

Project Proposal

Group 2

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Project Description

Scope

- ➊ A 24/7 radio taking request from users and playing music at client side.
- ➋ To make current playing song available to multiple nodes.
- ➌ There aren't many good and interactive web-clients for local songs. DiveSong will use local music files and make it available to a remote user.
- ➍ It will be a FOSS application.

Outcome

An Internet radio which takes requests from users, saves history of users, the rating of the songs on there platform, takes feedback of users and tells them when there requested song is going to be played so that they could tune up.

Project Team

- ① Varun Chhangani - Backend and Project Planning
- ② Mohamed Moosa - Testing and Project Designing
- ③ K Chandra Canth - Database and Server handling
- ④ Alivelu Sree Vidya - Database and API management
- ⑤ A.N. Vaishnavi - Frontend
- ⑥ Matla Sujala - API and Integration

Functional Requirements

- 1 Should be playing random songs when nothing in queue based on the previous likes and dislikes.
- 2 Authenticate users and take inputs like likes, dislikes and requests to play songs.
- 3 Requested songs list should be sorted based on number of requests, time of requesting and likes/dislikes
- 4 Users who requested for song to receive a mail of information when their track is going to be played in 5 minutes or less.
- 5 The UI should be interactive.
- 6 Songs should categorized based on language, artists, albums and more.

Functional Requirements (Contd.)

- 7 Songs could be searched via a search bar.
- 8 Songs could be downloadable.
- 9 Most heard song list.
- 10 History of songs played till 100 tracks.
- 11 Forgot password implementation.
- 12 Can face and recover tracks queue and continue playing after a power outage.

System Architecture

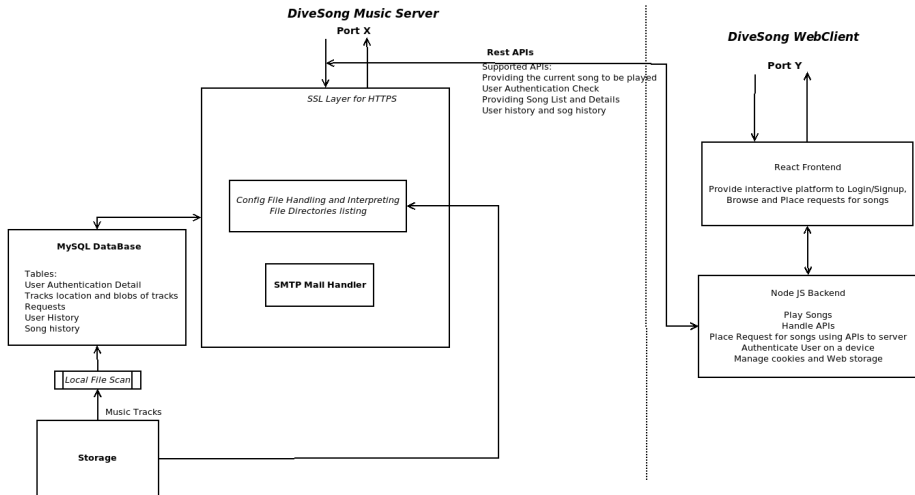


Figure 1: System Architecture

Technologies

- ① HTML5
- ② JavaScript
- ③ Node Framework on JS
- ④ React Libraries for Frontend
- ⑤ MySQL
- ⑥ Apache
- ⑦ SSL encryption
- ⑧ SMTP
- ⑨ RESTful API

Quality Assurance and Testing

- ① Unit Testing
- ② Alpha Testing
- ③ Integration Testing
- ④ Interface Testing
- ⑤ End to End Testing
- ⑥ Load Testing
- ⑦ Monkey Testing

Project Delivery Schedule

- ① 2 Weeks - Initial Tests written
- ② 4 Weeks - DiveSong Music Server
- ③ 5 Weeks - APIs and interface with DiveSong Music Server
- ④ 6.5 Weeks - DiveSong WebClient
- ⑤ 7 Weeks - Testing Complete

Contact Details

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Thank You