INITIAL WRITEUP OUTLINE

*Introduction*

* Whom its marketed towards / Client Needs
* What is our service
* Vision statement

Initial Discussion

* What is it trying to solve / purpose
* Objectives and success criteria

*Requirements /* *Features*

* Major goals
  + Native support for cross platform communication
  + Synchronous music playback across devices in a lobby
    - Spotify / SoundCloud
  + Real time communications
    - Text
  + Lobbies
    - Large guest limit
    - Join by typing in a code
    - Display Current Song Metadata
    - Display text chats in the lobby
  + Performance
    - Quick / Responsive sound control within lobbies
* Stretch goals
  + Synchronous music playback across devices in a lobby
    - Local Files
  + Voting System
  + Public / private lobbies
    - Browse public lobbies
    - Invite system (?)
  + Lobby UI
    - Extra chat features (emoji, pictures, etc…)
    - Display song lyrics
    - Audio Visualizer
  + Other synchronous music playback sources
    - Pandora
    - Youtube
  + Real time communications
    - Voice

*Implementation*

* Project Management Software
  + Trello / Slack
  + How we plan to use it
  + The importance of using project management applications
* Platforms
  + Web app
  + iOS and Android (semi-stretch goal due to audio streaming discrepancies)
* IDE
  + Visual Studio Code
  + Stay away from project files, don’t need because working in JS / TS
* Frameworks / APIs / Special Libraries
  + Django
  + Node.js Server for backend
  + Google Firebase
  + Angular (latest version)
  + NativeScript
  + MPEG-DASH
  + Source APIs: SoundCloud, Spotify, etc…
  + WebRTC if voice chat is added

*Final Discussion:*

* Risks and risk mitigation
  + Security
    - oauth
  + Legality
    - Since we will be using these companies api’s which are authenticated by them, all of the legal issues will be on them
* Design constraints
* Scalability
* Software Quality
  + Performance
  + Testing
  + Graphic Design

*Conclusion*

* Allocation of work
* Timelines (put in charts)
  + Elegantt on Trello
* How we hope to accomplish our goals
* How the service is going to affect users and have a lasting impact

Abstract Schedule/Tasks:

* Lobby and Synchronization service worked on in parallel
  + Lobby
  + Synchronization

Needs for synchronization:

Mapping of group id to user ids

Mapping of group id to now playing

Mapping of group id to current timestamp

Views:

Join lobby

Lobby

Settings

Project Name Ideas

* Synched
* Synchroscope
* Syncretist
* Syncopate
* Synchrony
* Ambient
* Ambience
* Tempo