

# **Project Plan**

SongQueue Master-(Littyfy)

*CS 481 - 01*

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# 1. Introduction

## 1.1 Purpose

A mobile application used for events and gatherings to allow users to create a list of songs, for a DJ to approve and play so people get to suggest and play songs from their phones.

## 1.2 Intended Audience

The application will be an android platform application designed for those that host gatherings or parties and also enjoy listening to music.

# 2. Requirements

### Song Queue Rooms:

Users will be able to join specific rooms and then be able to suggest songs to the queue.

### DJ Functionalities:

The DJ will be able to manage the songs to the queue through moving or deleting.

# 3. User Stories

### User process

- Users will enter the app and be presented with all the currently active room IDs
- If they plan on using their own room they can choose from a menu to create a new ID
- Once the user is in a room, they will see the current queue of songs and what is currently playing
- They will have the option to click the plus button in order to add the song of their choice to the queue
- If the user was the first one to create a room, they are assigned the DJ role and have access to modifying the contents of the queue through moving them or deleting them
- DJs have the capability of transferring the role to another user in the room (WIK).

## 4. Interface

### 4.1 Customer View

#### **Menu view-scroll down widget:**

This feature will allow the user to scroll through the song queue.

#### **Add to queue button:**

This feature allows users to add the songs they want to the queue

#### **Transfer Room DJ:**

This feature will allow the current DJ to give the DJ role to another user in the room.

#### **Set Name:**

There will be a button for the user to set there name for the rooms they join, so the DJ can easily identify them when needing to to transfer the role.

## 5. Software Development Framework

### **Agile - Extreme Programming (XP):**

Our team is using XP programming in the implementation of this project since we are expecting changes in our requirements, to which this document will reflect those changes.

## 6. Software Used/APIs

### **Android Studio:**

Framework used to implemet application.

### **Firebase Real Time Database:**

Used to store track and artist metadata. In addition, used to store User information.

### **Google Authentication:**

Used to authenticate users via email.

### **Square Retrofit:**

Used as web client to make API calls within the android application to retrieve music metadata.

### **Square Picasso:**

Implemented a helper class using this service to load track images to its respective image view.

### **LastFM API:**

API used to retrieve metadata of tracks. JSON is returned and then converted to a POJO for application usage.