# SA Presentation

# Warehouse Warriors The Game

A youngling by the name of *The Rizzler* is tasked with defeating the evil forces of *Jeremey Falcon*. To do so, *The Rizzler* must navigate multiple top-down levels of warehouse environments. Each level contains enemies to be defeated and collectables to be gathered to pass a level. Upon successful completion of the initial levels *The Rizzler* will battle *Jeremey Falcon* in an epic duel to complete his conquest.

This game draws inspiration from other top-down shooters such as The Binding of Isaac in its clear the room shooter fashion.

KIRKLIND
*Signature*

# Meet The Team

IT Manager (TL1): Braxton

Software Architect (TL2): Matthew

Software Architect (TL2.2): Divyansh

QA Manager (TL3): Conner

Project Manager (TL4): Benton

AI Specialist (TL5): Luke

Version Control Manager (TL6): Aaron

**KIRKLIND** *Signature*

# Story Board – Home Screen - Conner



Action: As the game starts, the player will see this scene, and choose to enter the Warehouse or not…

Dialogue: Buttons on Home Screen: Enter, Exit, Help.

Notes: Will look a lot prettier and there will be an option for BC mode.

# Story Board – Objectives List - Aaron



Grocery List:

-Get a Sample
-Milk
-Rotisserie Chicken
-Toilet Paper
-Bucket of Olive Oil
-Chicken Bake

Exit ( )

Action: Scene will overlap on game when "Objectives" button is pressed almost like a pause screen.

Dialogue: Text on screen showing the objectives needed to complete, there will also be a button to press or key to press to exit screen

Notes: Grocery List items will become green when completed, optional objectives might be added later on. Some objectives might require multiple items to be picked up; will include a (0/3) counter to update how many are left

# Story Board – Combat Scene (Ex. Level) - Benton



Action: Main player moves around the warehouse Attacking enemies and collecting different shopping items

Dialogue: No dialogue

Notes: Going to be crosshairs for player weapon shooting direction. A variety of enemies with different attributes. Camera should follow the player around the level when exploring new rooms.

# Story Board – Enemy AI - Matthew



- Action: Enemies either chase down the player doing melee damage or run away and shoot at them from a far

- Dialogue: No Dialogue

- Notes: Enemies spawn upon entering the level. If the player touches any enemy, the player takes damage. The enemy can only be damaged by the player's weapon

# Storyboard – Boss Fight - Luke



- Action: Player enters the boss room and battles the boss. The boss has unique abilities and events at different health levels.

- Dialogue: Boss and player voice lines

- Notes: The player must make it through all prior levels to get to this scene

# Story Board – Player Death & Respawn Scene -Divyansh
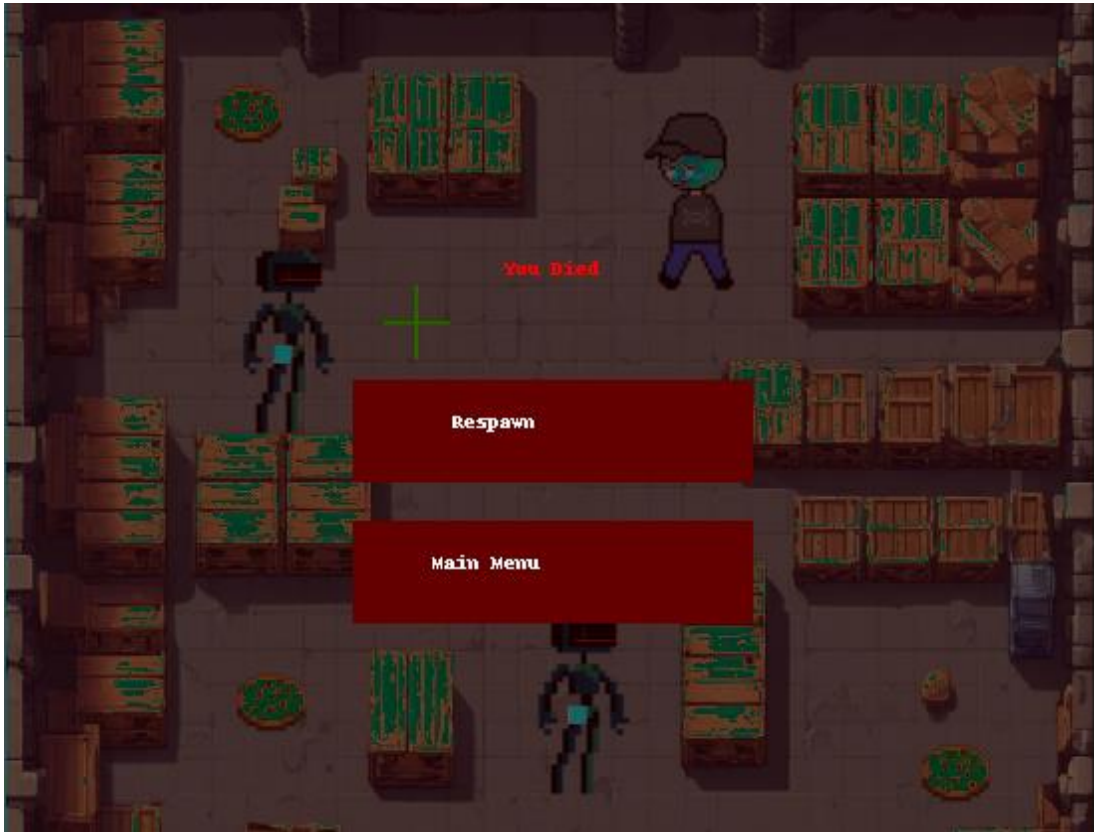


- Action: A "You Died" screen overlay will appear when the player is defeated. The interface displays options to Respawn or Return to Main Menu.

- Dialogue: "You have fallen in battle. Would you like to respawn?" Will appear in a text box.

- Notes: The player's sprite will appear as a ghost or grayed out, indicating they are temporarily out of action until they respawn.

# Storyboard – Winning Scene - Braxton



- Action: Player has defeated the final boss (its health has reached 0 and the player still has health) and a congratulatory screen displays and victory music plays

- Dialogue: No dialogue

- Notes: Players will be given an option to restart the game or quit the application

