Donald Hammer

1. Brief Introduction

Map creation is going to consist of 2d spaces represented using square tiles. Different tiles will have different designations that can decide how the player is able to interact with them. The map will consist of a major overworld area along with smaller sublevels.

1. Use case diagram with scenario

Diagram

Description automatically generated

Scenarios

Name: Collide

Summary: The movement system checks for collision, and the map system returns collision information.

Actors: Movement and Interaction System

Preconditions: Game Map has been initialized.

Basic sequence:

Step 1: Receive call for potential collision with new tile.

Step 2: Get collision data from the tile object

Step 3: Return collision data

Exceptions:

Step 3: Collision data shows the collided tile as an exit. Return exit information.

Post Conditions: Movement system knows whether collision should occur or not. It also knows whether the player must exit the scene.

Priority: 1

ID: DH1

Name: Interact

Summary: The movement and interaction system calls for an interaction with a tile.

Step 1: Receive call for interaction with an object.

Step 2: Get object data.

Step 3: Return data for interaction

Exceptions:

Step 2: Object is not interactable: return a not interactable result

Step 2: Object is an item: retrieve item data and return it

Post Conditions: Movement system knows what object was interacted with and if the player receives an item.

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

Diagram

Description automatically generated

Diagram

Description automatically generated

1. Acceptance Tests

Input simulated movement commands for each version of a tile, 50 times per direction, sending output to a file.

The output file will have the following characteristics:

* Tile Type, Direction Collide Boolean: Actual, Expected
* Should have no difference between actual and expected Boolean returns.

1. Timeline

|  |  |
| --- | --- |
| 1: Obtain Tile Resources | 5 |
| 2: Set Up Tile Properties | 8 |
| 3: Draft Overworld Map | 6 |
| 4: Implement Overworld Map | 10 |
| 5: Draft Subareas | 5 |
| 6: Implement Subareas | 8 |

A picture containing text, crossword puzzle, clock

Description automatically generated

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