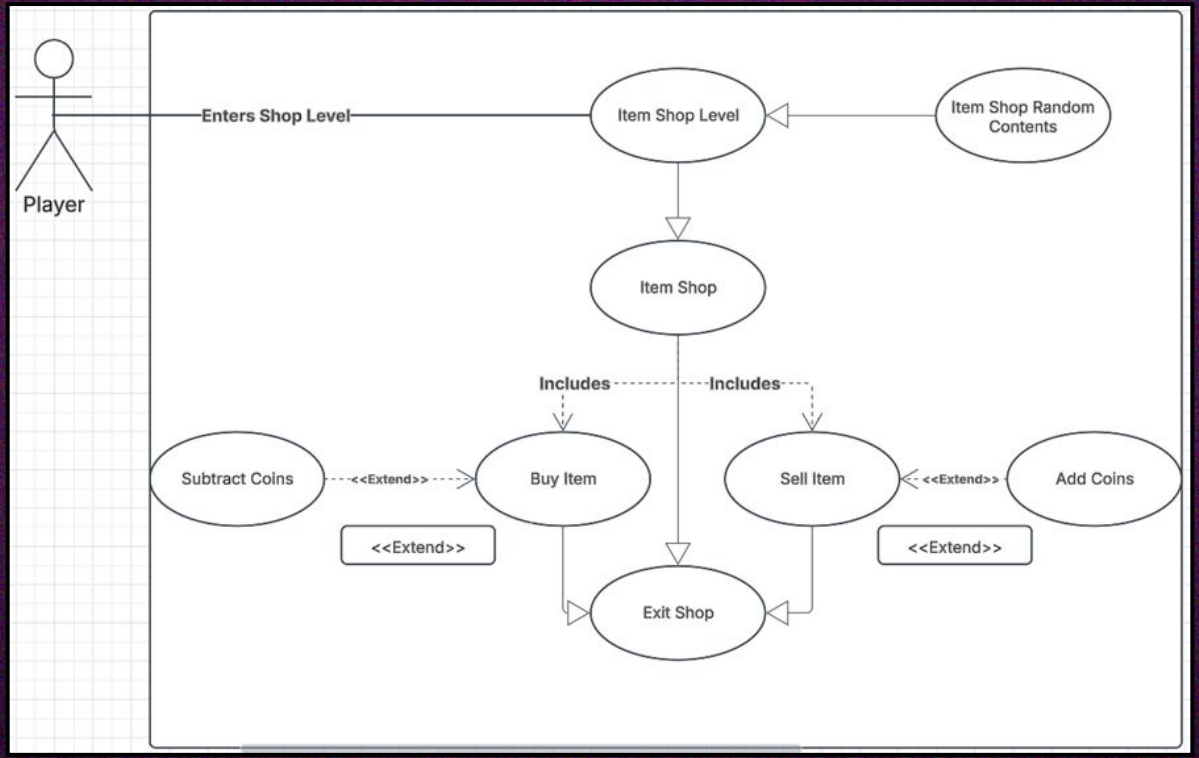
Shop System



Dax

Use Case Diagram

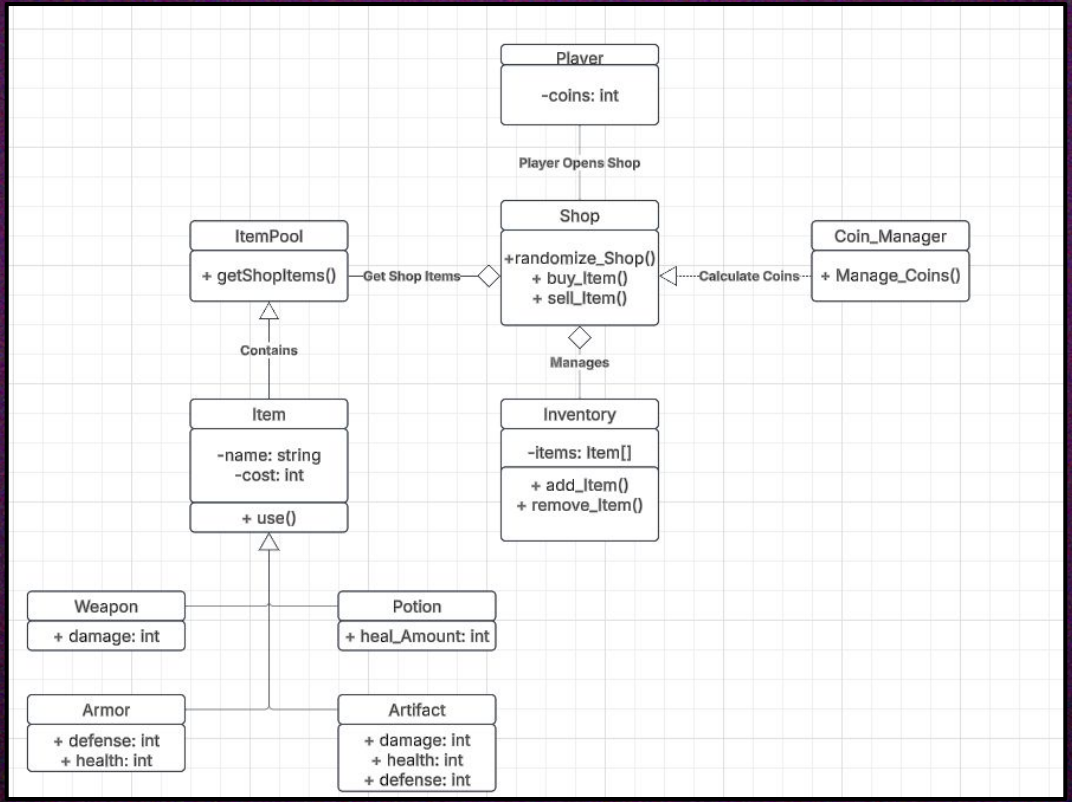
Shop System



Dax

Class Diagram

Shop System



Dax

Complexity - Shop System

I believe the complexity of the shop system itself to be in the middle of the pack, with the hardest feature being that the shop is filled with random items. Other features are relatively simple and are more of a time commitment than anything. The bulk of the item shop lies in creating the items themselves. Most of these items can follow a pattern of items that came before them, making the implementation of each item easier than the last. However, that is not to say that the shop system is entirely simple, as it still requires a great deal of work and creativity to fully flush out such a feature.

Complexity Score: 5/10

Dax

Subsystem 4: XP and Leveling