# Context Diagram

# Diagram 0
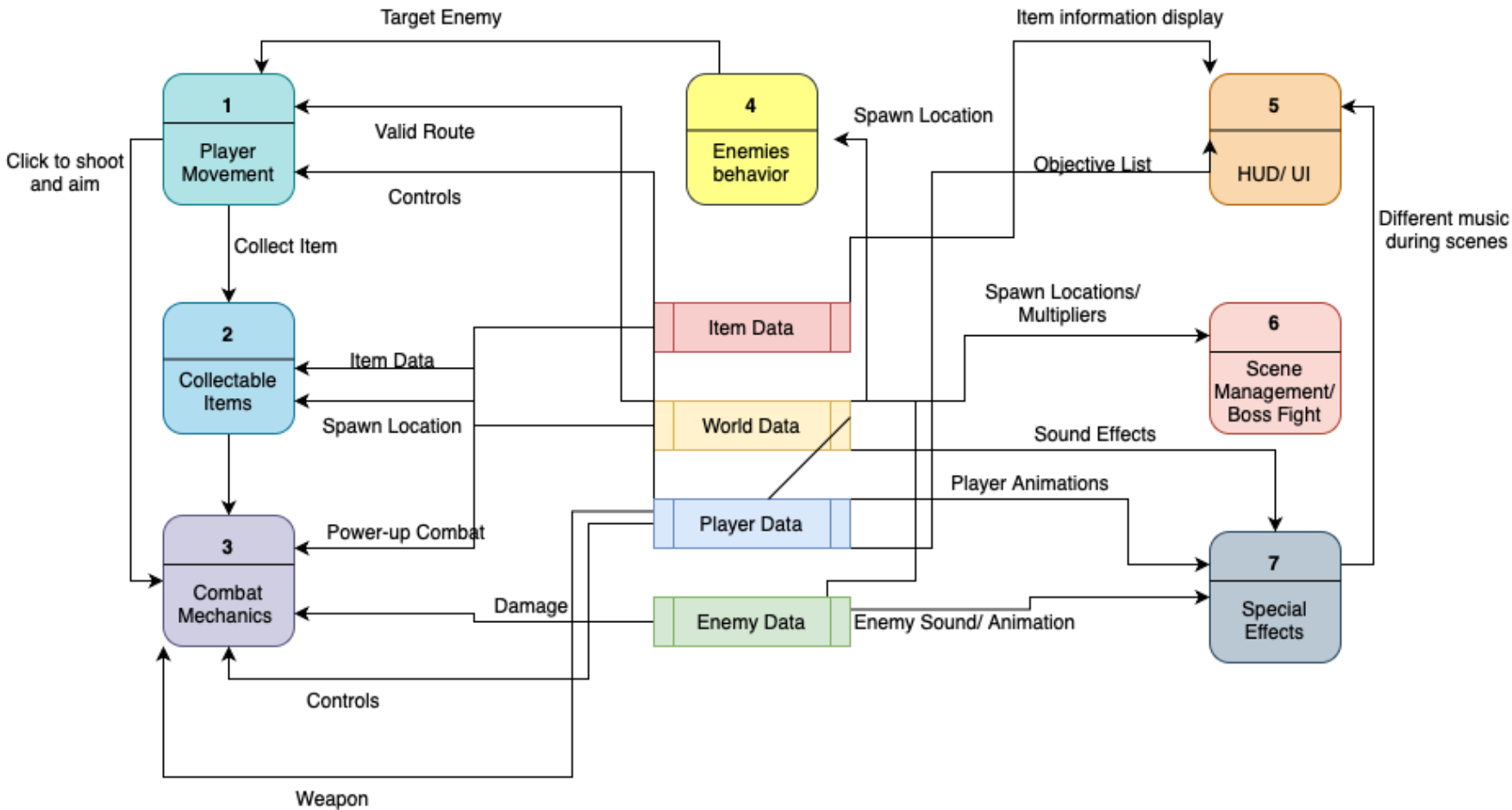


Braxton – Special Effects (Audio)

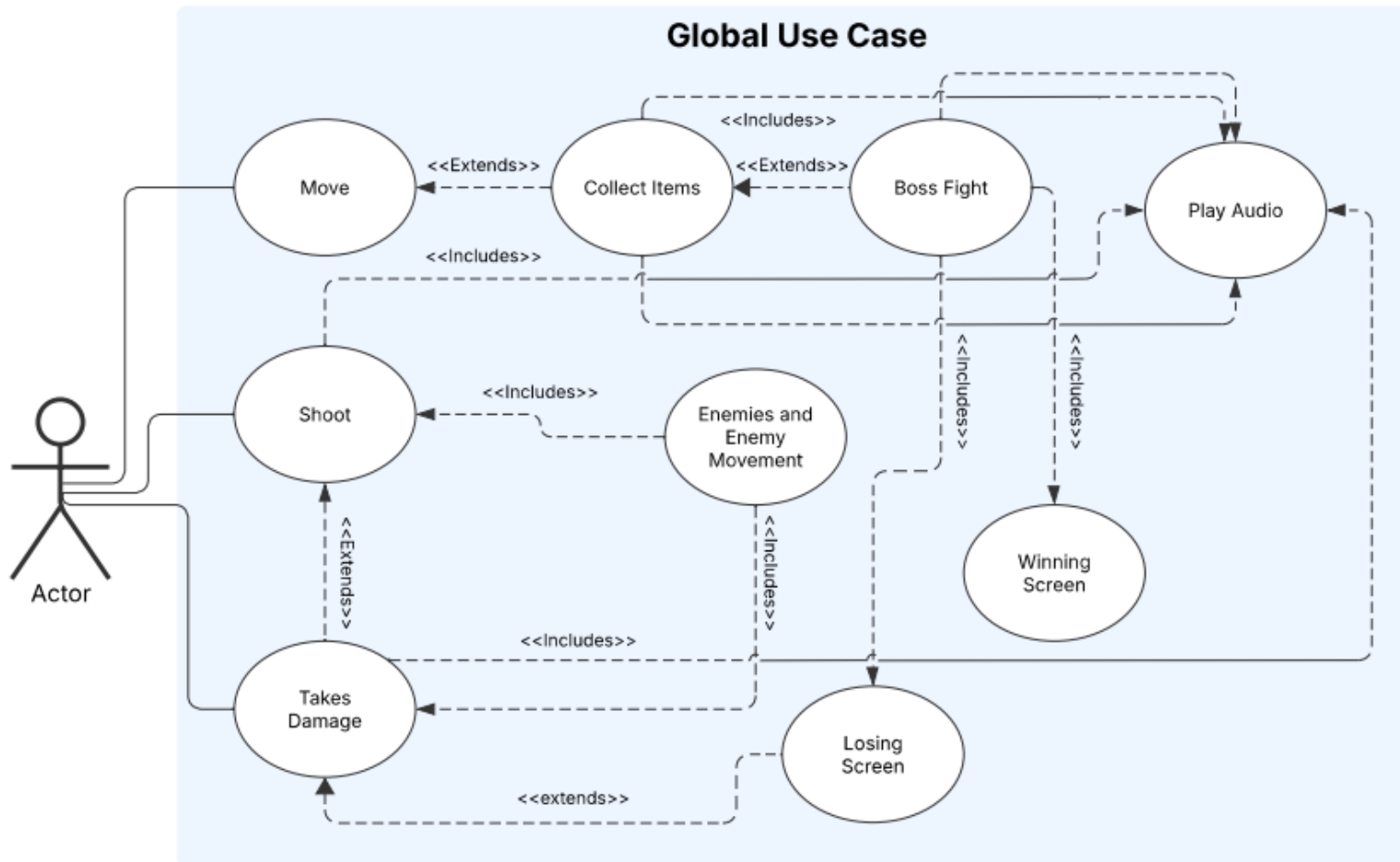Benton – Combat Mechanics & Player Movement

Luke – Boss Fight

Matthew – Enemies

Aaron - HUD

Conner – UI/Menus

Divyansh – Animations & Collectables

# Global Use Case Diagram



Braxton – Special Effects (Audio)

