Links

All files can be find in the GitHub link here

Summary

The purpose of this project to create an application that user can use to search some of the information for Pokémon. We are also logging the history of what the user search into the Google SQL database.

Introduction

The motivation of this project is like what has been stated above, as we are looking for a way for user to easily look information regarding Pokémon and their types.

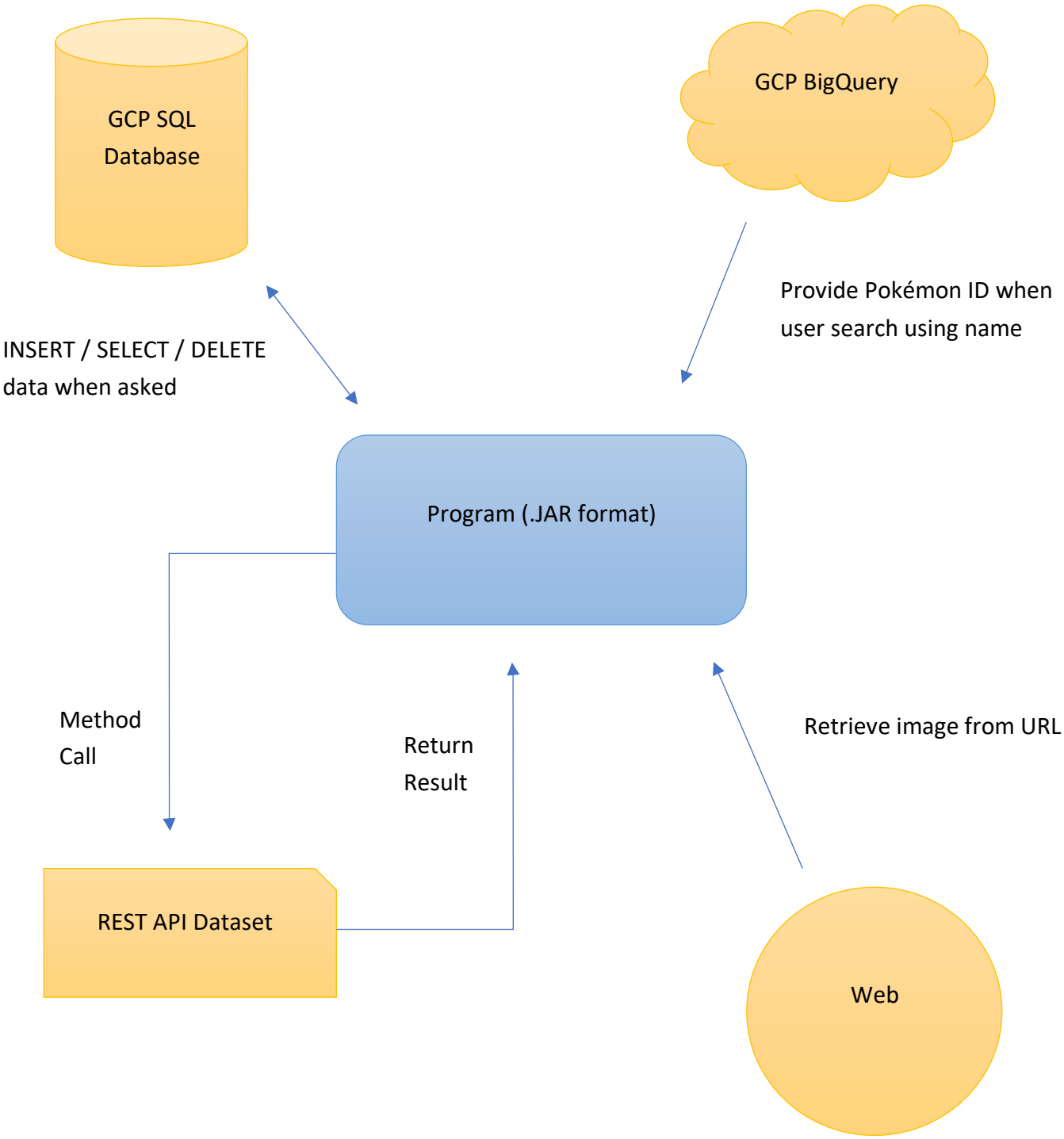
The program allows user to search Pokémon through their pokedex ID or name. It will show the color of the Pokémon, its type and from which Pokémon it evolved from. The user can also look for specific details about Pokémon type and the strengths and weaknesses of the particular type against other types of Pokémon.

