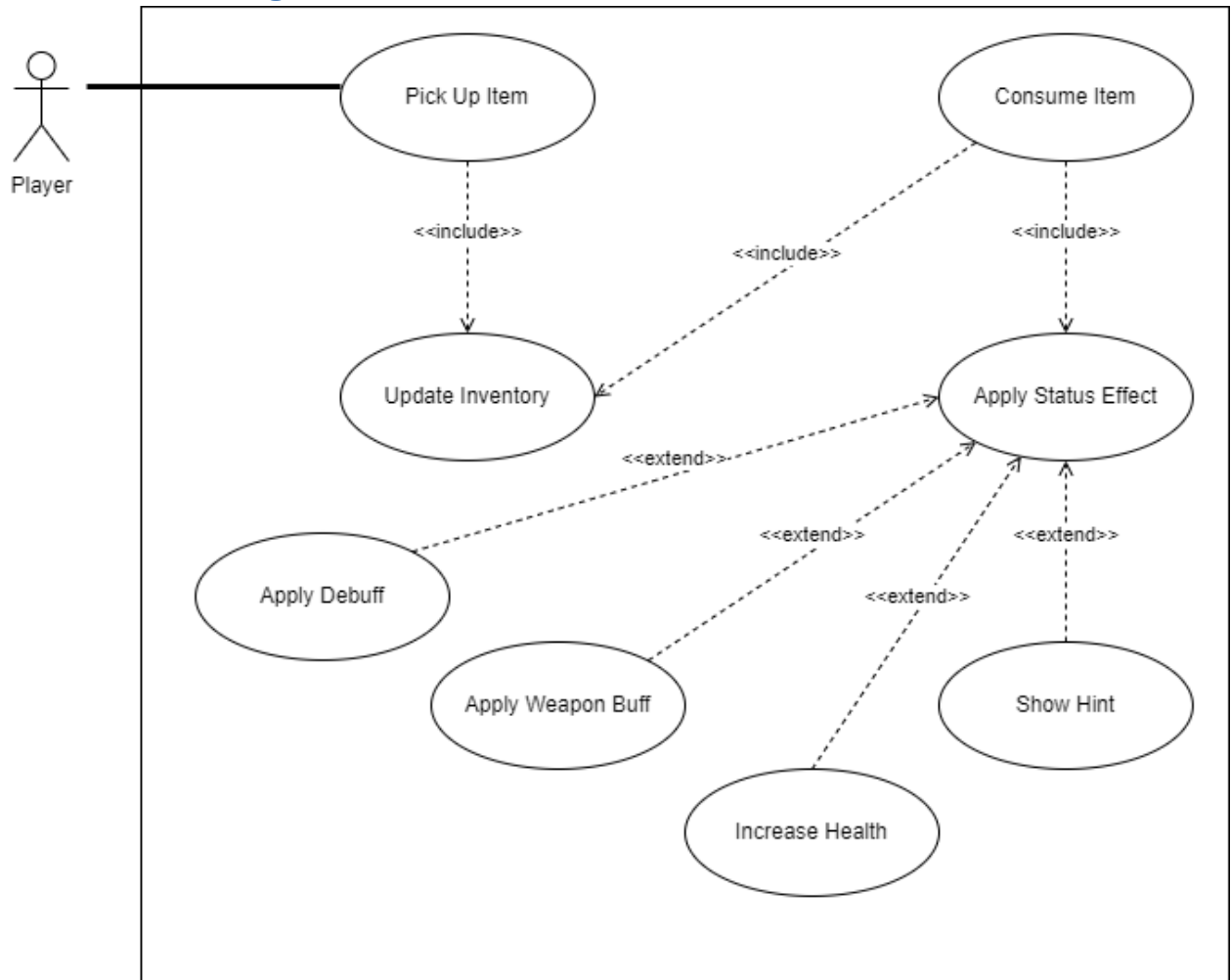


## 1. Brief introduction \_/3

As the user plays the game, they will pick up items like ingredients and weapons that will be used to help them progress through the game. The user will also pick up powerups that will aid them in making it through the game farther by healing any damage they may have taken.