Benton – Combat Mechanics & Player Movement

Luke – Boss Fight

Matthew – Enemies

Aaron -  HUD

Conner – UI/Menus

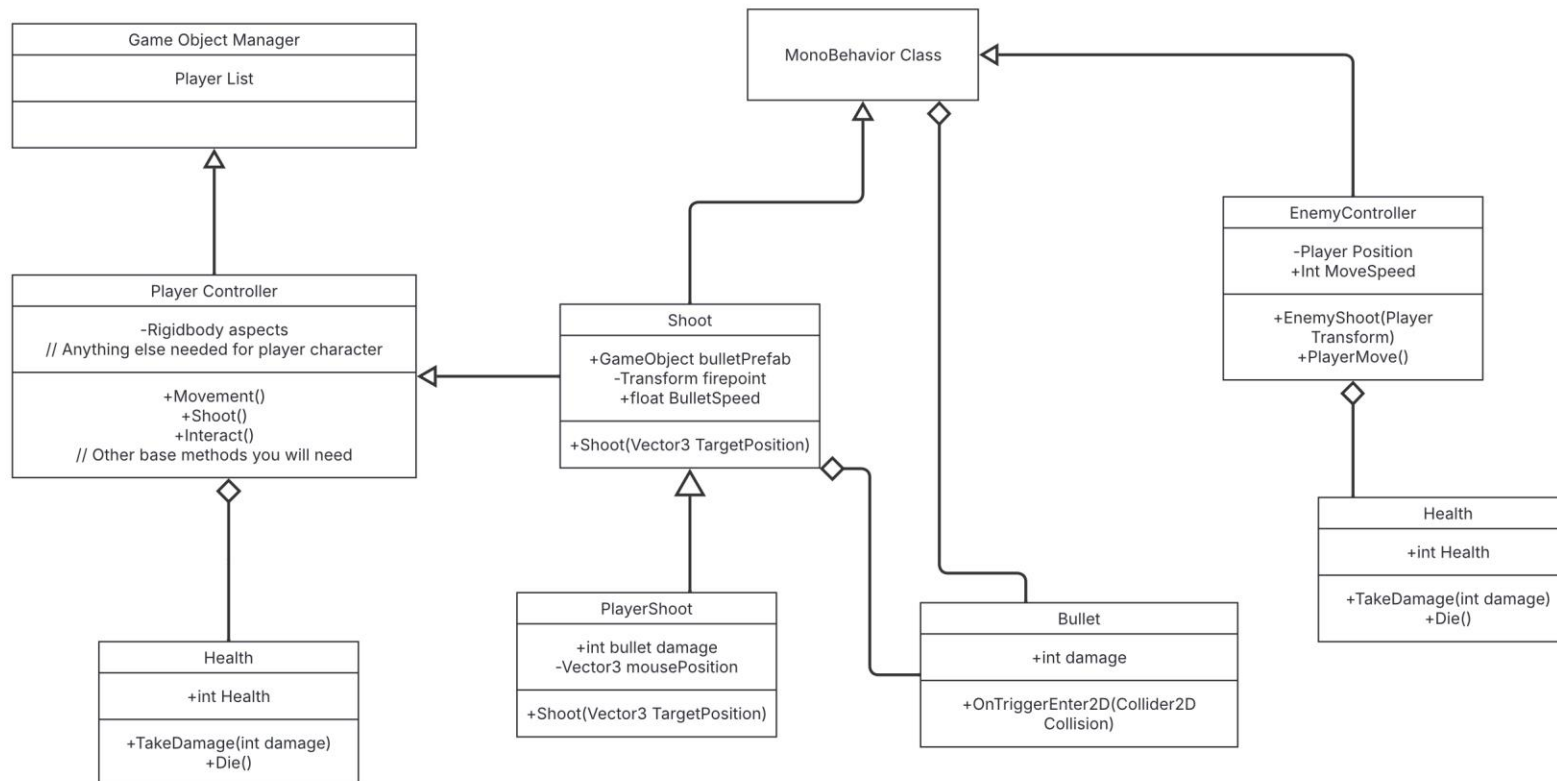Divyansh – Animations & Collectables

# Combat Mechanics - Benton
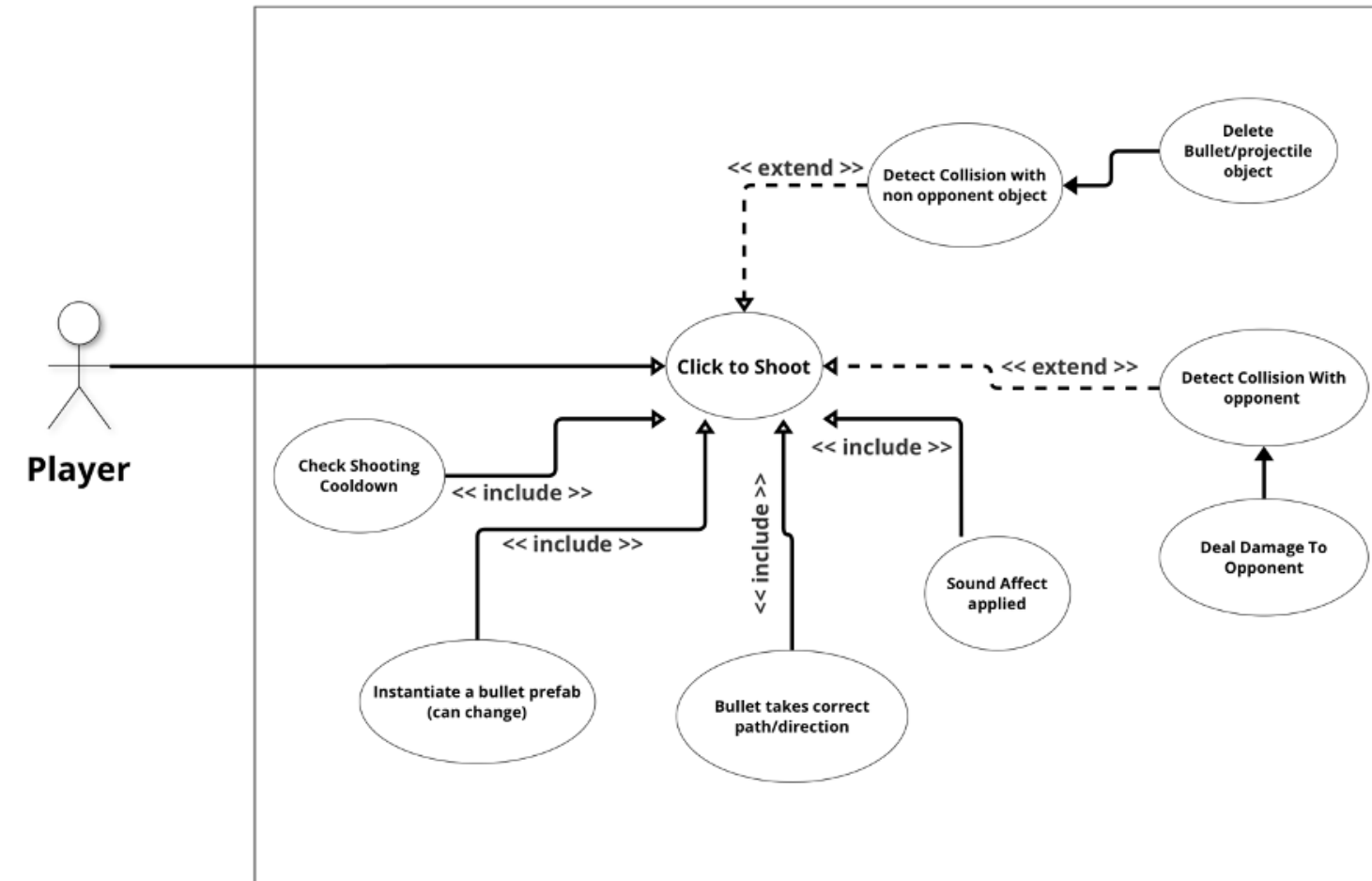


Data Needed:
- Bullet Damage
- Bullet Speed
- Player Click interaction
- Sound Effects
- Enemy Health

Exceptions:
- Bullet collides with a wall object
- Bullet collides with an enemy object

# Combat Mechanics - Benton



Complexity – **Moderate/Variable**

Classes:
- o Shoot
- o EnemyController
- o Health
- o Bullet
- o PlayerShoot
- o PlayerController

