Project Proposal: K-pop Explorer

1. Tech Stack:

For this project, we will utilize a full-stack approach using React for the front end and Node.js for the back end. This tech stack offers a robust and scalable solution for building web applications with real-time updates and interactive user interfaces.

2. Focus:

The project will be evenly focused on both front-end UI and back-end development to ensure a seamless user experience and efficient data management.

3. Application Type:

K-pop Explorer will be a website accessible from desktop and mobile web browsers. This approach ensures broad accessibility across different devices, catering to a wide user base.

4. Project Goal:

The goal of K-pop Explorer is to create a comprehensive platform where K-pop enthusiasts can immerse themselves in the world of K-pop, access detailed information about their favorite groups, and discover new music seamlessly.

5. Target Users:

The primary users of K-pop Explorer will be K-pop fans of all ages and demographics, particularly those who seek detailed information about their favorite groups, members, and discography.

6. Data Sources:

We will utilize a free API related to K-pop, pulling data such as group information, member profiles, and discography. Additionally, we will integrate the Spotify API to link users directly to the music of their preferred K-pop groups.

7. Approach:

a. Database Schema: The database schema will consist of tables for groups, members, albums, songs, and user profiles.

b. API Issues: While using existing APIs can simplify data retrieval, we may encounter limitations in data accuracy or coverage.

c. Security: User authentication and authorization will be implemented to secure sensitive user information such as profiles and preferences.

d. Functionality: The app will allow users to search for Kpop groups, access detailed group and member profiles, view discography, and listen to music through Spotify integration.

e. User Flow: Users will land on the homepage where they can search for K-pop groups or browse through featured content. Upon selecting a group, they can explore detailed information, view member profiles, and listen to music.

f. Features and Stretch Goals: Beyond basic CRUD operations, the site will offer features such as personalized user profiles, and bookmarking favorite groups. Stretch goals will include integrating Spotify API so that a user can click on a K-pop Idols link and it’ll take the user to that group or artists' Spotify page.

By implementing this project proposal, I aim to create a dynamic and engaging platform for K-pop enthusiasts to explore and enjoy their favorite music and artists.