Name Aneesha Shrestha Mark \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/50

## Brief introduction \_\_/3

As TL5, I will be working on boss enemy character design and boss fight movements. We have 3 boss fights, each with their own unique movesets due to the storyline of the game. I am planning on these bosses to each have 3 distinct levels of difficulty, similar to other classic platformer games.

My duties will be planning the boss moves, how they attack, and how the main character interacts with them. I will be working on doing that with some help from TL1. Each moveset must be tailored to the story and the character. For example, one of the bosses, Jeff Bezos, is fighting from inside his amazon warehouse. Therefore, an example of a moveset tailored to him would be his delivery drones making sweeping attacks at the main character while Bezos throws boxes to do damage. It’s also important to make the moveset have weaknesses that the user can exploit to defeat the bosses.

I’ll also have to make sure that the bosses have a health bar, both so that the character can defeat the enemy, but also when the health bar reaches certain points, their movesets will change and the character will become faster and more difficult to defeat. After designing these moves, I’ll spend time implementing them and then testing the bosses against different users so I can properly evaluate the character boss interactions and the difficulty, and my adjustments accordingly.

## Use case diagram with scenario \_\_14

### Use Case Diagrams

<<includes>>

<<includes>>

<<includes>>

<<extends>>

User

### Scenarios

**Name:** Boss Fight

**Summary:** The player fights the boss. The boss moves, attacks, and has a health bar.

**Actors:** User/Player.

**Preconditions:** User enters boss level

**Basic sequence:**

**Step 1:** User enters boss level

**Step 2:** Boss begins first sequence of movement and attacks

**Step 3:** Health drops to a certain level

**Step 4:** Boss begins second sequence of movement and attacks

**Step 5:** User and boss continue fighting until health drops again to a certain level

**Step 6:** Boss begins third and final sequence of movement and attacks

**Step 7:** Character defeats boss and ending cutscene plays, escorting player to next level

**Exceptions:**

**Step 1:** Boss defeats player, player is sent back to the start of the level

**Step 2:** The game is in Dr. BC mode, in which case the boss’s attacks will not damage player

**Post conditions:** Boss is defeated and player can move onto next level

**Priority:** 2\*

## 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]

Example:

### Data Flow Diagrams:

A computer screen shot of a diagram

AI-generated content may be incorrect.

5.1

Boss Design

5.2

Boss Movement

TL5

design

design

Combine

Combine

5.4

Deal Damage

5.5

Take Damage

5.3

Boss interaction with player

interacts

interacts

### Process Descriptions

Boss Fight Begins:

IF boss health > 60 && player is not dead then:

Movement = sweeping motion

Minions attack player at slow speed

ELSE IF boss health <60 && boss health > 30 && player is not dead then:

Movement = throwing boxes and jumping

Minions attack player at medium speed

ELSE IF boss health < 30 && boss health > 0 && player is not dead then:

Movement = bull rushing the player

Minions attack player at top speed

Lasers from side of screen attack player

ELSE IF boss health == 0 && player is not dead then:

Play(Exit Sequence)

End level

ELSE

Play(BossWinSequence)

Regenerate Health to 100

Respawn player

## Acceptance Tests \_\_\_\_\_\_\_\_9

**Movement test:**

After creating character movement, let the boss character move in the background environment. The character should have:

1. Correctly interacted with background environments, such as platforms
2. Smooth movement that is followable by a user
3. Distinct changes in the movement as the boss character changes levels of difficulty
4. Ability to throw attacks

**Interaction Test:**

Once the boss character can move correctly in a blank environment, I will put the main character in the environment and interact with the boss. I’ll try to use the character differently each time, with different playing styles. I’ll be looking for:

1. Correct attack and damage taken from and to the boss character
2. Proper difficulty for the user when trying to defeat the boss
3. Proper leveling up of difficulty as the user defeats boss stages
4. Smooth cutscenes at the beginning and end of the level
   1. Dialogue between characters and defeat sequence
5. Correct animations when the boss or the character hit/attack each other
6. Smooth transitions between preceding level and next level

## Timeline \_\_\_\_\_\_\_\_\_/10Pert diagram

|  |  |  |
| --- | --- | --- |
| Task | Duration (HpW) | Predecessor Task(s) |
| Requirement Collection for Enemy Design | 3 | 0 |
| Sprite Design | 4 | 1 |
| Movement Design | 4 | 1 |
| Attack Design | 4 | 1 |
| Minimum Viable Product | 10 | 1, 3, 4 |
| Assigning Sprites to movement | 2 | 2, 5 |
| Testing on blank backgrounds | 2 | 5,6 |
| Testing with main character | 4 | 7 |
| Installation | 2 | 8 |
| Requirement Collection for AI | 2 | 0 |
| Building AI runner | 10 | 10 |
| Creating AI escape sequence | 1 | 11 |
| Testing and debugging AI on all levels | 5 | 12 |
| Installation/Finalization | 2 | 13 |

\*Pert Chart in Git\*

### Gantt timeline

\*In Git\*