John Compuesto and Jolene Bodika Sabine Rosenberg CART 263 - Creative Computation II February 13, 2025 Project Proposal Section B

Project Description

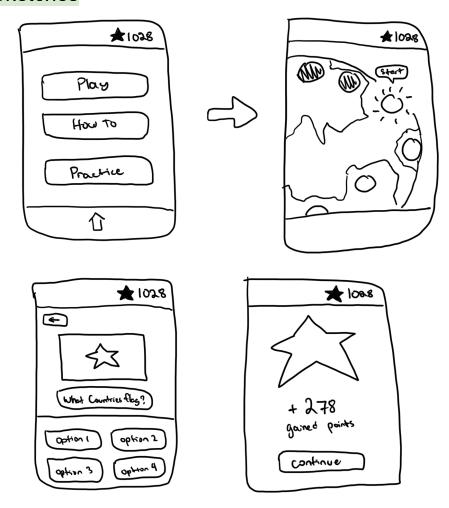
The goal of this semester project is to create an interactive story game based on human discovery through the lens of an extraterrestrial creature. The project Astral Exploration is centered around an alien who crashed into an unrecognizable location on earth. During the crash the alien had to leave behind their ship in another location, and they are now stranded and scared. The player must help the alien get back to their ship so they can return back home, help them out by completing the levels and collecting clues along the way.

Players will progress through 20 levels, each containing different types of mini-games focused on learning about what makes humans "humans". The game is structured into three sections, each spanning 5 levels:

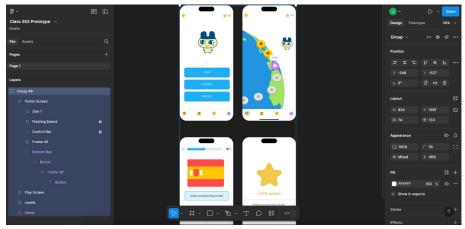
- Problem Solving Players will have to solve mathematical problems.
- History Players will match historical periods to their corresponding dates and choose correct historical facts.
- Emotional Intelligence Players will have to demonstrate compassion in fictional situations.

The game will feature a clean UI, an intuitive point system. We may also explore implementing achievements for milestones reached in the game.

Visual Sketches



Prototype (work in progress)



https://www.figma.com/design/Gn4PlrOQ9tF6CjyTHYMrWd/Class-263-Prototype?node-id=3-1232&t=6myt1dn0a6qKQ6Nz-1

Technical Challenges

Game Logic Implementation:

- Developing the core functionality to select a country and display a related clue based on the selected button.
- Implementing a timed response system before time runs out.
- Adding a scoring system that rewards the player based on the correct guesses.

User Interface and Navigation:

- Designing different pages including:
 - Homepage (intro page, buttons, nav bar, and other options)
 - o Game Category Selection Page (problem solving, emotional intelligence, history)
 - Main game page (where the actual game takes palace with the country's clues and answer input/button selection)
- Ensuring a smooth and visually engaging user experience.

Data Management and API integration:

- Using Rest Countries API [https://restcountries.com/] to fetch country-related data
- Managing a pool of country-related clues efficiently.
- Tracking player achievements
 - Through local storage cookies

Prototyping and Tools:

- React Native [https://reactnative.dev/docs/getting-started] for building a mobile interactive and responsive user interface
 - The learning curve for React Native might be a challenge since it would be a new technology for the both of us.
- Github for version control
- JS, HTML, CSS for structuring and styling the game
- JSON or Database

Conclusion

This project combines creativity and code to deliver a fun and educational experience. Through prototyping we will refine the user interface and mechanics to ensure an engaging gameplay experience. Our game will serve as both a technical challenge and a showcase of our programming and design capabilities.