Beginners' Guide for Hindustani Classical Music

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Contents

1 Introduction

1.1 Purpose

This document gives the description of the project named "Beginners' Guide for Hindustani Classical Music" which we propose to build.

1.2 Scope

This document discusses -

- The functionalities we intend to provide in our software.
- The target audience.
- Java API we will be using.

1.3 Overview

This software will be an interactive tool for learning Hindustani Classical Music. The Ragas & Taals are the basic functional components of music. This software basically aims at the naive users & will teach them the basic concepts of the ragas. Taals will be covered in short.

1.4 Target Audience

The target audience will be naive users who have no knowledge of music, & those who have moderate knowledge and want to refine it.

2 General Description

2.1 Languages & Libraries

The software will be written in Java. The system will use a database in the backend. It will be build using JFugue - Java API for Music Programming or Java Sound API (whichever suits our requirement), Java GUI API, & JDBC.

2.2 Division of Work

The domain knowledge will be primarily provided by Kuhoo Gupta. Aditee Badge & Amruta Gokhle will be focussing more on the GUI part. They will also cover the search modules. Kuhoo Gupta will concentrate on learning & lessons modules of the software. But we all three intend to have a good exposure of the JFugue API, which will be the heart of the software.

2.3 Implementation Intended Till Stage 2

We intend to complete the basic functionality of Raga Lessons & Simple Compositions Based on Ragas. Then the interactive synthesis of music, search part & other add-ons will be done later, like building of good GUI, and other refinements.

3 Functional Requirements

3.1 Description

We intend to provide the following functionalities -

- Learning Music Notations - The software will aquaint the naive user to the music notations used in the Hindustani Classical Music. It will provide with the format using which the user will be able to use the system.
- Interactive Music Synthesis - User will type in different music notes or enter in a GUI environment, & system will generate & play the music for him. We will try to enhance the user's interest by providing animated display.
- Taal Lessons - The software will teach the user different taals used in classical music, there variations in speed & relations with different types of singing styles.
- Ragas Lessons - This feature will provide user with a nice graphical interface, which will teach which notations are used in the different ragas. The user can listen to the notes by clicking on respective buttons. It gradually takes the user to the intricacies of the raga. This feature will based on the concept of "Listen & Learn".
- Simple Compositions Based on Ragas - This feature will teach the user, different compositions, basically "Lakshan Geet", "Khayals" & "Tarana" for some ragas. This will also incorporate teaching the user to sing at different speeds.
- How to Practice - This interface will help users to practice more & more on some specific thing if they want. It will also give instructions on how to improve on the singing talent.
- Lyrics Support - It will provide the user with the lyrics of some songs which are purely raga based. It will also give the taal used in that song, singers etc.
- Lyrics Search - User can search for the lyrics based on the fields like songname, raga or taal.

- Raga Search - User can submit a series of notes & system searches for the possible ragas which corresponds to those notes.
- Quizzes - The system will have a provision for taking quizzes & evaluate the performance of the user after the end of the whole course is taken.

4 Conclusion

This software will provide an exhaustive guide for the beginners to learn Hindustani Classical Music. The only thing which they will miss is a personal touch which is only possible if they have a "Guru" with them to train them. Otherwise this software will be complete to understand basic music concepts.