**Description: Automatic Playlist Recommendation System**

**Date: 2017 09 06**

**Elizabeth Thomas, Dhiksha Ramkumar,**

**Priyanka Sharma, Sairam Rajagopalan,**

**Indrajeet Mishra**

STATEMENT OF THE GOAL

The goal of our project is to recommend a playlist of M songs based on the user’s preference, where M can be as small as 1. The song is suggested based on: - 1. Users’ listening history 2. The system takes into consideration genre, artist, demographic details and popularity of the song. This Automatic Playlist Recommender also provides a web application that users can interact with, to receive song recommendations based on songs the user already knows and likes. Thus, providing a clean and easy interface to interact with.

LIST OF THE SERVICES TO BE PROVIDED BY THE PROPOSED SYSTEM

1. Take as input a set of user songs and create a “playlist” of song recommendations based on those selections. For this service, we will be using a similarity based collaborative filtering technique to compare user song preferences and find similar song selections, based on genre, artist and popularity. We will be using data structure and Machine Learning libraries packages in python, such as Pandas and Scikit-learn.
2. Provide a web based GUI/app with which the user can interact with the software in a clean, simple manner. The software hosts a website which perform the recommendation service in the backend.