ASTROQUIZ

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INTRODUCTION

An **educational** game designed to make learning **Ethics principles** fun and engaging through a **space themed** game where players navigate a spaceship shooting at asteroid fields, while answering ethical questions.

ASTROQUIZ

CUSTOMER REQUEST

- Develop a fun way for students to learn complicated **Ethics principles** and test the students on their learning.

- Players need to be taught ethical vocabulary and concepts, and why their study is important. The **user** can then play the game and concepts could be taught along the way.

- Include **game levels** (increase challenge)

- Implement 2D, four way scrolling games populated with objects sharing a set of standard properties and behaviors.

- Game uses **own logic** and should be **modifiable**, include an editor interface to be able to add different kinds of questions/scenarios

TEAM ORGANIZATION

- **Ahmed Krubally**: Team Leader

  - Overseeing project progress and coordinating team efforts ensuring alignment with project objectives

- **Calvin Leavy**: Game Mechanics & Programming

  - Experience with game development frameworks

- **Michelle Orru**: Modeling & Design

  - Creation of visually appealing assets and environments

- **Tailor Burkham**: Audio & Sound Design

  - Enhancing gameplay with immersive sound effects and music

SYSTEM DESIGN (Navigation Diagram)
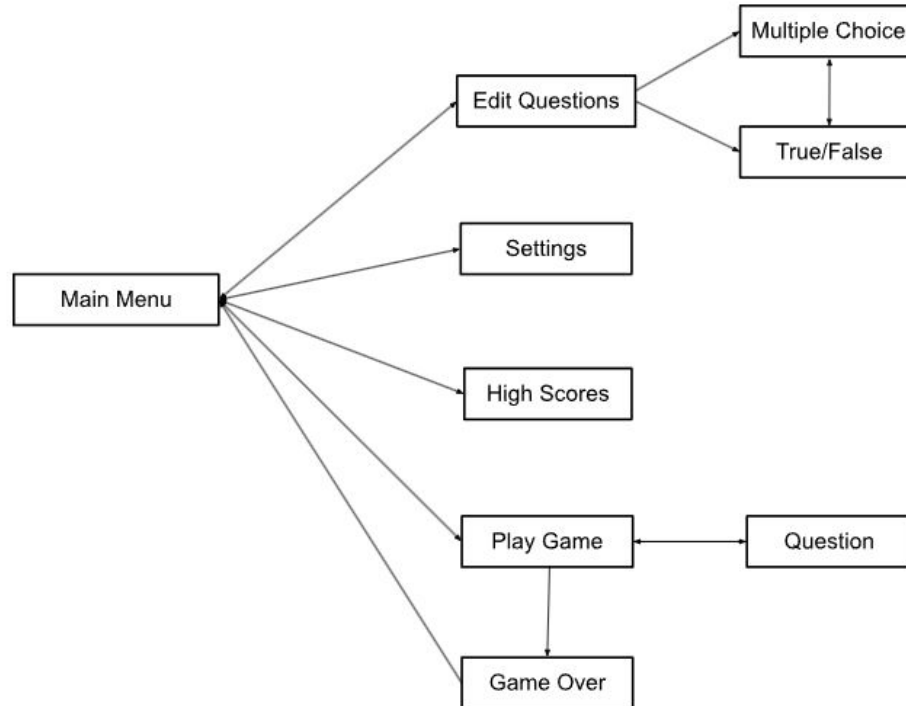
DEMO

TEST REPORT

- We stayed on track with the Requirements we had set at the beginning including Features, Target Users and User Interface

DEPLOYMENT ISSUES

Known problems include a collision issue with fast moving asteroids and the ship. Collision can sometimes occur before it appears that it should happen. Chances of this happening are minimized by reducing ship speed.

Second known issue is entering too long of data on the edit questions screen will cause some of the data to be cut off. The simple solution is to not enter too much of data in the question screen.

IF WE HAD MORE TIME

- Choose Asteroid type from settings

- Personalize Ship (color, speed, type, weapon)

- Add more levels of difficulty

- Save high scores globally for anyone playing the game

- Add glossary with all questions to review before playing

- Make it web-based so the user is able to access it from anywhere

- Possibly add login feature if used for class purposes, so instructor can get specific feedback on each student

WHAT WE LEARNED

- **Integrating educational content:** We learned how to incorporate educational questions into gameplay, finding the right balance between entertainment and educational content.

- **Ethical considerations:** Developing content related to ethics required reading about ethical principles, hence we gained a deeper understanding of ethical concepts in the computer science field.

As a team :

- **Task delegation:** Assigning tasks based on individual strengths.

- **Feedback and continuous improvement:** Embracing feedback from all team members and our customer (Dr. Stringfellow) allowed us to identify areas for improvement and refine our product.