

## 1. Brief introduction \_/3

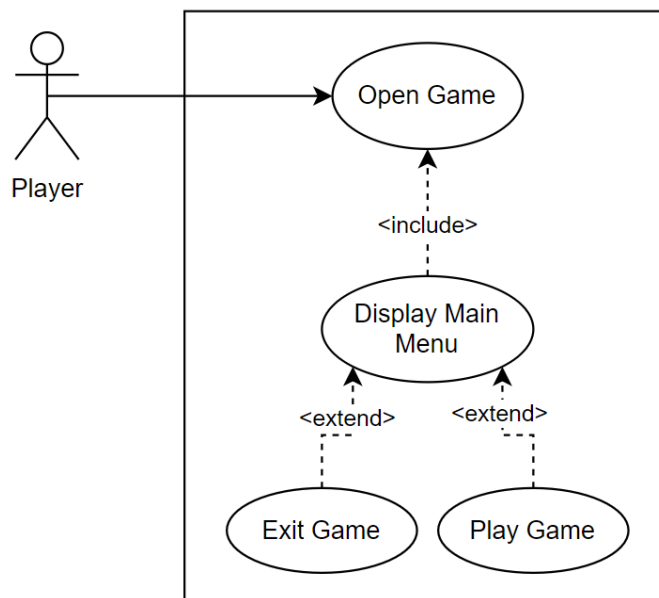
I will be developing two main features for Rogue Realm: main menu and game play. The game play feature doubles as our team's minimum viable product.

When the user opens the game, a main menu will be displayed. The player will then either choose to exit the game or play. If play is selected, the level generation process will begin and the user will be brought into the game. If exit is selected, the program will gracefully quit.

My second feature will be main game play. After the level is generated, the user will be brought into the completed map and the game will begin. This feature will handle all user movement (idle, run left or right, and jump) as well as updating the status of the player and enemies. The player will be able to pick up weapons which will alter the way they attack an enemy, so I will develop those specific movements as well.

## 2. Use case diagram with scenario \_14

### Use Case Diagram



### Scenarios

**Name:** Main Menu

**Summary:** After the game is opened, the main menu is displayed and the player can either choose to play the game or exit.

**Actors:** Player.

**Preconditions:** Game has been built and .exe downloaded.

**Basic sequence:**

**Step 1:** User opens Rogue Realm Game.

**Step 2:** Main menu is displayed.

**Step 3:** Accept player selection.

**Step 4:** Either exit game or move onto the game initialization process depending on selection.

**Exceptions:**

**Step 3.1:** Player selects exit button: Exit the game.

**Step 3.2:** Player selects play button: Level generation and game initialization begins.

**Step 3.3:** Player clicks elsewhere on the screen: Do nothing.

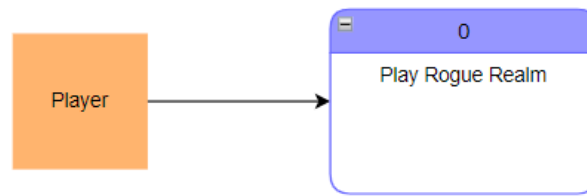
**Post conditions:** Game initialization and game play begins.

