## 1.  Brief introduction ___/3

The Game Manager receives a prompt from the player launching the game.  The Game Manager then evaluates the player's level based on data stored in the Game State.  The Game Manager then requests an environment to be generated by the Environment Generator, requests enemies to be spawned by the Enemy Controller and Initializes the Asset Pipeline for Graphics and Sound.

## 2.  Use case diagram with scenario   ___/14

### Use Case Diagram:  (please note blue dash line is meant to show flow)
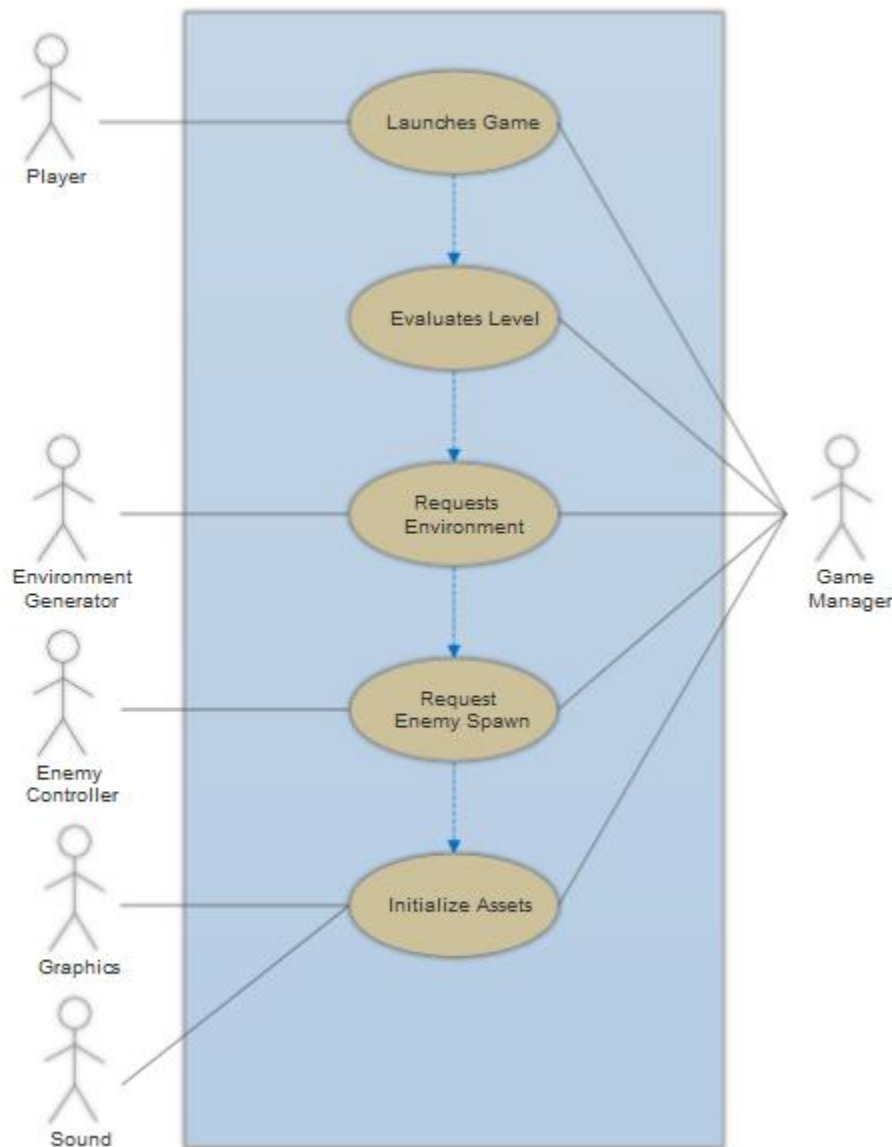
**Name:** Launch Game.

