Name__Samuel Beal Mark _____/50

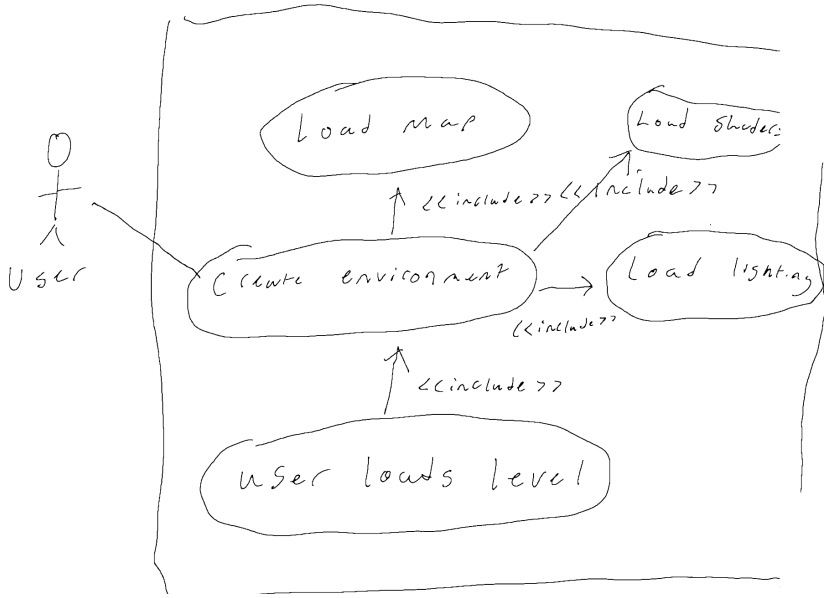
The UML tool you suggested also doesn't have a working website anymore, and I couldn't find good tools for free for this project.

1. Brief introduction __/3

Environment, so essentially the Map, Lighting and Shadows. Essentially I will be adding a world map with light and shaders in some sort of way Lighting and shaders so that edges and corners blend in, adding a more natural look to the game, and to make it look good.

2. Use case diagram with scenario __14

Use Case Diagrams



Scenarios

Name: Load Map

Summary: User loads into a new level and map is created

Actors: User

Preconditions: Map has been loaded and the user starts a level.

Basic sequence:

Step 1: User loads a level

Step 2: Map is created

Step 3: Visuals are sent back to user

Exceptions:

Step 1: Lighting or shaders is loaded before map

Step 2: Map is loaded after user loads in rather than as/before

Post conditions: Map is loaded

Priority: 1* Very Important

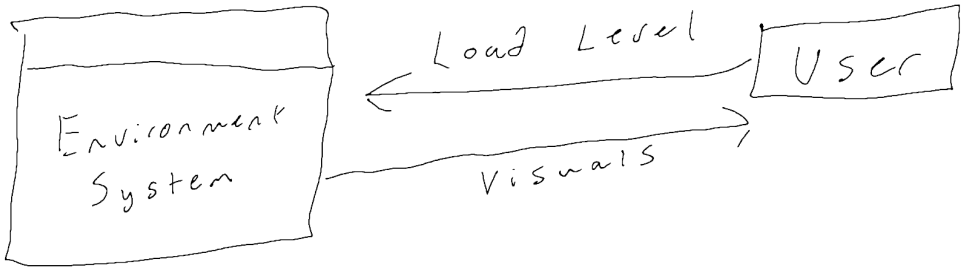
Name: Load Shaders
Summary: User loads shaders into the map and world
Actors: User
Preconditions: Map has been loaded and the user starts a level.
Basic sequence:
Step 1: User loads a level
Step 2: Map is loaded
Step 3: Load Shaders
Exceptions:
Step 1: Map hasn't loaded yet
Post conditions: Shaders are loaded.
Priority: 3*

