Team 22 : Memoji

Product Backlog

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, leading us to 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.

Background Information

Overview

Progressing into the future, young people are incorporating technology into their lives in evermore creative ways. With the Jackbox Party Packs pioneering into the design space of phones as controllers for party games, there is plenty of room for both competition and innovation. By delving into this niche of entertainment, we can impact party games for local play on mobile devices as well as online gaming in friend groups using our online servers and diverse platforms on both mobile and PC fronts.

Audience

The target users of our game include teens, college kids, and young adults primarily but in general any group of friends or family with access to personal phones or computers to play our game. In addition, we will also target streamers on sites such as Twitch which use our style of game as a way to interact with their audiences.

Similar Products

The *Jackbox Party Pack* series of games shares the player layout of using phones as controllers to a hosted game. Some family games and board games could also be considered similar, some of which

also exploring the Jackbox 'phone as a controller' idea. Traditional board games result in similar experiences to what we aim to provide.

Limitations

The functionality of *Jackbox Party Pack* games is limited in that the players use their browsers to connect to the game. With a dedicated application for the players to use, limitations and compatibility issues of using different browsers are irrelevant. This also allows us to tailor any animations to specific platforms if needed. In addition, none of the Jackbox games have thoroughly explored using emoji images as their gimmick in answering prompts; we plan to use this as a key feature in our game's design.

Requirements

Functional Requirements:
1. **As a host**, I would like to create a game lobby and display the lobby's server generated letter code on screen
2. **As a host**, I would like to begin the game once enough players have joined the lobby
3. **As a host**, I would like to display a lobby screen while waiting for players to join
4. **As a host**, I would like to display a waiting screen while players are inputting answers to prompts
5. **As a host**, I would like to ignore/skip players who have not submitted answers to prompts within the allotted time and continue the game
6. **As a host**, I would like to display a results screen for each prompt of each round
7. **As a host**, I would like to display a total results screen at the end of each round
8. **As a host**, I would like to display a final results screen and winner/credits screen after the game completes
9. **As a host**, I would like to play additional games after the first game without forcing all players to disconnect and reconnect to a new lobby
10. **As a host**, I would like to exit the game properly, disconnecting all players and blocking further connections to the defunct game lobby
11. **As a host**, I would like to allow audience members to join at any time after the main players have connected
12. **As a host**, I would like to set up additional game modes (if time permits)
13. **As a host**, I would like to hear sound effects throughout the game (if time permits)
14. **As a host**, I would like to experience animations that add a personality to the game (if time permits)
15. **As a host**, I would like to host the game via a web-player (if time permits)

16. **As a player**, I would like to connect to a game lobby using my phone through the game application
17. **As a player**, I would like to choose my in-game username and avatar emoji
18. **As a player**, I would like to quit the game in-between rounds if desired, releasing my spot in the player list for a new player to join

19. **As a player**, I would like to receive instructions and prompts from the host computer screen during play
20. **As a player**, I would like to view a prompt response screen on my device for each assigned prompt in each round
21. **As a player**, I would like to view a voting screen on my device for each round of prompt voting
22. **As a player**, I would like to view a waiting screen on my device in-between tasks in which the game requires no further inputs from me
23. **As a player**, I would like to input emojis in my responses to prompts easily via a straightforward GUI
24. **As a player**, I would like to edit my response before submission - adding, moving, or deleting emojis with the GUI
25. **As a player**, I would like to vote for answers to the prompts using the GUI
26. **As a player**, I would like to select multiple answers during the final round when needed
27. **As a player**, I would like to view the results of the votes on the host screen
28. **As a player**, I would like to view round summaries on the host screen
29. **As a player**, I would like to view visual confirmation on the host screen when my inputs and votes are properly received
30. **As a player**, I would like to reconnect to a running game after disconnecting and be able to continue playing as the same player with the same username and same avatar
31. **As a player**, I would like to experience a diverse set of prompts such that at least two consecutive games have little overlap in the prompts chosen
32. **As a player**, I would like to view the remaining time for a question on the host screen
33. **As a player**, I would like to view a synced-with-the-host remaining time counter during answer and voting rounds on my device (if time permits)
34. **As a player**, I would like to connect to the game via a web-player (if time permits)

35. **As a developer**, I would like to maintain a server for which host computers can obtain a letter code for their game lobbies
36. **As a developer**, I would like to maintain a server to facilitate communication between the host computer and player devices in each lobby
37. **As a developer**, I would like to maintain a server which will connect player phones to the correct host computer lobby for each respective letter code
38. **As a developer**, I would like to remove inactive/unresponsive lobbies from the table of hosts on the server
39. **As a developer**, I would like to handle mid-game disconnects such that players can resume their games
40. **As a developer**, I would like to view crash messages in case of errors when possible

Nonfunctional Requirements:
1. Code should be well organized and commented where necessary.
2. Scalability for each individual game session should not be an issue by setting an upper limit for how many players can participate.
3. Game will support Windows/OSX/(Linux if time permits) and Android/iOS

4. Application-server communication should operate responsively with low enough latency to not impact game participation (i.e. it doesn't take too long for answers to be sent)
5. Usability should be simple so that as wide an audience as possible is reached.
6. For security, inputs should be sanitized to prevent communication or usage of ill-formed data which may result in unintended effects
7. There should be a unifying theme across the applications and ports (if time permits)