Priority: **2 ESSENTIAL**
- o Without combat mechanics for the player in a shooter game then the game will not function. Many function in this are going to be needed for the MVP as well.
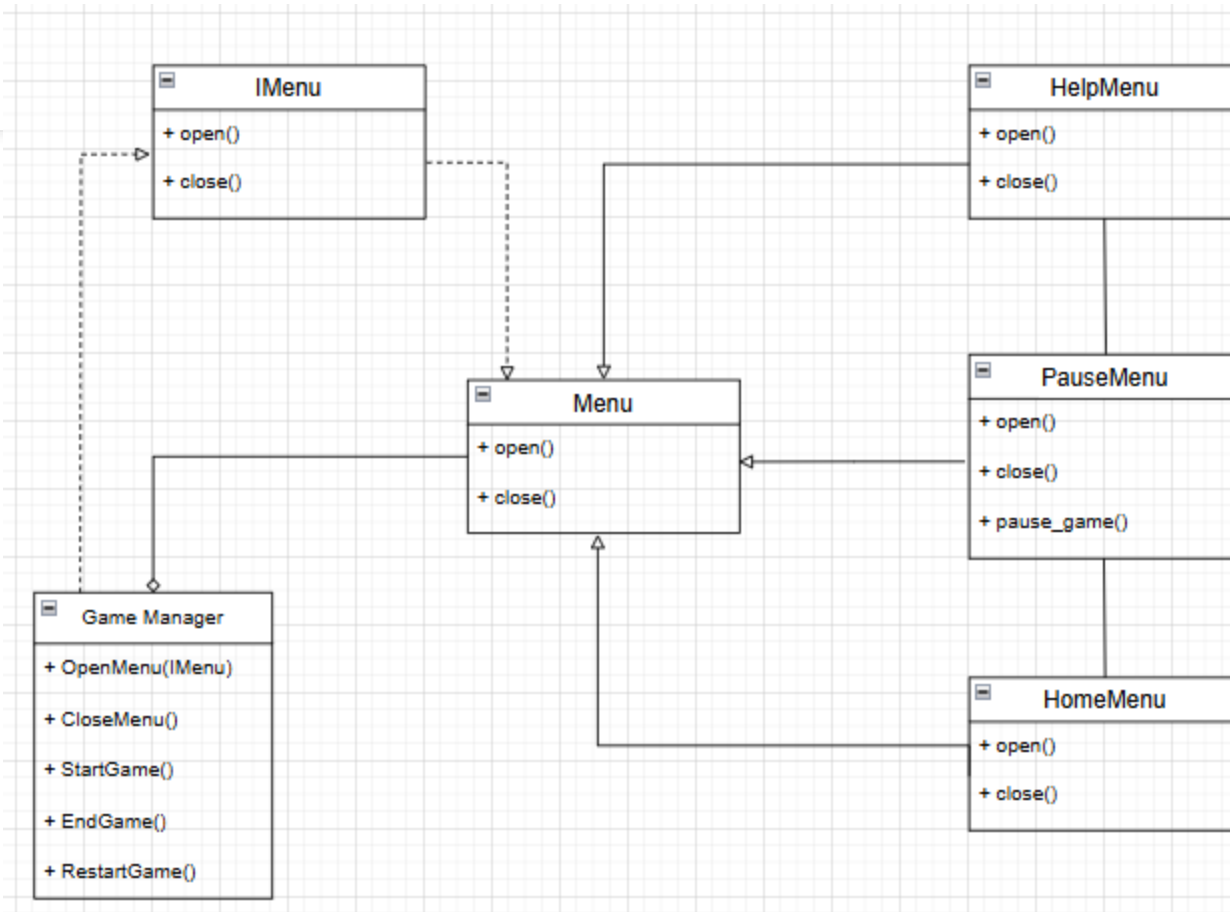
# User Interface - Conner
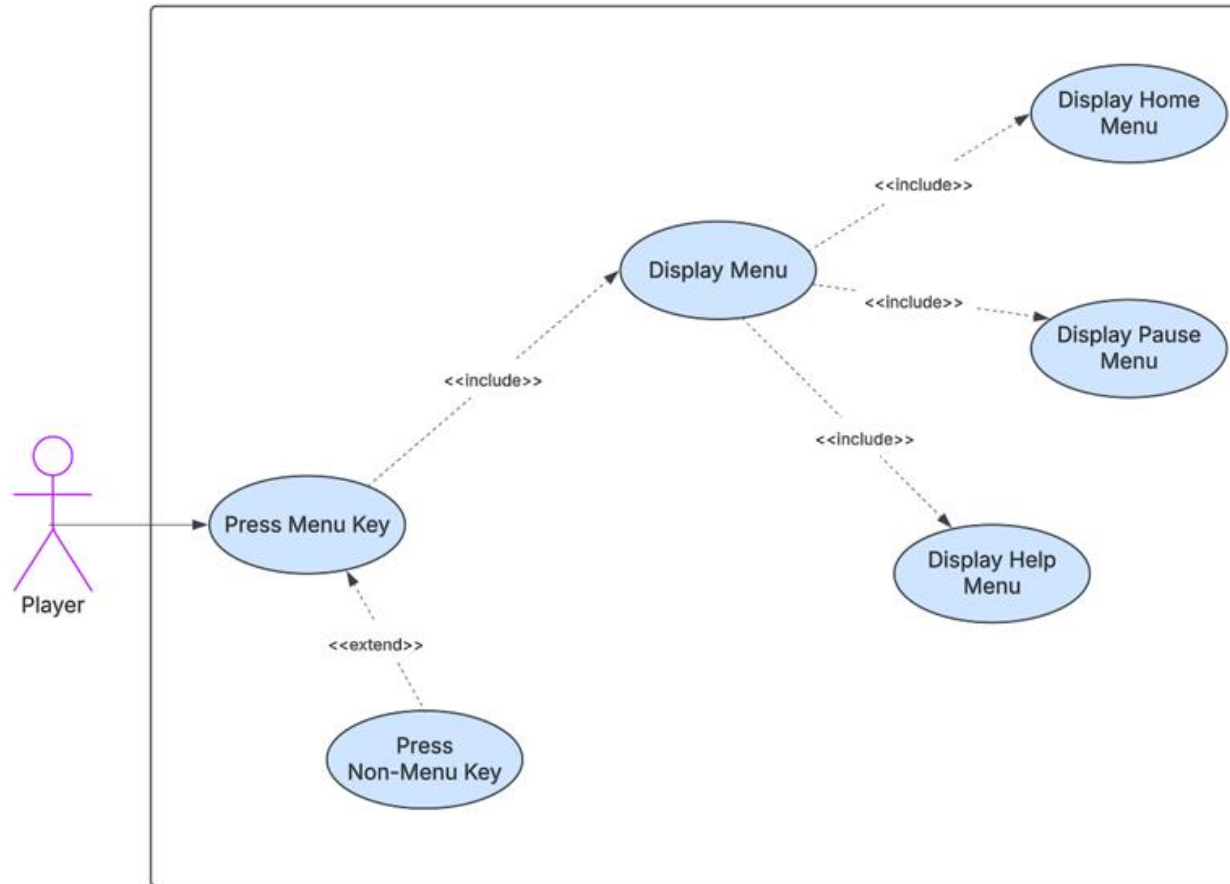


