



Developing a Music Streaming App



Title: Development of a Music Streaming Application using **Apple iTunes API**

Objective: To design and implement a web application that allows users to search for music tracks, fetch details from the Apple iTunes API, and play the selected tracks using the HTML `<audio>` tag. Additionally, users should be able to create a playlist and play songs added into the playlist.

Background

In the tech industry, music streaming applications have transformed how we access and enjoy music. Platforms like Apple iTunes offer vast libraries of music that users can search, discover, and play. This assignment aims to simulate the development process of a basic music streaming app to provide students with practical experience in API integration, responsive design, and user interaction.

Assignment Requirements

1. User Interface:

- Develop a responsive web page.
- Implement a search bar for users to enter queries/music and search for music tracks.
- Display the search results with track details.

2. Functionality:

- Integrate the Apple iTunes API to fetch music tracks based on user search queries.
- Display the fetched tracks on the web page.
- Implement an audio player using the HTML `<audio>` tag to play the selected tracks.
- Provide basic controls for play, pause, and stop functionalities.

3. Developer's Tasks:

- **Create Playlist:** Allow users to create their own playlist.
- **Add Songs to Playlist:** Enable users to add searched songs to their created playlist.
- **Play Songs from Playlist:** Allow users to play songs directly from their created playlist.

4. Technical Specifications:

- Use HTML, CSS, and JavaScript for the front-end development.
- Utilize modern JavaScript features (ES6+).
- Ensure cross-browser compatibility and responsiveness.
- Implement error handling for API requests.

5. Evaluation Criteria:

- Functionality and correctness.
- Code quality and adherence to best practices.
- User interface and user experience.
- Comprehensive and clear documentation.