

**RIPHAH INTERNATIONAL UNIVERSITY**

**RAWALPINDI, PAKISTAN**

Bachelors In Computer Science

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| **Project Proposal** | **01** |
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**MUSIC MOBILE APPLICATION**

***Project Proposal***

**Introduction:**

The purpose of this proposal is to create a music mobile application that integrates the Spotify API using Android Studio. The application will provide a user-friendly interface and allow users to listen to their favorite songs, create and manage playlists, and discover new music based on their preferences.

**Background:**

Music streaming services like Spotify have become increasingly popular in recent years. With the help of APIs, developers can create music applications that provide users with access to vast music libraries and features that enhance their listening experience. Android Studio is a powerful tool for developing mobile applications that run on Android devices.

**Objectives:**

The primary objective of this project is to create a music mobile application that integrates the Spotify API. The application will provide the following features:

1. Login with Spotify credentials
2. Browse and search for songs and playlists
3. Create, edit and delete playlists
4. Play songs and playlists
5. Pause, skip, rewind and shuffle tracks
6. Show album art and song information
7. Display recommended songs based on user listening history

**Methodology:**

To achieve the objectives, we will follow these steps:

1. Create a Spotify Developer account and obtain the Client ID and Client Secret.
2. Install the Spotify SDK and necessary dependencies in Android Studio.
3. Implement the Spotify authentication flow in the application using the Authentication Client class.
4. Connect to the Spotify app on the user's device using the Spotify App Remote SDK.
5. Develop the application's user interface, incorporating features such as browsing, searching, creating, and managing playlists.
6. Integrate the Spotify API to play and control music tracks in the application.
7. Implement features such as pause, skip, rewind, shuffle, and displaying album art and song information.
8. Develop a recommendation system to suggest songs based on the user's listening history.

**Expected Outcomes:**

By the end of the project, we expect to have a fully functional music mobile application that integrates the Spotify API. The application will provide users with a seamless experience for listening to their favorite songs, creating and managing playlists, and discovering new music. The application will be user-friendly and incorporate features such as playback control and song recommendations.

**Conclusion:**

This project aims to create a music mobile application that integrates the Spotify API using Android Studio. The application will provide users with a comprehensive music listening experience, including features such as browsing, searching, creating, and managing playlists, playback control, and song recommendations. The outcome of this project will be a functional and user-friendly music application that will enhance users' music listening experience.