

# WEB DEVELOPMENT SUMMER INTERSHIP PROJECT 2025



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<https://samirjsarmah.me/Samify-MusicPlayer/>

# Purpose

Music streaming web application inspired by popular platforms like Spotify. The project structure includes multiple playlists stored in dedicated folders, each containing MP3 audio files and a playlists.json metadata file with contains all the meta data of the Playlists.

1. A landing page (index.html) for initial access.
2. A main player interface (main.html) displaying playlists, a library of songs, and playback controls.

# Users Can

- 1 **Browse playlists visually with album covers and artist information**
- 2 **Load and play songs from any selected playlist.**
- 3 **View track details, progress, and duration**
- 4 **Use play, pause, next, and previous controls**

# Technologies Used

- 1 **HTML** - for page structure.
  
- 2 **CSS** - for responsive design and styling
  
- 3 **JavaScript** -
  - Loading playlist data from JSON.
  - Handling audio playback and controls.
  - Dynamically updating the user interface



# Key Features

Multiple playlists with MP3 files.

Dynamic content loading using JSON(JavaScript Object Notation File) .  
Interactive audio controls (play, pause, next, previous).

Responsive and modern design.

Clear separation between landing page and player interface.

Responsive UI with hamburger navigation

# Project Structure (Directory Overview)

**index.html**

```
├── <body>
│   └── .main-wrapper
│       ├── .left
│       │   ├── .logo      ← Sidebar (hamburger menu)
│       │   ├── .songList  ← Website name / icon
│       │   └── <ul>...</ul>
│
│       └── .right      ← Main area
│           ├── .topbar
│           │   ├── .hamburger  ← Mobile menu toggle
│           │   └── <img>      ← Icon <p> Feel THE Music </p>
│
│           ├── .cardContainer  ← Playlist cards (thumbnails)
│           │   ├── .card        ← Individual playlist
│           │   ...
│
│           ├── .currentPlaying  ← Now playing song info
│           │   ├── .songinfo
│           │   └── .songtime
│
│           ├── .seekbar      ← Progress bar
│
│           └── .controls     ← Play, Pause, Previous, Next, Volume
│               ├── #previous
│               ├── #play
│               ├── #next
│               └── .volume
│                   ├── <img> icon
│                   └── .range input
```

**css/**

```
├── style.css      ← Core styles for layout
└── utility.css    ← Reusable classes
```

**js/**

```
└── script.js      ← Loads playlists.json and controls playback
```

**img/**

```
├── icon.png      ← Site favicon
├── play.svg, pause.svg  ← Control icons
├── volume.svg, mute.svg
└── music.svg      ← List icons
```

**playlists.json**    ← All playlist info (title, cover, songs)

```
[{"folder": "A_zubeen_mode", "cover": "songs/A_zubeen_mode/cover.jpg", "title": "Zubeen Mode", "description": "Zubeen's Collections", "songs": ["AAMI JEN JANTRA.mp3", "Anuradha.mp3", "MAYA MATHU.mp3", "Mayabini Ratir Bukut.mp3"]}, {"folder": "Folder_Name", "cover": "songs/Folder_Name/cover.jpg", "title": "Playlist Title", "description": "Playlist Description", "songs": [.....mp3]}]
```

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[{"folder": "A_zubeen_mode", "cover": "songs/A_zubeen_mode/cover.jpg", "title": "Zubeen Mode", "description": "Zubeen's Collections", "songs": ["AAMI JEN JANTRA.mp3", "Anuradha.mp3", "MAYA MATHU.mp3", "Mayabini Ratir Bukut.mp3"]}, {"folder": "Folder_Name", "cover": "songs/Folder_Name/cover.jpg", "title": "Playlist Title", "description": "Playlist Description", "songs": [.....mp3]}]
```

# The Frontend UI

## LAYOUT:

- left panel: Navigation & Library
- right panel: Header, playlists, and the playbar

## FEATURES:

- Hamburger menu (for mobile view)
- Dynamic playlist rendering
- Controls: Play, Pause, Next, Previous
- Volume slider
- Seekbar with live updates

# The Styling

## **STYLE.CSS (STYLING THE PLAYER)**

- Dark theme inspired by Spotify
- Responsive using media queries
- Styled cards for albums
- Playbar fixed at the bottom
- Hover effects on cards
- Current song highlighted with a green background (.playing class)

## **UTILITY.CSS (REUSABLE UTILITY CLASSES)**

Examples:

- .flex, .bg-black, .rounded
- Custom scrollbar styling

# JavaScript Logic

## SCRIPT.JS

### Key Functions:

- *getSongs(folder)*  
Fetches MP3 files from meta file and lists them.
- *playMusic(track)*  
Loads and plays a specific track; highlights it.
- *displayAlbums()*  
Fetches all albums
- *main()*  
Initializes:
  - First song
  - Event listeners for play, pause, seek, volume
  - Album switching and UI controls

# The Desktop View



# The Mobile View

A screenshot of the Samify web player interface on a desktop browser. The top navigation bar includes the Samify logo and a "Feel The Music" tagline. On the left, a sidebar titled "Your Library" shows four tracks: "AAMI JEN JANTRA.mp3", "Anuradha.mp3", "MAYA MATHU.mp3", and "Mayabini Ratin Bukut.mp3", each with a "Play Now" button. The main content area is titled "Playlists" and displays a grid of various playlists like "GNX" by Kendrick Lamar, "LUCKY ALI" by Lucky Ali, and "Post Malone". Below the playlists are sections for "Beats", "Chill Music", "Bolly Mix", "Latest Trends", "Phonk", and "Lofi Music", each with a representative image and a brief description. At the bottom is a dark player bar with a progress bar showing "00:01 / 05:44", a play/pause button, and volume controls.

A screenshot of the Samify mobile application on an iPhone. The top navigation bar shows the Samify logo and "Feel The Music". The main screen displays a "Playlists" section with a large thumbnail for "Zubeen Mode" and a list of tracks. Below this is a playback screen for the track "AAMI JEN JANTRA" by AAMI JEN JANTRA, showing the song title, a play/pause button, a progress bar at 02:10 / 05:44, and a volume slider.

A second screenshot of the Samify mobile application on an iPhone. This view shows the "Your Library" section on the left with tracks "AAMI JEN JANTRA.mp3", "Anuradha.mp3", "MAYA MATHU.mp3", and "Mayabini Ratin Bukut.mp3", each with a "Play Now" button. To the right is a playback screen for the track "AAMI JEN JANTRA" by AAMI JEN JANTRA, showing the song title, a play/pause button, a progress bar at 02:10 / 05:44, and a volume slider.

# Thank You

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