HKBK COLLEGE OF ENGINEERING

PROJECT TITLE: ANIME WISHLIST

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DEPT: COMPUTER SCIENCE AND ENGINEERING

DOMAIN: MERN STACK

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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

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    const addToWishlist =
(anime) => {

      setWishlist([...wishlist,
anime]);

    };
```

- **Search Functionality**:

```
    js

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    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

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

Component Styles:

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

css

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```
@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:
    - Input validation for search queries.
    - Proper error boundaries for image failures.
    - 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

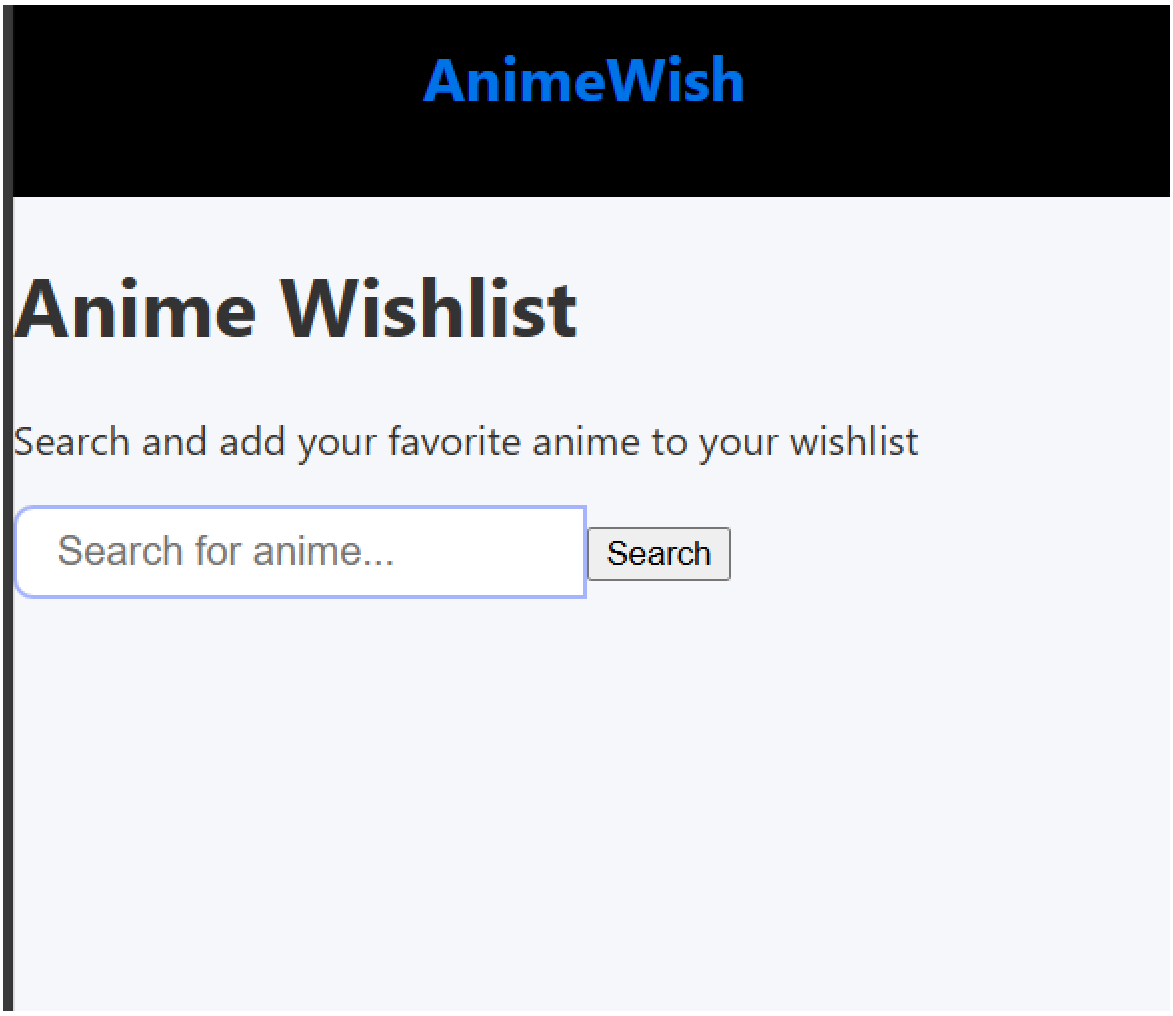
- Node.js environment.
- Jikan API (no key required).
- Deployment through Netlify/Vercel or local server.

```
npm install

npm run dev     # Local development

npm run build   # Production build
```

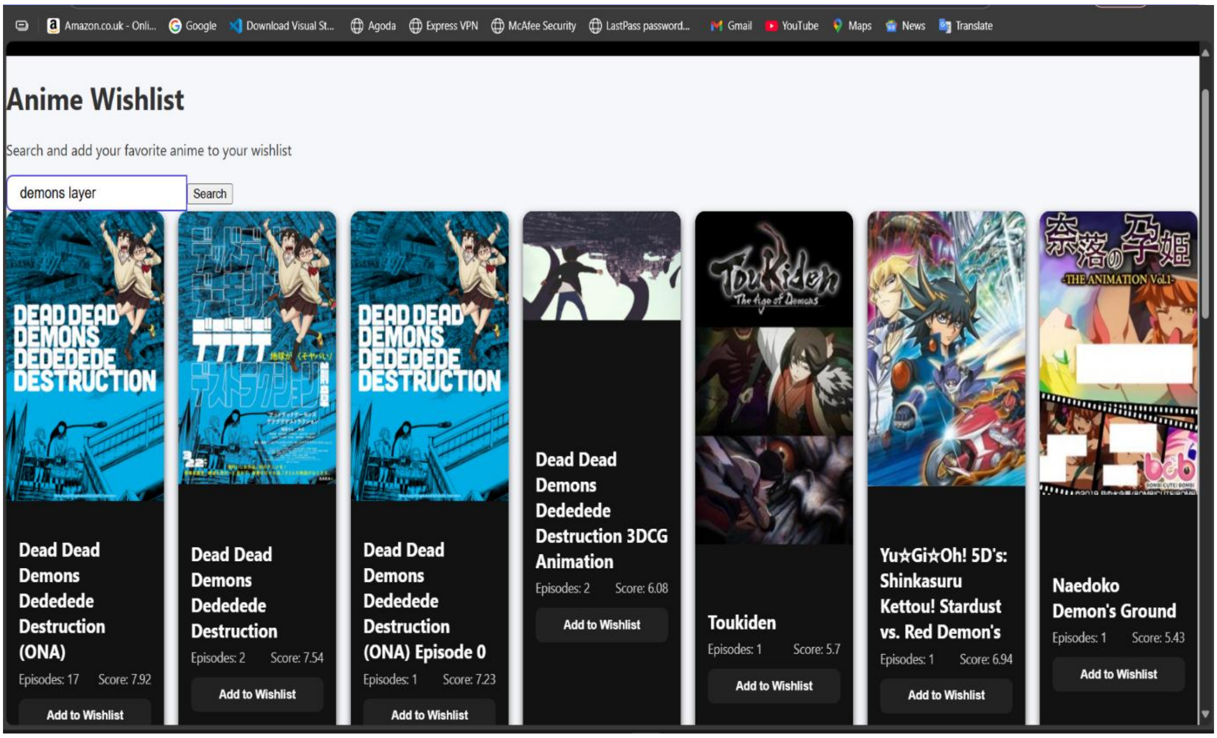
SNAPSHOTS OF THE CODE:



AnimeWish

Anime Wishlist

Search and add your favorite anime to your wishlist



Anime Wishlist

Search and add your favorite anime to your wishlist

demons layer

Dead Dead Demons Dededede Destruction (ONA)
Episodes: 17 Score: 7.92

Dead Dead Demons Dededede Destruction
Episodes: 2 Score: 7.54

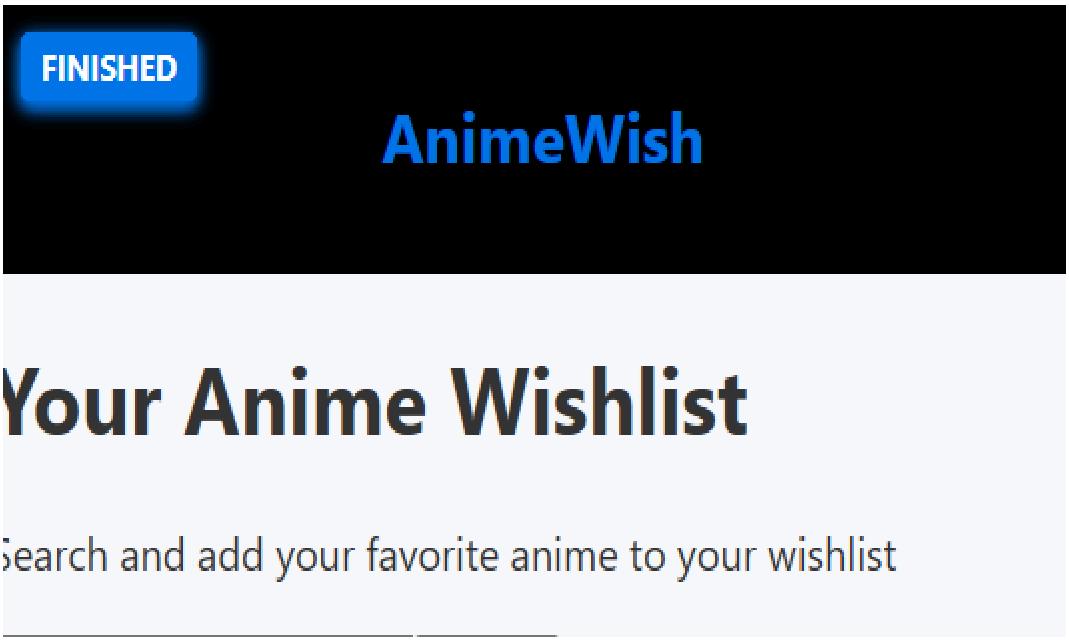
Dead Dead Demons Dededede Destruction (ONA) Episode 0
Episodes: 1 Score: 7.23

Dead Dead Demons Dededede Destruction 3DCG Animation
Episodes: 2 Score: 6.08

Toukiden
Episodes: 1 Score: 5.7

Yu☆Gi☆Oh! 5D's: Shinkasuru Kettou! Stardust vs. Red Demon's
Episodes: 1 Score: 6.94

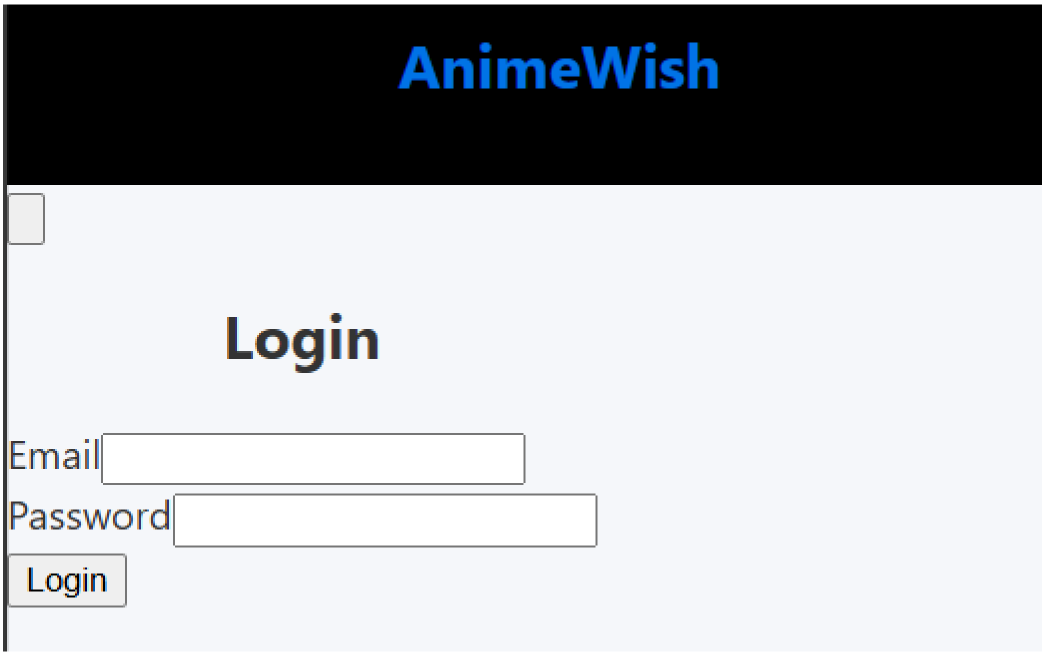
Naedoko Demon's Ground
Episodes: 1 Score: 5.43



AnimeWish

Your Anime Wishlist

Search and add your favorite anime to your wishlist



AnimeWish

Login

Email

Password