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

## Brief introduction \_\_/3

I am creating the item system within our game, *The Crawl*. That includes creating a dynamically bound class which stores the info for the items, Implementing a thematic catalog of weapons and items, that are fun and intuitive to use, and coordinating with other members of my team to integrate my items in their processes. I will have to create the sprites, sounds, and effects for my weapons, and ensure they work with the player character.

## Use case diagram with scenario \_\_14

### Use Case Diagrams

A diagram of a process with Ice hockey rink in the background

AI-generated content may be incorrect.

### Scenarios

**[You will need a scenario for each use case]**

**Name:** Gets Item

**Summary:** The user gains an item from either starting class select or picking one up in the dungeon.

**Actors:** User

**Preconditions:** Game is running and the user creates a character.

**Basic sequence:**

**Step 1:** Triggers New Item Pickup

**Step 2:** Pull item from class

**Step 3:** Add to player class.

**Step 4:** Assign Sprite to player.

**Step 5:** Change values of player based on item if prudent.

**Step 6:** Remove the item from the pool of potential items to ensure no repeats.

**Step 4:** Put Item sprite into UI element.

**Exceptions:**

**Step 1:** Player is full on item slots: Allow player to discard item or ignore new item.

**Post conditions:** New item is initialized or discarded based on user input.

**Priority:** 2\*

**ID:** C01

\*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

[Get the Level 0 from your team. Highlight the path to your feature]

### Data Flow Diagrams

A diagram of a game

AI-generated content may be incorrect.

### A diagram of a computer data AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

### Process Descriptions

Binds to Item Slot\*:

INPUT DropChoice

FOR select Item from AvailableItemPool

REMOVE Item from AvailableItemPool

IF AvailableItemSlots == 3 THEN

ASSIGN SlotOne == Item

ELSE IF AvailableItemSlots <=2 AND AvailableItemSlots >0 THEN

FOR search available slots to find which are open

ASSIGN OpenSlot == Item

ELSE

DISPLAY Current Item Slots are Full. Please Choose Item to Drop

If DropChoice == 1 THEN

ADD SlotOne to AvailableItemPool

REMOVE SlotOne

ASSIGN SlotOne == Item

ELSE IF DropChoice == 2 THEN

ADD SlotTwo to AvailableItemPool

REMOVE SlotTwo

ASSIGN SlotTwo == Item

ELSE IF DropChoice == 3 THEN

ADD SlotThree to AvailableItemPool

REMOVE SlotThree

ASSIGN SlotThree == Item

ELSE

DISPLAY User has chosen to keep items

ADD Item to AvailableItemPool

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

**Example for Generate Item feature**

Run feature 1000 times generating items and assigning them to player.

The Generated Items will have the following characteristics:

* Number of Items generated is 1000
* Items should never repeat an already existing item
* Once Items are selected they should be removed from item pool
* Once items are discarded they should be added back into item pool
* The item will change the values of the player while appropriate
* The item will enact change in the game while appropriate
* The item will display unique sprites
* The Items will have unqiue audio associated with them

**Example for Generate Item feature**

* The player creates a character when intially starting game
* The player chooses warrior as their character
* The warrior class comes equiped with the Axe item
* The Axe item gets assigned to the character
* The Axe item is removed from item pool
* The Axe item adds damage to the player damage stat
* The Axe item assigns itself to the user’s item bar
* The Axe makes unique weapon sounds if the user swings their weapon

## Timeline \_\_\_\_\_\_\_\_\_/1

### Work items

|  |  |  |
| --- | --- | --- |
| Task | Duration (PWks) | Predecessor Task(s) |
| 1. Requirements Collection | 5 | - |
| 2. Item Class Design | 10 | 1 |
| 3. Item Pool Implementation | 6 | 2 |
| 4. Item Available Slot Design | 4 | 3 |
| 5. Item Sprites Implementation | 5 | 4 |
| 6. Adding Audio to Items | 5 | 4 |
| 7. Integrating Designs with other team members projects | 10 | 5,6 |
| 8. Testing | 8 | 7 |
| 9. Installation | 3 | 8 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 5 | 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 7 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 8 |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 |

### Pert diagram

A diagram of a number of squares

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