Data Needed:
o Core Menu Data
o Game State
o Input Handling
o UI Visual Elements

Exceptions:
o Player Presses non-Menu input

# User Interface - Conner
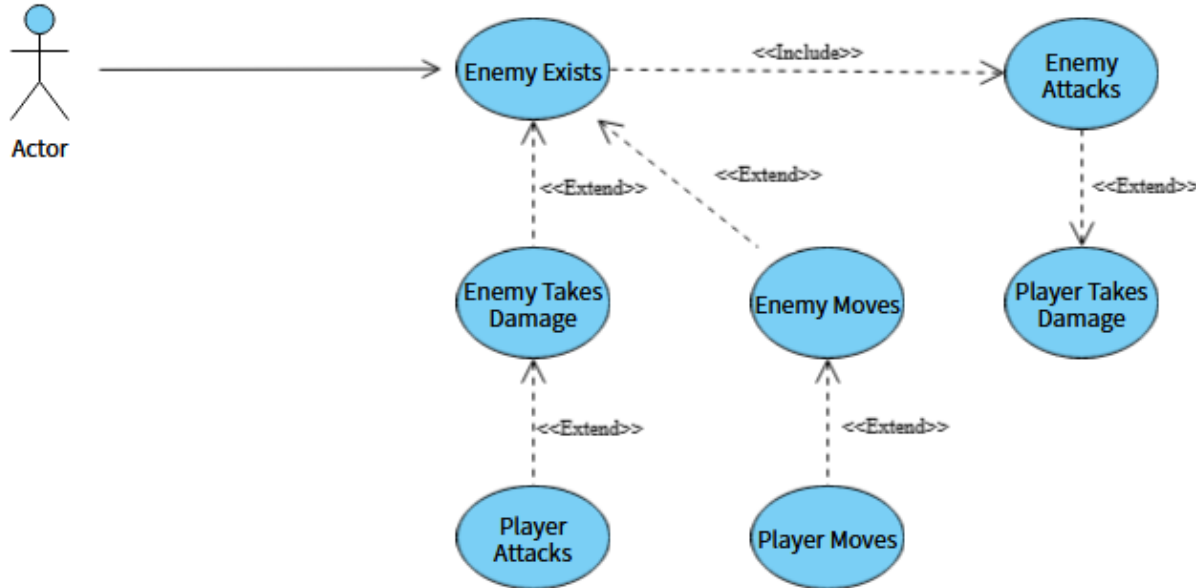


Complexity: **Moderate**

Classes:
o IMenu
o Game Manager
o Menu
o HomeMenu
o PauseMenu
o HelpMenu

Priority: **1 Must Have**
o Without the user being able to access these menus, the game would lack essential navigation and control, making it difficult to start, pause, or seek help during gameplay.
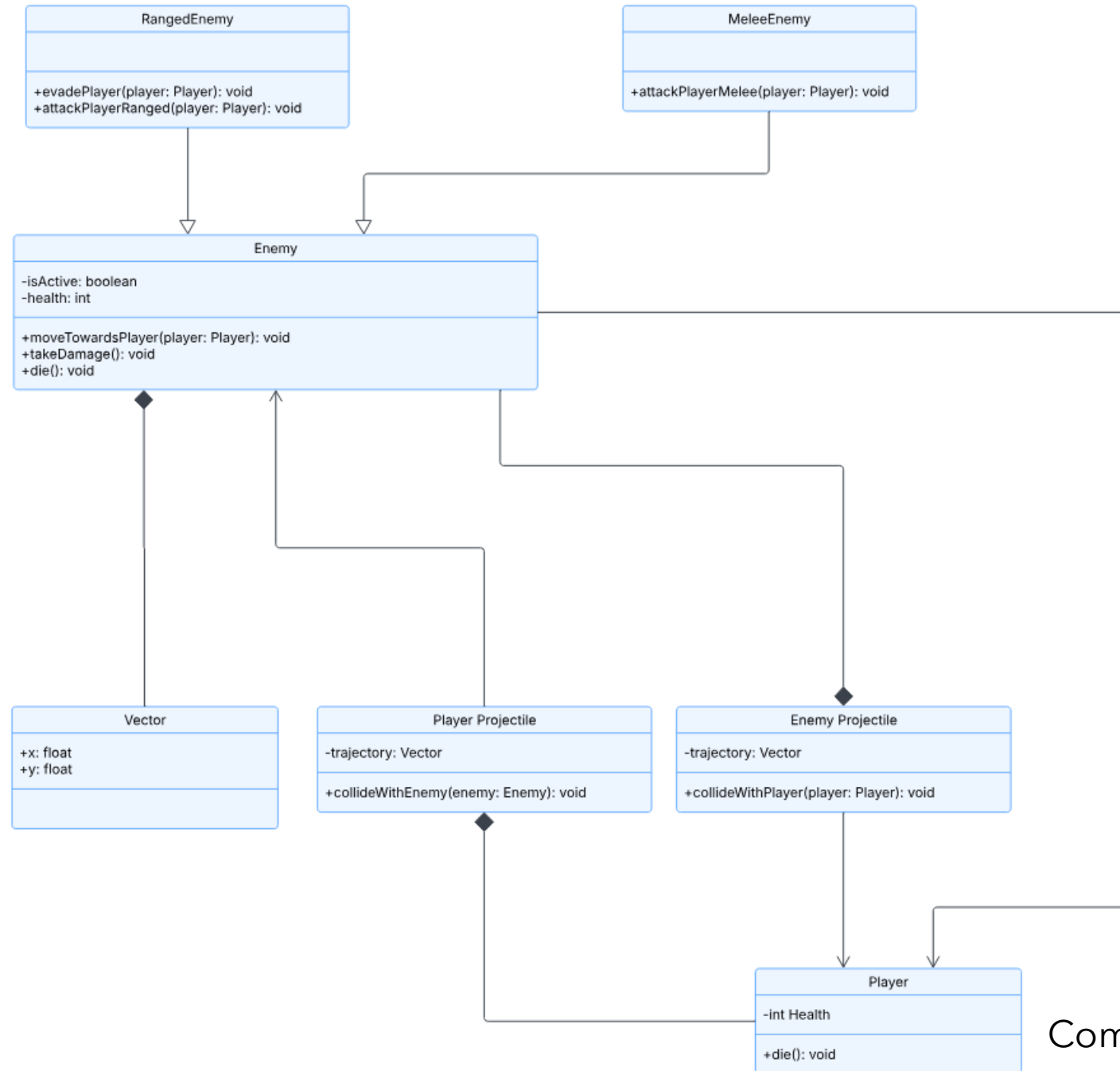
# Enemy AI - Matthew



**Data Needed:**

- Player location
- Enemy Health
- Player Health
- Sound Effects

**Exceptions:**

- Player/Enemy dies
- Player/Enemy attack misses
- Enemy has no where to move

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# Enemy AI - Matthew

**Classes:**
- Enemy
  - Ranged Enemy
  - MeleeEnemy
- Player Projectile
- Enemy Projectile
- Health (player)

Priority: **2 ESSENTIAL**
- Without enemies & enemy variety, the game will be boring and have no use for other gameplay mechanics.

