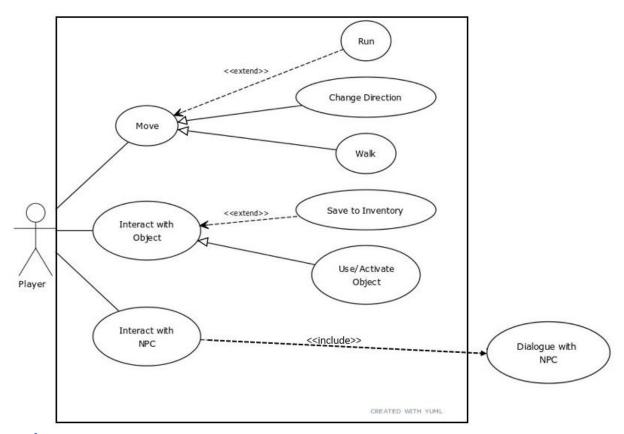
1. Brief introduction __/3

My section includes player movement and interaction with objects in the world. There are four main ways the player will interact with the world. First, they will collide with and not be able to pass through wall or some objects. Second, they must be able to interact with overworld objects. Third, they must be able to pick up some objects. Finally, they must be able to begin dialogue with the NPCs.

2. Use case diagram with scenario __14



Scenarios

Name: Move

Summary: The user inputs a direction, then the player moves that direction.

Actors: Player

Preconditions: The world and player are loaded and the game is ready for input.

Basic sequence:

Step 1: Directional input

Step 2: Player moves in that direction. If the button assigned to Run is being pressed, the player will move faster.

Exceptions:

Case 1: The player collides with an object or tile in that direction

Result: The player doesn't move, just faces that way.

Case 2: The input direction changes while moving.

Result: The player changes to move in that direction instead.

Post conditions: The player's location has changed in the direction of the input.

Priority: 1 ID: M01

Name: Interact with Object

Summary: The player activates or picks up an object in the overworld.

Actors: Player

Preconditions: The game is loaded, the player is facing an object.

Basic sequence:

Step 1: The player faces an object

Step 2: The player inputs the Enter/A button to interact with an object.

Step 3: The object runs its OnInteraction code, which will trigger some sequence of events depending on the object. It could just be a door opening, or something bigger.

Exceptions:

Case 1: The object is an Inventory Item

Result: The object is picked up and placed in the player's inventory.

Post conditions: The object has either run its OnInteraction function or it is placed in the inventory, depending on the type of object.

Priority: 3 ID: M02

Name: Interact with NPC

Summary: The player interacts with an NPC.

Actors: Player

Preconditions: The game is loaded, the player is facing an NPC.

Basic sequence:

Step 1: The player faces an NPC

Step 2: The player inputs the Enter/A button to interact with the NPC.

Step 3: The Dialogue Manager that handles player/NPC interactions takes over.

Post conditions: After the Dialogue Manager is done running, control will return to the player to move on to the next NPC.

Priority: 1 ID: M03

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

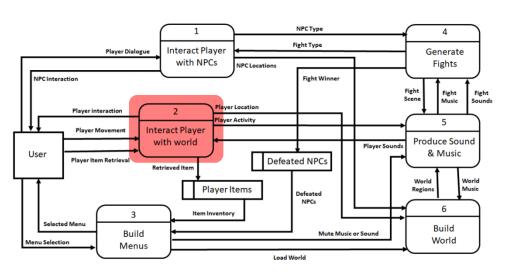
____14

Data Flow Diagrams

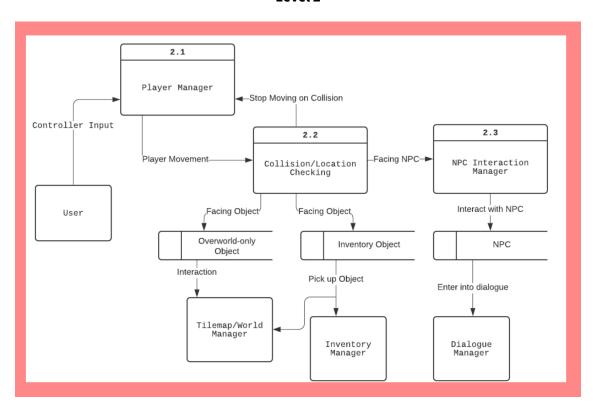
Diagram 0



Level 1



Level 2



Process Descriptions

IF up is pressed

IF run is also pressed

Move player up quickly

ELSE

Move player up

ELSE IF down is pressed

IF run is also pressed

Move player down quickly

ELSE

Move player down

ELSE IF left is pressed

IF run is also pressed

Move player left quickly

ELSE

Move player left

ELSE IF right is pressed

IF run is also pressed

Move player right quickly

ELSE

Move player right

ELSE IF player is facing an object

IF object is overworld-only

Prompt for interaction

IF interacted with

Run that object's OnInteraction function.

ELSE do nothing

ELSE IF object can be picked up

Prompt for interaction

If interacted with

Add object to inventory via Inventory Manager

ELSE do nothing

ELSE IF player is facing NPC

Prompt for interaction

IF interacted with

Call that NPC's dialogue function

ELSE do nothing

ELSE wait for input

4. Acceptance Tests _____9

Player Movement

Have the player randomly move around the map for a long period of time, so they have enough time to interact with all the possible collisions, and see if they end up anywhere they shouldn't be. The time scale can be increased to speed up the testing.

Object Interaction

While testing the player interaction, have them interact with any objects they run in to. After running the test for a while, check to see if

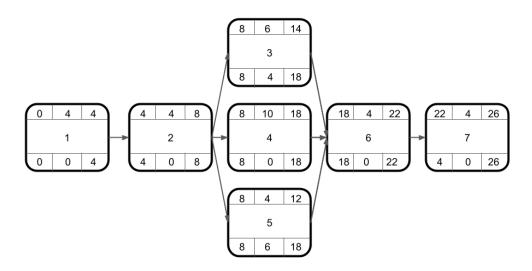
- 1. the world has changed how it should (overworld-object interaction)
- 2. the inventory has the items it should (inventory-object interaction) the NPCs are defeated (set player to auto-win the NPC battles)
- 3. Log errors to the console when possible. Timeline ______/10

5. Work items

Task	Duration (hrs)	Predecessor Task(s)
1. Overworld Movement	4	-

2. Player Controls (Overworld)	4	4		
3. Player/World Collisions	6	8		
4. Player/Object Interaction	10	8		
5. Player/NPC Interaction	4	8		
6. Dr. BC Mode Implementation	4	28		
7. Testing	6	32		
Totals	38	38		

Pert diagram



Gantt timeline

World Interaction	Time	4	8	12	14	18	22	24	28	32	36	38
Overworld Player Movement	4											
Player controls (Overworld)	4											
Player/World Collisions	6											
Player/Object interaction	10											
Player/NPC interaction	4											
Dr BC Mode Implementation	4											
Testing	6											