Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mark \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/50

[**Instructions**: Remove everything that is not a heading below and fill in with your own diagrams, etc.]

## Brief introduction \_\_/3

My feature for the “Hot Dog Jones” project is designing the map/level as well as placing powerups/checkpoints throughout the map.

When a player starts the game, I’m charge of making sure the proper level is there as well as making sure powerups and checkpoints are placed where they need to be. The rest of my team will be using my code in order to continue their parts (such as sprites/animations, easter eggs, player entity, enemies, sound, HUD and a state machine).

## Use case diagram with scenario \_\_14

Example:

### Use Case Diagrams

A diagram of a level map

Description automatically generated

### Scenarios

**Name:** Entity (Interaction)

**Summary:** The entity (player and/or enemy) moves within the map and interacts with its surroundings.

**Actors:** Player

**Preconditions:** Player is controlling the “player/character” within the game and the game is running.

**Basic Sequence:**

**Step 1:** The Player is controlling the character.

**Step 2:** The Player stays in bounds (Level Map)

**Step 3:** The Player collects a powerup.

**Exceptions:**

**Step 1:** The Player reaches the end of level and/or Checkpoint.

**Step 2:** The Player goes through end of level and/or Checkpoint to another level.

**Postconditions:** The player stays within the level map or goes to another level within the game.

**Priority:** 1\*

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

**ID:** C01B.1

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

My feature highlighted in yellow:

A diagram of a game

Description automatically generated

### Process Descriptions

Player controls character\*:

WHILE Player is not at checkpoint and/or end of level

Player interacts with environment:

* + Physically staying inbounds
  + Interacting with environment
  + Fighting enemies
  + Discovering easter eggs

Player is in control of character and scene doesn’t change

END WHILE

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

[Describe the inputs and outputs of the tests you will run. Ensure you cover all the boundary cases.]

Testing for making sure the level map works correctly will be in the form of the player staying inbounds (x and y coordinates), checkpoint saving progress, powerups functioning and player movements.

**Example for MVP feature**

Have the player move from it’s starting point to a random point. If the player successfully reaches the point and it’s in bounds (meaning not outside of the playable area), the output will be True. If the player goes outside of the boundary, the False.

* **Example with Boundaries being -200 <= X <= 200 and -200 <= Y <= 200:**

|  |  |  |  |
| --- | --- | --- | --- |
| Output | X Coord (int) | Y Coord (int) | Notes |
| True | 1 | 2 | Player is inbounds |
| False | -400 | 200 | Player is outside playable area (x-coord specifically). |
| True | -199 | -199 | Player is just inside playable area. |
| True | 0 | 200 | Player is inside playable area. |
| 255.5 | -300 | -400 | Player is outside playable area. |

## Timeline \_\_\_\_\_\_\_\_\_/10

[Figure out the tasks required to complete your feature]

Example:

### Work items

|  |  |  |
| --- | --- | --- |
| Task | Duration (PWks) | Predecessor Task(s) |
| 1. Basic Level Functionality | 4 | - |
| 2. Entity Creation | 2 | 1 |
| 3. Map Design | 2 | 1 |
| 4. Powerup Locations | 3 | 2, 3 |
| 5. Checkpoints | 2 | 3 |
| 6. Programming | 7 | 4 |
| 7. Testing | 4 | 6 |
| 8. Installation | 1 | 6,7 |

### Pert diagram

A diagram of a number system

Description automatically generated with medium confidence

### Gantt timeline

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  | 2,3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 6,7 |  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |