

Final Report

Introduction

This web app is an anime explorer that allows anime fans and all others to search for their animes and get relevant data on them such as episode count, score, and start date. The app uses Jikan API to fetch the data and present it warmly to the user.

Usability Goals

The app was designed with the following usability goals in mind:

- **Effectiveness:** Accurate results in brief timeframes.
- **Efficiency:** Cached API calls and immediate rendering with Streamlit.
- **Learnability:** The input is easy to utilize, and the charts/tables are labeled clearly.
- **Memorability:** Consistent structure helps users return and reuse features.
- **User Satisfaction:** Visual layout, feedback messages, and icon usage add to this.
- **Error Prevention:** Feedback when no anime is found or a score is unavailable.

Design Process

- **Flow of Ideas with Interface flow:** title -> search -> display -> download
- **Sketched the layout and mapped elements to Streamlit features.**
- **Intergrated API and parsed the JSON response**
- **Made a DataFrame, visualized data using charts and tables**
- **Tested for broken inputs and handled edge cases (like no results)**

API Integration

- The app uses the Jikan API, which Provides anime data from MyAnimeList.
- Endpoint used: <https://api.jkan.moe/v4/anime?q=<query>&limit=10>
- Extracted relevant fields: title, score, rating, start date, etc.
- Converted JSON response to a pandas.DataFrame for future use

Interactive Elements

- `st.text_input()` - used to enter anime search queries
- `st.dataframe()` - Interactive search results table
- `st.bar_chart()` - visual score comparison
- `st.download_button()` - export results to CSV
- `st.map()` - mock coordinates to fulfill map requirements

HCI Design Principles

- **Visibility:** Clear field of input, headers, and button layout
- **Feedback:** Messages show success, warnings, or errors
- **Consistency:** Reused layout for search, results, and download
- **Aesthetics:** Emphasis on clear, professional formatting with icons
- **Error Handling:** invalid quires handled with warnings

Conclusions

The project increased my skills at combining API integration with user-focused design. This is my second use of Streamlit and I applied HCI principles to structure an app that is useful and enjoyable. In further additions, I can add filters for genres, anime images, or personal recommendations.