For InBetween, I'm in charge of the leveling of the character through XP and upgrades. Enemies will drop XP when defeated. When enough is collected, the player will “Level Up” and scale the character in terms of stats such as health, attack, attack speed, and more.

In addition, earning a level will reward the player with a choice from a pool of random upgrades. The different upgrades will provide the user with a unique weapon, ability, or other variety of bonuses that may help the player scale with the enemies in the game

Zach

Priority

XP & Leveling

I believe the leveling system has a priority of 2.5, as without it the game would still be entirely functional, visually and physically.

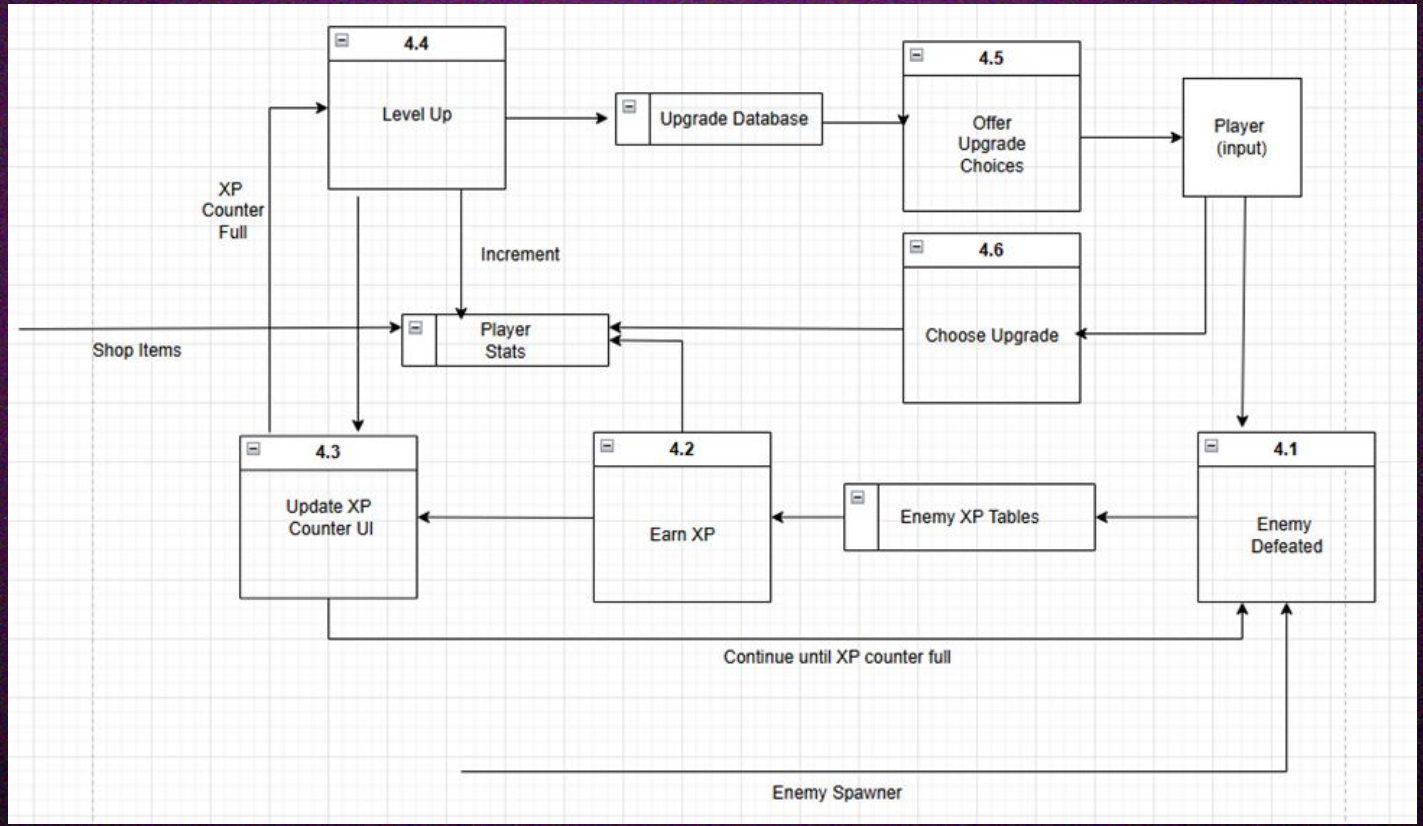
However, the variance that comes with a unique player experience and build strategy is what gives life and personality to the existing structure.

