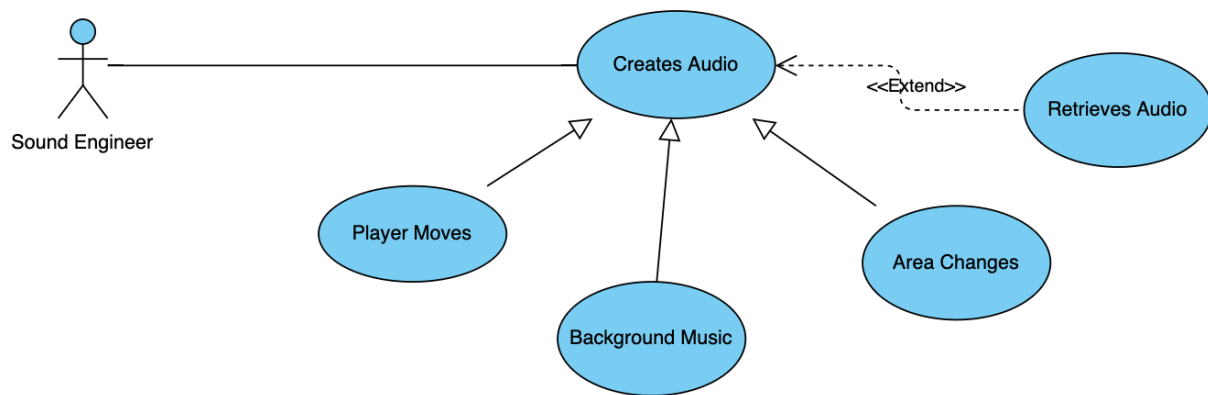


## 1. Brief introduction \_/3

The feature I will focus on in the game is sound. Sound is a crucial element to creating atmosphere and an intriguing environment for the user to explore. I will be using sound as a way to create dramatic moments appear to have depth and to provide a sense of realism in our environment.