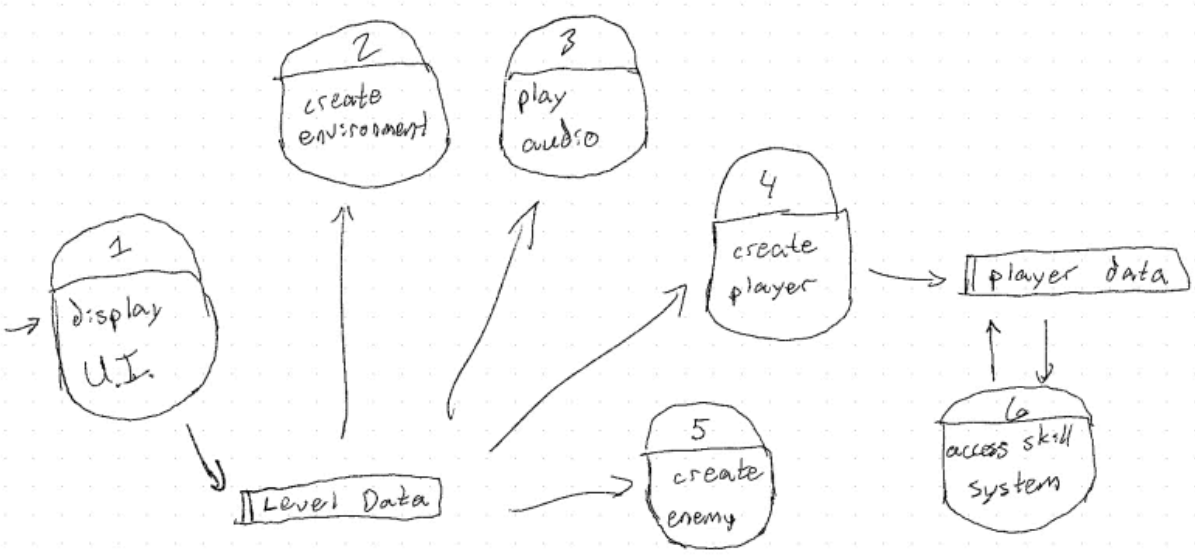
Name: Load Lighting
Summary: User loads lighting onto the map.
Actors: User
Preconditions: Map has been loaded and the user starts a level.
Basic sequence:
Step 1: User loads a level
Step 2: Map is loaded
Step 3: Load Lighting
Exceptions:
Step 1: Map hasn't loaded yet
Post conditions: Lighting is loaded.
Priority: 2*

3. Data Flow diagram(s) from Level 0 to process description for your feature _____14

Context Diagram:

Context Diagram





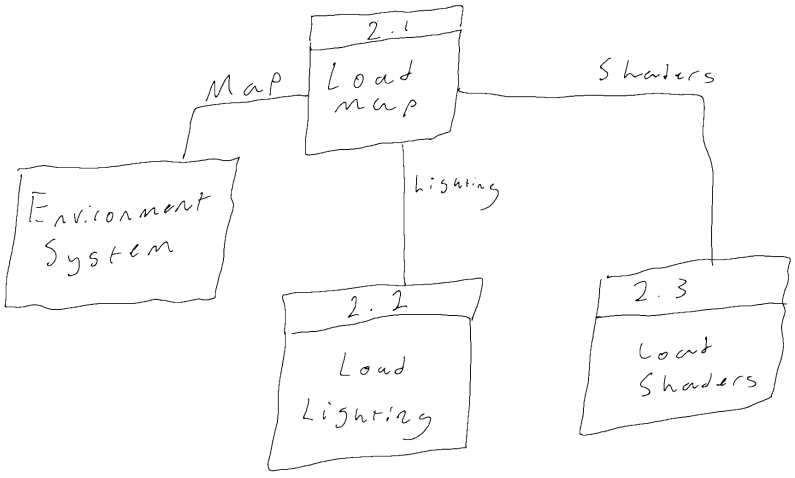


Diagram 1

Process Descriptions

Load Map *:

Load world map
Call for lighting and shaders.
update_map()

Load Lighting*:

Start creating lights,
update_lights()
Set variable names and values

Load Shaders*:

Load shaders and any other needed data.
WHILE we are running the game,
update_player_view() // data needed for update_shaders
update_shaders()
reload all packages and data into respective locations
END WHILE

4. Acceptance Tests _____9

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

Map

Ensure the World map looks good and check whether the ground and boundaries are solid so we cannot walk out of the map.

Input	Notes on Visuals
Left boundary	Boundary should stop player from moving past
Right Boundary	Boundary should stop player from moving past
Front Boundary	Boundary should stop player from moving past
Back Boundary	Boundary should stop player from moving past
Ground	Boundary should hold a floor for the player to walk on

Lighting Feature

Run features in various scenarios with the map a number of times. Test it by visuals and using different percentages of lighting/opacity/strength type thing.