## 2. Use case diagram with scenario \_14

### Use Case Diagrams



### Scenarios

**Name:** Pick Up Item

**Summary:** The user picks up an item and stores it in their inventory. From the inventory the player will be able to consume the item. The item will apply an effect such as buffing weapon damage, increasing the players health, apply a debuff to the player, or show hints on what ingredients the player needs to grab.

**Actors:** Player

**Preconditions:** Items have spawned in the room.

**Basic sequence:**

**Step 1:** The Player enters a room

**Step 2:** The player picks up an item off the ground

**Step 3:** The player consumes the item from their inventory

**Step 4:** The item applies an effect to the player

**Exceptions:**

**Step 1:** The item applies a weapon buff, increases player health, applies a debuff to the player, or gives a hint to the player.

**Post conditions:** The item is now in the inventory or consumed and the player can pick up more items.

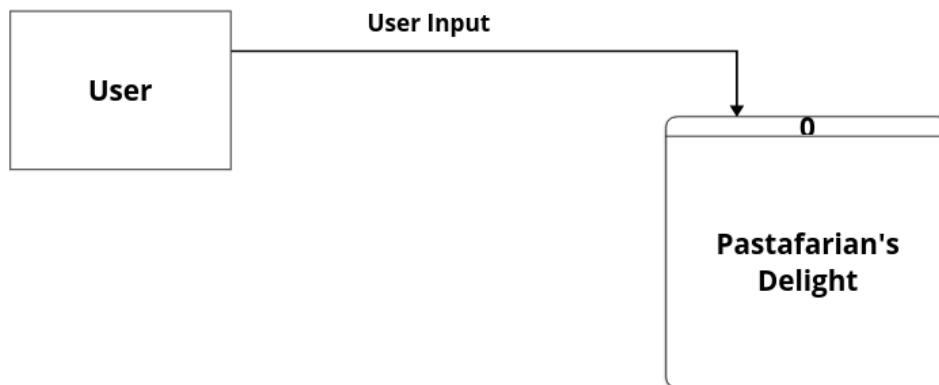
**Priority:** 2\*

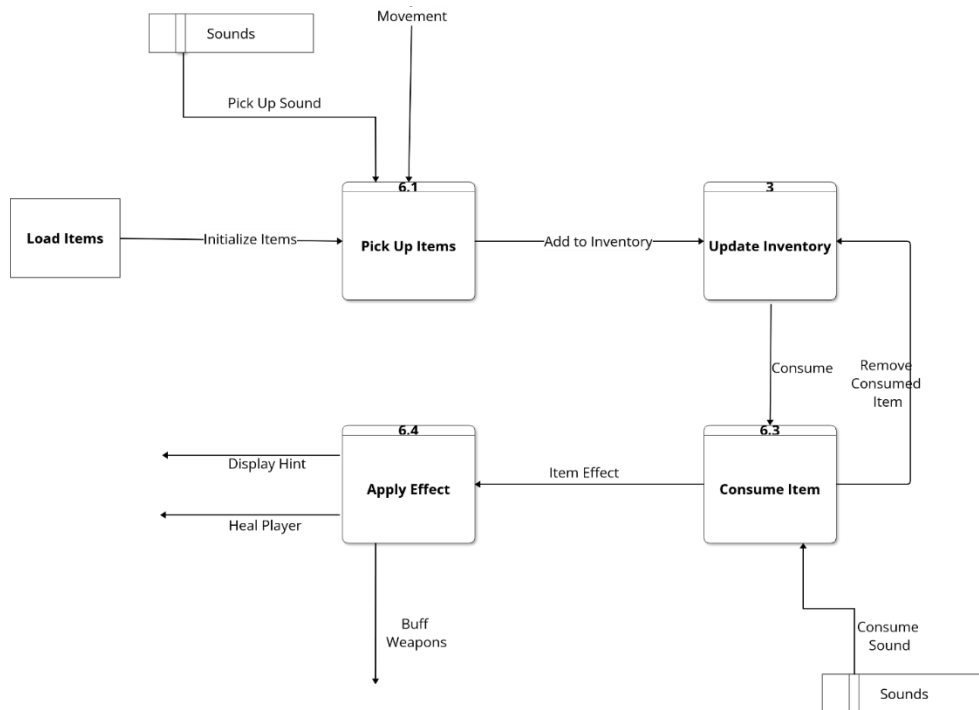
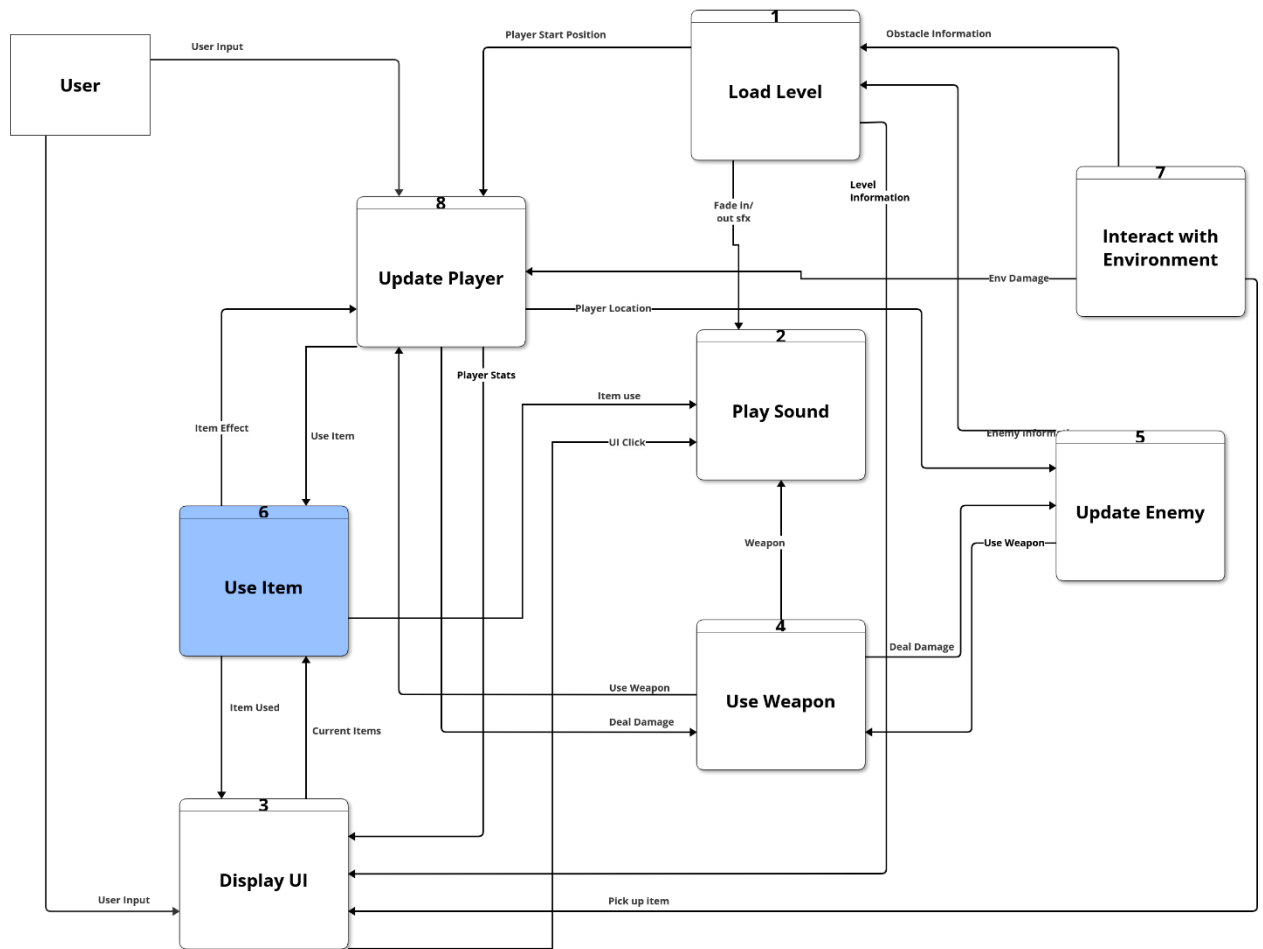
**ID:** I01

