

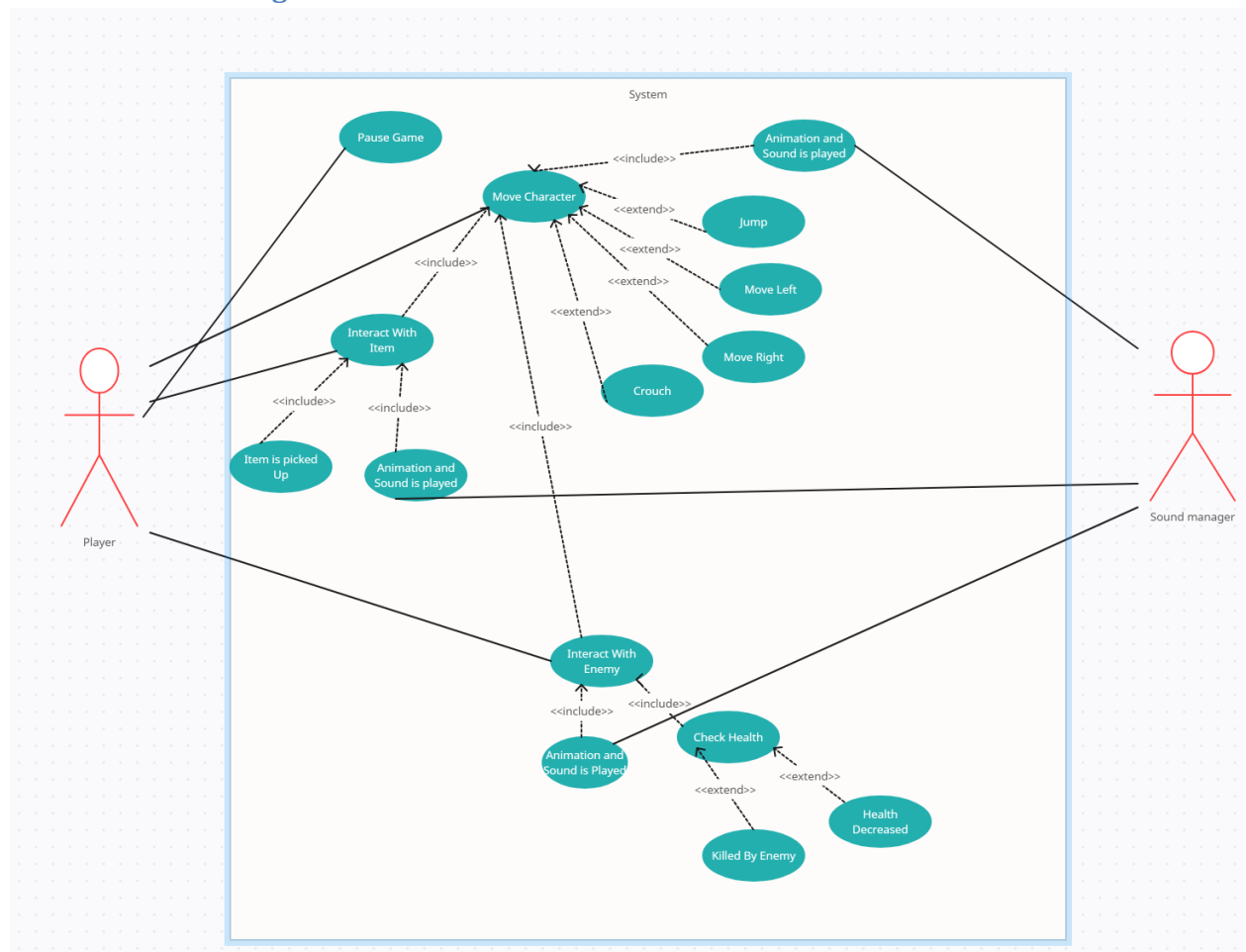
[Instructions: Remove everything that is not a heading below and fill in with your own diagrams, etc.]

