

Name: Ethan Hinkle

Mark _____/50

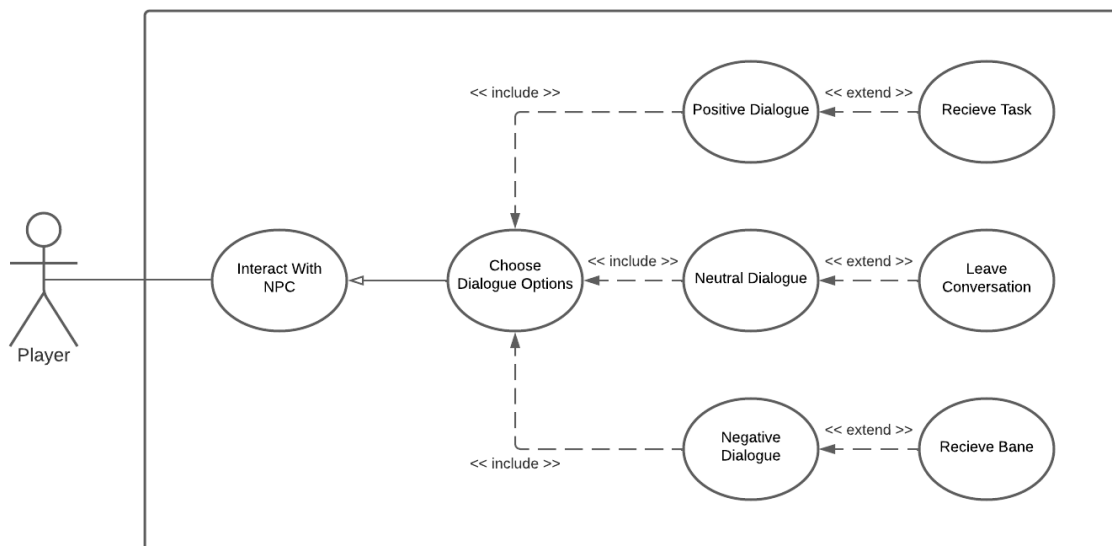
[**Instructions:** Remove everything that is not a heading below and fill in with your own diagrams, etc.]

1. Brief introduction __/3

For our game “Dungeon Jump” I will be working on the Overworld NPCs. Our plan for the game is built around an overworld with friendly NPCs and platforming sections with hostile NPCs. I am responsible for the creation of the overworld NPCs and their interactions.

2. Use case diagram with scenario __14

Use Case Diagrams



Scenarios

Name: Speak Positively

Summary: The player chooses the positive dialogue option when talking to the NPC

Actors: Player

Preconditions: Player has interacted with the NPC

Basic sequence:

Step 1: NPC gives dialogue

Step 2: Player responds positively to NPC

Step 3: NPC thinks positively of the player

Step 4: NPC gives player a task

Exceptions:

Step 4: NPC task is complete: Overworld altered

Step 4: NPC task is not complete: NPC annoyed dialogue

Step 2: Player moves away from NPC: End dialogue

Post conditions: Player is given a task to advance in the game

Priority: 1

ID: EH01

Name: Speak Neutrally

Summary: The player chooses the neutral dialogue option when talking to the NPC

Actors: Player

Preconditions: Player has interacted with the NPC

Basic sequence:

Step 1: NPC gives dialogue

Step 2: Player responds neutrally to NPC

Step 3: NPC is bored of the players indecisiveness

Step 4: Dialogue is ended

Exceptions:

Step 2: Player moves away from NPC: End dialogue

Post conditions: Player exits dialogue with NPC

Priority: 1

ID: EH02

Name: Speak Negatively

Summary: The player chooses the negative dialogue option when talking to the NPC

Actors: Player

Preconditions: Player has interacted with the NPC

Basic sequence:

Step 1: NPC gives dialogue

Step 2: Player responds negatively to NPC

Step 3: NPC is angered by the player

Step 4: NPC attempts to hinder the player's progress

Exceptions:

