Project Charter

Memoji (Working Title)

Team Members

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Problem Statement

As proven by the success of the Jackbox™ Party Packs, there is a market for engaging multiplayer experiences incorporating digital technology into traditional sit-down board game entertainment. One key feature that these games utilize is a short 4 letter code displayed on the computer hosting the game which allows players to easily connect to the host using their own computers, or even their mobile devices, without requiring the complex networking details of IP addresses and the like. This increases the accessibility of the games for a diverse audience. We believe there is a great opportunity here to develop additional games which delve into this fairly unexplored design space incorporating users' phones as controllers for a game hosted on their computer. Many games in this space utilize simple text inputs, but we plan to design a game utilizing emojis in our responses, a nod to pop culture and a novel, fun way to play.

Project Objectives

- Develop an entertaining, interactive, and accessible party game.
- Create a phone and desktop application to run the game.
- Create an easy to use system for joining and hosting games.
- Allow users to connect their devices without explicit knowledge of network details.

Stakeholders

- Users - Any people that play the game
- Developers - Jonathan Poholarz, Maxwell Jones, Manoj Polisetti, Andrew Ring, Delun Shi
- Project Owners - Jonathan Poholarz, Maxwell Jones, Manoj Polisetti, Andrew Ring, Delun Shi
- Project Manager - Buster Dunsmore and the Teaching Assistant Team

Deliverables

- A desktop application capable of hosting the game for others to connect to
- A phone application capable of connecting to a host game and functioning as a player
- Server software that facilitates easy connection between the host and player applications via codes, without the need for players to know specific IP addresses
- A functional tutorial to introduce new users to the game
- Use Godot as the backbone of the game logic and direct connections to the server
- Develop applications for Windows/OSX and Android/iOS
- Node.js for server implementation

CS 30700 Projects

- **Project ZAI - Maxwell Jones**
  - https://github.com/CS-307-Project-ZAI
  - Unity based strategy top-down shooter. The user is put into a scenario to survive waves of zombies, build a base, rescue and recruit other survivors, and complete quests. User is able to gather materials from killing zombies, completing quests and exploring the map. Other features include commanding allies to perform certain actions, different weapons, and enemy types. The game ends when the player dies.
- **upgrade - Jonathan Poholarz**
  - https://github.com/Ztrains/upgrade
  - Because finding a tutor for a class or someone to study with can be difficult and time consuming, upgrade aims to bridge the gap between students and tutors for their classes. Users create an account and log into the system as a student and/or tutor and then search their classes for other students and tutors to connect with. In addition to private messaging between users, a message board was also implemented in which students can make posts and ask questions to others in their class.
- **Heart Rate and Behavioral Analysis Tool - Manoj Polisetti**
  - https://github.com/manojpolisetti22/HeartRateProgram
  - A desktop application made for Psychological research professors to analyze the relation between Heart rate data and Behavioral data and to relate them to phases of heart rate deceleration. HBAT takes in CSV files for both the Heart rate data and the Behavioral data of a single trial or a group of trials to receive an output CSV with the deceleration phases along with the absolute timestamps for the data. HBAT was made for researchers without enough knowledge or resources about SAS and other programming languages to successfully implement the Deceleration algorithm and to let them continue to research and observe the effects of Behavioral attributes on Heart rate. This project was made according to specifications of the Purdue Psychology department.

- **Roost - Andrew Ring**
  - https://github.com/thesoupgirl/Roost
  - An app to help people find nearby activities that they may be interested in. The app is designed with a familiar interface similar to Tinder, where users see nearby activities appear and they can then choose if they want to participate or not. When they choose to participate, they enter a chat room with all other users who also want to participate so that they can organize the event. The application is all encompassing, any activity can be listed from sports events to movie nights.
- **Admiral Radar - Delun Shi**
  - https://github.com/ByHr/AdmiralRadar
  - Admiral Radar was an adaptation of the gameplay mechanics of the board game Captain Sonar to a multiplayer computer game. Our implementation of the game had 2 teams competing against each other, with 4 players in each team, in a turn based strategy game of stealth and deduction. Players each ran a desktop application on their computers that communicated with a central server which handled game logic.