CS 307 Project Charter
Professor Turkstra 2/1/2021

Team 2 Project Charter

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PROBLEM STATEMENT

Our game aims to fill the void of lackluster social gatherings (in-person and virtual) by providing an entertaining arena-style game where players can compete in a wide variety of fast-paced minigames to see who will come out with the highest overall score. Unlike many other party games that test players' ability in a single skill like trivia knowledge or drawing ability, our game offers a more diverse space of entertainment by presenting players with many different game styles.

OBJECTIVES

Our project's primary objective is to build a fun and engaging party activity for all ages using many of the existing technologies available for rapid game development. We have already started drafting preliminary designs for character sprites and minigame structures, and the next component we plan to tackle is our game's matchmaking and scoreboard systems. From there, we will move on to fully developing a diverse suite of minigames that will then be combined into the game coordinator to give players a fun and varied experience while playing the game. If all goes well with the game's development, we also plan to release it to the public and potentially add some form of monetization, either through advertising or in-game transactions.

STAKEHOLDERS

- Users
  - Players of the game (Students, Young adults 18-30, Teens 13-18)
- Customers
  - Advertisers
  - Players
- Developers
  - Lenny Meng -- meng110@purdue.edu
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  - Parker Lawrence -- plawren@purdue.edu
  - Garner Newton -- newtonw@purdue.edu
  - Chen Kai Chuang -- chuang23@purdue.edu
- Development Managers
  - Yu Shi -- shi442@purdue.edu
  - Dr. Jeff Turkstra -- jeff@purdue.edu

DELIVERABLES

1. Build the “metagame”/backend system that will handle the game coordinator using the Godot engine (This may be our goal for Sprint 1)
    a. A matchmaking system / game coordinator will have to be built to assign subsets of players within a single lobby to each other to be sent to one of the minigames
    b. A scoreboard system will have to be implemented. This will take results from individual minigame rounds and combine them into numeric scores that will be reported back to the game coordinator each round and will ultimately determine the “winners” of a full game within the lobby.
    c. Randomized minigame
2. Create enough individual avatar characters that all players can be using a unique avatar.
3. Build individual minigames using the Godot engine
    a. Isometric game where all players stay on a platform and try to stay there without being knocked off.
    b. Isometric game where players attempt to eliminate each other by laying down bombs and staying out of the explosion patterns.
    c. Isometric game where players battle in a battle royale fashion while the playable area decreases.
    d. Top-down racing game with collectible powerups
    e. Top-down demolition derby with collectible powerups
    f. Simple side scrolling platformer where all players race to the finish
    g. Simple side scrolling game where the player taps to fight gravity and tries to stay on the map as long as possible.
    h. “get to the right color” before all other colored tiles disappear
    i. Minigame that asks confusing questions and expects the players to move to the area of the screen representing the answer as fast as possible.
4. Implement monetization
    a. Initial game purchase
    b. Microtransactions
    c. Skins
    d. Loot boxes
    e. Emotes
    f. Level ups, powerups, XP boosts
    g. Banner advertisements via Google AdMob or similar provider