\*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

#### Data Flow Diagrams





## Process Descriptions

Load items

If Item is can be picked up pick up item

Update the inventory UI

Play pick up sound

If item is consumed

Remove item from inventory

Update inventory UI

Play consume sound

Apply Item Effect:

If item is healing

Heal Player

Else if item is weapon buff

Buff weapon

Else

Display hint

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

The input that my processes will be taking is the player picking up and using items. There are going to be When a player uses an item it will give a status effect to the player which can be healing, increasing weapon damage, and possibly increasing player speed.

Healing test:

This test will require adjusting the healing effect that an item does on a player. To conduct this test, I'll test what different strengths of healing do to a player and what happens when a player attempts to heal beyond their maximum health. We'll want to make sure that the player can't heal so much that it overflows the health values which could kill the player instead of healing them.

Weapon buff test:

Similar to the healing test we'll adjust the damage buff effect that a player's weapon can use. To conduct this test, I'll test the different values of weapon buffs and what happens if a player buffs their weapon too much. We'll make sure that the weapon can only have a maximum buff modifier so that it doesn't overflow the weapon buff modifier values so that the weapon doesn't damage.

Player speed test:

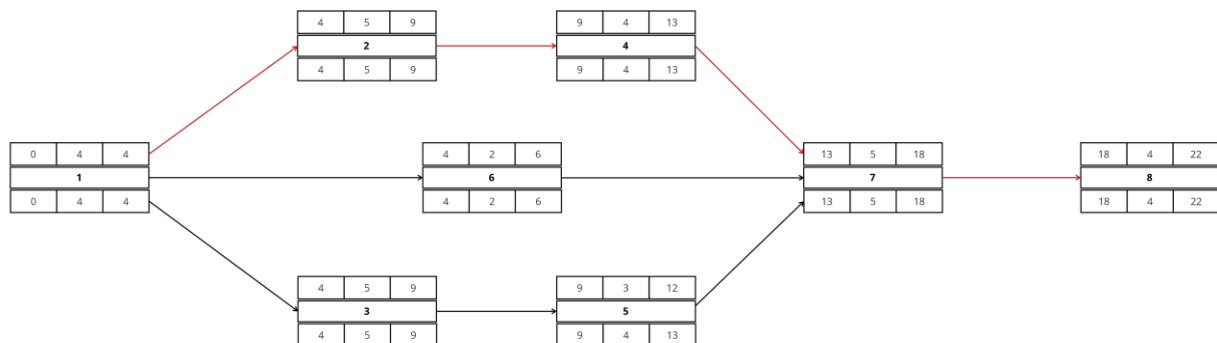
When the player picks up an item that affects the player's speed, we'll test that the speed has a limited time that it is active and how the speed modifiers affect the players movement. For example, we'll test that the players' speed doesn't become so fast that they lose collision and exit the map.

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

### Work items

Task	Duration (Hours)	Predecessor Task(s)
1. Item Class Creation	4	-
2. Power Up Creation	5	1
3. Miscellaneous Items Creation	5	1
4. Power Up Effect Characteristics	4	2
5. Hint Item Characteristics	3	3
6. Player Stats Checks	2	1
7. Implementation	5	4, 5, 6
8. Testing	4	7

### Pert diagram



### Gantt timeline

