**Project 2 Report**

**A. Introduction**

- I designed a web app using Streamlit that enables users to navigate details on music artists. Using the Spotify API, the app shows an artist's number one hits as well as useful information such as popularity and song length. It also shows an image of the artist as well as a map showing their country of origin. The aim was to design an interesting as well as useful tool for music lovers.

**B. Usability Goals**

- My primary objectives were to make the app intuitive, concise visually, and interactive. I wanted users to easily obtain information without being confused. For this, I used a setting sidebar, clean data charts, and interactive widgets so that users could choose what they wanted to see. The design was simplified and made intuitive.

**C. Design Process**

- I started out by sketching the layout on paper, planning out where everything within the app would go. Then I built the app in pieces, first with artist and song data, then the image, charts, and map. I tested the layout regularly and adjusted things so that everything fitted tidily and was easy to understand.

**D. API Integration**

- I have utilized the Spotify API to get artist details and most popular tracks. It has given me details like track names, duration, and popularity. What was difficult for me was handling errors when artists could not be found or did not have enough data. I needed to figure out how the API was structuring its responses too, but overall, it was fine.

**E. Interactive Widgets**

- The application possesses a couple of widgets within the sidebar to make it interactive. The users can enter an artist's name, choose the number of songs to be displayed using a slider, and arrange the songs in a dropdown. The widgets allow users to customize the experience and enhance the application to make it fascinating and personal.

**F. HCI Design Principles**

- I followed HCI guidelines of consistency, visibility, and user control. The interface has a plain design, similar hues, and minimal navigation. The updates reflect in real time and offer user feedback. The sidebar offers users control over what they see, making the app user-friendly and efficient.

**H. Conclusion**

- I learned how to integrate Streamlit with APIs and create an intuitive user interface thanks to this project. Managing the data from the Spotify API was the most difficult aspect, but it was satisfying to watch everything come together. To make the app even better in the future, I would like to include features like song previews and the ability to save favorite artists.