Installation Instructions

This is a database where one can go to query information and statistics about baseball. It is written in Java and uses Swing for the GUI. To run this, one must install Eclipse. To install Eclipse IDE, go to <https://www.eclipse.org/downloads/packages/installer> and follow the instructions on the installer. When your Eclipse workspace is installed, go to File > Import > General > Existing Projects Into Workspace. This will allow you to view the code and run the project.

Secondly, make sure MySQL Server and MySQL Workbench are installed and working. Thirdly, go to Kaggle and download the data as a CSV file (linked in the references section below). Fourthly, import the CSV file in MySQL Workbench using the Table Data Import Wizard, importing all fields as their default data types. Finally, go to line 26 of DBC.java and change the name of the connection to "jdbc:mysql://localhost/baseball?"+ "user="+username+"&password="+password. The query statement in DBC.java is simply to test the data.

Usage Instructions

* Select Table: This dropdown allows you to select the table from which you would like to pull data. To start off with, there are two tables: fielding and batting.
* The “Query” button is what you push when you would like to execute a query. No code must be written for this. If no fields below are filled out, then the full table will show up in the area on the bottom third of the window.
* The filters (labeled Filter 1 – Filter 5) are the columns that you can choose to filter by.
* The “with value” box is for specifying **specific** values (e.g., you are looking for a player with exactly 81 home runs).
* The “in range” boxes allow you to specify a **range** of values rather than a specific value (e.g., you are looking for a player with a *playerID* within range “aaaaaaa” to “bbbbbbb”.
* In the analysis section, a player can create a new table in the area below by selecting the best batter in a certain position on a certain team (based on either batting average, runs batted in (RBI) or slugging percentage (SLG), or they do not have to select any of these and can leave them blank. It will automatically order the players by the selected statistic.
* To run the analysis and create the new table, press “Create Table”.

Resources:

* Dataset: <https://www.kaggle.com/datasets/open-source-sports/baseball-databank/data>
* MySQL Server: <https://dev.mysql.com/downloads/mysql/>
* Eclipse IDE: <https://www.eclipse.org/downloads/packages/installer>
* Eclipse WindowBuilder: <https://projects.eclipse.org/projects/tools.windowbuilder>
* ChatGPT: chat.openai.com (used for repetitive tasks and boilerplate code).