**Priority:** 2

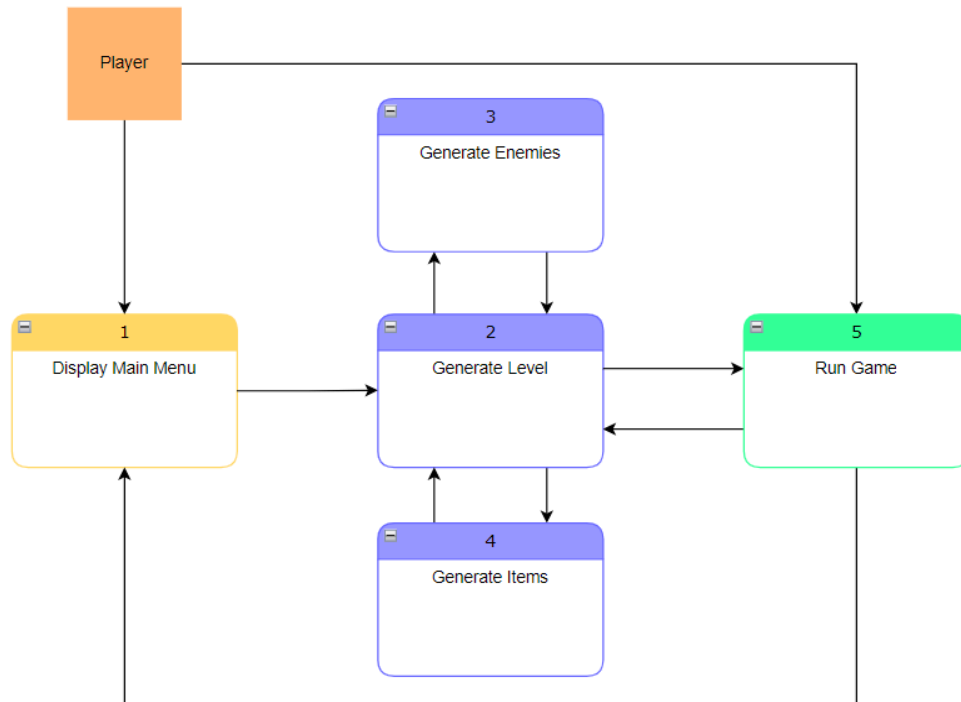
\*The priorities are 1 = must have, 2 = essential, 3 = nice to have.

### 3. Data Flow diagram(s) from Level 0 to process description for your feature \_\_\_\_14

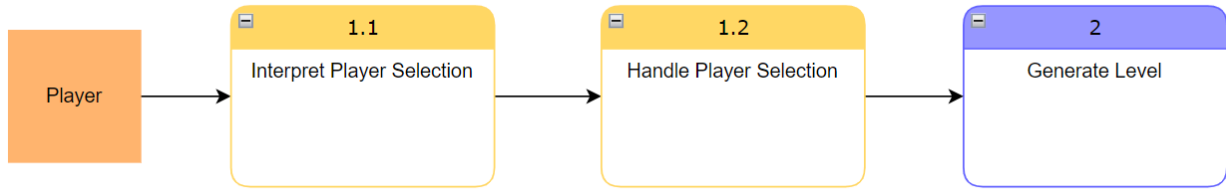
#### Level 0 Data Flow Diagram (Context Diagram)



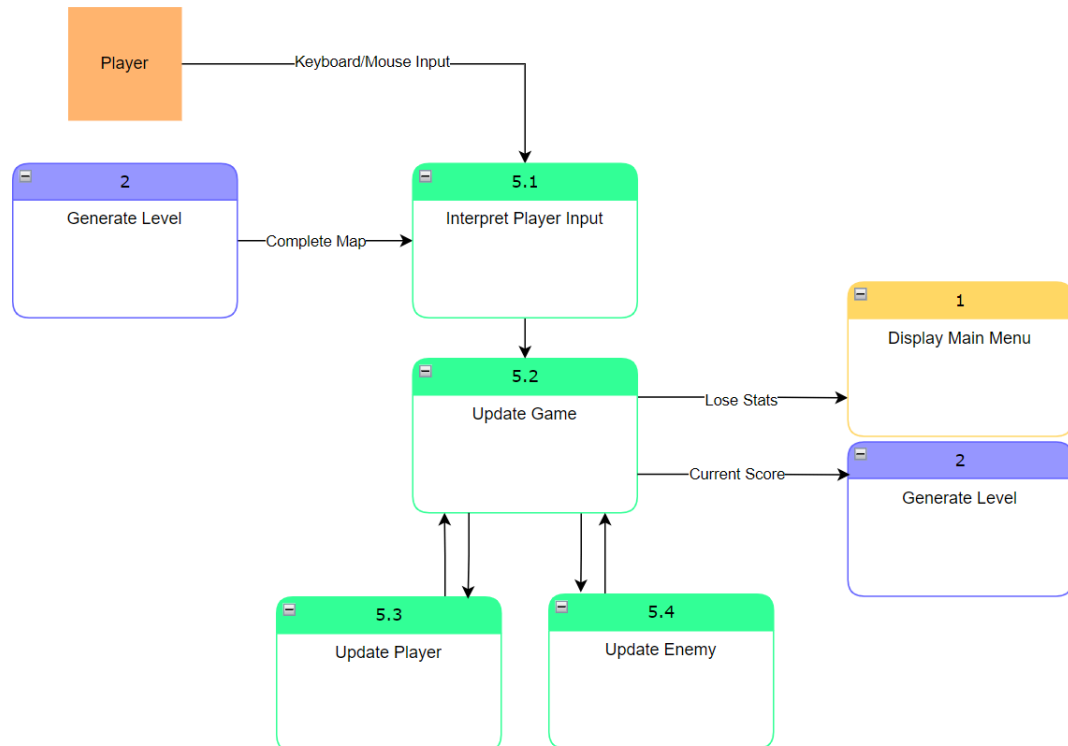
#### Level 1 Data Flow Diagram (Diagram 0)



