

## **CMSC436 Project Proposal**

### **Project Team**

- Olivia Reese
- Annemarie Peek
- Grant Hergenroeder
- David Kim

### **App Description:**

This app will allow users to share music within their friend networks. Users will be alerted once a day at a random time to “share a song of the day”. Users have feeds where they scroll down the page and see what songs their friends have posted. Mobile features we will use are notifications and hopefully sound through song previews.

### **Minimal Goals**

- Communicating and pulling data from a streaming service
- Friend network
- Display data related to songs
- User login/authentication via firebase authentication
- Notifications via firebase cloud messaging and apple UserNotifications

### **Stretch Goals**

- Connecting with multiple music platforms/databases (including Spotify, Apple Music)
- Background animations, social features (liking posts, commenting, rating, etc)
- Connecting with other social media platforms

### **Project Timeline:**

#### Milestone 1

- Create a connection to firebase database from our swift application
- Design app architecture and database schema
- User login/authentication components
- Starting to build friend networks across users
- Conduct internal testing and bug fixing

#### Milestone 2

- Conduct research on streaming APIs and audio streaming technologies
- Implement a streaming service integration
- Schedule/develop notification system
- Test audio features and refine user experience

- Scrolling through feed
- Blocks for each user's post
  - Username
  - Album cover image
  - Song player/song name
- Conduct internal testing and bug fixing

### Milestone 3

- Implement feedback
- Include social features in interface (liking a post, commenting on a post, etc)
- Hopefully include ability to play previews of songs in user feed
- Conduct final testing and bug fixing

### Final Submission

All 3 milestones completed, hopefully have completed stretch goals (at least UI ones). Have submitted the project and have a demonstration scheduled.