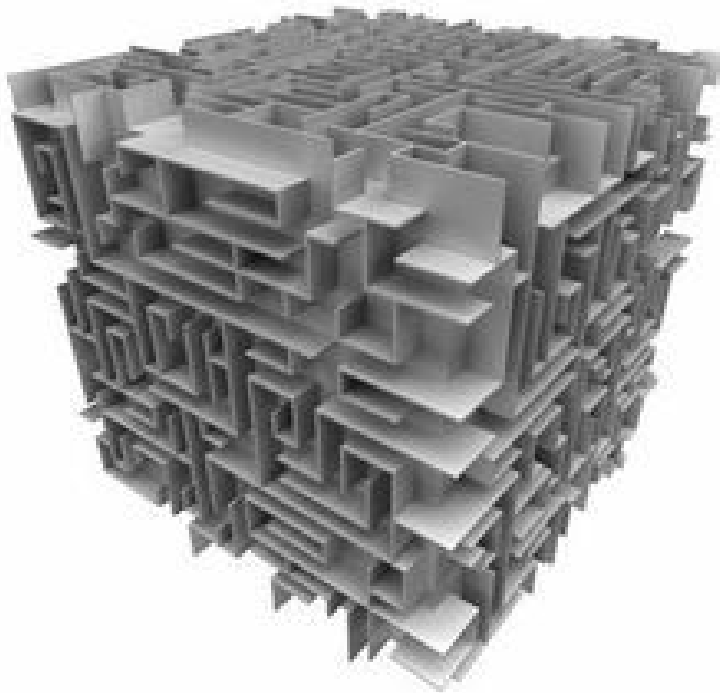


Sprint 1 Planning Document

CS 30700

PERSPECTIVE



TEAM 24

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Table of Contents

1. Sprint Overview	2
2. Current Spring Details	
2.1. Functional User Stories	
User Story #1	3
User Story #2	4
User Story #3	5
User Story #4	6
2.2. Non-Functional User Stories	
User Story #4	7
3. Remaining Backlog	
3.1. Functional Requirements	8
3.2. Non Functional Requirements	9

Sprint Overview

For our opening sprint, we will focus mainly on implementing user control functionality. Our goal for this sprint includes making sure the user will have access to an intuitive, easy-to-pick-up movement system. The player will also be able to change his or her orientation and thus be able to walk along walls to imitate a shift in gravity. Since creation of the game environment is a large and time consuming process, we will only begin the design of individual components of the map for now. Meanwhile we will build a generic room object in the shape of a cube for the user to walk around in.

SCRUM Master: Vincent Jiang

Meeting Schedule: Sunday, Tuesday and Friday @ 8pm

Risks/Challenges: The main concern of this sprint is the fact that many group members are not familiar with using the Unity Game Engine and/or its scripting languages and libraries. We will spend much of the sprint teaching everyone JavaScript, C# Script, and Unity. Since this is the first time many of our teammates have worked together on a large-scale project, we must work to ensure everyone is contributing and communicating efficiently.

Hours Overview:

Name	Hours
Vincent	31
Peter	30.5
Aneesh	31.5
Saurav	30
Akanksha	31

Current Sprint Details

User Story #1 - Functional

As a gamer, I would like functional player movement.

Task #	Task Description	Estimated Time	Owner
1	Create player model	3 hours	Saurav
2	Write movement script and have functional player movement	8 hours	Peter
3	Write script to switch between keyboard inputs and VR controller inputs	5 hours	Saurav
4	Create Character Manager to manage interactions with environment	3 hours	Aneesh & Peter
5	Add player sounds	4 hours	Aneesh

Acceptance Criteria:

- Given a functional player model, when the user inputs a movement command, then the player is expected to move parallel to the input.
- Given a functional player model, when you look at the character, there will then be an actual 3D model.
- Given a functional player model, when the player moves, there will be movement sounds (i.e. footsteps).

User Story #2 - Functional

As a gamer, I would like the display to be through a virtual reality headset.

Task #	Task Description	Estimated Time	Owner
1	Initialize VR headset	5 hours	Vincent
2	Attach VR headset to in-game camera view	5 hours	Vincent
3	Be able to register player head movement and replicate in-game	3 hours each	Akansha & Saurav

Acceptance Criteria:

- Given the VR headset, when the user puts on the headset in real life, the player will then be able to see the game view.
- Given the VR headset, when the user moves his head with the headset in reality, the player's scope of view will shift proportionally in response.