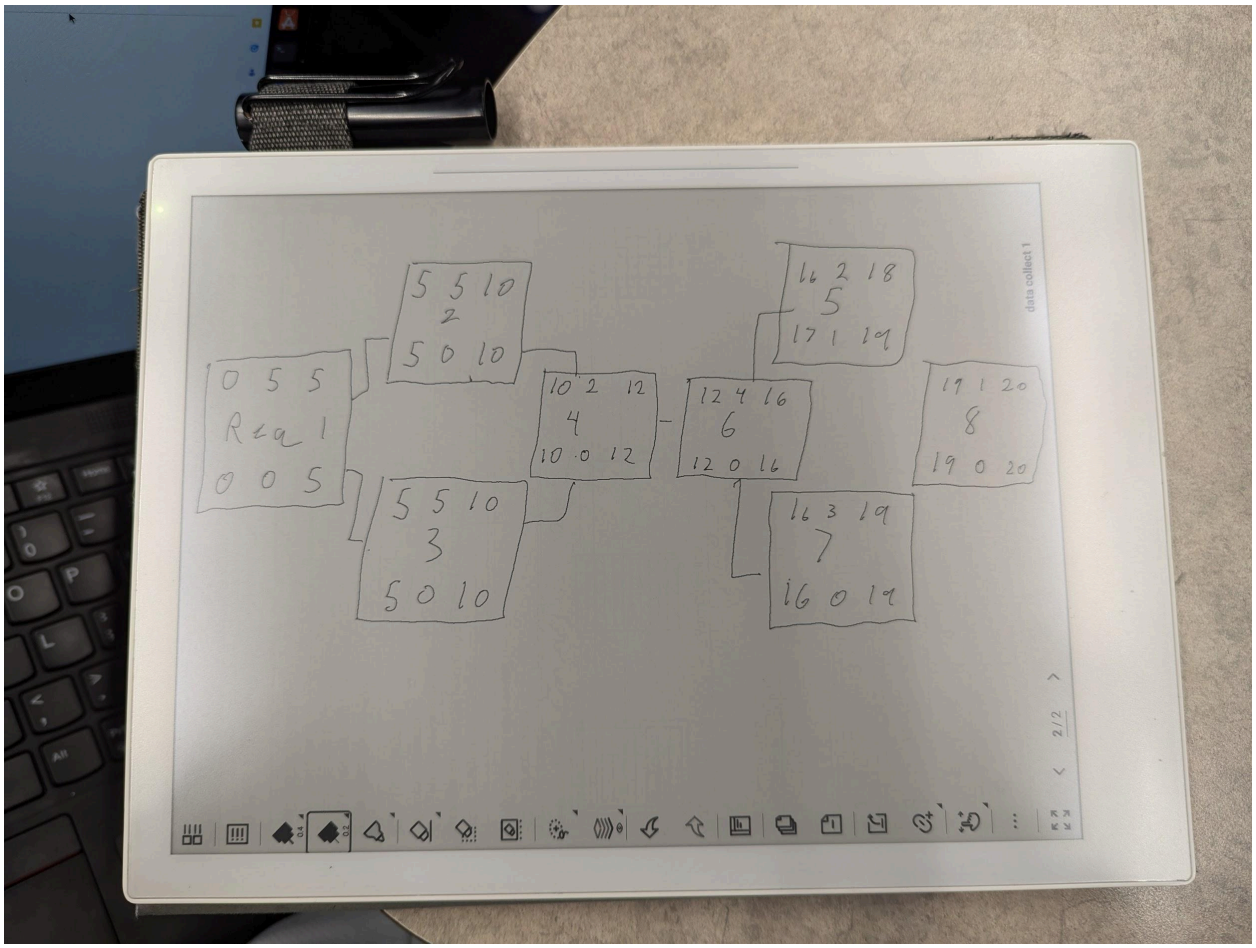
Input	Notes on Visuals
50%	Interesting amount of lighting, possibly overly bright
100%	Sun blinds and makes it impossible to see anything but white
10%	Shadow like, good for corners.
3%	Very difficult to see but could be used for main area

5. Timeline _____/10

Work items

Task	Duration (PWks)	Predecessor Task(s)
1. Requirements Collection	5	-
2. Map Design	5	1
3. Level Design	5	1
4. Shader Design	2	2, 3
5. User Documentation	2	6
6. Programming	5	4
7. Testing	3	6
8. Installation	1	5, 7

Pert diagram



Gantt timeline