Personal Statement

Over the past few months, our team has been working together on a music recommendation site called "Match Melody". As part of the team, I was responsible for back-end Javascript coding, interacting with the front-end UI design to implement various features of the site, such as adding songs to the user's liked list, switching to the next song and designing the algorithm. I was also responsible for designing the testing content, writing test documentation and testing the site.

As our project is a music streaming site, it is prone to music copyright issues and to avoid this we decided to build the website as a third-party Spotify site. In the process, I learnt how to call the Spotify API and use its database to get information about the songs. This was done by requesting a Web API connection using JQuery from the javascript library to make it return the corresponding response data. On our website, we need to use the JSON data from the playlist of the user's Spotify account to sort the songs by their corresponding genre, album, artist and other features to recommend songs with similar features to the liked playlist in their account. On the technical side, I learnt how to connect to open-source databases through Javascript. Using "GET" requests to get responses from the web API and playback SDK, as well as using "PUT" to put the generated songs into the Spotify playlist, responding to external servers to Implement the website functionality, embedding the player into the website and generate the corresponding song play information. This is also done by interacting with the API and retrieving track seed data for similar songs to generate recommendations.

The biggest problem I have encountered is connecting the database to our website. At the beginning of the project plan, I intended to create our own database for the website, integrating songs and user information into the database. However, it turned out that due to the copyright of the songs and the large number of songs we wanted to put in the database, it was beyond my capacity to build a database. There was also the risk of a security breach in the handling of user information. Therefore I decided to connect to the Spotify API to get the song information and associate the data with the website via JQuery, which solved the database problem for our website.

Working with my group members, I felt the strength of supporting each other to help each other out. When I was implementing the website features, I would face some difficulties in connecting to external servers using JQuery because I had not learnt anything related to websites before. My group members would work together to solve each other's problems during our weekly meetings and try to achieve what we were trying to achieve with the website. We also set weekly goals and try to achieve them before each meeting, which has resulted in no significant delays in our progress. Also, when a member of the group is faced with a problem that causes a delay, others share in the task to ease the pressure. These mutual help factors enabled us to complete the website successfully and to plan our time wisely, breaking down a large project into individual tasks and achieving them step by step. In terms of interpersonal relationships, as this was a large project, many of the tasks had to be completed with other members of the group, and during this process, there were often inconsistencies, and sometimes our own ideas did not match those of others, resulting in the final content is different from what we had envisaged. However, we usually use the group vote to decide and choose the better idea, through which we can work more closely together.