An element of random chance is vital in the sense of longevity and enjoyment of the game, but not functionality.

Zach

Level 1 Diagram

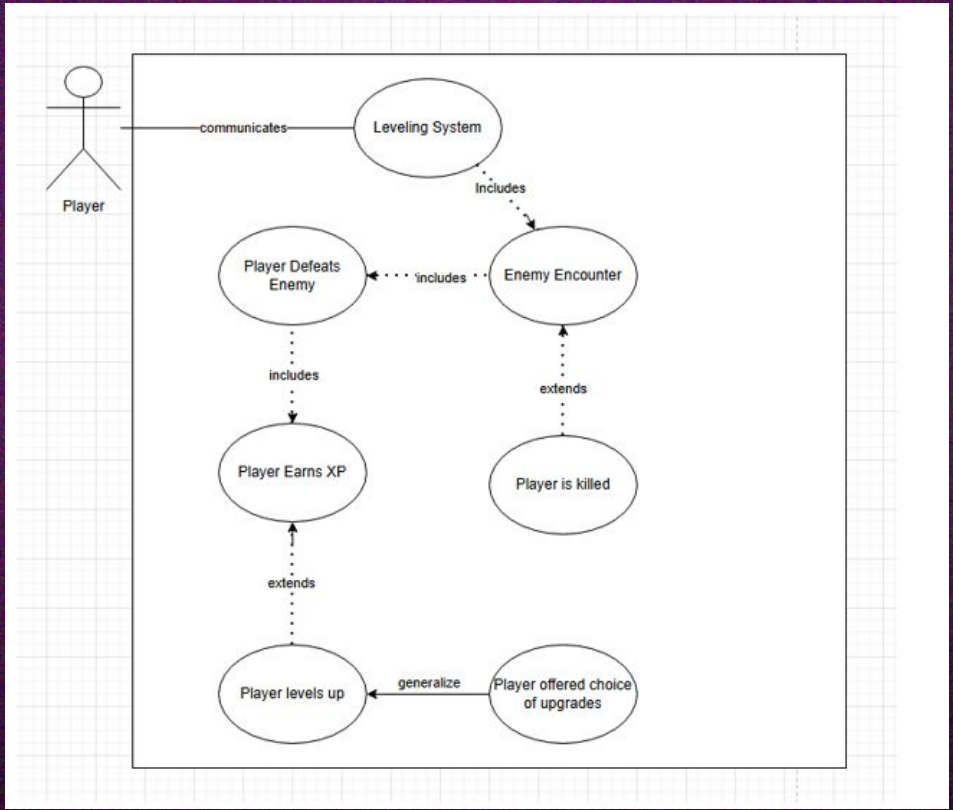
XP & Leveling



Zach

Use Case Diagram

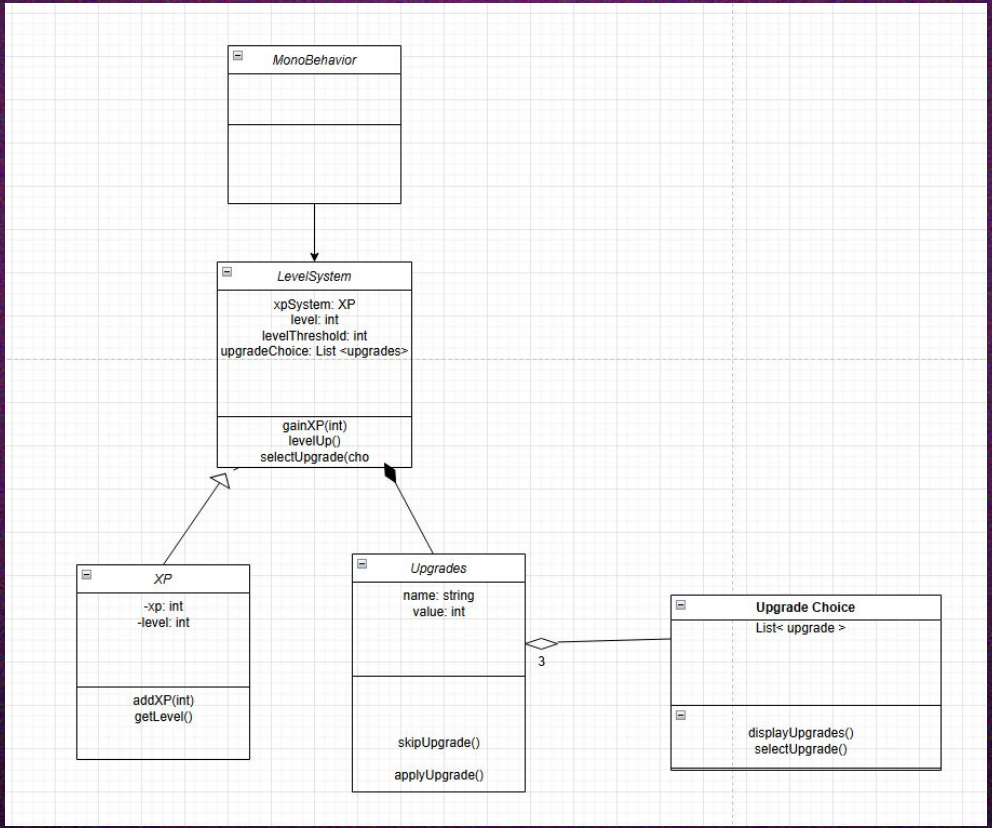
XP & Leveling



Zach

Class Diagram

XP & Leveling



Zach

Complexity

XP & Leveling

I believe the base complexity is low (4/10), as the lack of interdependence with the other processes provides room to adjust this process as needed.

Having said that, the more depth, synergy, and effort that is put into this process leaves room for the