San Jose State University

Project Requirement Document

Project Name: YouRMusic

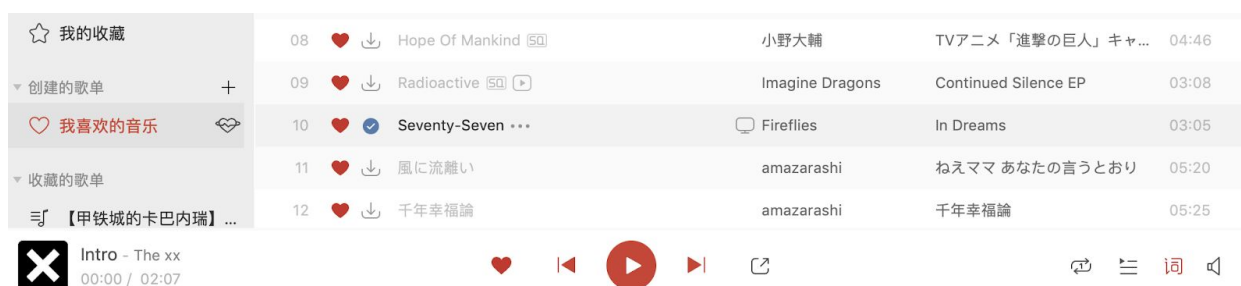Team number: 20

Team member's name:

Khoa Pham

Johnny Phenglavong

Yu Xiao Zheng

Project Description

This project **YouRMusic** is simulating the ultimate music streaming website from a real-world Music website. It will clone some real events: the customer may create a new account, and log in to his/her user pages; the user can play the music online and operate to add or delete a song into his favorite music list. The goal of our application is to provide a convenient way to listen, add, remove, and search for a song. If the user likes a song, he can either share or like that song. Besides, our application will also provide a beautiful user interface that is clear and intuitionistic.

- The below picture is an example:

At the same time, our application also provides a user interface for the backend engineer. The goal of this back-end UI is to provide an easy way to manipulate data. For example, if the customer rates a song, the customer can give a like or negative feedback on that song, then our back-end engineer will manipulate the database to import or delete a song. After that, we will push the result to the front-end website. In short, we hope to separate the front-end website and back-end website.

Speaking about the motivation, there are times when people forget about when their favorite artists release music so we develop this website to make sure that the music listeners will get the notification of the latest music release as soon as possible. By thinking that way, we plan to create one of our major features: new music reminder. By this feature, this project will be
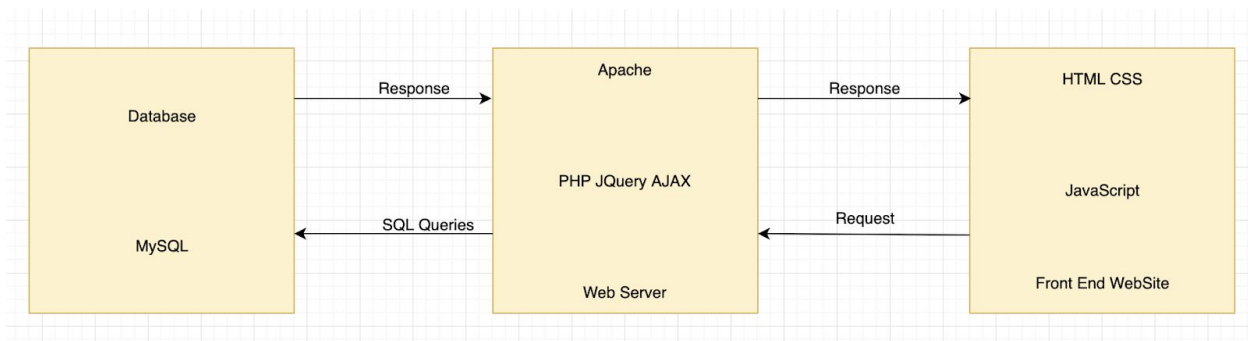
important in retaining customer attention and awareness of the latest songs in the market, which will benefit the music lovers.

The stakeholders of this project will be the people who listen to music, people who want to get to know about music or everyone involved in the entertainment industry.
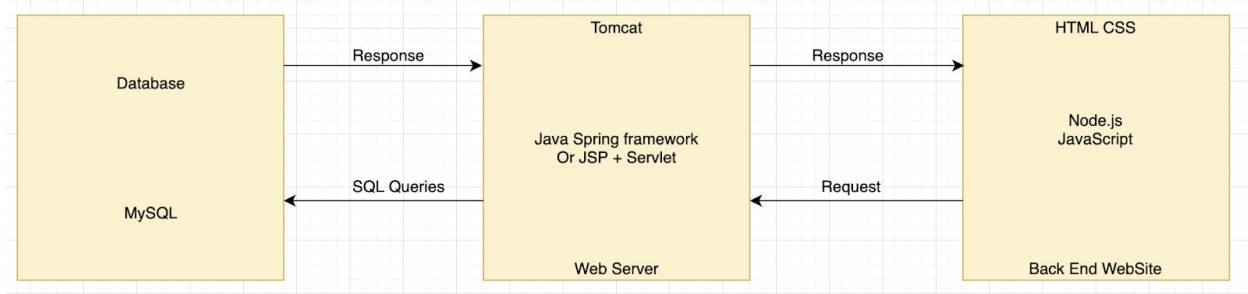
System Environment

Structure of the System

1. For customer three-Tiered

2. For back-end engineer three-Tiered

Hardware and Software used

- Macbook Pro
- macOS   Windows
- Apache Tomcat
- Visual Studio Code
- Intellij Idea
- PhpStorm

RDBMS

- MySQL Ver 15.1 Distrib 10.3.16-MariaDB

Application Languages

- Java, Java EE,
- HTML, CSS, JavaScript, JQuery, PHP, XML, MySQL, Node.js
- Spring framework

Functional Requirements

The users of this website will be everyone who wishes to listen to the music. They have the capacity to access the website freely. In order to interact with our website project, the name of the website can be entered in any browser. They'll see a lot of music to choose from when they have access to the site. Users will have many characteristics to execute on our website, such as login to a registered account, creating a new account, looking for a song, adding, removing a song from their playlists, and setting up a new music reminder appointment.

1)Login and creating account feature
By login with an account, the users gain the ability to modify many music lists as they wish for. Without logging into the account, the users can only listen to music on our website. When the user accesses to the web page, he/she has an option to log in to the website with an existing account. They can type in the user name and password of their own to log in. In case the user needs to generate a new account, they can click on the term "Sign up" under the "LOG IN" button. In creating a free account side, the user needs to input username, first name, last name, email address, and password. The password will have to be entered twice so that the user can

Non-functional Requirements

The Graphical User Interface or GUI will be based on Spotify's interface, but with some drastic changes in sections in order to increase user-friendliness and also make room for our own extra features.

Security will be tight regarding access to the music database and user information. We do not want everybody to be able to directly download artists' intellectual property as well as them having access to our private user information. User passwords will be salted and hashed in order to reduce the chances of a password hit. Also, after five failed login attempts the user will have to recover their account via stored email as we need to do our best to prevent a brute force attack.