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GITHUB-https://github.com/Shubhamraj73773/Melodia mix

Use cases

Detailed Use Cases:

1.User Registration:

Description: A new user signs up by providing a unique username, email, and password.

Precondition: User accesses the registration page.

Postcondition: User's registration details are stored securely, and they gain access to the platform's features.

Flow of Events:

- 1.User navigates to the registration page.
- 2.User enters a unique username, email, and password.
- 3. System validates the uniqueness of the username and email, and password strength.
- 4. User submits the registration form.
- 5. System securely stores the user's registration details.

2.Explore and Discover Music:

Description: Users can explore and discover music by genres, playlists, and personalized recommendations.

Precondition: User accesses the music exploration page.

Postcondition: User discovers new music and playlists based on their preferences.

Flow of Events:

- 1.User navigates to the music exploration page.
- 2.User browses music by genres or explores curated playlists.
- 3. User receives personalized recommendations based on their listening history.
- 4. System updates recommendations based on user interactions and feedback.

3. Create and Manage Playlists:

Description: Users can create and manage personalized playlists.

Precondition: User is logged in and accesses the playlist creation page.

Postcondition: User creates a new playlist or updates existing ones with their favorite songs.

Flow of Events:

- 1.User navigates to the playlist creation page.
- 2.User creates a new playlist and gives it a title.
- 3. User adds songs to the playlist by searching or browsing the music library.
- 4.User saves the playlist, and it becomes accessible in their library for future

listening.

4. Follow Artists:

Description: Users can follow their favorite artists and friends to stay updated on their latest releases and activities.

Precondition: User accesses the artist or friend profile page.

Postcondition: User receives updates and recommendations based on the activities of followed artists and friends.

Flow of Events:

- 1.User navigates to the artist or friend profile page.
- 2.User clicks on the "Follow" button to follow the artist or friend.
- 3.User receives updates on new releases, concerts, and activities from followed artists and friends.

Tools, Technologies, APIs and Libraries used.

Frontend Technologies:

- 1.Next.js: Next.js a framework built on top of React.js served as the primary frontend framework for building interactive user interfaces. Its component-based architecture allowed for modular development and efficient UI updates.
- 2. TypeScript : TypeScript was used to add static typing to the JavaScript codebase, enhancing code reliability and developer productivity.
- 3. Tailwind CSS: Tailwind CSS provided a utility-first approach to styling, enabling rapid prototyping and easy customization of UI components.
- 4. React Hook Form: React Hook Form was utilized for efficient form handling and validation, facilitating smooth user interactions with input fields.
- 5. Supabase Auth: Supabase Auth provided user authentication and authorization functionalities, ensuring secure access control to the application's features.
- 6. Stripe.js: Stripe.js was integrated for handling secure payment processing, enabling users to make purchases and subscriptions within the application.

- 7. React Icons: React Icons library provided a wide range of customizable icons for enhancing the visual appeal of the application.
- 8. React Spinners: React Spinners library offered customizable loading spinners to indicate asynchronous operations, enhancing user experience during data fetching.
- 9. React Hot Toast: React Hot Toast provided customizable toast notifications for displaying alerts and messages to users.
- 10. Use-Sound : Use-Sound library enabled the integration of sound effects for enhancing user interactions and feedback within the application.

Backend Technologies:

- 1. Node.js with Next.js: Node.js with Next served as the backend server framework, facilitating efficient handling of HTTP requests and responses.
- 2. Supabase: Supabase provided a backend-as-a-service platform for data storage, management, and real-time event handling.
- 3. Supabase Realtime: Supabase Realtime enabled real-time updates and notifications, allowing clients to subscribe to changes in the database.
- 4. Stripe API: The Stripe API was integrated for secure payment processing, enabling the handling of payment transactions and subscription management.

Build Tools and Utilities:

- 1. Next.js : Next.js was used as the React framework for server-side rendering, enabling optimized performance and SEO-friendly rendering of web pages.
- 2. ESLint : ESLint was utilized for static code analysis and enforcing code quality standards across the codebase.
- 3. PostCSS : PostCSS served as the CSS preprocessor for applying transformations and optimizations to the stylesheets.

- 4. Autoprefixer: Autoprefixer automatically added vendor prefixes to CSS rules, ensuring cross-browser compatibility.
- 5. Query-String : Query-String library provides utilities for parsing and stringifying URL query parameters.

SCREEN-SHOTS



























