Project Title: Block Party
Team: Euphoria (Sonos)

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Vision

A new way of sharing and enjoying music in groups. This services aims to allow hosts and guests to effortlessly share music through different music services to collaboratively build music playlists, thus enhancing the listening experience and promoting a dynamic and fun environment.

Core Features

- Cooperative music playlist creation using a simple and intuitive app.
    - Permissions to allow hierarchical control
    - Song suggestions that can be voted on
    - Voting of previous songs to provide a better idea of the atmosphere of the event
- Providing a visualization of the playlist allowing you to view the current song and the playlist as to eliminate the frustration of looking up songs.
- Provide a seamless music streaming through different Sonos (and possibly non-Sonos) devices throughout different networks.
- Provide algorithmic playlist creation based on the overall mood of the party, previous voting, locations, or other factors.

Importance

To create an environment where anyone can share their music with one another regardless of music application. Now, instead of one person controlling the playlist for an event or party, a number of people will have access to share their music that can be voted on in order to create the best possible playlist for whichever environment that can persist autonomously (through algorithmic music selection).

How is it solved today

Currently our problem is the inability to seamlessly share music between multiple devices owned by a variety of people within the same area. As far as public knowledge stretches, the problem remains unsolved.

Possible Technologies

> Server: Docker, Python, Heroku, Firebase
> Client: Android, Mobile Web
> Code Coverage : Coverage.py
> Other Technologies: NFC, Bluetooth, Wi-Fi

Process Model

We plan on using agile methodologies throughout the duration of our project. These methodologies include 2 week sprints, daily standups, code review process, retrospectives and tech demos.

Agile Methods

- Daily Standup (physical/virtual)
- Establish consistent coding and documentation standards
- Use Slack for communication
- Use Trello for sprint planning
- Github for repository and version control
- Google drive for documentation storage
- Meet weekly with mentor in person

Our Github workflow will be following: We will have a master branch where all the functioning code is located, each developer will cut a branch from master to work on their story/task; Upon finishing their task they will make a pull request; Upon doing the pull request, the code will be code reviewed by two other members of the group; Once the code has been OK'ed, it will be merged with the master branch.

Planning

Sprint #1-2: Basic Foundation

- Get acquainted with Sonos API
    - Build a 'Hello World'
- Research and test different backend technologies for our server setup.
- Get acquainted with Android programming.
    - Build a 'Hello World'
- Setup all administrative programs (trello, github, etc.)
- Define use cases
- Develop wireframes of app
- Define backend API calls