Step 4: Player has completed task: NPC insults player

Step 2: Player moves away from NPC: End dialogue

Post conditions: Player is given a bane to hinder their progress

Priority: 3

ID: EH03

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

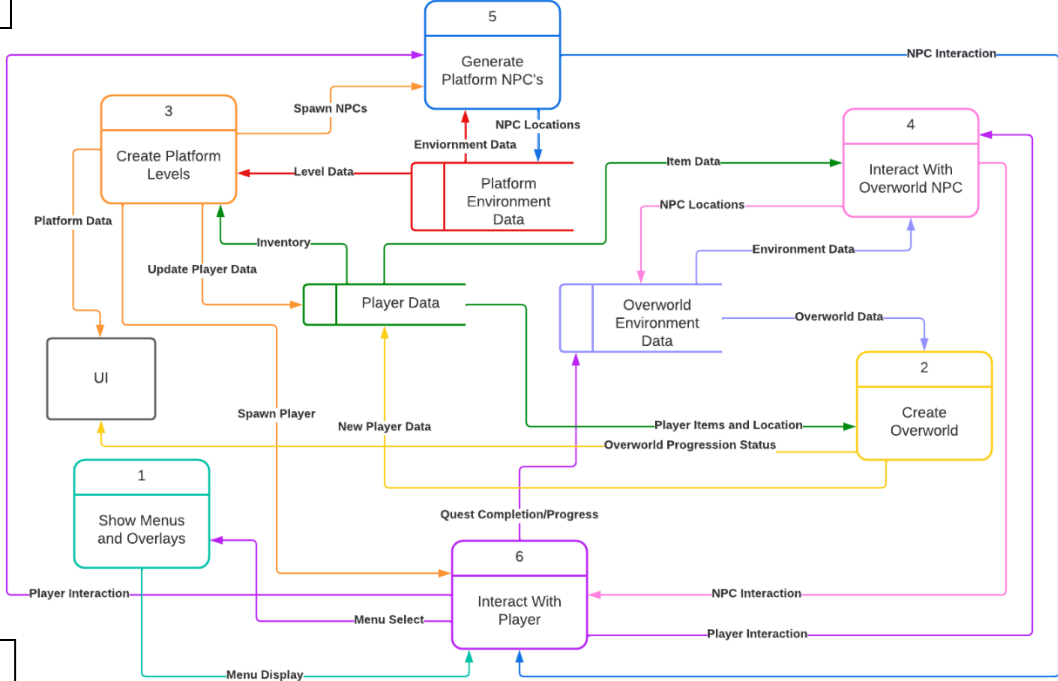
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Data Flow Diagrams

