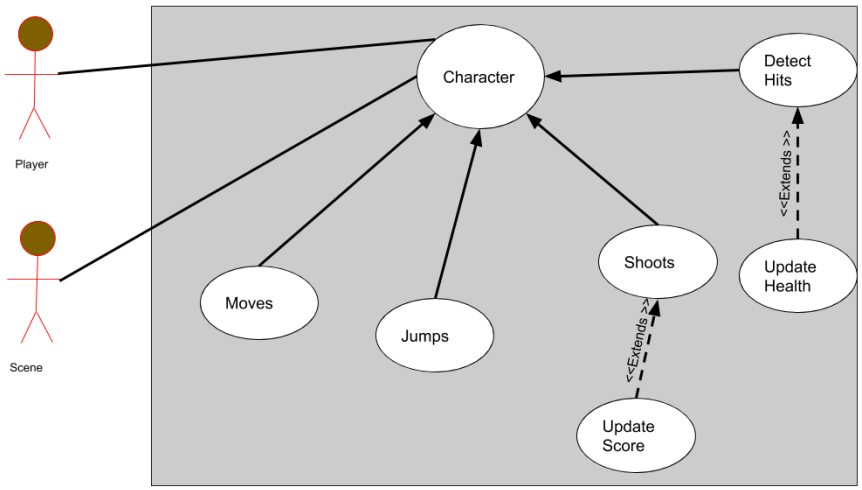
Name _____Luis Lopez_____ Mark _____/50

1. Brief introduction __/3

My feature is the player controlled character.

2. Use case diagram with scenario __14

Use Case Diagram



Scenarios

Name: Moves

Summary: The character moves based on keyboard input

Actors: Player.

Preconditions: Scene has been loaded

Basic sequence:

Step 1: Let Unity Accept input.

Step 2: Based on what I mapped each input to the character moves. W key to move forward, A key to move left, S key to move down and D key to move right

Step 3: Repeat step 1 and 2 until the game ends

Exceptions:

Step 2: Character reaches a level boundary so character can't move past boundary.

Post conditions: Characters position is offset on the map based on what key was pressed

Priority: 1

ID: C01

Name: Jumps

Summary: The character jumps if spacebar is pressed

Actors: Player.

Preconditions: Scene has been loaded

Basic sequence:

Step 1: Let Unity Accept input.

Step 2: Make the character jump when Unity detects space bar input

Step 3: Repeat step 1 and 2 until the game ends

Exceptions:

Step 2: Character can't jump because of an object above it

Post conditions: Characters jumps

Priority: 2

ID: C01

Name: Shoots

Summary: The character shoots a projectile in direction character is facing

Actors: Player.

Preconditions: Scene has been loaded

Basic sequence:

Step 1: Let Unity Accept input.

Step 2: When enter key is pressed get Vector value of direction the character is facing

Step 3: Move the character to hold up the weapon

Step 4: Instantiate a new projectile object

Step 5: Launch projectile in direction character is facing

Step 6: Projectile moves until a collision is detected

Step 7: Once a collision is detected projectile notifies character if it collided with an enemy

Step 8: The projectile then self-destructs

Step 9: If enemy collision occurs the player lets scorekeeper know

Exceptions:

Step 6: Projectile collides with boundary

Post conditions: The character either hit or miss an enemy

Priority: 2

ID: C01

Name: Detects Hits

Summary: The character detects when it is hit by an enemy

Actors: Player.

Preconditions: Scene has been loaded

Basic sequence:

Step 1: Let unity detect collision event

Step 2: Interface with a score to decrease player Health points

Step 3: Repeat step 1 and 2 until the game ends

Post conditions: Characters has lower health

Priority: 3

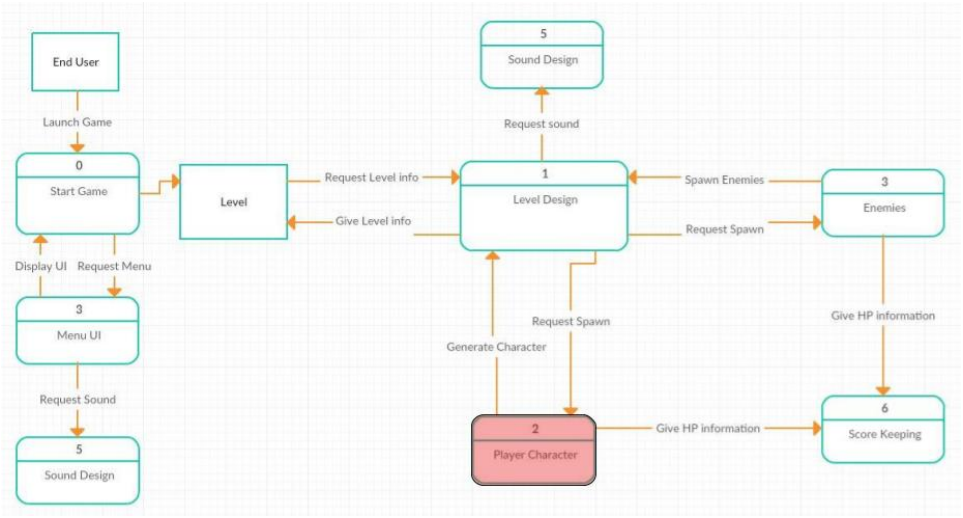
ID: C01

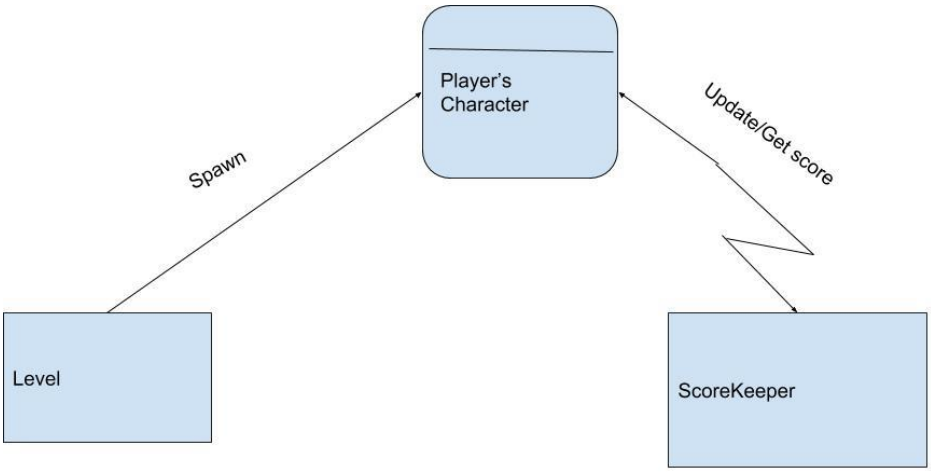
3. Data Flow diagram(s) from Level 0 to process description for your feature _____14

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

Example:

Data Flow Diagrams





4. Acceptance Tests _____9

For Jump Feature

Input: space bar at different frequency

Output: Player jumps set height only if on the ground so if space is pressed while player is in the air, the player doesn't jum

For Move Feature

Input: Colide with with enemies and boundaries

Output: Character can't move through objects

For Shoot Feature:

Input: Multiple shots in direction of target object

Output: All shots should collide with object and send feedback to player

Collide:

Input: n enemies attack player

Output: n hits detected

5. Timeline _____/10

[Figure out the tasks required to complete your feature]

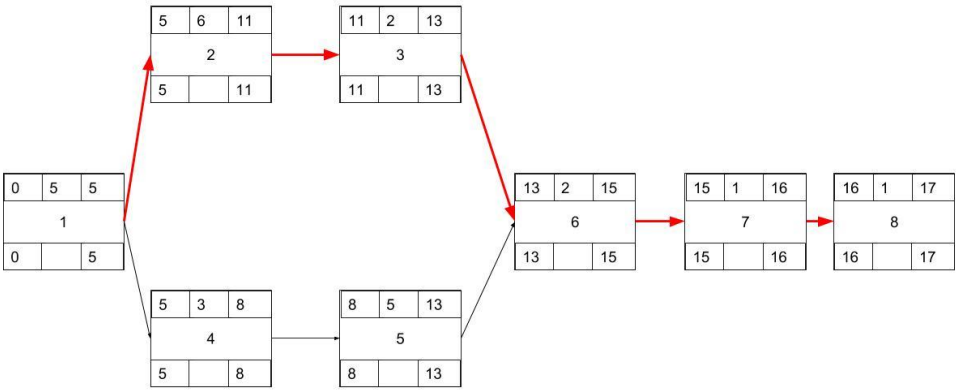
Example:

Work items

Task	Duration (PWks)	Predecessor Task(s)
1. Requirements Collection	5	-
2. Create scripts to control rigid body movements of character	6	1
3. Integrate scripts controlling character movement into character actions like walking or jumping	2	2
4. Create a weapon and it's projectile	3	1
5. Projectile behavior(Logic and physics)	5	4
6. Debug and Integration with	2	3,5

other parts		
7. Intensive Testing	1	6
8. Installation	1	7

Pert diagram



Gantt timeline