



S: Help Our jukefox To Conquer New Habitats!

This document describes the subject and the general time schedule of the semester thesis of *Sebastian Wendland* and *Samuel Zihlmann* in the autumn term 2011. Adaptations or changes can be agreed upon by the advisors.

Motivation and Informal Description

Imagine how wonderful it would be if your music player automatically found out which music you want to listen to right now and just played such songs? JUKEFOX, a versatile music player developed in our group, is capable of this wonderful feature – it is called smart shuffle. Moreover, it can display all your music in a 2-dimensional map according to the similarity of your songs and has many other novel features (see www.jukefox.org for more information).

However, our JUKEFOX (so far) only occurs in the sealed habitat of the Android platform for mobile phones. We would like to release JUKEFOX from its prison to let it roam the wilderness of other platforms.

JUKEFOX has been developed in the Java programming language, specifically targeted for the use on Android mobile phones. Unfortunately, the underlying API is not abstracted in a way that allows to use it on a regular home computer. The main goal of this project is to extract JUKEFOX's powerful music similarity API to obtain a stand-alone version of the music database, which can easily be used in other players or in plug-ins for other players.

A second goal is to use the extracted application to implement a plug-in for your most favourite music player.

If you are interested in extending your experience in software design, want to be part of a larger project to help to make the strength of JUKEFOX available to thousands of users, then you should drop us an email or come to our office to talk about the project.



Requirements

Good programming skills (preferably in Java) are strongly recommended. The student(s) should be able to work independently on the topic and furthermore be resourceful to gather required information unassisted.

Supervisors

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