ceiling to grow significantly. Added complexity will bring the player further from a linear story and closer to a unique and fulfilling experience.

Zach

Subsystem 5: Enemies

I am developing all things enemies (except for the bosses!). I will be creating all the various enemy types, their movement, attacks, sprites, sounds, and any other misc. Interactions with the player.

Gabriel

Priority: 1

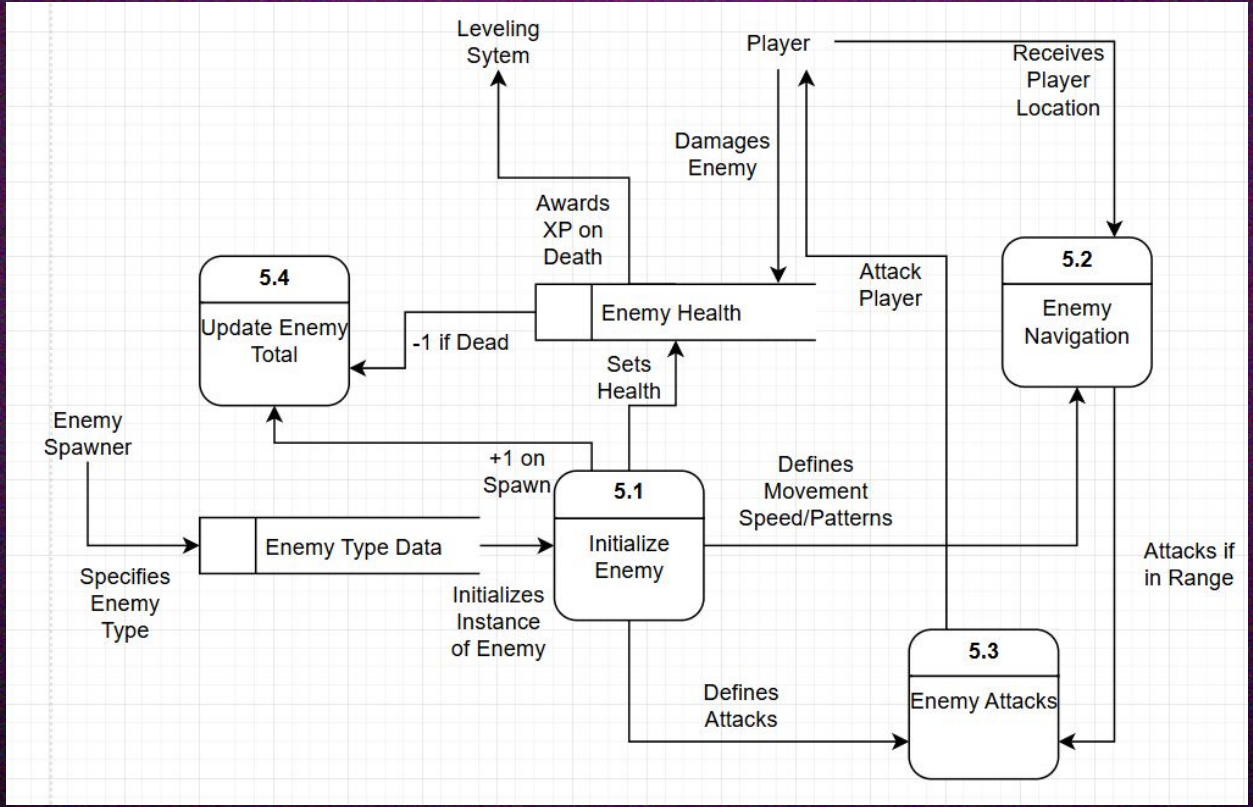
Enemies

- Can’t have a game like this without enemies.
- Gameplay revolves around enemies.
- Interacting with enemies be your main focus for most of the game.