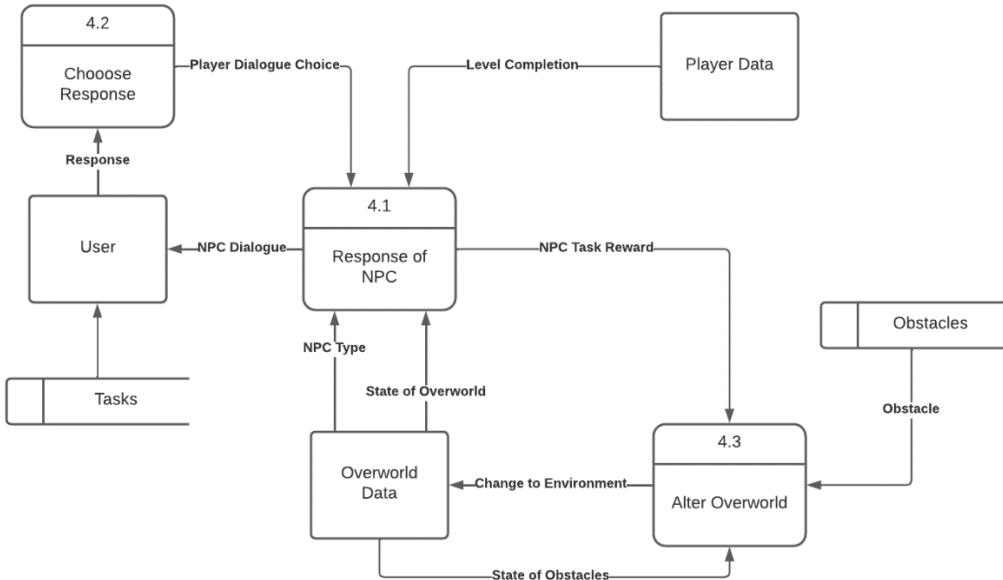
Context Diagram



Level 1



Level 2



Process Descriptions

4.1 Response of NPC:

```
IF player initializes interaction with NPC
    Use NPC type, state of overworld, and level completion to
    determine dialogue
    Send introduction dialogue to the player
    IF player dialogue choice is positive
        IF task is not complete (checked via items)
            IF not given player task
                Give player task
            ELSE
                Give annoyed dialogue
        ELSE
            Inform alter overworld to remove obstacle
    ELSE IF player dialogue is neutral
        Exit dialogue
    ELSE IF player dialogue is negative
        IF not given player task
            Give negative dialogue
        ELSE
            Give insulted dialogue
    END
```

4.2 Choose Response:

```
IF player is in conversation with NPC and dialogue is displayed
    Display 3 text responses for the player
    Wait for player choice
    Save player response
    Inform Response of NPC of player response
END
```

4.3 Alter Overworld:

```
IF obstacle is requested to be removed
    Fetch info on obstacle to be removed
    IF obstacle still exists on the overworld
        Inform overworld to remove obstacle
    END
```

4. Acceptance Tests _____9

Invalid Inputs

Enter dialogue with an NPC.

Start random character inputs not for dialogue.

Press dialogue inputs.

Output

During the test, dialogue should not advance until the correct input is given to the dialogue.

Environmental Changes

Trigger dialogue with an NPC.

Report task completion.

Exit Conversation.

Repeat for next NPC until all NPCs have been interacted with.

Output

If all NPCs have their tasks completed, check if the world environment has changed correctly.

Check console to see if the world environment has changed in the right order for NPC interactions.

Abrupt Dialogue Exit

Trigger dialogue with an NPC.

Move away from NPC without dialogue inputs.

Return to NPC.

Select dialogue option, move away.

Output

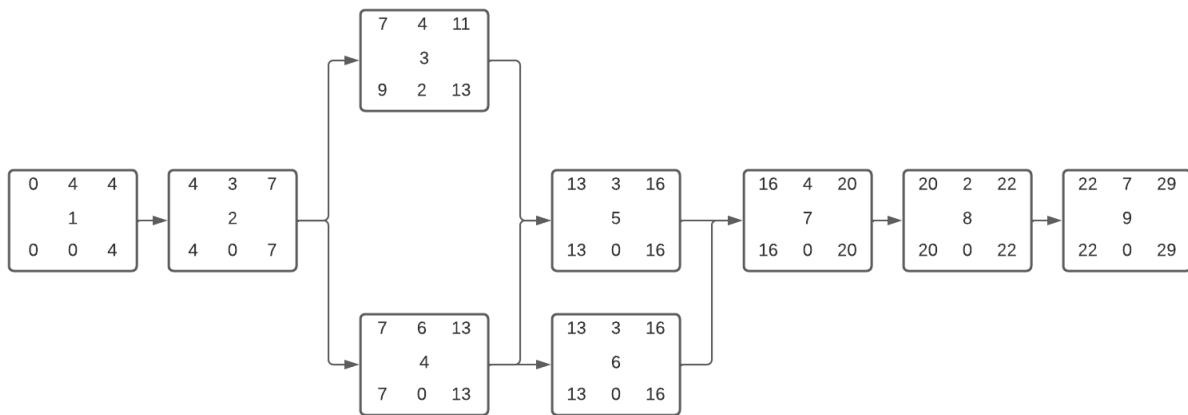
If player leaves conversation with an NPC, they will remember what was said before the abrupt conclusion.

5. Timeline _____/10

Work items

	Tasks	Duration (Hours)	Predecessor Tasks
1	NPC Prototype	4	-
2	NPC Types	3	1
3	NPC World Interaction	4	2, World Design
4	NPC Player Interaction	6	2, PC Design
5	Dynamic NPC Interaction	3	3, 4
6	Dialogue UI	3	4
7	Unique Dialogue Trees	4	5, 6
8	Sprite Design	2	7
9	Testing With Other Components	7	8

Pert diagram



Gantt timeline

