Summary of My implementation decisions.

The Recommendation module I created which was two python file, I would explain what I implemented in each file

**Load\_dataset\_module.py**

In this python file, a class was created called **Load\_data** in the class we created four methods, firstly we created a list that contained all the columns we would use for recommendations, this list was used in the first method called **load\_dataset** in this method we did some data wrangling on the **names** and **artists** columns, the next method in our **Load\_dataset\_module** is called **artist\_music\_func** and in this method we created a list that had all the column we needed then called the **load\_dataset** to get the data and then select the necessary columns for this function, next we set the index of our data frame using the artist column, this was also done for the **music\_features\_func** the only difference here was that instead of the artist columns which we dropped, we used **name** which had the values of all the songs in our data set, for **music\_for\_artist\_func** which we used to get the most similar music for a particular artist, we used **name** and **artists** column in the data but **name** was used as our index.

**Similarity\_module.py**

This python module was where the recommendation algorithms were implemented, this module contained a class called **Similarity\_comp** which had 5 methods, also in this module we had a **main** function which only ran from that module, more details about this at the end of this summary,

The first thing I did imported python modules that were allowed for this assignment, we imported **pandas**, **numpy** and **scikit-learn**. Also from the **load\_dataset\_module** we imported **Load\_data** class, it was called and named **ld**, next here was the class, we created the **init** method first, and next was the \_**compute\_similar** method which is a helper method that takes, values sent from three different method **compute\_similar\_music, compute\_similar\_artist** and **compute\_similar\_music\_for\_artist,** the values it takes from these methods are **types** which tells this method the type of data to collect from the **Load\_dataset\_module**, **iden** contains the artist name or the song name, depending on the method called, **n** is used to determine the number of values to return that are most similar to the artist or song depending on the method that queried this method.

The cycle this method goes through is it checks the **types** values