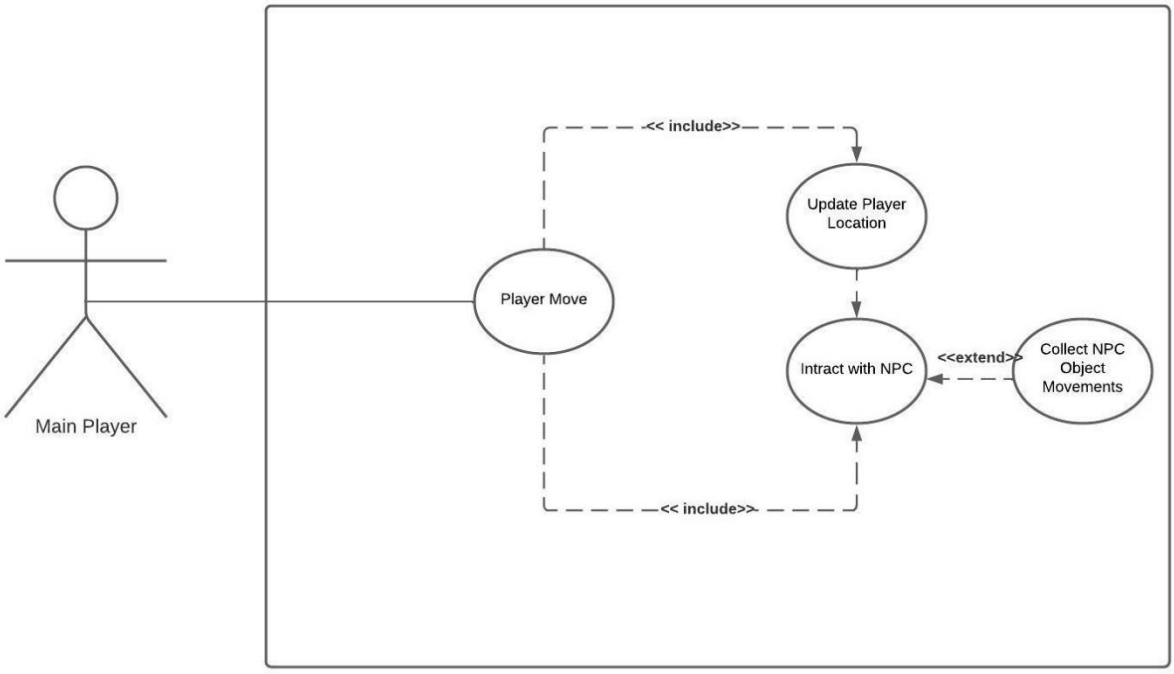
Name : Kurian Georly Kunnathushery Mark_____/50

1. Brief introduction __/3

My feature for “Dungeon Jump” is the main character’s actions. In our game “Dungeon Jump”, the player controls a single avatar and its human being. The main player has the ability to move, interact with non-player characters and collects manipulates objects. Move would involve, well movements like idle, running, jumping, falling and general movements etc. Interact with objects would be more enter levels, get power up or turn in quest item. So, interact NPC could have attack or talk to them. The main player has a range of defenses and attacks. The health of the player depends on achievements and attacks. The player will encounter obstacles, coins, achievements, and enemies.

2. Use case diagram with scenario

Use Case Diagrams



Scenarios

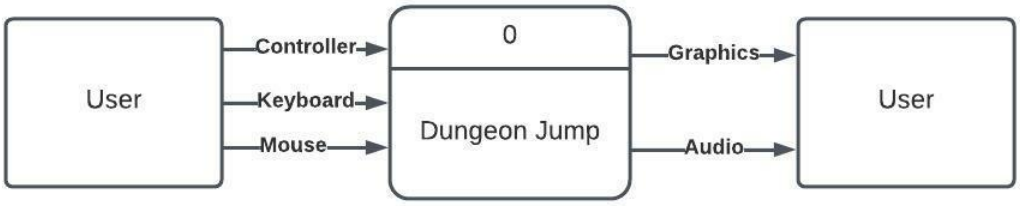
Name: Role of Main Player
Summary: Move, interact with NPC and Attack
Actors: Main Player
Preconditions: Main Player Moves and Interacts
Basic sequence:
Step 1: Player Moves forwards.
Step 2: player location update
Step 3: Interact with objects.

