Application Planning

# What data structures are you using?

The application with use multiple data structures. A double linked list will be used to store the main list of songs. Lists and arrays with be used to store copies of the list that can be modified based on searching or sorting.

# Where are you using hashing techniques?

# What sorting algorithm are you using how this is different from selection and bubble sort?

An Insertion sort will be used to sort the data and can sort based on different sorting criteria.

Insertion Sort and Selection sort both have the data separated into two sections an unsorted and sorted section, they differ in that the selection sort iterates through the unsorted section to find the smallest value to bring to the sorted section where as the insertion sort iterates through the sorted section to find the next place to insert the next value.

# What search technique are you using?

Due to the application allowing for the user to search for songs with multiple criteria

No normal search algorithm has been used instead the application will take a copy of the list of songs and simply remove any songs that don’t match and remove them from the list the remaining data is then displayed to the user.

# What third party libraries are you using?

We shall be using a third party library called CsvHelper. CsvHelper is useful from reading and writing to csv files and can be used to directly read data from a csv file into a new instance of an object helping save time and reduce code size

# Where can I find the documentation for this?

All documentation and related content can be found on their website <https://joshclose.github.io/CsvHelper/>

# A mock-up of the GUI.

# What source control are you using?

GitHub is being used for source control with a repository created for use during the development of the application

<https://github.com/mEp3ii2/MediaPlayer>

# What are your coding standards you are enforcing?

The application will follow the coding standards set out by Microsoft in the MSDN.

# What tests are you going to run?