Overview

This application is for the use of Music Angel Investors around the world to search for popular music. This can also be useful for big labels around the world to search and discover music for investment purposes.

URL: discover-music.appspot.com

1 INTRODUCTION

The main purpose of this software is to enable easy discovery of music which is likely to become popular so that potential investors can find and make early investments for business purposes.

2 SYSTEM OVERVIEW

It's a java based web application. For user interface we have used HTML, Javascript, JSon and other Java libraries. We deployed the application on our laptop using Tomcat. We have used the database provided to us for Database class CS:541 for doing our analysis.

3 FUNCTIONALITY

1. Song view Prediction: Our main feature is Song Popularity prediction. We are taking the crawls from different date to predict future popularity of the song. We are using Linear Regression with Least squares Estimation to predict the popularity of song. If a song is increasing in popularity. We are creating a filter using genres and year, then based on views the client and see the popular songs and the songs which are more likely to become popular.

2. **Country Relations:** We are also finding a correlation between countries and the decade and genre of the songs they produce. This will help to find out which type of songs are more popular in each country. It will also help in finding out the relation between the song types which have been popular over the years. We have analyzed three types of relations:

- Country – Genre
    - We have defined and used a list of top countries and top genres. The threshold used for genre was 500, so among the specified genres, the countries that has more than 500 songs have relations in the diagram.
- Country – Decade
    - We have used decaded 196, 197, 198, 199 and 200; since those were the ones having top number of songs. Country list used among all analysis are the same top country list.
- Country – Genre – Decade
    - We also connected together above two relations among common country information.

3. **World music Heat Map:** We are doing a visualization which is based on Google geo charts. We have created a heat map which can display the popular songs from different countries based on genres.

4 REFERENCES

I. Infovis Visualization Library http://philogb.github.io/jit/
II. Protovis Visualization Library http://mbostock.github.io/protovis/
III. JQuery Visualization Library https://jqueryui.com/
IV. Apache Common Math Library http://commons.apache.org/proper/commons-math/javadocs/api-3.5/index.html