**Summary:** Player launches a game.

**Actors:** Player, Game Manager, Environment Generator, Enemy Controller, Graphics and Sound.

**Preconditions:** Game has been launched.

**Basic sequence:**

    **Step 1:** Evaluate level.

    **Step 2:** Request environment.

    **Step 3:** Request enemy spawn.

    **Step 4:** Initialize graphics and sound.

**Exceptions:**

    **Step 1:** Game fails to launch: display error message and return to menu screen

    **Step 2:** Environment fails to generate: display error message and return to menu screen.

    **Step 3:** Enemies fail to spawn: display error message and return to menu screen.

    **Step 4:** Graphics fail: display error message and return to menu screen.
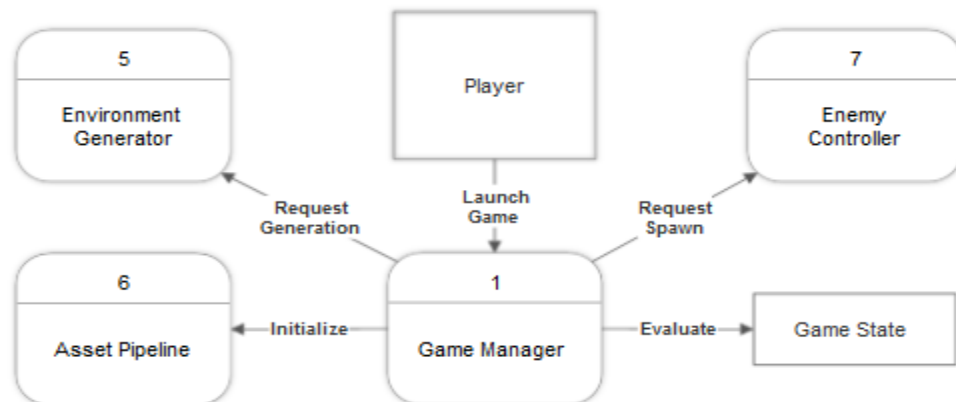
    **Step 5:** Sound fails: continue with game.

**Post conditions:** Environment is generated, enemies have spawned, graphics and sound have been initialized.

**Priority:** 1-must have

**ID:** C01

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

### Data Flow Diagram

## 4. Acceptance Tests ___/9

Test Cases would include a levels at zero (beginning level), playing level and beyond max level.

The output file will have the following characteristics:

- Level 11 – Beyond Max Level
- Level 0 – Beginning Level
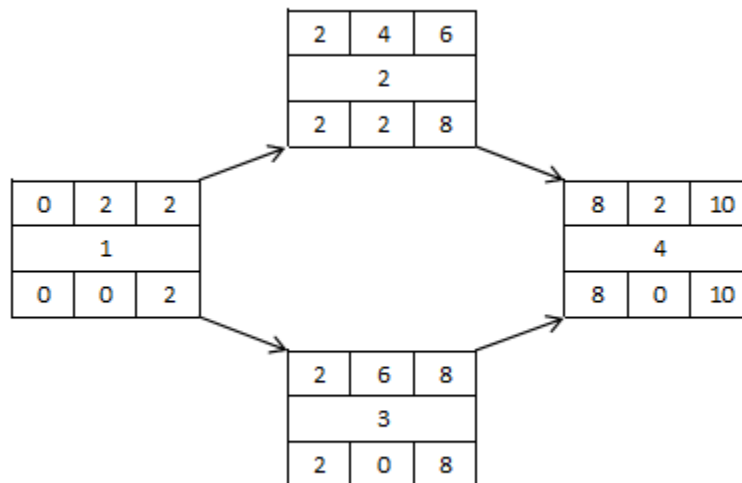- Level 1-9 – Playing Levels

| Input Level | Output | Action |
|---|---|---|
| 11 (beyond max) | Game Won Menu | Restart New Game Option |
| 0 (beginning level) | Help Screen & Level Display | Start Game |
| 1-9 | Level Display | Continue Game |

## 5. Timeline ____/10

### Work items:

| Task | Duration (weeks) | Predecessor Task(s) |
|---|---|---|
| 1. Evaluate Level | 2 | - |
| 2. Environment Generation | 4 | 1 |
| 3. Enemy Spawn | 6 | 1 |
| 4. Initiate Assets Pipeline | 2 | 2, 3 |

### Pert diagram:

**Gantt timeline:**

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | |
| 2 | | | 1 | | | | | | | |
| 3 | | | 1 | | | | | | | |
| 4 | | | | | | | | | 2,3 | |