Exceptions:
Step 3: Collect NPC objects.
Post conditions: Attack stops.
Priority: 1
ID: KG01

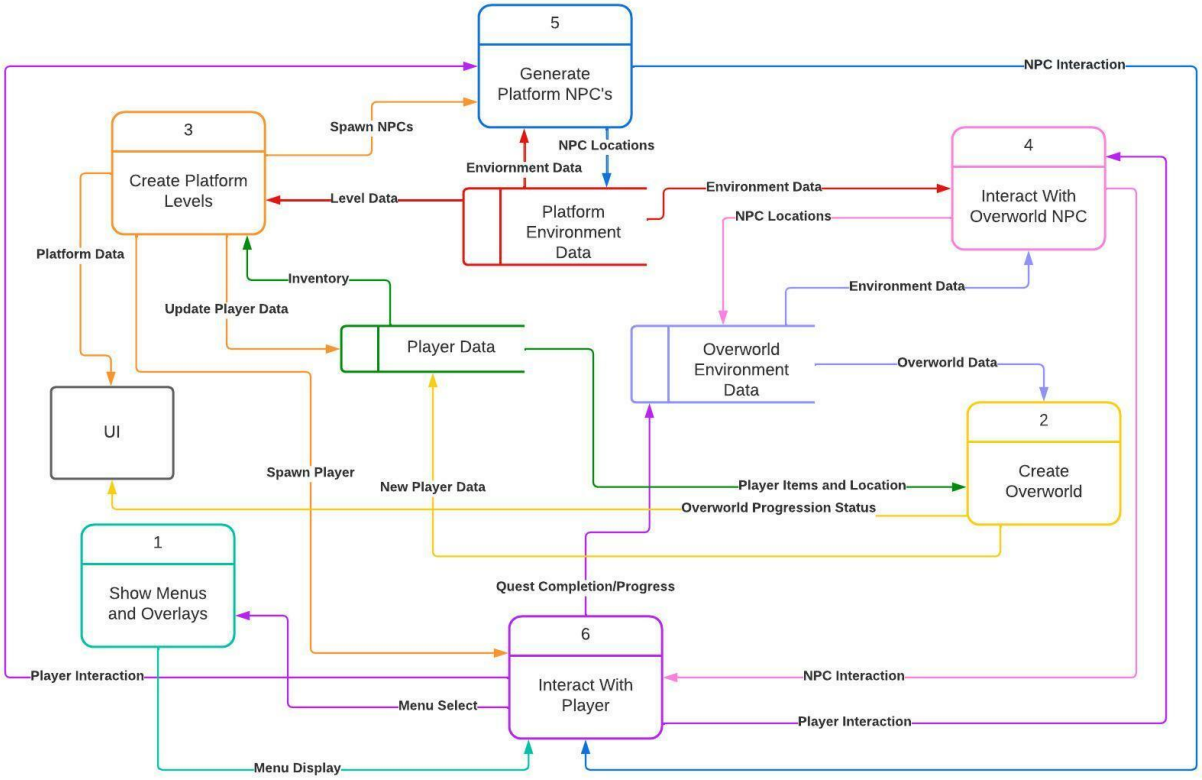
3. _____ Data Flow diagram(s) from Level 0 to process description for your feature 14

