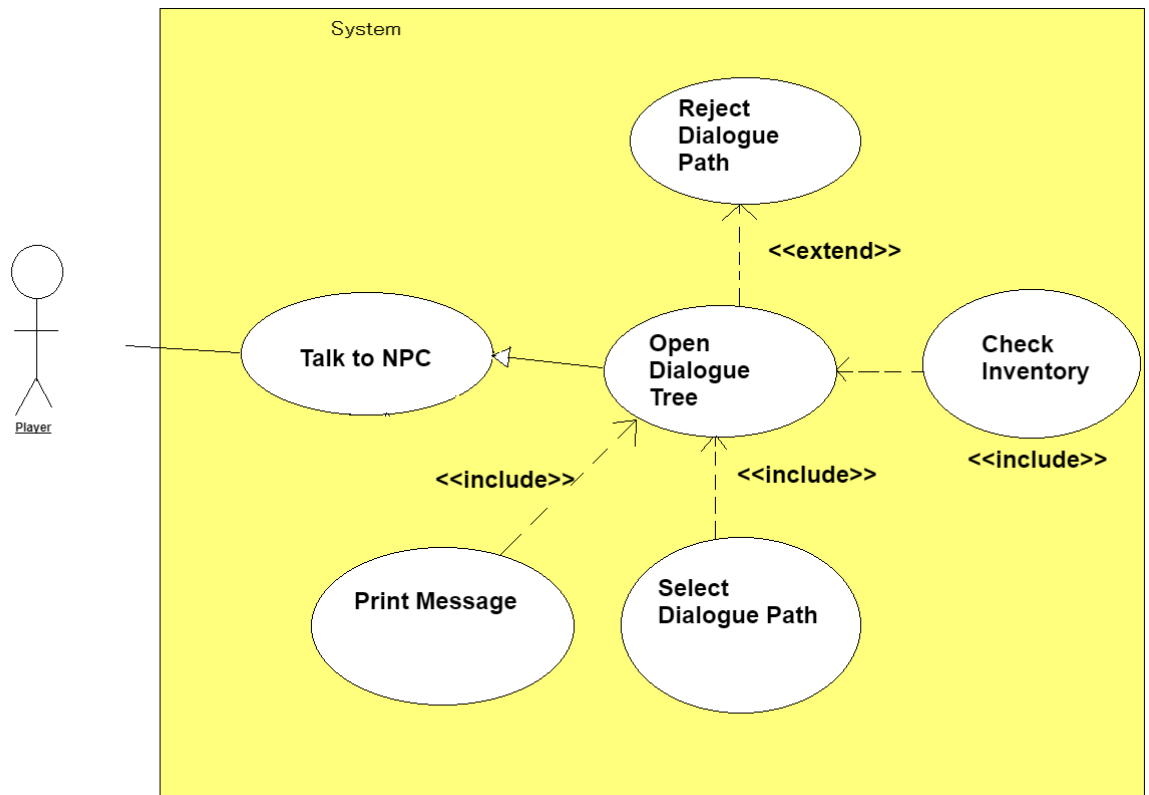


## 1. Brief introduction \_\_/3

Midnight Slice Madness is a 2D pizza delivery game with horror elements. I am responsible for developing the Non-Playable Characters (Customers), as well as the sound design for the game. The main gameplay loop will consist of the player delivering a pizza to one of these NPC's. I will be developing processes that will allow the player to converse with the NPC, exchange pizza for payment, and will be designing the individual characters and conversations. I will have to coordinate with Andrew if he would like to use the NPC's to deliver his game objective instructions. I will also be actively accepting tickets, from fellow team members, requesting sound effects/music relating to the game.

## 2. Use case diagram with scenario \_\_14



**Summary:** The NPC speaks to the player via text to give direction and to progress the story.

**Actors:** Player, NPC

**Preconditions:** Player is within 1 cell of the NPC, player initiates conversation via controller input

**Basic sequence:**

**Step 1:** Speech bubble above NPC sprite

**Step 2:** Display message is read from a dialogue tree and printed in speech bubble

**Step 3:** Wait for player input

**Step 4:** Check Player Inventory

**Step 4:** Continue, branch, or end the conversation based on tree structure based on player input

**Exceptions:** A player chooses a dialogue option that requires an item

**Step 1:** Display a rejection message

**Step 2:** Repeat the dialogue node if it is a fork, end the conversation if it is linear

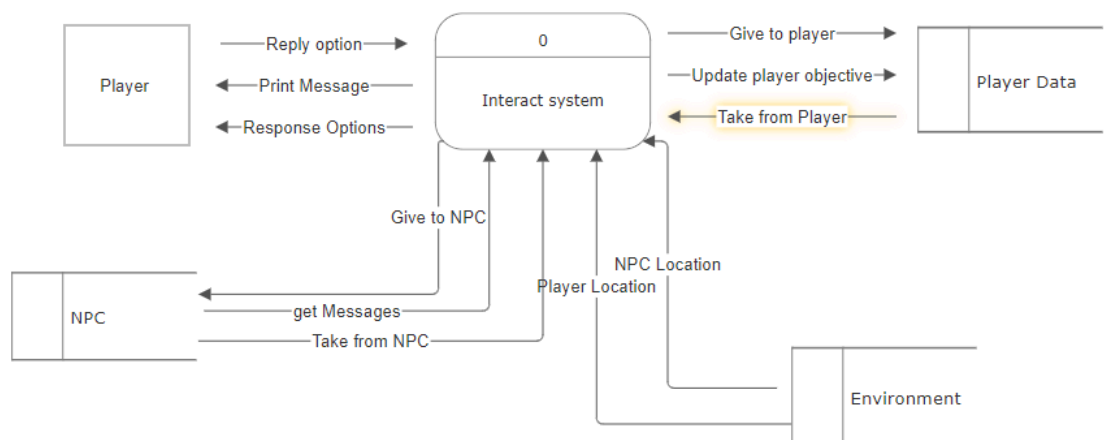
**Post conditions:** Player is free to move around again once the encounter concludes

**Priority:** 1\*

**ID:** C01

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

#### Context Diagram



## Level 0 (Zoom in for a better View)



## Data Flow Diagrams

Diagram 2

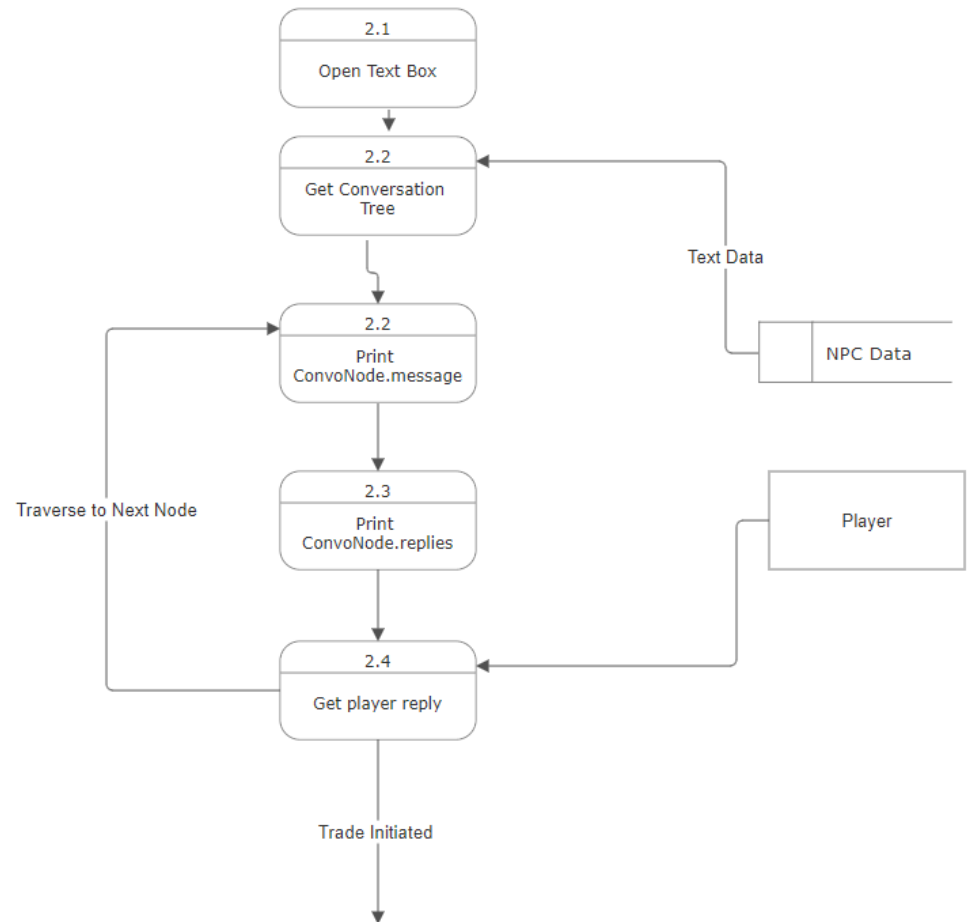
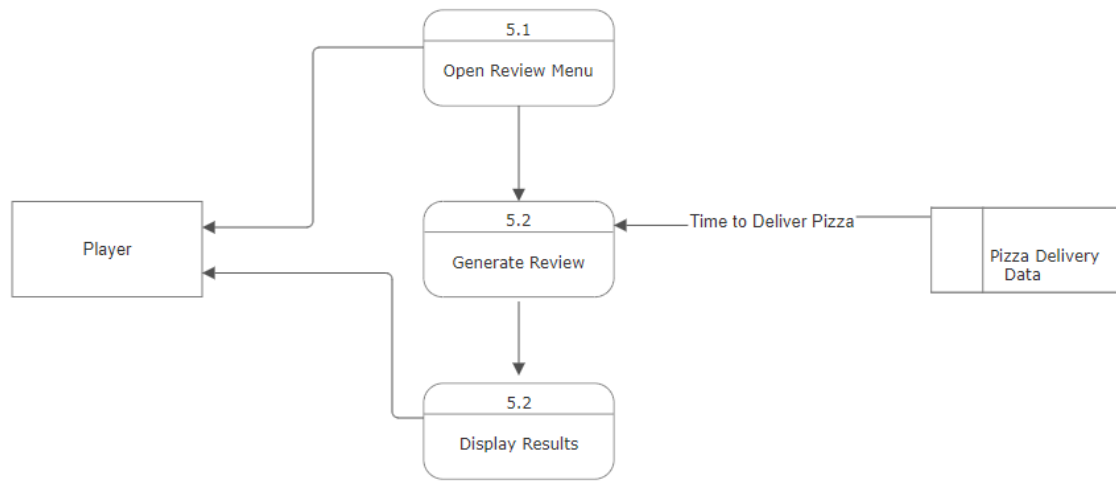


Diagram 5



## Process Descriptions

### Pseudo Code

#### 1. Interact Menu\*:

```
WHILE (NPC is waiting for delivery)
  if(Player Location NPC Location are close to each other)
    Open Interact Menu*
    if(input button is pressed)
      Talk to NPC
  END WHILE
```

#### 2. Talk to NPC\*:

### 2.1 Open Text Box:

```
OpenSpeechBubble();  
DisplaySprite();  
openDialogue();
```

### 2.2: Get dialogue tree

```
npcOBJ.convoNode.printPrompt() //2.3  
npcOBJ.convoNode.printReplies() //2.4  
npcOBJ.convoNode.getReply() //2.5
```

### 2.5: Get Reply:

```
if(reply = trade)  
    Check Items  
if(reply = exit)  
    exit();  
if(reply = response)  
    npcOBJ.convoNode.traverse(response choice);  
    openDialogue();
```

### 3. Check Items\*:

```
if(playerHasPizza() and npcOBJ.checkInventory())  
    Initiate Trade  
else  
    exit();
```

### 4. Initiate Trade \*:

```
player.removeItem(pizza);  
npcOBJ.payPlayer();
```

### 5. Delivery Review\*:

```
if(deliveryTime < 30 minutes)  
    npcOBJ.tipPlayer();  
else()  
    npcOBJ.throwPizza();
```

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

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

Selecting to deliver the pizza when it is not in the inventory

##### 1. Interact Menu

**Input:** Player gets assigned delivery to npc, and is within talking range of npc

**Expected Output:**

Pop up appear of HUD, prompting the player to press [input button] to play

**Boundary Cases:** Test distance from npc, test on npc's who don't have an order

##### 2. Talk to NPC

**Input:** Player uses arrow keys and enter to select responses

**Expected Output:**

Dialogue Nodes should print their message, and prompt the player with reply options

**Boundary Cases:** Test replying, exiting early, re-entering

##### 3. Check Items

**Input:** Player has selected to trade in conversation

**Expected Output:**

Trade process is started if player and npc have the required items

**Boundary Cases:** Test trading without required items

##### 4. Initiate Trade

**Input:** Player has selected to trade in conversation, and has passed item check

**Expected Output:**

Player and NPC have swapped items

**Boundary Cases:** Player or NPC has duplicate(s) of the items being swapped.

##### 5. Delivery Review

**Input:** Player has finished trading with NPC

**Expected Output:**

Player either gets a tip or Pizza thrown in the face.

**Boundary Cases:** Test delivering pizza, vary the time taken to complete delivery between tests

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

[Figure out the tasks required to complete your feature]

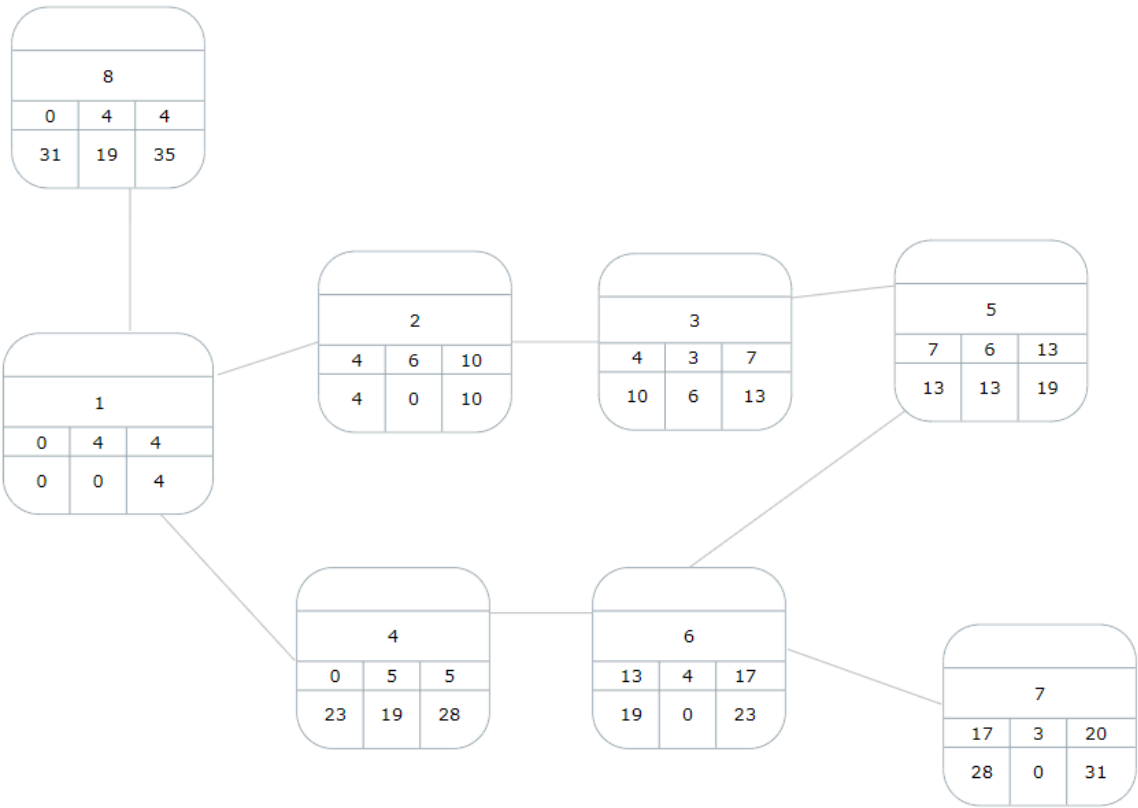
Example:

### Work items

Task	Duration (PWks)	Predecessor Task(s)
1. Design Dialogue Tree/Chat System	4	-
2. Design NPC Class	6	1
3. Design NPC Child Class	3	1
4. Design characters for NPC objects	5	-
5. Class Documentation	6	1,2,3
6. Programming	4	1,2,3,5
7. Testing	3	1,2,3,4,5,6
8. Sound Design	4	-



Pert diagram



Gantt timeline