## 2. Use case diagram with scenario \_14

### Use Case Diagram



### Scenarios

**Name:** Player Moves

**Summary:** The player produces sound as he moves throughout the environment

**Actors:** Player

**Preconditions:** None

**Basic sequence:**

**Step 1:** Player moves in a direction

**Step 2:** a wav file is played

**Exceptions:**

**Step 1:** If sound effects are disabled, ignore sequence

**Priority:** 1

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

**Name:** Area Change

**Summary:** Different audio plays as the player enters different environments

**Actors:** Player

**Preconditions:** None

**Basic sequence:**

**Step 1:** Player moves into a new area or section of the map

**Step 2:** a mp3 file is played

**Exceptions:**

**Step 1:** If sound effects are disabled, ignore sequence

**Priority:** 2

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

**Name:** Background Music

**Summary:** Music for the loading and pause menu screens

**Actors:** Player

**Preconditions:** None

**Basic sequence:**

**Step 1:** Player accesses the game menu

**Step 2:** a mp3 file is played

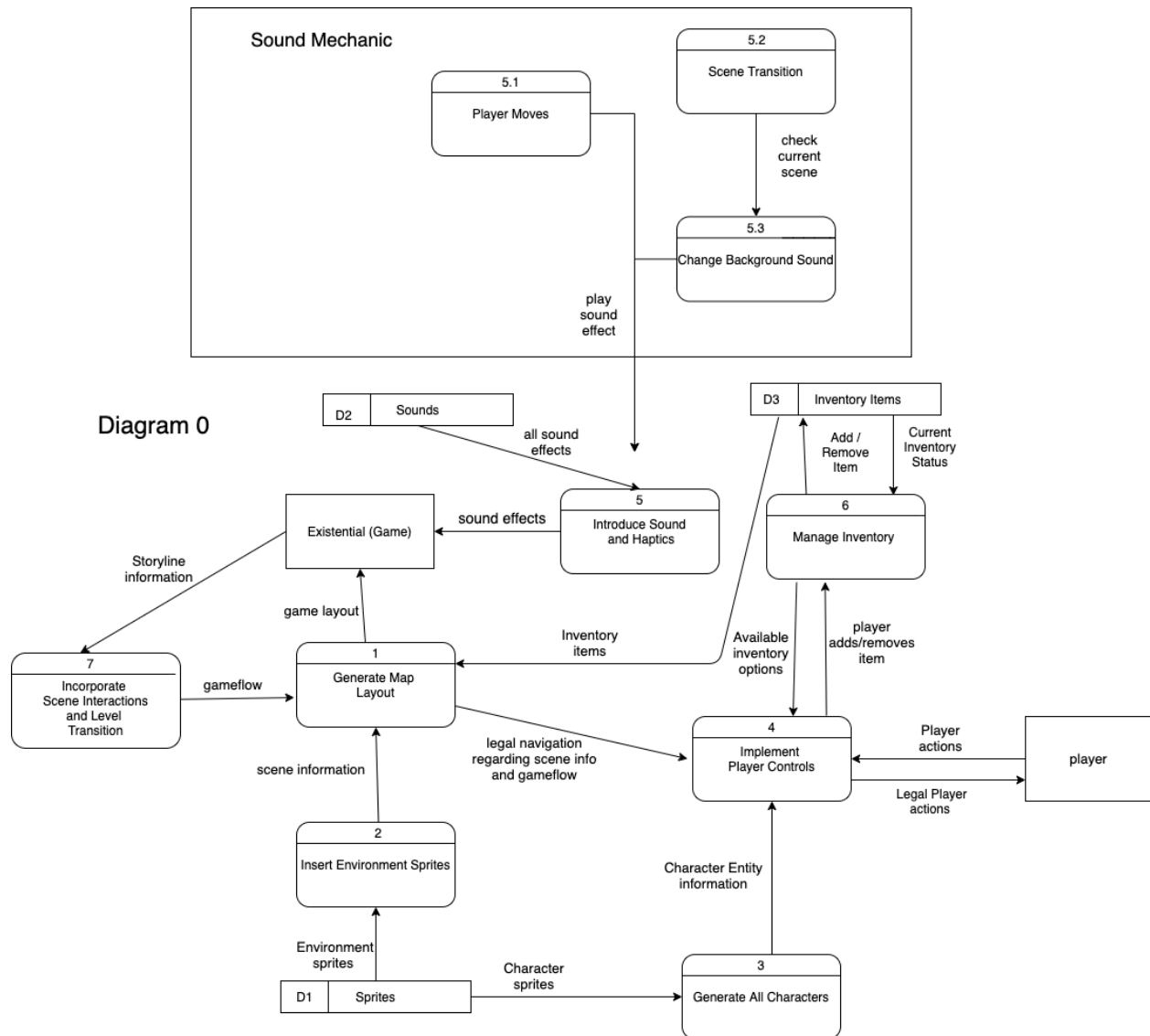
**Exceptions:**

**Step 1:** If sound effects are disabled, ignore sequence

**Priority:** 3

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

## Data Flow Diagrams



## Process Descriptions

Player Moves\*:

Define player steps = movement of player by 10px

If player steps % 3 is equal to 1:

play heavy step sound wav file

```
else:
```

play light step sound wav file

Scene Transition / Change Background Sound\*:

If scene = forest:

```
        stop previous music
        play mysterious forest mp3
else if scene = house:
    stop previous music
    play creepy piano mp3
else if scene = caves:
    stop previous music
    play dropping water mp3
else if scene = floating mountains:
    stop previous music
    play strange wind sounds mp3
else:
    stop previous music
    every 20 seconds play breathing wav
```

#### 4. Acceptance Tests \_\_\_\_\_9

##### **Test for footsteps noise in character controls**

I will be listening to the player as it moves for a duration of 2 minutes.

Conditions to note:

- sound effects work on top of the background noise.
- sound effects are mutable without affecting background music

Stress Test Levels:

- Clarity if the player is moving at half speed
- Clarity if the player is moving at full speed
- Clarity if the player is moving at 10x speed

##### **Test for background sound**

I will be listening to the sounds produced by the different scenes in the game.

Conditions to note:

- background sound works with sound effects
- background music is mutable without affecting sound effects

Stress Test Levels for different scenes:

- player transitions between 2 scenes 3 times at half speed
- player transitions between 2 scenes 5 times at half speed

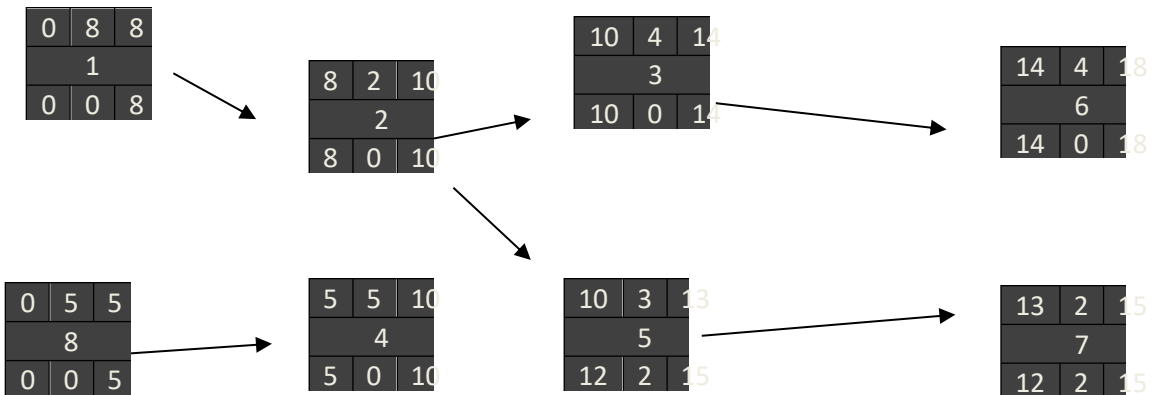
- player transitions between 2 scenes 10 times at full speed

## 5. Timeline \_\_\_\_/10

### Work items

Task	Duration (PHrs)	Predecessor Task(s)
1. Collect Sound Samples	8	-
2. Edit Sounds	2	1
3. Link sounds to scenes	4	1,2
4. Change volume feature	5	8
5. Link sounds to movement	3	1,2
6. Quality Test	4	3,4,5
7. Documentation	2	3,4,5
8. Popup Support Menu	5	-

### Pert diagram



Gantt timeline

1																		
2									1									
3											1,2							
4						8												
5											1,2							
6															3,4,5			
7															3,4,5			
8																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18