# References

**Dataset (NFL Penalties Data)**

<https://www.kaggle.com/datasets/mattop/nfl-penalties-data-2009-2022-season/data?select=games.csv>

**External Libraries:**

Java Swing

**Installation Instructions:**

Unzip the folder. Open up your MySQLWorkBench. The two SQL scripts in the folder will create the players and log tables. After they are created, right click the tables and select Table Data Import Wizard. For the log table, use log.csv and make sure the columns match before executing. Similar for players, use the players.csv and make sure columns match. The tables should now have data.

Open the unzipped folder inside any IDE that you use for Java.

Replace these lines with info for your own mySQL server:

private static final String DB\_URL = "jdbc:mysql://localhost:3306/nfl\_penalties";

private static final String USER = "root";

private static final String PASS = "Y9pq82020!";

Once you see your folder in the IDE, run the program MainApp.java. For example, in Visual Studio Code, right click the java file and click ‘Run Java”.

**Usage Instructions:**

There are two main places to search for data. You are able to search the players table of penalties or the games table. The top half of the application is to search players. Players names must be entered in the format of firstInitial.lastName. For ex, Tom Brady would be T.Brady. There is also an option to enter a year when searching a players penalties, this is optional. After entering the parameters you want, select ‘Search for Player Penalties’. Leaving it as ‘All’ selects all years. You are also able to write permanent data to the players table. This is done right below where you search, in the row containing the ‘Write data’ button. On the bottom half of the application you are able to search the games data. The first parameter is the date of the game in the form YYYY-MM-DD. Second is the home teams city, and third is the away teams city. You may use a combination of the parameters as you wish.