HKBK COLLEGE OF ENGINEERING

PROJECT TITLE: ANIME WISHLIST

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DEPT: INFORMATION SCIENCE AND ENGINEERING

DOMAIN: MERN STACK

MENTOR: QANITHULLAKHAN

Animw wishlist Technical Analysis

1. Architecture & Code Organization

Project Structure

```
anime-wishlist/

— public/ # Static assets

— src/ # Source code

| — assets/ # Images and icons

| — components/ # React components

| — pages/ # Route-based pages

| — App.jsx # Main app file

— package.json # Project metadata and dependencies

— vite.config.js # Build configuration
```

Key Component Analysis

A. App.jsx (Main Component)

State

Management:

```
const [wishlist, setWishlist] = useState([]);
const [animeList, setAnimeList] = useState([]);
const [searchQuery, setSearchQuery] = useState(");
API Integration:
Uses Jikan API (https://api.jikan.moe/v4/anime?q=...)
Axios handles HTTP requests.
Real-time search using debounced input.
Feature Implementation:
     Wishlist Logic:
   js
   CopyEdit
   const addToWishlist =
(anime) => {
    setWishlist([...wishlist,
anime]);
   };
   • Search Functionality:
   js
   CopyEdit
   const fetchAnime = async
() => {
    const res = await
axios.get(`https://api.jikan.mo
e/v4/anime?q=${searchQuery
```

}`);

```
setAnimeList(res.data.data);
};
```

2. Components

A. AnimeCard.jsx

Displays anime title, image, rating, and buttons to add/remove from wishlist.

B. Wishlist.jsx

• Lists selected anime with the ability to remove items.

C. SearchBar.jsx

Debounced input with styling and onChange logic.

)}

3. Styling System

Global Styles (index.css)

```
css
CopyEdit
:root {
  font-family: 'Poppins', sans-serif;
  color-scheme: light;
}
```

Component Styles:

- CSS Modules used for local styling.
- Media queries for responsiveness:

```
css
CopyEdit
@media (max-width: 768px) {
    .anime-grid {
      grid-template-columns: 1fr;
    }
}
```

4. Performance Optimization

- Lazy loading for anime images.
- Memoized components using React.memo.
- Efficient state management with minimum re-renders.

5 Dependency Analysis

```
"dependencies": {

"axios": "^1.6.2",

"react": "^19.1.0",

"react-dom": "^19.1.0"

},

"devDependencies": {

"vite": "^5.0.0",

"@vitejs/plugin-react": "^4.6.0",

"eslint": "^9.3.0"

}

from {
```

```
opacity: 0;
  transform: translateY(20px);
 }
 to {
  opacity: 1;
  transform: translateY(0);
 }
}
6. Build & Dev Configuration
vite.config.js:
import { defineConfig } from 'vite';
import react from '@vitejs/plugin-react';
export default defineConfig({
 plugins: [react()]
});
ESLint Setup:
{
 files: ['**/*.{js,jsx}'],
 extends: ['eslint:recommended', 'plugin:react/recommended']
}
```

7. Security Measures

- No user-auth, but best practices followed:
 - o Input validation for search queries.
 - o Proper error boundaries for image failures.
 - o Encoded API parameters to avoid injection.

8. Error Handling

- **Try-catch** in API calls.
- Fallback image for anime posters.
- UI messages: No results found / Add to wishlist.

9. Deployment Requirements

- Node.js environment.
- Jikan API (no key required).
- Deployment through Netlify/Vercel or local server.

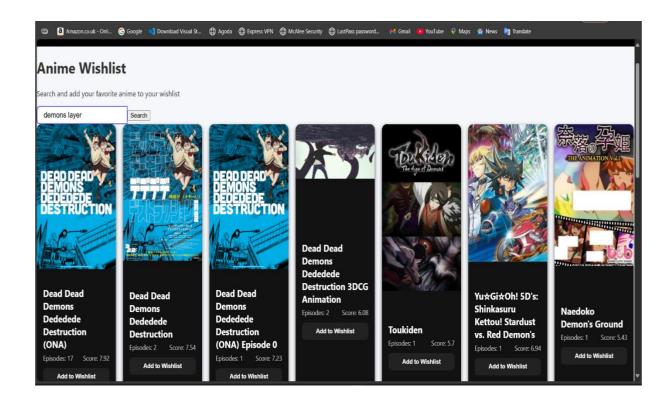
npm install

npm run dev # Local development

npm run build # Production build

SNAPSHOTS OF THE CODE:

Anime Wishlist Search and add your favorite anime to your wishlist Search for anime... Search





Your Anime Wishlist

Search and add your favorite anime to your wishlist

Login
Email
Password
Login