Nicholas White – Database Design and Web Implementation

Assignment 6: Description of Online Database Application

The web application I am designing is a music-tracking site. Users will be able to enter songs/playlists that they have played to see their music listening habits. The user will be able to see their collection of entries summarized in various ways, i.e. Top 25 tracks played all time, favorite genres, top tracks of the week/month/semester, etc. In this case, the audience can be a broad group of people. From young teens to older adults, this web app should be convenient enough to enter and search the data quickly and get clear results. The format of the output will also vary; if they are looking for a top track, the output will be a song. The output could be in the form of a playlist if they are searching for Top 25 or a playlist based on a genre, for example. Also, the app made online could link to the song on YouTube or a music player online. The layout of the web app will have inputs for the user and another section for searching the database. Users will enter information about recently listened to songs/playlists such as artist, album, genre, track name, and the last time listened (will be set to current time/day unless they want to change it).

To create this web app, I will be using HTML and CSS for the front end, and MySQL and PHP to manage the database and queries. To keep up to date information about most played for the day or week, back-ups should be frequent - end of every day for example. The entries will consist mainly of ints and varchars but will also have a datetime entry for day and time the song was last played. The app will dynamically update a selection input for options of artists/albums/genre as the database grows. The options for this input will also have an "other" option with a textarea to enter a new

artist/album/genre. Since this web app runs on user inputs, the security from SQL Injection will be a priority. The storage for this data will depend on the user input amount, in another assignment using a subset of the Million Song Dataset (10,000 songs) the data took about 2 MB. For this assignment, I would assume a user could input about the same amount so storage should be around 2MB as well.