Data Flow Diagrams

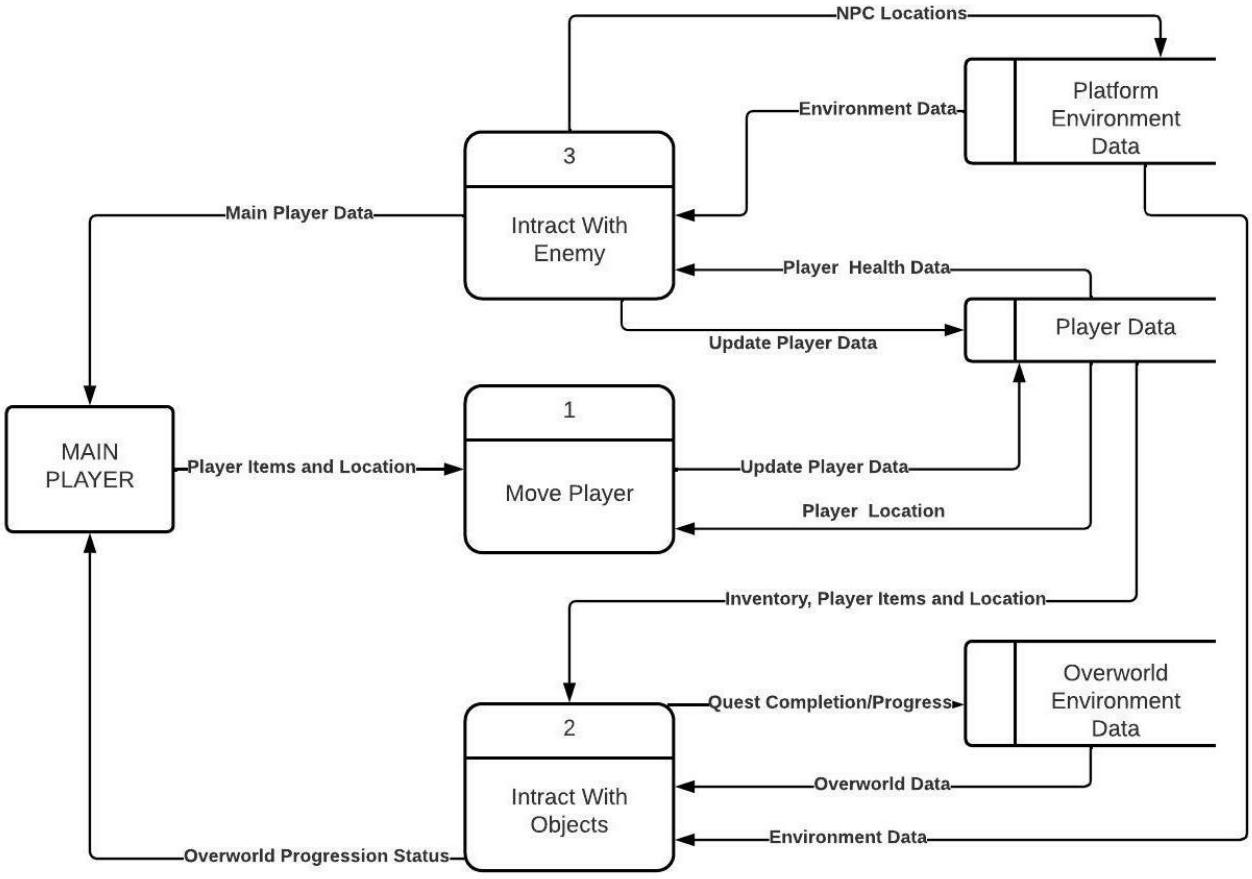
Context Level



Level 1



Level 2



Process Descriptions

4.1 Main Player Attacks

IF Player Attacks NPC
    Use Enemy NPC health and location Details
    IF Main Player Wins
        Increases Main Player Health and NPC destroyed
    ELSE
        IF Main Player Health less than or equals to zero
            Main Player's Life Loses
        ELSE
            Decreases Main Player Health

END

4.2 Main Player Moves

IF Player Moves forward
    Use Main Player Location Details
    IF Main Player Forward
        Updating Main Player's Location Details
    ELSE
        Updating Main Player's Location Details
END

4.3 Main Player Founds NPC Objects

IF Player Founds NPC Objects
    Use NPC Objects Details
    IF Main Player Pick up an NPC Objects
        IF NPC object is an Item
            Adding to Item List and Updating Main Player's Item List
        ELSE IF Main Player Step on an NPC Hazard Object

            Damage Player and launch Player

END

4. Acceptance Tests 9

The acceptance tests will check the main contents related to the main player such as health, position, Item collection and attack status.