Gabriel

Level 1 Diagram

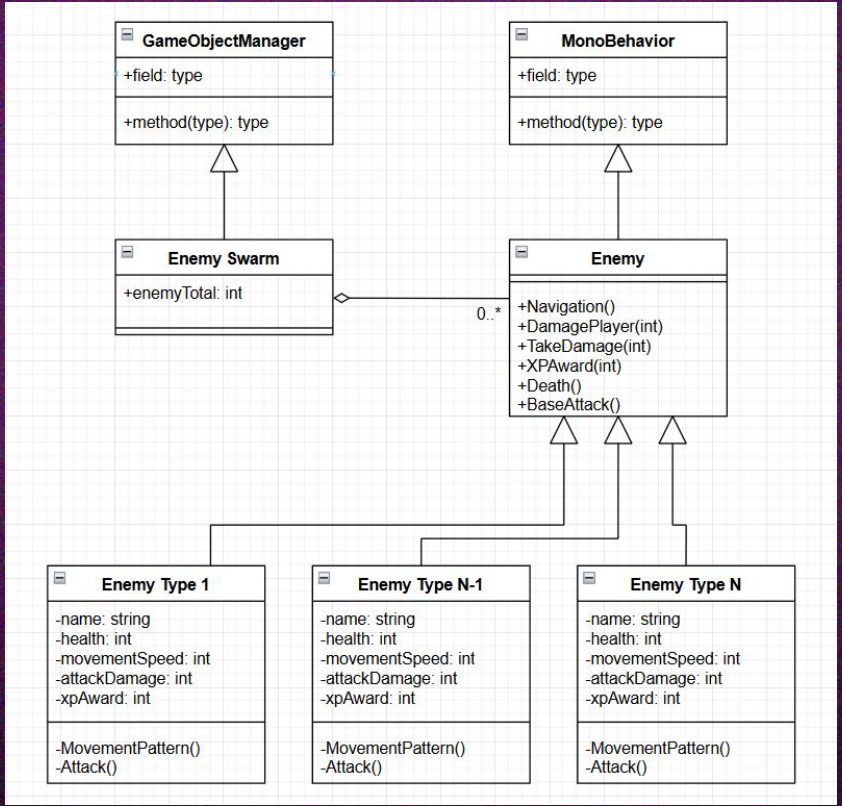
Enemies



Gabriel

Class Diagram

Enemies



Gabriel

Complexity

Enemies

- 8/10
- Good sprite work & animation will take a lot of time.
- Enemies will require balancing.
- Plenty of room for error.

Gabriel

Subsystem 6: Player

Developing the functional systems surrounding the player including attacking, interactions, and movement.

Liam

Priority: 1

Player

- Can’t have a game without a player.
- Can’t have any interaction with an environment without something controlling when and were interactions occur.
- Controlling the player is the game itself.