While the project is not something that was created out of necessity, we recognized the existence of people who are very enthusiastic about Pokémon and how for many of them, there are only so many ways to learn about the details of Pokémon without using a program like what we have created.

Related Work

The API source where we took our data from allows user to search through their database using URL, but it does not have the fluidity of an actual application.

Software Design

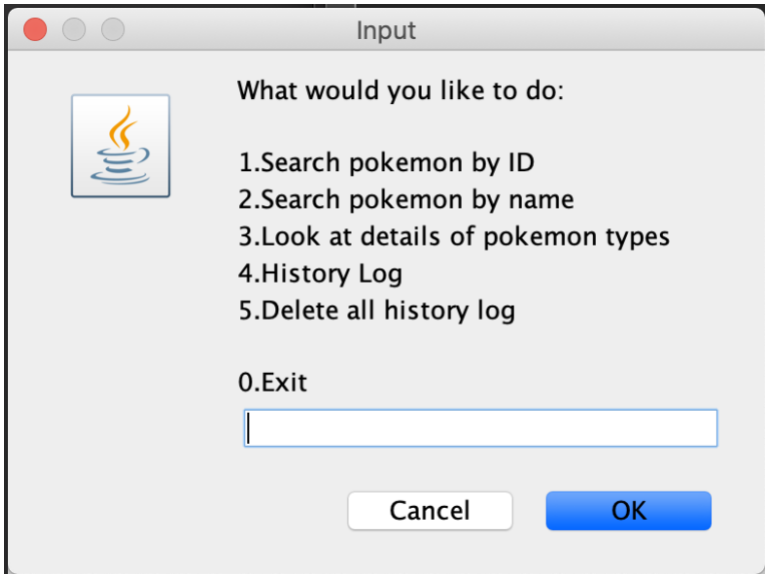


Implementation

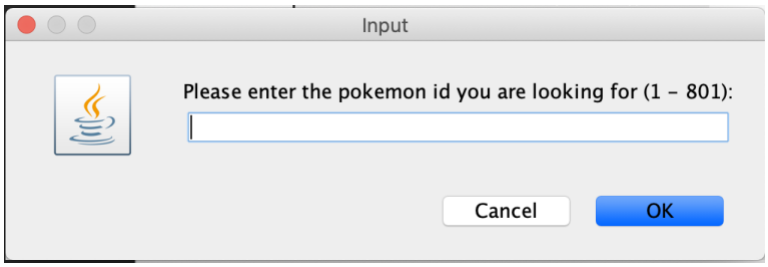
1. Find the API that you would like to use and their Maven dependencies links.
2. Create a new Maven project in Eclipse EE
3. Create new Java class
4. Copy the dependencies of the API into the pom.xml file in your project
5. Look up for Pokémon csv that contains the name of the Pokémon and their pokedex number
6. Upload the csv into your Google Cloud Platform BigQuery
7. Use the link here to integrate your BigQuery into Java
8. Go to Google Cloud Platform SQL and create your instances along with your database.
9. Create your connection from GCP SQL to your java using standard JDBC connection to SQL server
10. Create your database table so that it is available to be used by the application.
11. Create your method to search for Pokémon with ID. This requires you to retrieve data from the Pokémon API
12. Create your method to search Pokémon with name. It requires you to search the BigQuery using SELECT statement and get the Pokémon ID. Afterwards, we can use the search Pokémon with ID that we have created previously.
13. Create method to search Pokémon type.
14. For each of these methods, record the user input and then log them into the Google SQL table using INSERT statement.
15. Create a method that contains the statement that allows user to delete the history log
16. Export your .java file into a runnable JAR, select the option to the package all the libraries into the JAR itself.

