Problem 2: Pre-proposal

Tentative project title: World Music Play Ground - A network music visualization app.

Name, email, programming comfortably of each member of your group

Name: Antonio A Eggermont, antonio.eggermont@post.harvard.edu
Programming skills: Backend Python, JavaScript, HTML, CSS

Research questions and hypotheses. Primary research question(s) and any secondary questions you are trying to answer with your data

My primary question would be the research of the overall community structures based on music habits in major metropolitan cities around the world and events. Other questions I would like to research include current trends in music based on top tracks with most listeners and their similarities between artists around the world.

Motivation: Explain why you are interested in your research question(s)

The continues emerge and development of social networks, mobile devices and better Internet connectivity experiences has enabled the aggregation of data to research music social trends, exchange of information about music preferences, and new music styles around the world. For example, it is easier to use applications like Pandora or ITunes to find music of different styles from virtually any country in the world. For my second project I have chosen to build a network visualization of music trends by mapping similarities and differences between artist and countries to better understand music affinities, and personal playing preferences.

Data: What data will you use to construct your visualization? How is it obtained? How is relevant to your research questions?

To obtain the data I will be using last.fm's Web services and application programming interfaces: http://www.last.fm/api/intro . Last.fm is a music website which employs a music recommender system called "audioscrobbler" implementing detailed profiles of registered users about their music taste by recoding details of the songs the user listens to from Internet radio stations or other devices.

Visualization:

How would you display the data? Provide some general ideas that you have for the visualization, broken down into two tiers of priority: those ideas that your project will aim to implement and those ideas that, given time , would ideally be implemented.

For this project, I will display the data in 2D visualizations as portraits of the world as seen in space and the top tracks, top music preferences, and events as line spikes formed by the information related to the track, music, or artist. Ideally, I would like to also create

contours creating community structures based on music style similitudes and music habit trends. Although visualization in 3D is discouraged to form charts, I think the visualizations in my project could have the potential to use 3D animation in Web GL to create a 3D experience of the world rotating exposing trends in the world of music that I would like to research.