Liam

Complexity

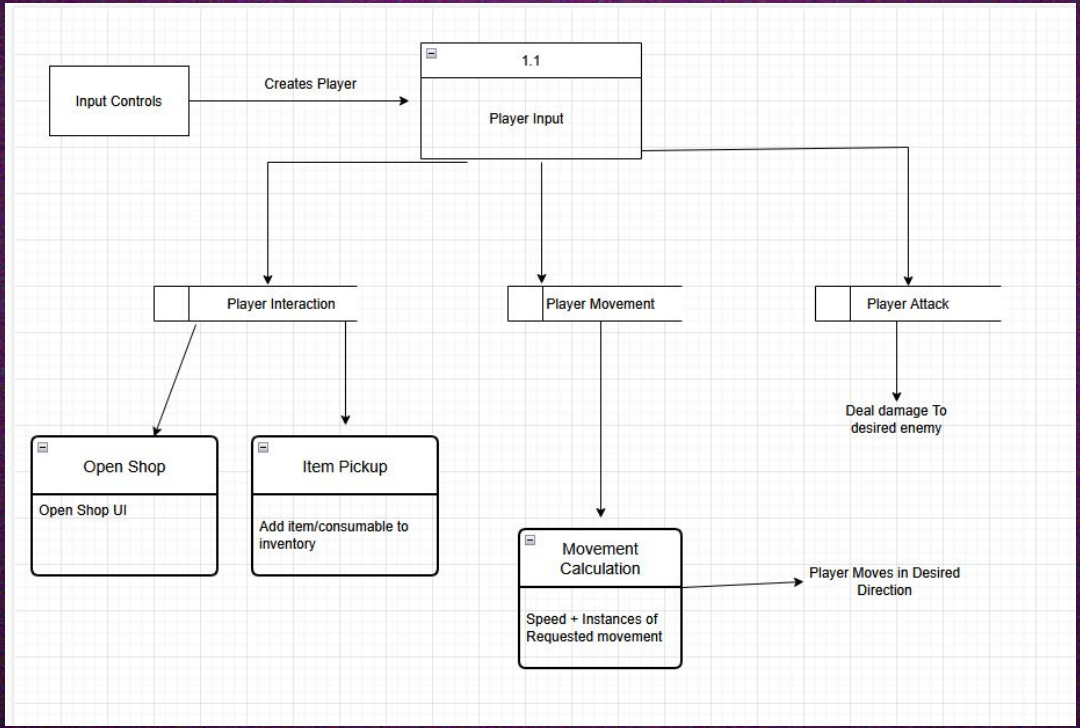
Player

- Player will be interacting with almost every other feature the game provides
- Movement will be relatively simple.
- Attacking will be progressively more difficult as we progress with enemies.
- Interactions need to bring up proper UI and proceed with proper logic
- 7/10 complexity