Complexity: **Moderate**

# HUD/Inventory - Aaron

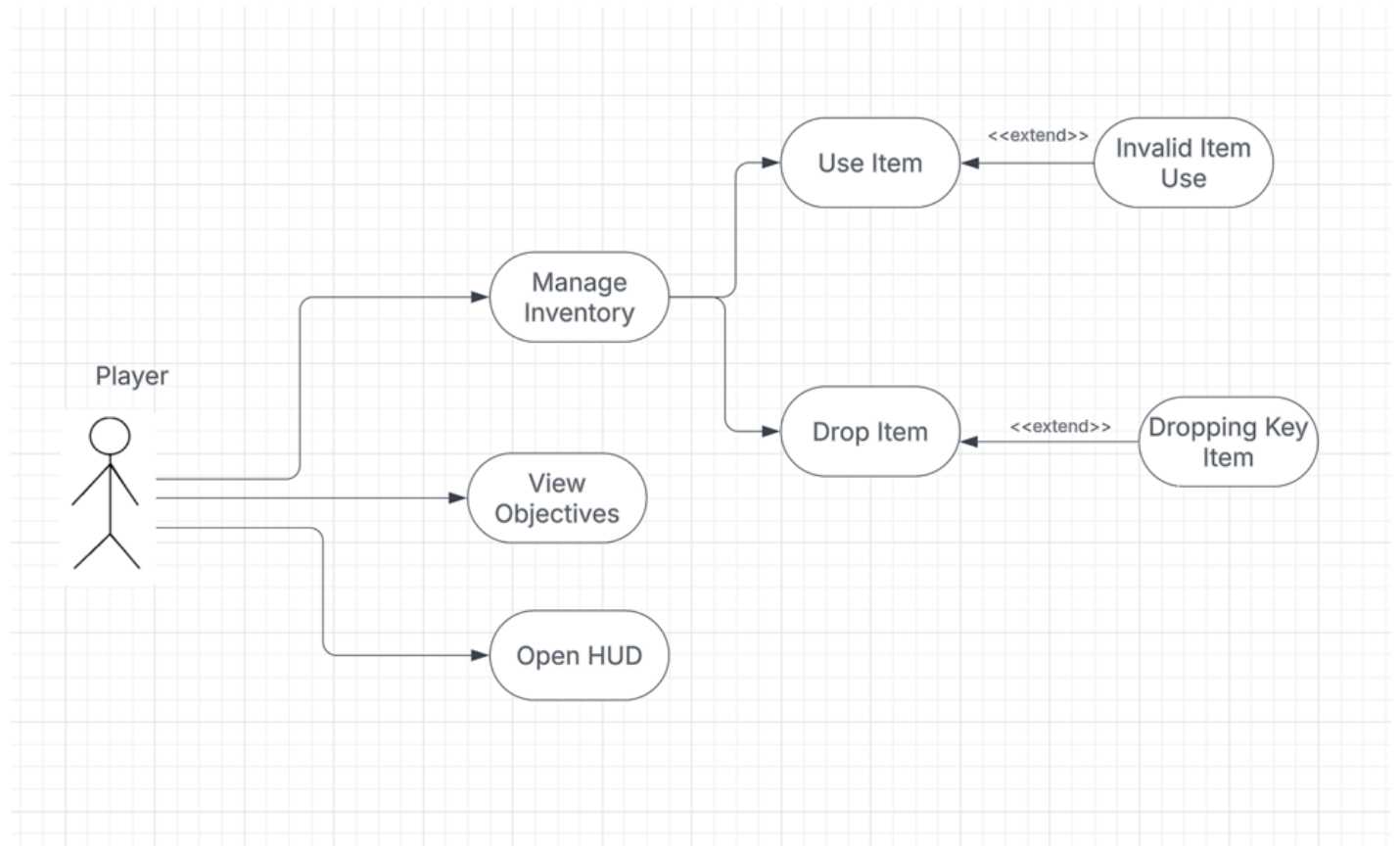**Data Needed:**

Player Weapons

Current Scene

Player Inputs

**Exceptions:**

Player Dies

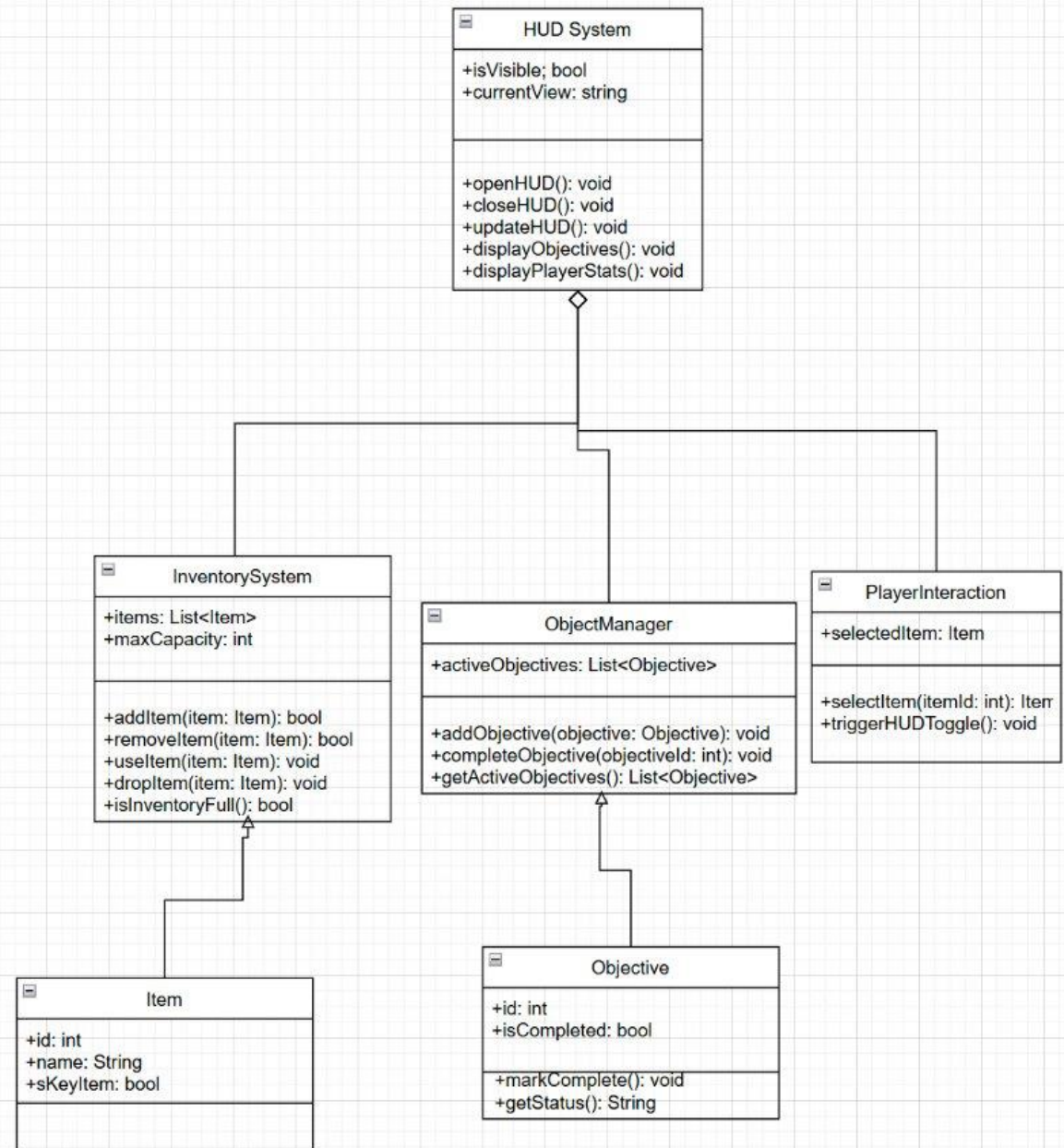No Items to drop

Not currently playing

# HUD/Inventory - Aaron

Classes:

- HUDSystem
- InventorySystem
- ObjectManager
- PlayerInteraction
- Item
- Objective

Priority: **2 ESSENTIAL**

- In order for the player to know what to do, or interact with the items they pick up, they will need to have some sort of way to interact with them
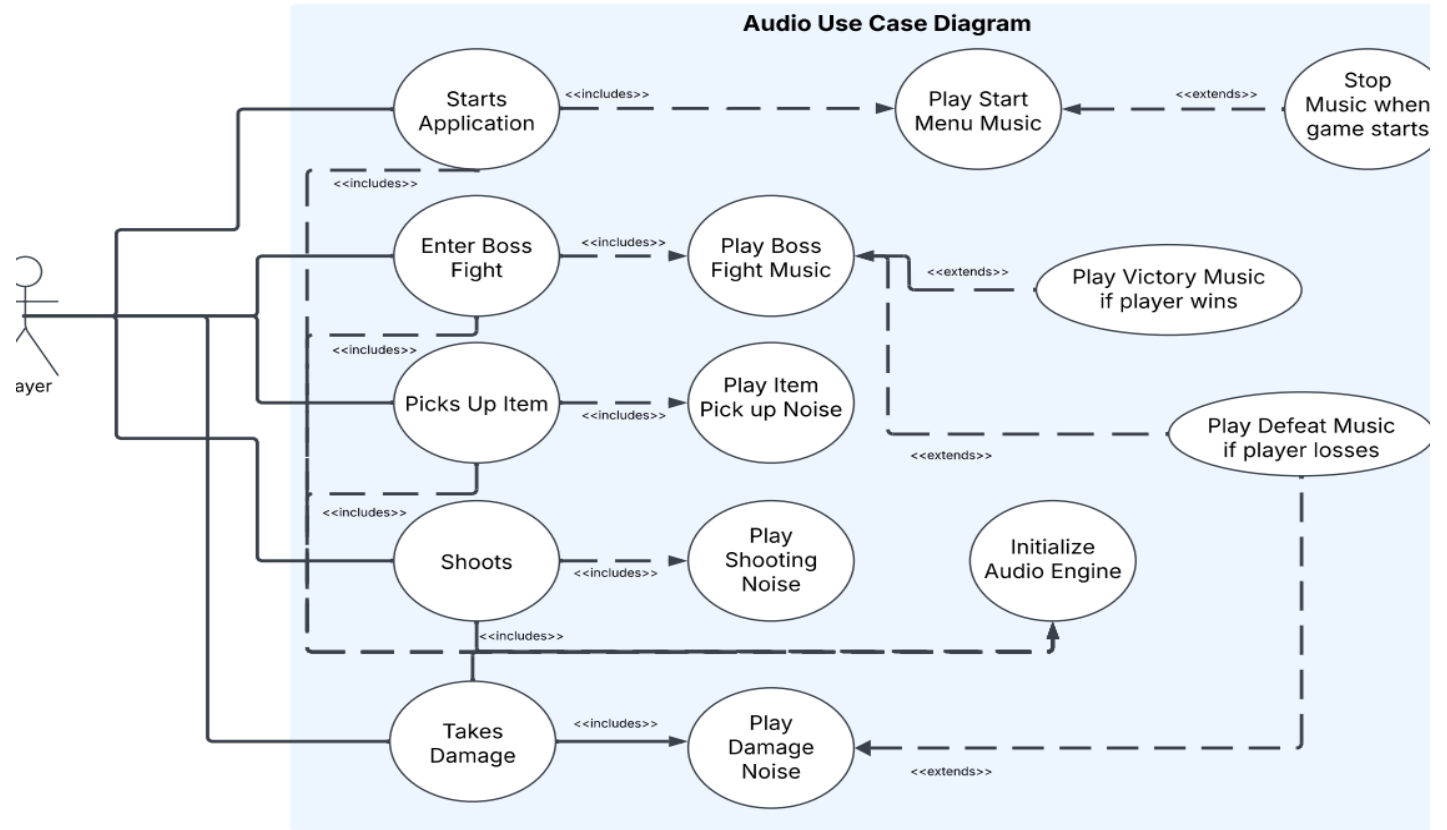
# Audio System Use Case - Braxton

