MAZE SPACE GAME

By Q

Introduction

The Super Heavy rocket had completed its mission from the Sun’s orbit and was on its way back to Earth when, suddenly, it was hit. Alarms blared as a debris field was detected. The captain gripped the controls with extreme caution, steadying the rocket. They fired the thrusters, quickly rolling left to avoid a sharp piece of metal. Then, a quick boost forward cleared the path just in time to avoid an asteroid.

At the same time, the oxygen levels flashed so every move had to count. The captain had to find the best route for the rocket while also navigating carefully to avoid getting too close to a planet that was not home, as its gravity could pull the rocket.

Background

The Super Heavy rocket was designed to carry both crew and cargo to Earth orbit, the Moon, Mars, and other planets. In the future, Earth needs a lot of energy, so people rush to mine solar plasma crystals from the Sun’s orbit using special Super Heavy rockets that are only suitable for the planets.

Screenshot

Ran out of time to color

Features

- **Flying Controls** – The rocket moves in different directions (up, down, left, right) within the maze.

- **Gravity Effects** – Certain sections (like near planets) can have gravity pulling the rocket, making movement harder.

- **Oxygen System** – A decreasing oxygen meter that decide the fate. Like gravity bar in bullet bills

- **Asteroids (Between Planets)** – Moving obstacles that must be avoided. Like gumba sprite

- **Collision** check collision between the rocket and obstacles.

Pillars

- **Flying (70%)**
    1. Navigate the Super Heavy rocket through dangerous space environments players must carefully navigate to avoid obstacles, as one hit ends the game.
    2. and avoid hazards like debris fields, asteroids, and planet gravity

- **Survival management (30%)**
    1. Avoid getting pulled by unwanted planets due to their gravity.
    2. Be aware of the oxygen levels and make safe movements

Skills student will use

- **Physics & Movement** [Velocity, Collision Detection, Gravity for space movement] **e.g. Gravity mechanics for unwanted planets pulling the rocket.**

- **Programming OOP** [Creating reusable classes for objects like, Rocket, Planet, Debris]

- **Problem-Solving & Creativity**: facing real word coding challenges and fix game mechanics.

- **Graphics and UI design** [sprites, animations and UI animations for oxygen warnings]

- **Source control** [git and git hub]

- **Software** [VS2022, photoshop]

- **Teamworking and communicating** [Assigning tasks (one person on UI, another on gameplay, etc]

- **Documentation** [concept, GDD, comments]

Fun to work on

I think the game has a good balance between challenge and strategy from only making the concept! Every decision matter, especially when managing oxygen levels and avoiding debris or asteroids. It's exciting, keep you focused but not too stressful.

I like that it's the kind of game where you need to think, but you don't get frustrated. It's easy to play for a long time without getting bored!

And the different obstacles keep things interesting and make every decision fun.

Super Heavy Rocket Game Elements

Visual Asset Creation [0-10]

- Draw the rocket from above. [5]
- Design asteroids and space debris. [5]

HUD [0-10]

- Display oxygen level and rocket health. [10]

Basic Game Play [20]

- Control rocket speed, rotation, and thrusters. [20]
- Wrap around the screen for space travel.

Graphics [20]

- Animated thrust and explosions. [10]
- space debris and asteroids. [10]

Video [5]

- Project Management [5]