Liam

Level 1 Diagram

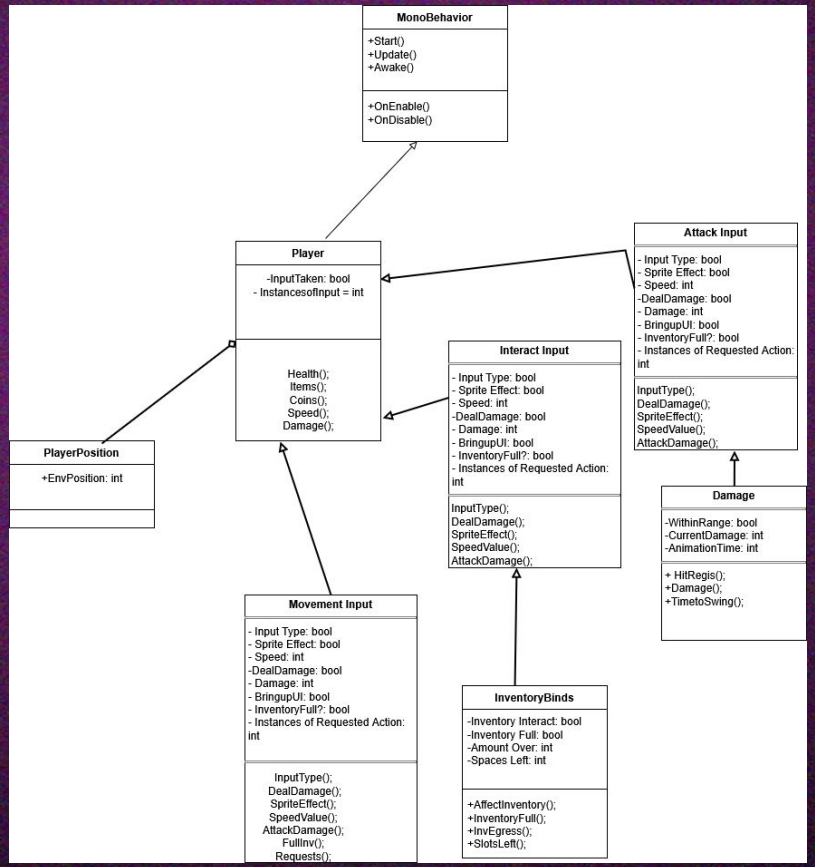
Player



Liam

Class Diagram

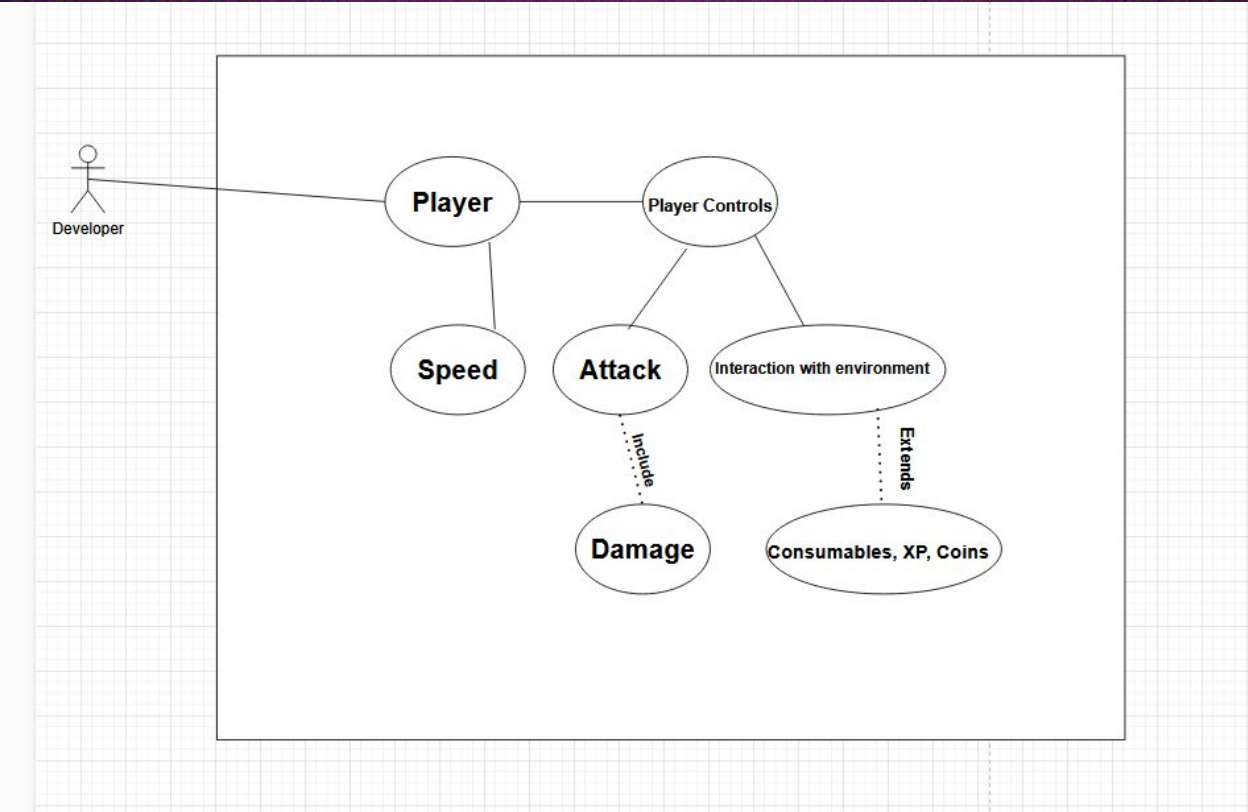
Player



Liam

Use Case Diagram

Player



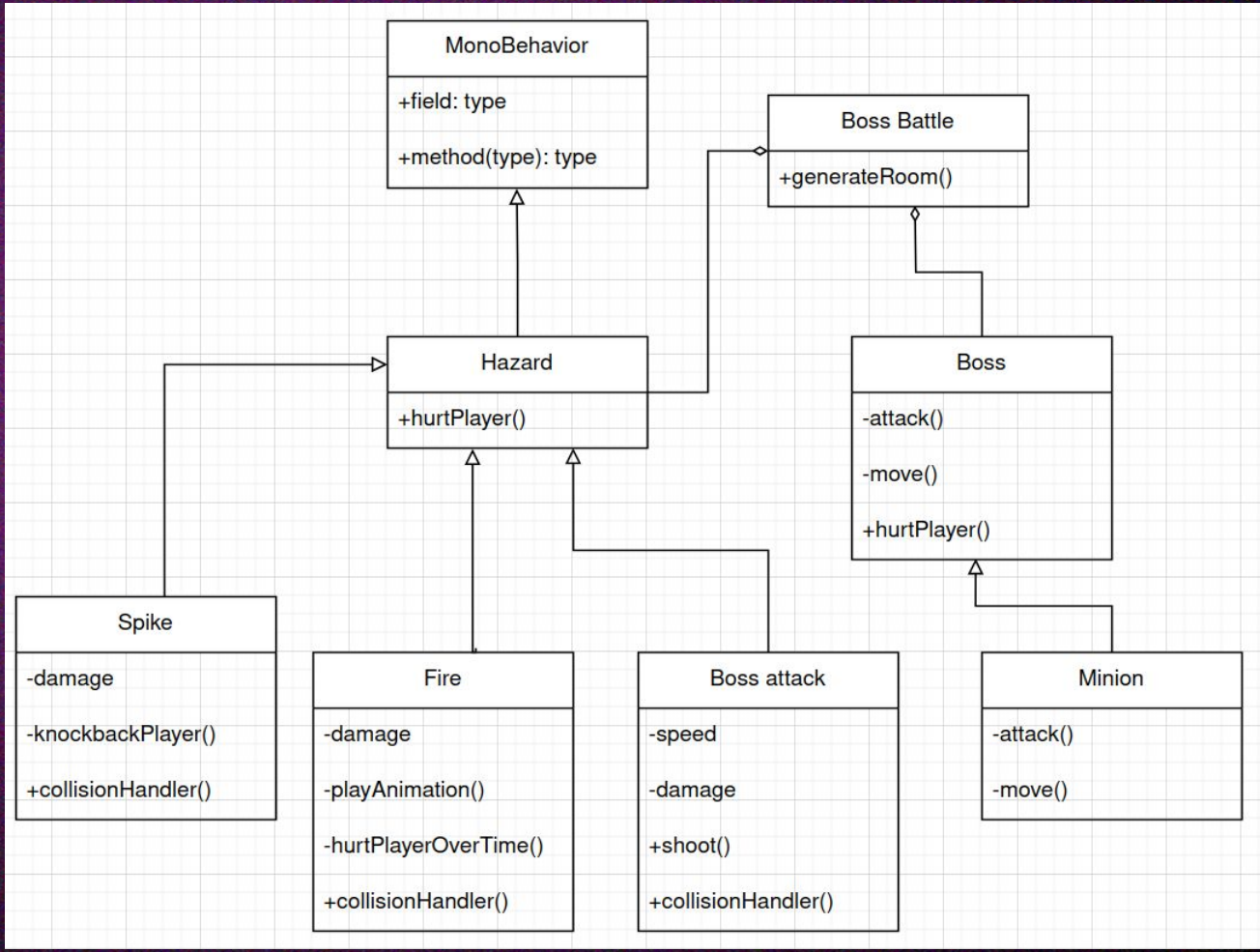
Liam

Subsystem 7: Boss Fight

Designing and coding the Boss, its attacks, its minions, and hazards that the player with have to dodge or defeat. The player wins when they kill the Boss.