1. Brief introduction __/3

My feature is the Player and controls. I want to make the movement simple as the controls change between the different levels and scenes. The movement will include jumping and moving left to right or punching, kicking and fighting controls. I want to implement haptic and button controls for mobile as well. I also want the player to be able to interact with the objects and enemies correctly.

2. Use case diagram with scenario __14

Use Case Diagrams



Scenarios

Name: Move Character

Summary: The Player uses the controls to move

Actors: Player, Sound Manager

Preconditions: Level and Player have loaded.

Basic sequence:

Step 1: Player uses **Level 1** controls to move the character

Step 2: Animation and Sound effects are played based on movement

Step 3: Player avoids Enemies to find items needed to complete the level

Exceptions:

Step 1.1: Player crouches

Step 1.2: Player Jumps

Step 1.3: Player Moves Right

Step 1.4: Player moves Left

Step 3: Player encountered an Enemy

Step 3.1: Player is damaged by the Enemy

Step 3.2: Player is killed by the Enemy

Post conditions: Player makes it to the end of the level.

Priority: 1*

ID: MC1

Name: Pause Menu

Summary: The Player pauses the game

Actors: Player, Sound Manager

Preconditions: Player is in the level. Pause Menu is available

Basic sequence:

Step 1: Player presses esc to pause the game

Step 2: Pause Menu Opens

Step 3: Player chooses to unpause, settings, or exit.

Name: Interact with Enemy

Summary: The player collides with the enemy

Actors: Player, Sound Manager

Preconditions: Player is in the level. Enemy is on screen.

Basic sequence:

Step 1: Player moves into the enemy

Step 2: The Enemy Attacks the Player

Step 3: The player is hit.

Exceptions:

Step 3.1 Player health only decreases

Step 3.2 Player is killed

Post conditions: Player loses health.

Priority: 1*

ID: IE1

Name: Interact with Item

Summary: The Player runs over a needed item

Actors: Player, Sound Manager

Preconditions: Player is in the level. Item is run over by character movement

Basic sequence:

Step 1: Player moves into an item on screen

Step 2: Item is Picked up

Step 3: HUD is updated to reflect collected item

Priority: 1*

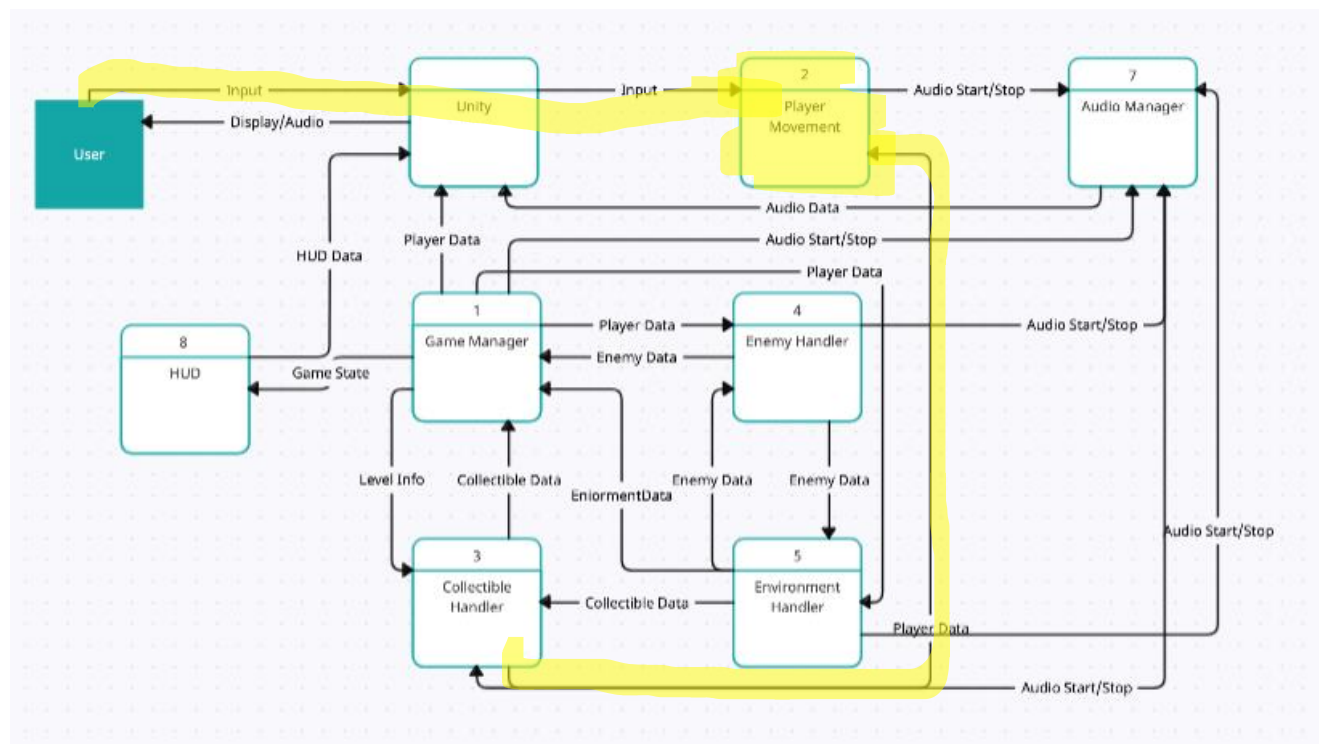
ID: II1

*The priorities are 1 = must have, 2 = essential, 3 = nice to have.

3. Data Flow diagram(s) from Level 0 to process description for your feature 14

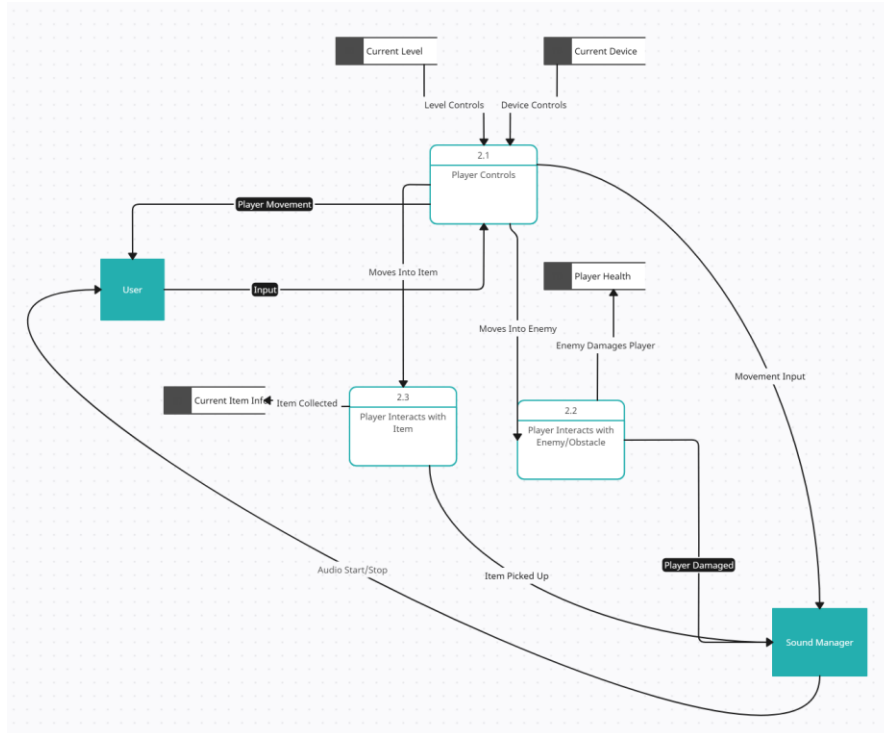
[Get the Level 0 from your team. Highlight the path to your feature]

Level 0:



Data Flow Diagrams

Player Movement



Process Descriptions

Player Controls*:

WHILE level ==1

IF Device == Keyboard

JUMP = W

DOWN = S

LEFT = S

RIGHT =D

Get Input Key

Move Character Based on Input

Play sound based on movement

ELSE IF Device = Mobile

Display Button Controls on Screen

Wait for screen to be pressed

Determine which button was pressed

Move character

Play sound based on movement

END WHILE

WHILE level ==2

IF Device == Keyboard

LEFT = S

RIGHT = D

```

        Get Input Key
        Move Worm Based on Input
        Play sound based on movement
    ELSE IF Device = Mobile
        Wait for Device to Tilt
        IF Tilt = Left
            Move Left
        IF Tilt = Right
            Move Right
        Play sound based on movement
    END WHILE
    WHILE level ==3
    IF Device == Keyboard
        JUMP = W
        DOWN = S
        LEFT = S
        RIGHT =D
        PUNCH = L
        KICK = K
        SPECIAL = Z
        Get Input Key
        Perform Action Based on Input
        Play sound based on Action
    ELSE IF Device = Mobile
        Display Button Controls on Screen
        Wait for button on screen to be pressed
        Determine which button was pressed
        Perform Action based on Button
        Play sound based on Action
    END WHILE

```

Interact with Enemy*:

```

    WHILE game is played
        Player is hit by Enemy
        IF Health >= (Damage That Enemy Does)
            Enemy Damages Player
            Damage Sound is Played
            Health is Updated
        IF Health < (Damage That Enemy Does)
            Enemy Damages Player
            Damage Sound is Played

```

Health Is Updated
 Enemy Kills Player
 Game Over Screen

END WHILE

Interact with Item*:

WHILE level==1
 Player moves into Item
 Item is Picked Up
 Sound is played to User by Sound Manager
 Current Item info is updated
 END WHILE

4. Acceptance Tests _____9

The feature will need to make sure all the controls work for each level and on mobile devices. Each level has a set of different controls that will need to be tested. As well as how the player interacts with the items and enemies.

Player: Sound Effects should play for all actions except Pause.

User Input	Action	Notes
Left	Move Left	Character should move left when the left control is pressed. Either Keyboard or on-screen button. Levels 1 and 3
Right	Move Right	Character should move Right when the Right control is pressed. Either Keyboard or on-screen button. Levels 1 and 3
Down	Crouch/Off Platform	Character should move duck in Level 3 . Be able to go down off a platform in Level 1 . And move down with the worm in Level 2
Up/Space	Jump	Character should Jump in level 1 . Move up in Level 2 and Up - Shield/Block in Level 3 . Or Space will Jump in Level 3
Tilt Left/Up	Move Worm Left or up	For Mobile Controls, Level 2 Will use a tilt motion to move the worm. Depending on how the level is made it will go left to right or up and down.
L	Attack Punch	User Input Control is not certain for Level 3 . But there will be an Attack Action for Level 3
K	Attack Kick	User Input Control is not certain for Level 3 . But there will be a Kick Action for Level 3
Combo	Combo	Jump Kick or Jump Punch or Upper Attack. When

Input	Attack	jump or crouch and attack controls are pressed at the same time. Level 3
Z	Special Attack	Character can activate a Special Attack. That plays a special animation. Level 3
Run over Item	Pick Up Item	Level 1 The player will collect items, and should interact with them so that they are shown as collected.
Hit by Enemy	Damaged or killed	Level 1 and 2 If the player lets the Enemy hit them the Player should be damaged or killed depending on health and an animation to indicate damage.
ESC	Pause Game	Should Open the Pause Game Menu.

5. Timeline ____/10

Work items

Task	Duration Hours	Predecessor Task(s)
1. Character Design	4	-
2. Level 1/2 Movement	5	1
3. Interaction	5	2
4. Level 3 Controls	6	3
5. Mobile Controls	8	4
6. Testing	4	5
7. Installation	2	6

Pert diagram