## Level 2 Data Flow Diagram (Main Menu Process)



## Level 2 Data Flow Diagram (Run Game Process)



## Process Description

If player makes selection then

    If selection is play button then

        Begin level generation process and switch scene to main game

    Endif

    If selection is exit button then

        Exit game gracefully

    Endif

    Else

        Do nothing

    Endif

Else

    Keep displaying main menu

Endif

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

### Test for Main Menu

Make random selections on the main menu and send information to an external file or debug log. These messages will include the following data:

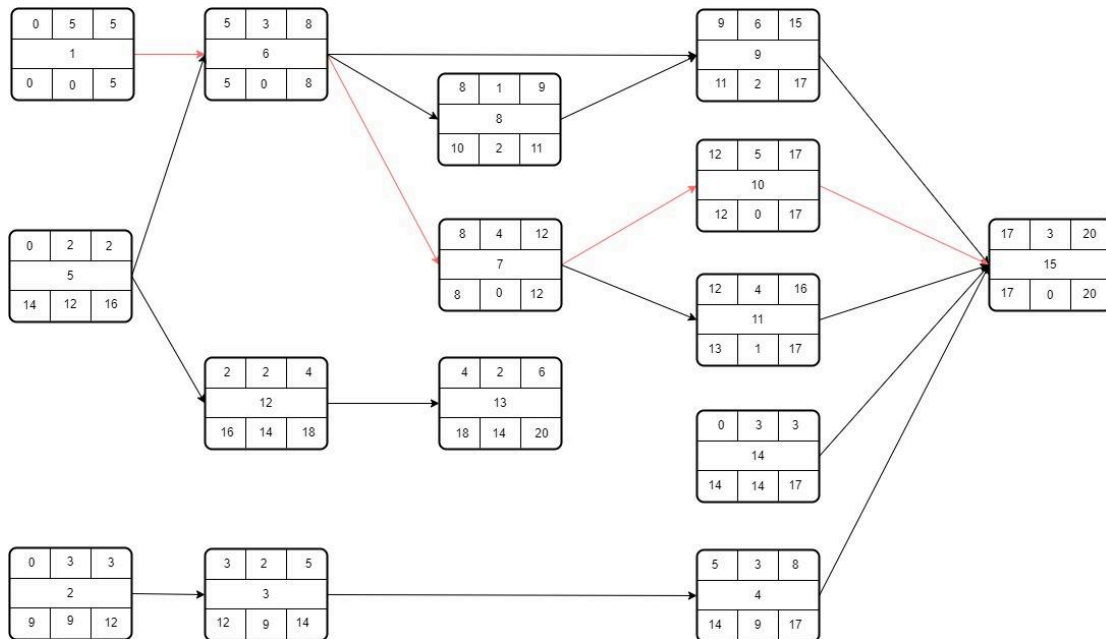
- Successful exit messages from each function if the exit button is pressed.
- Successful level generation messages from level generation functions if the play button is pressed.
- No message if any other space on the screen is selected.

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

### Work items

Task	Duration (hours)	Predecessor Task(s)
1. Class diagrams and organization	5	-
2. Select/create assets (Sprites)	3	-
3. Design main menu/buttons	2	2
4. Script main menu	3	3
5. Create main game scene	2	-
6. Integrate player movement	3	1,5
7. Add obstacles/interactions	4	6
8. Build state machine for animations	1	6
9. Animate player	6	6,8
10. Incorporate weapon usage/pickups	5	7
11. Incorporate health/enemy interaction	4	7
12. Design pause menu/buttons	2	5
13. Code pause menu	2	12
14. Find and format sound effects/background music	3	-
15. Add sound to game	3	4,9,10,11,14

## Pert diagram



## Gantt timeline