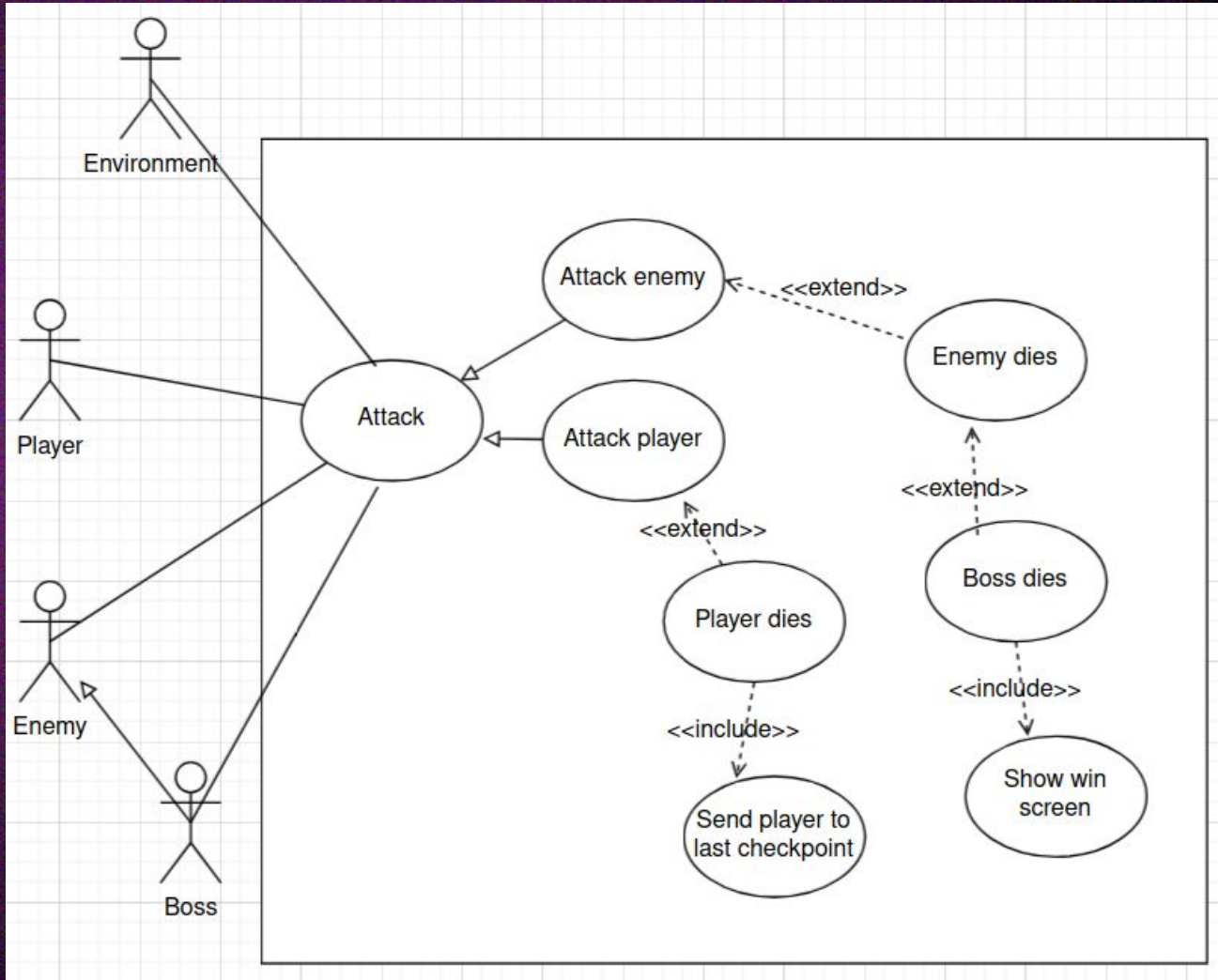
Tavin

Class Diagram



Tavin

Use Case Diagram



Tavin

Importance

- Moderately important.
- Makes InBetween feel complete.
- Gives players a satisfying ending.

Complexity

- Moderately complex.
- 3-stage Boss fight where the boss gets stronger at each stage.

Tavin

THE END

Created by:
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