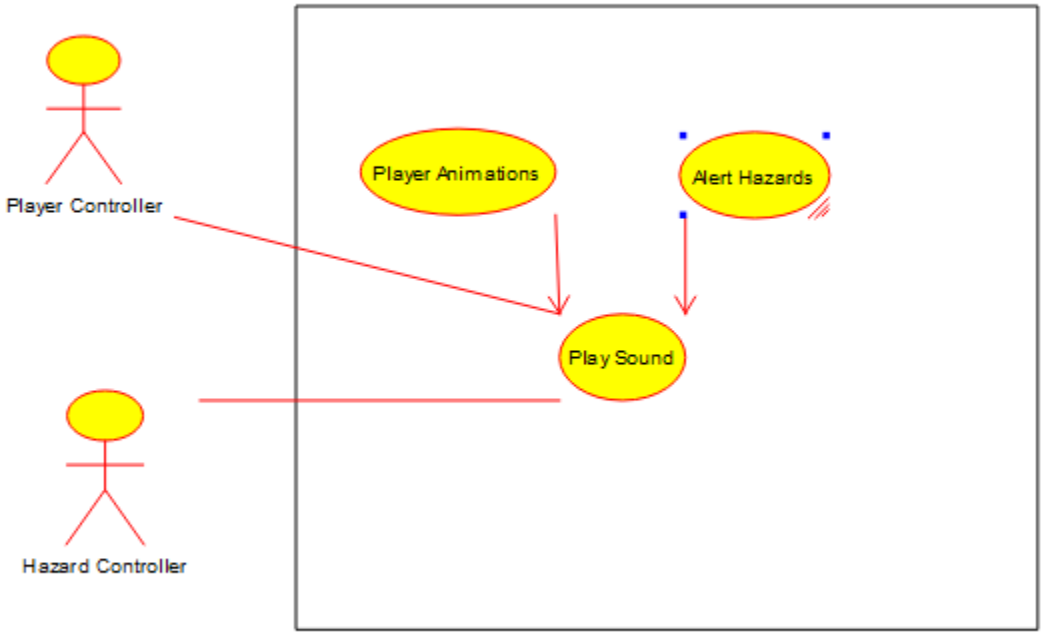
Gavin Haynes Mark _____/50

1. Brief introduction _/3

An important feature for video games is to convey additional information in the form of alerts, pings, environment sounds, and enemy interactions. This feature outlines the implementation of a sound manager, which adds an additional layer of immersion and interactivity to Hero Jump.

2. Use case diagram with scenario _14



Scenario

Name: Alert Hazards

Summary: as the hero progresses upwards, the lava below speeds up more quickly. A warning sound should play when near the lava and according to the current speed.

Actors: player controller

Preconditions: sound controller and player scene are initialized

Basic Sequence:

1. Query player distance from lava
2. If the player is within threshold, begin playing alert.
3. As score increases, increase alert speed

Exceptions:

1. Player dies or is in lava: stop playing

Post Conditions: alert is played

Priority: 2

Scenario

Name: Sound Player Animations

Summary: walking, fighting, climbing, and all other environmental interactions are sounded to provide an additional layer of depth and interactivity.

Actors: player controller

Preconditions: sound controller and player scene are initialized

Basic Sequence:

1. Query AnimationManager
2. Play corresponding sound

Exceptions:

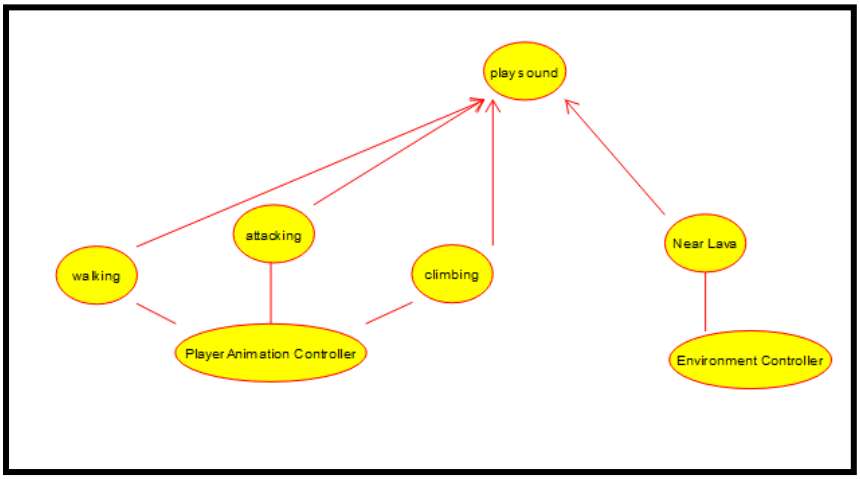
2. Player dies or is in lava: stop playing

Post Conditions: alert is played

Priority: 2

ID:

3. Data Flow diagram(s) from Level 0 to process description for your feature _____14



Player Sounds

While Player.Animation = (walking OR attacking OR climbing) play PlayerSound(animation_name)

Hazard Sounds

While Player.Position < threshold play alarm

4. Acceptance Tests _____9

Player Sounds

Run 1000 random valid player inputs and output sound played to debug.

- Animation name
- Sound played
- Animation sound should only be played for corresponding animation

Hazard Sounds

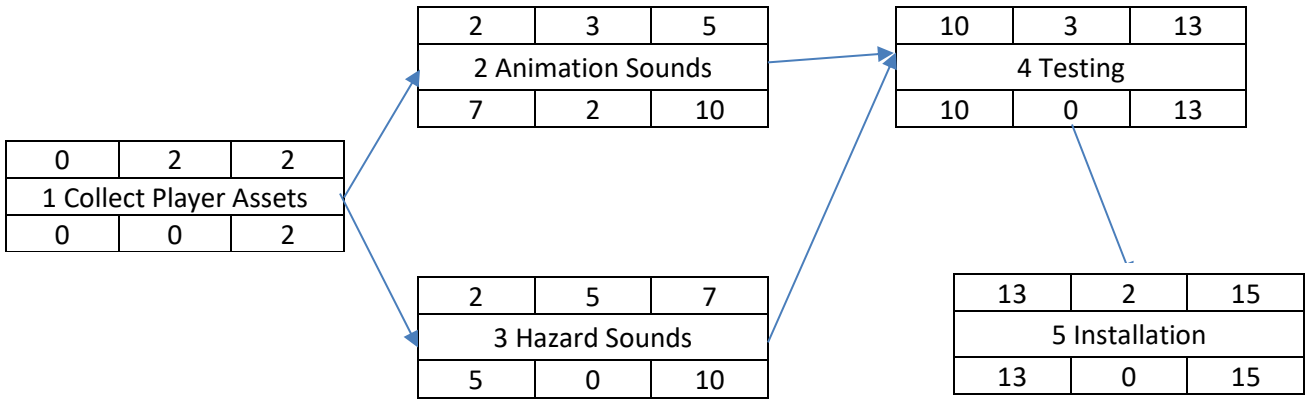
Spawn the player 1000 times in random valid positions on the screen, sound an alert if within lava threshold, and print hazard sound to debug. Save debug output and validate that an alert was sounded for all thresholds near the lava. Acceptance is based on the following:

- Player distance from lava <= threshold
- Hazard sound played()

5. Timeline _____/10

Task	Duration (hours)	Predecessor Task(s)
1. Collect Sound Assets for Player and Hazard Alerts	2	-
2. Player animation sounds	3	1
3. Hazard animation sounds	5	1
4 Testing	3	2, 3
5 Installation	2	4

Pert diagram



Gantt timeline