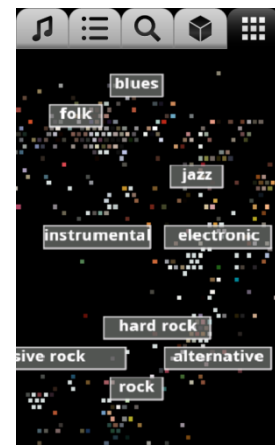


Define Music Taste

Several factors, such as the growth of the Internet, peer-to-peer technologies, or the emergence of the compact media formats have changed the way people deal with music. Personal music collections have grown bigger, and, thanks to portable players and advances in storage technology, they can nowadays be accessed anywhere and anytime. The music collections accumulated by music lovers have reached sizes that make it hard to maintain an overview of the data by just browsing hierarchies of folders. Therefore, novel methods to organize music are required – methods that efficiently operate on orders of thousands of songs, and that allow personal music collections to be seen not just as isolated entities, but positioned in the global context of the world of music.

jukefox

In our laboratory, we have developed *jukefox* (<http://www.jukefox.org>), a Music Player for the Android Mobile Platform. An important ingredient of the application is a “map of music” that reflects music similarity. In particular, we have placed more than 1M artists and songs into a Euclidean space, such that similar items reside at similar location in this space. Such a representation is an excellent foundation to design sophisticated user interfaces for music retrieval. *jukefox* has now a broad user basis and a lot of them send usage statistics back to our server, containing information about when a user listened to which song. This information could be used to derive music taste profiles and determine different type of listening behavior.



The goal of this project is to develop methods and algorithms that make use of the large amount of music log data we collected. This could mean, that you develop a method of how to represent a user's music taste or how to compute music similarity based on the users' feedbacks or listening behaviors. You could also use the data to offer music community features, such as finding persons with a similar music taste. If you are interested in the topic of music or music players, you are welcome to come by my office and talk about possible theses (also if you have own ideas).

Required Skills: Good programming skills (preferably Java) are required.

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