User Story #3 - Functional

As a gamer, I would like to have functional interactions with the environment.

Task #	Task Description	Estimated Time	Owner
1	Rough design of puzzles and obstacle components	6 hours each	Saurav & Akanksha
2	Create a testing maze for the user to walk in	5 hours	Aneesh
3	Write the change-orientation script	2 hours each	Everyone
4	Create Environment Manager to spawn objects	4 hours	Akanksha
5	Search and download Sprites from the Unity Asset Store	1 hour each	Saurav & Akanksha

Acceptance Criteria:

- Given the obstacle components, when the user interacts with the obstacle, the obstacle will react with the user (block the user/trap user/kill user if death object).
- Given rough designs of puzzles, there will be at least three different types of puzzles.
- Given the change-orientation script, when the user interacts with the wall, the user should be able to shift 90 degrees and walk up on the wall.
- Given the testing maze, the user should be able to navigate and complete the maze.
- Given the testing maze, when the user interacts with the wall, the developers will be able to notice a correct response of the user walking up the wall.

User Story #4 - Functional

As a user, I would like to have a functional Menu Screens.

Task #	Task Description	Estimated Time	Owner
1	Create empty Title Menu with background	3 hours	Vincent
2	Create Options Menu with background	3 hours	Vincent
3	Create end game menu screen with background	3 hours	Peter
4	Write script for Game Manager to link scenes	6 hours	Peter
5	Add pause button in-game	2 hours	Aneesh
6	Add restart game option	2 hours	Aneesh
7	Add exit game option	1 hour	Aneesh
8	Write script to interpret what user selects	3 hours	Vincent
9	Add menu music and sounds	5 hours	Akanksha
10	Add functional volume settings	4 hours	Aneesh

Acceptance Criteria:

- Given a functional Menu Screen, when the user inputs a command, the screen should register the input and respond in return.
- Given a functional Title Menu, when the user clicks on “New Game”, the user should spawn into the game.
- Given a functional Options Menu, when the user clicks on the “Options” tab, the user should be taken to the options setting.
- Given a functional pause button-in game, when the user hits the pause key, the game will freeze in place and bring up the pause menu.
- Given a functional restart option, when the user selects to restart, the game will restart back to the beginning.
- Given functional volume settings, the user should be able to adjust volume level and in game sounds.

User Story #5 - Non-functional

As a developer, I would like to be able to use Unity to develop the game.

Task #	Task Description	Estimated Time	Owner
1	Learn how to use Unity	4 hours each	Everyone
2	Learn Javascript/C# Script	4 hours each	Everyone
3	Learn how to work with VR headset	2 hour each	Everyone

Acceptance Criteria:

- Given that all of our team members have either very basic or no experience using Unity, Javascript, C# and VR technology, when we start working on the project, we should practice with these technologies and scripts in order to move ahead with our project efficiently.

Remaining Backlog

Functional Requirements

As a gamer

1. I would like to have a progress bar reporting how I play.
2. I would like to see a functional navigation system while playing.
3. I would like to reopen my account and start where I left off from.
4. I would like to see a functional website containing information about the game.
5. I would like to watch a video demoing the game before I play.
6. I would like to see screenshots of the game before I play.
7. I would like to be able to take screenshots as I play.
8. I would like to have the game increase in difficulty as I play.
9. I would like a timer to keep track of how long I'm playing.
10. I would like to see puzzles that require connections between field of view and the environment.
11. I would like to make an in-game account (if time allows).
12. I would like to have multiple accounts (if time allows).
13. I would like to see my character model in-game.
14. I would like to customize my character model (if time allows).
15. I would like to have different environments to walk in.
16. I would like to have an AI companion to accompany me.
17. I would like to have hints when I'm stuck.
18. I would like to see the environment be able to affect the user.
19. I would like to know the plot of the game.
20. I would like to have regular updates on the game to make it cleaner and faster.
21. I would like to have regular content updates.
22. I would like to reduce FPS lag by being able to change the graphics setting (if time allows).

Non-Functional Requirements

1. Be able to download the game.
2. The interface must be user-friendly and easy to navigate.
3. Strong connection between front-end development and backend development.
4. Be able to run the game at 60 frames per second.
5. Be able to have almost no input lag from the controller to the game.