Player Position:

Getting a key press, the main player must move N pixels depend on the key. If the correct script/function was called in response, then player must move N pixels in correct direction. After moving the player, the position details must be updated also. If there is any change in N number of position and the stored details, then it's become worse.

Player Direction:

If a key assigned to move forward then user press that key, player must move to the assigned direction. If player moves to opposite or any wrong direction, then it must be removed.

Attack NPC:

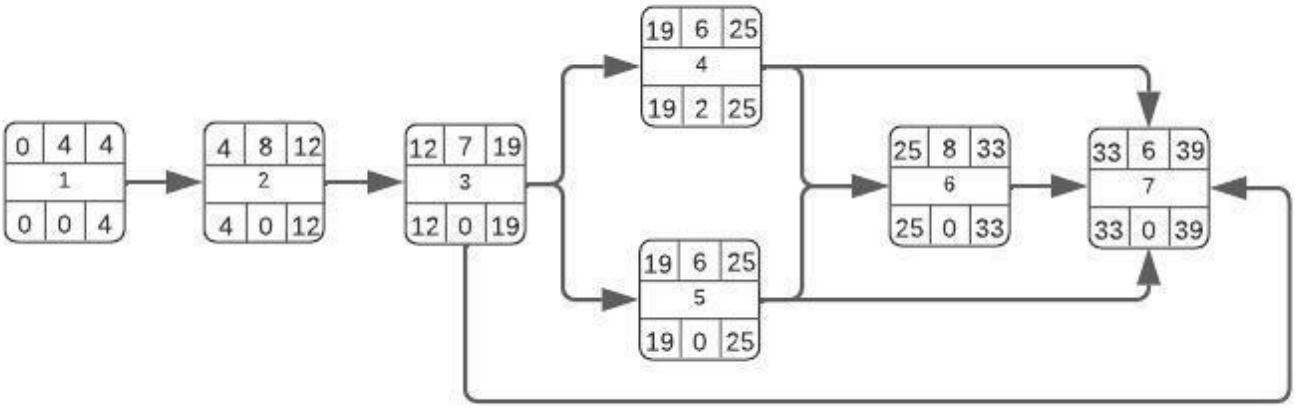
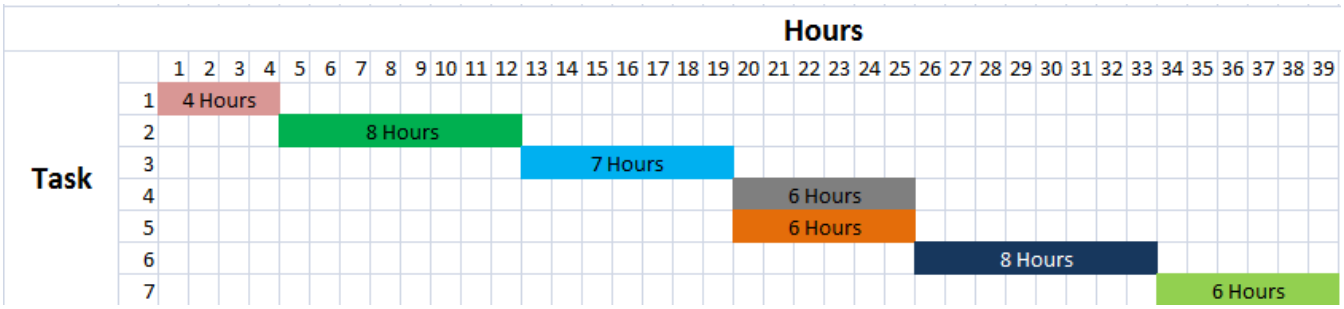
While attacking an NPC opponent, health of the player and health of the opponent must decreased by N number iteratively. After N number of attack count the NPC opponent must be dead.

5. Timeline /10

Work items

Task	Duration (PWks)	Predecessor Task(s)
1. Study Unity Character Design	4	-
2. Player movement Design	8	1
3. Interact with NPC class Design	7	2
4. Attack NPC class Design	6	3
5. NPC object Interaction Class Design	6	3
6. Health Class Design	8	4,5
7. Testing	6	3,4,5,6

Pert Diagram



Gantt Timeline