Name\_\_Amara Jeide\_\_\_\_\_\_\_\_\_\_\_\_ Mark \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/50

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

## Brief introduction \_\_/3

My feature involves the various items and pickups throughout each level of the game. Items include pieces of a Stillsuit, which must be collected to advance to the next level, and water.

## Use case diagram with scenario \_\_14

### Use Case Diagrams

### A diagram of a system Description automatically generatedScenarios

**Name:** Collide with item

**Summary:** The player character collides with an item, then performs a number of actions depending on the item that was collided with

**Actors:** Player

**Preconditions:** Items have been initialized

**Basic sequence:**

**Step 1:** Check which item has been collided with

**Step 2:** Remove the item from play so it can’t be picked up again

**Step 3:** Increase the score counter

**Step 4:** Check if a win condition has been met for the level

**Exceptions:**

**Step 1:** Enemies are not items. Handled by Enemy Handler

**Post conditions:** Score counter is updated, and level may be completed

**Priority:** 2\*

**ID:** 3

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

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

### Data Flow Diagrams

A diagram of a data flow

Description automatically generated

A diagram of a computer

Description automatically generated

### Process Descriptions

Check Item Type:

IF Stillsuit

Check which piece (ID)

Play Stillsuit pickup sound

Send data to score counter

ELSEIF Water

Play water pickup sound

Send data to score counter

Remove Item from Active Play:

Item active = FALSE

Update Score Counter:

IF Stillsuit

Compare number of pieces collected to total pieces

IF All pieces collected

Level completed

Update Game Manager

ELSEIF Water

Increase score

Update Game Manager

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

Test Item pickups

* Player and Item recognize a collision occurred
* Item vanishes after collision
* Item type is recognized

Test Score Counter

* Level ends when all items are collected
* Score increases after an item is picked up

Test Sound plays

* Correct pickup sound plays depending on item type

Test Stillsuit parts

* Each piece can be distinguished from others

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

### Work items

|  |  |  |
| --- | --- | --- |
| Task | Duration (PWks) | Predecessor Task(s) |
| 1. Create Items | 1 | - |
| 2. Item Programming | 3 | 1 |
| 3. Scoring | 3 | 2 |
| 4. Level Win Conditions | 3 | 3 |
| 5. Incorporate Music | 2 | 1 |
| 6. Animations | 2 | 1 |
| 7. Testing | 3 | 4 |
| 8. Installation | 1 | 7, 5, 6 |

### Pert diagram

A diagram of a number diagram

Description automatically generated with medium confidence

### Gantt timeline

A white and blue grid with numbers

Description automatically generated