Data Needed:
Game State/Scene
Player Actions i.e, shooting/taking damage/item pickup
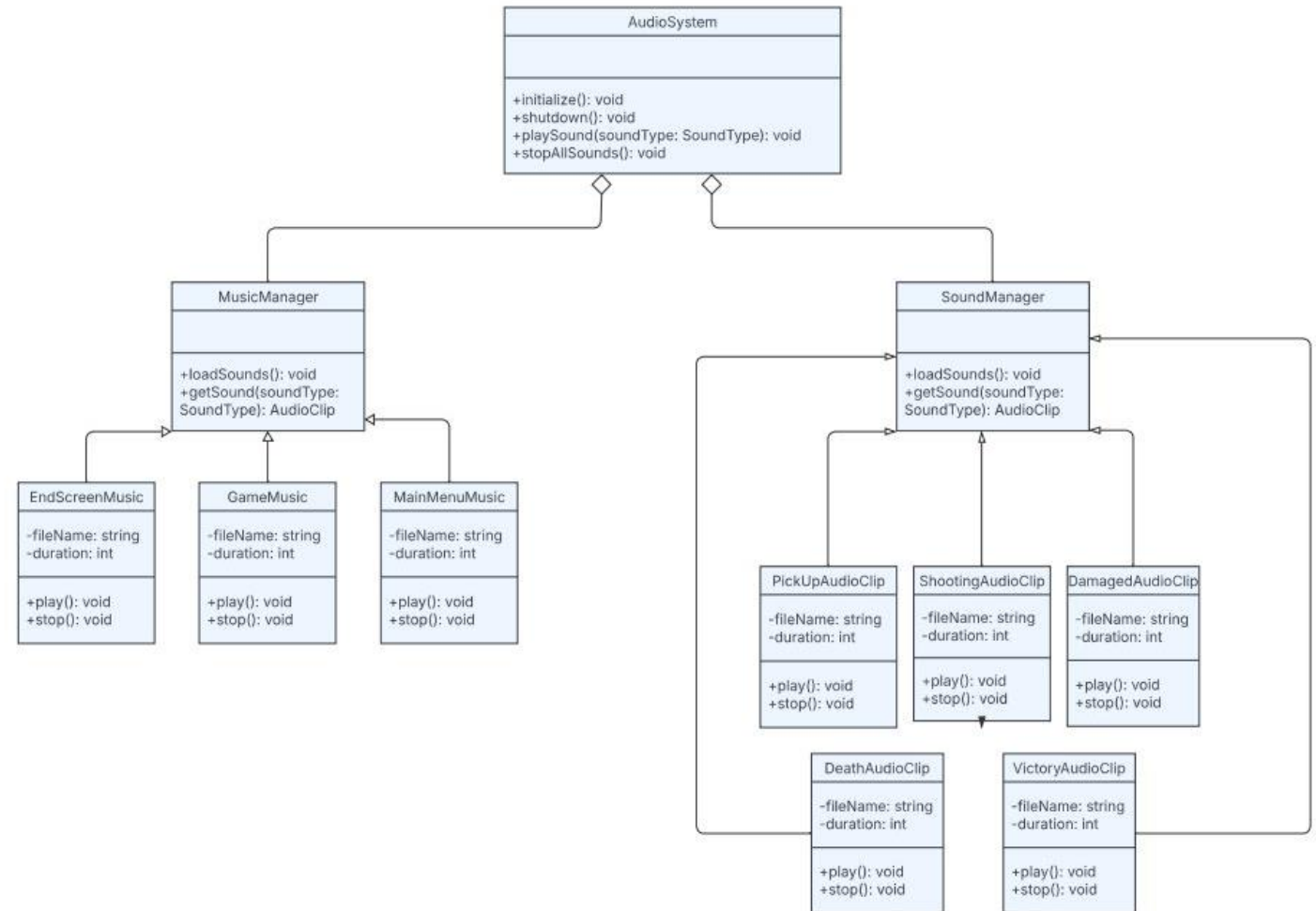Player Health
Boss Health

Exceptions: Music Stops from prior scene, Play music/noise for current action



**Audio Use Case Diagram**

# Audio System Classes - Braxton

Priority**- Moderate**

Complexity- **Moderate**

# Boss Fight Use Case - Luke

**Data Needed:**
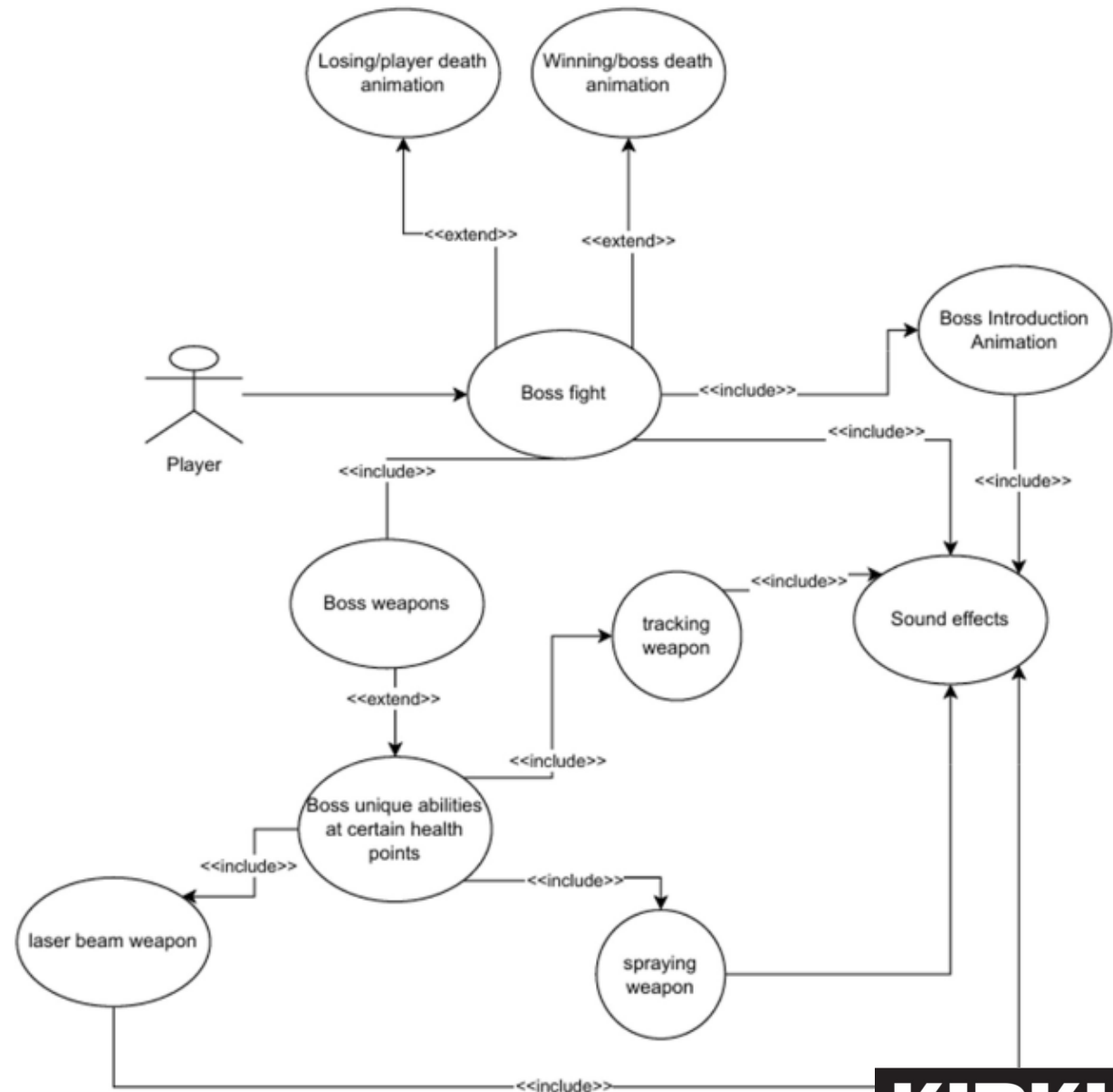
Game State/Scene

Player location

Player Health

Player weapons
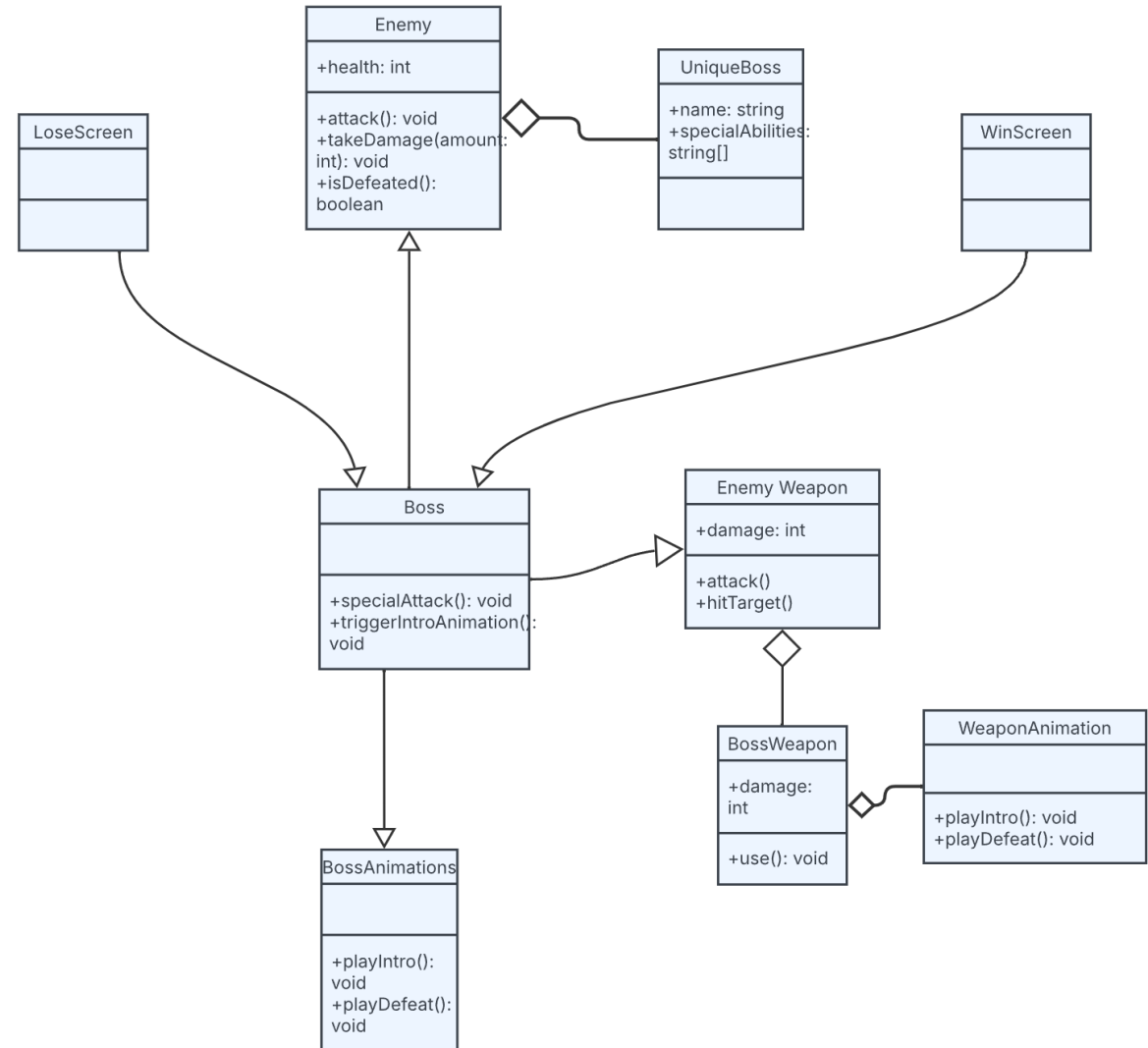
Boss Health

**Exceptions:** Player Health at 0,

Boss Health at 0, Paused state

# Boss Fight Classes - Luke

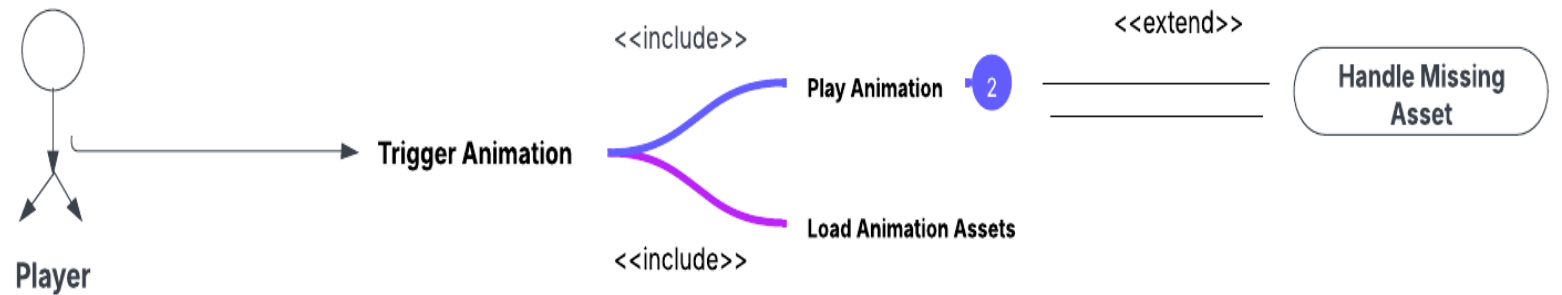Priority**- Moderate**

Complexity- **Moderate**

# Animation Use Case -Divyansh

**Data Needed:**
Player Location
Player Action
Animation Assets
Game State

**Exceptions:**
Missing Animation Asset

# Animation Classes - Divyansh

- **Classes:**

- Character

- AnimationController

- AnimationState

- AttackingAnimation

- IdleAnimation

- WalkingAnimation

- Renderer

- AssetLoader


- **Priority:** 2 Essential

In order for the character to function correctly, it needs an animation system that manages different states and transitions.