# **Webapps Final Project Specification**

#### **Team Information**

Team #: 26

Team Members: Vishal Baskar, Minji Kim, Joanne Park, Iris Wang

# **Product Backlog**

# Authentication with Spotify:

- Application registered with Spotify developers
- Ability to connect with and authenticate to a user's Spotify account
- Ability to pull the user's playlists and play songs using the API

#### Music Rooms:

- Music is played by a host in a room, users can join any room that is currently being hosted listen to music being played live by the host
- Unique playlist themes for each room
- Live song queue that users can view, which is managed by the host

#### Chat Feature

- Real time chat room functionality that updates every second
- Shows all chats of all members in a room

#### Following friends

- Users can follow DJ's that they want to hear more songs from
- Friends will show higher up on the list of currently playing hosts

### **Sprint 1 Product Owner**

Iris Wang (imwang)

## **Sprint 1 Backlog**

Work Allocation: (J: Joanne, I: Iris, M: Minji, V:Vishal)

- Set up environment for Django project utilizing Spotify API (M)
- Create an application on Spotify for Developers (I)
- Utilize spotipy package as a python wrapper for API with application credentials (M, I, J)
- Enable Spotify user account authentication (M, I, J)
- Retrieve playlists from authenticated user account (M, I, J)
- Finish wireframe mockups for the application (M)
- Decide which data models and fields are used within the application (J, V)
- Write the project specification (I)

#### **Data Models**

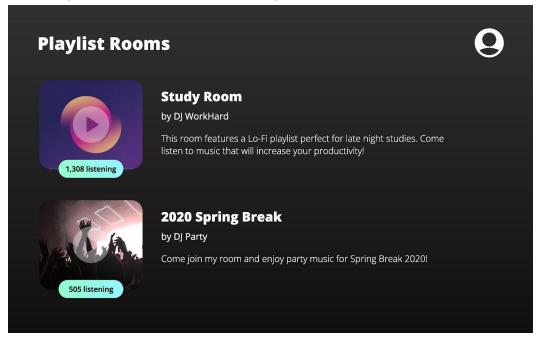
```
from django.db import models
from django.contrib.auth.models import User
# Create your models here.
class Profile(models.Model):
  username = models.OneToOneField(User, on delete=models.CASCADE)
  spotify id = models.CharField(blank=True, null=True, max length=500)
  def str (self):
       return 'Post(id=' + str(self.id) + ')'
class Room(models.Model):
  dj = models.OneToOneField(Profile, on delete=models.CASCADE)
  play status = models.BooleanField()
  time stamp = models.IntegerField()
class Song(models.Model):
  spotify song id = models.CharField(blank=True, null=True, max length=500)
  artist = models.CharField(blank=True, null=True, max length=500)
  title = models.CharField(blank=True, null=True, max length=500)
  album = models.CharField(blank=True, null=True, max length=500)
  room song = models.OneToOneField(Room, on delete=models.CASCADE,
related name='current song')
  associated room = models.ForeignKey(Room, on delete=models.PROTECT, blank=True,
null=True, related name='song queue')
  def __str__(self):
      return 'Post(id=' + str(self.id) + ')'
```

# **Wireframes**

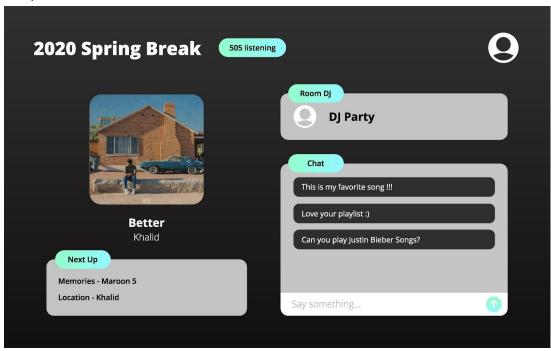
• Login page



Home page to access all of the rooms to go into



 The actual room which contains the currently playing song, chat, song queue (for normal user)



 The actual room which contains control button, spotify api search box, song queue, end/close room button, room settings (for DJ)