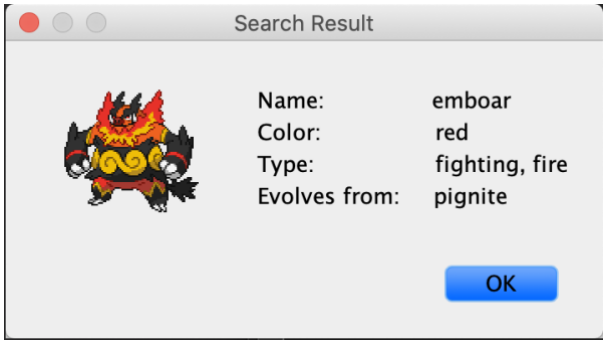
User Manual

1. Opening Application

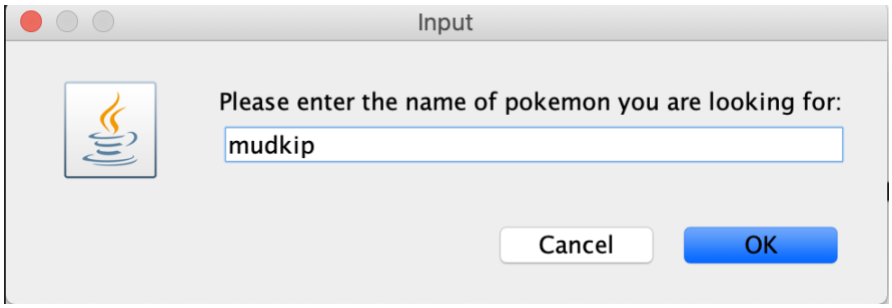


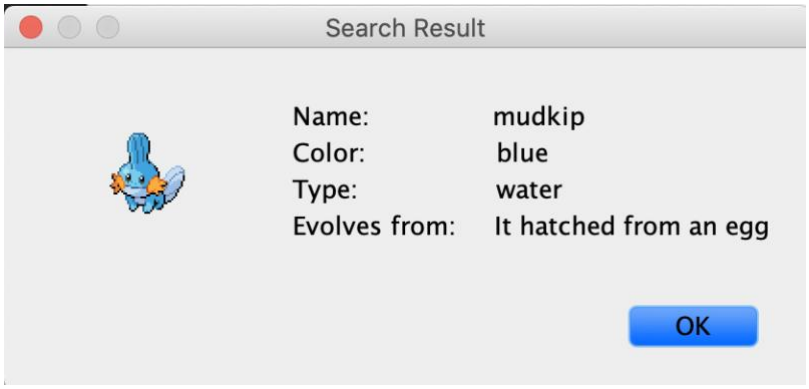
2. Search Pokémon by ID



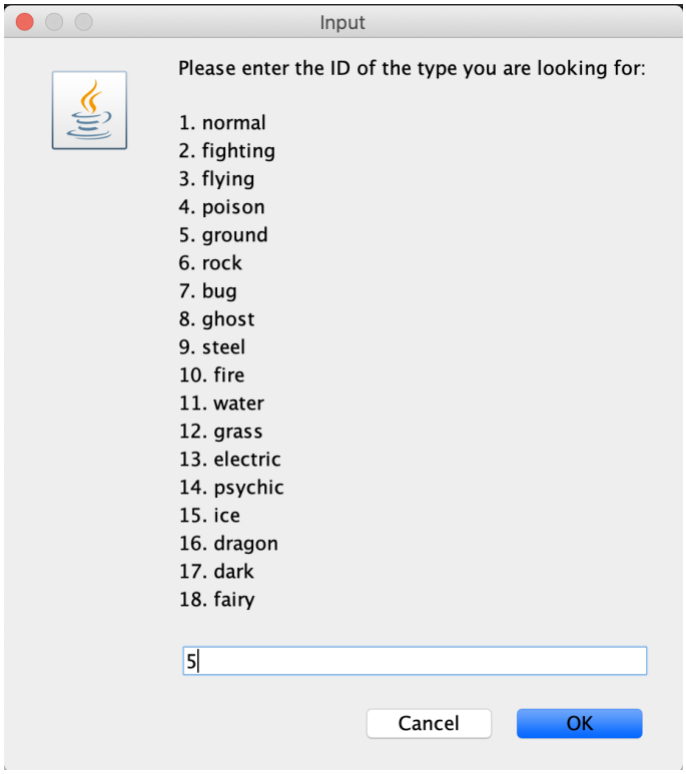


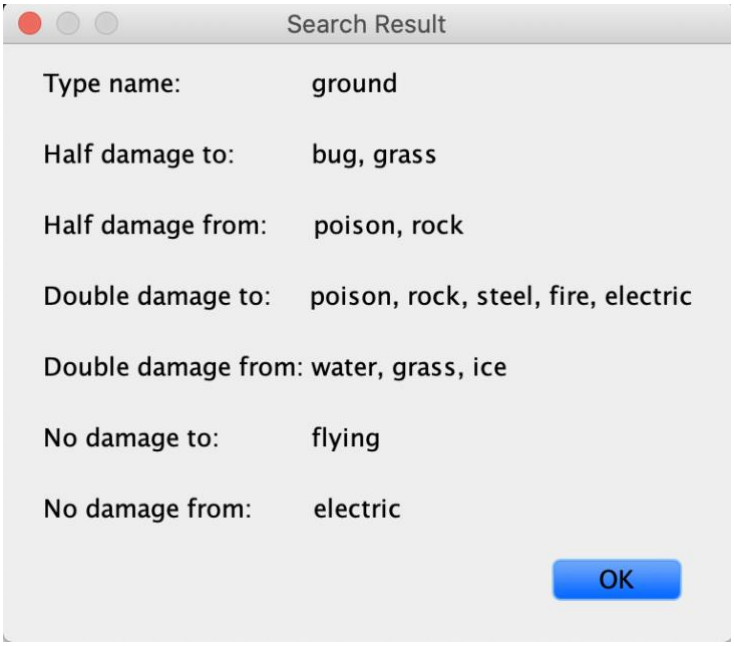
3. Search Pokémon by name



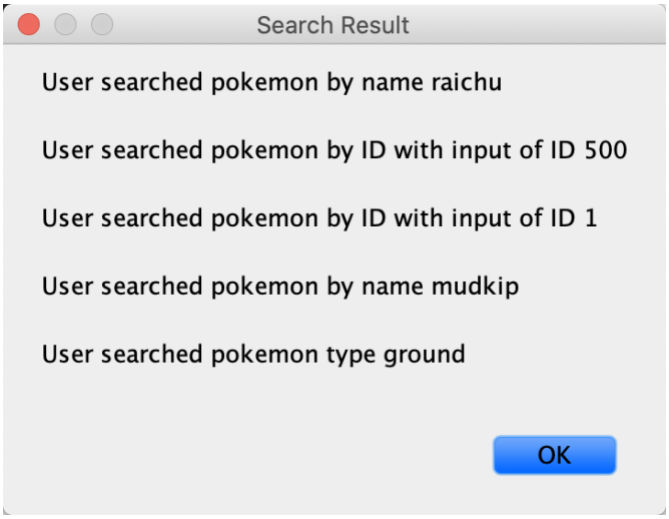


4. Looking at Pokémon types

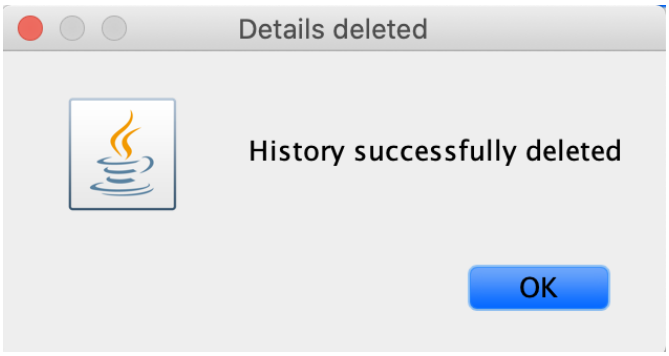




5. History Log



6. Delete history log



References

1. https://cloud.google.com/bigquery/docs/reference/libraries#client-libraries-install-java
2. https://www.javatpoint.com/example-to-connect-to-the-mysql-database
3. https://www.w3schools.com/sql/sql_insert.asp
4. https://pokeapi.co
5. https://www.geeksforgeeks.org/establishing-jdbc-connection-in-java/