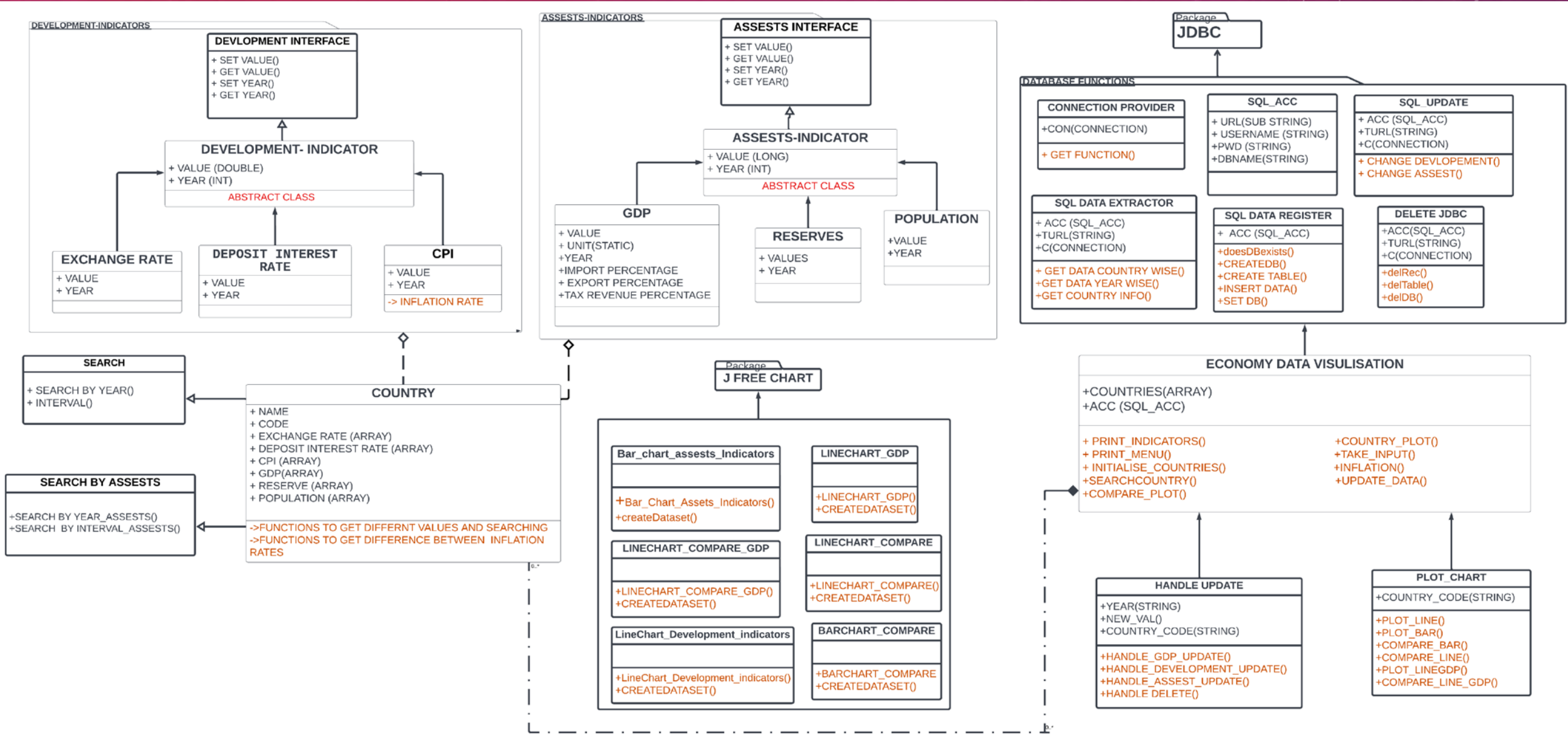# ECONOMY DATA VISUALIZATION

A TOOL TO VISUALIZE THE ECONOMY

OBJECTIVE

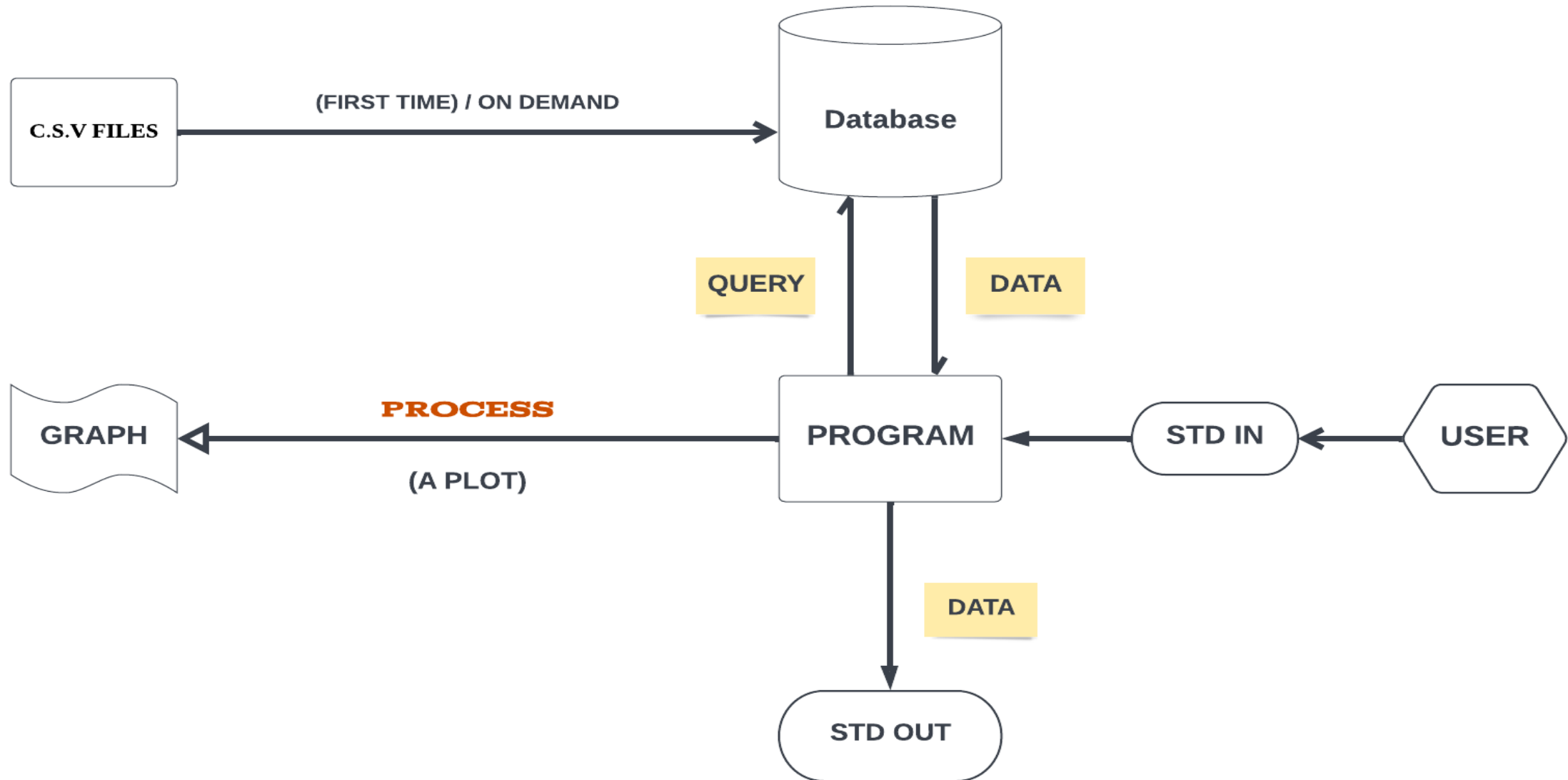- The main objective of this project is to create a software which can explain the complex parameters of economy to normal people easily using data visualization technology.

- This project will have many function to compare data of different economies as well as of different era.

- Apart from visualization this project will have many functions to add, delete and modify data.

UML DIAGRAM OF PROJECT

WORKING OF PROGRAM

TEAM MEMBERS AND THEIR ROLES

1)AARAV NIGAM **(S20210010002)**

→ Schema Structuring,
- I designed the whole structure of the Project for proper and smooth functioning.
- I distributed specific roles to each collaborator so that we always work in sync.

→ Implementing The UI Classes,
- I implemented the classes which make User Interaction easy and smooth. It includes the following classes:
a)Economy Data visualization Class,
b) Plot Chart Class,
c)Handle Update Class.

→ Integrating ,
- Our project was divided in 3 things:
a)Database Handling
b)Graph Plotting
c)Objects with Functions to handle data

---My main purpose was to integrate all these 3 sections so that these different subdomains can work together in sync.

2) PARTH BHANDARI (S20210010170)

→ GRAPH PLOTTING SCHEMA,
  - Using Jfree chart and Swing for implementing Bar graph and Line chart.
  - Modifying Dataset to implement comparisons.
  - Implementing the graph plots for Import, Export, and Tax revenue for a specific GDP.
  - Updating the plot name and description on the basis of provided data.

→ GENERIC CLASS IMPLEMENTATION,
  -Problems faced in typecasting subclass as superclass (in method parameter).
  - Solution of above problem using Generic classes(Wildcards).

→ Schema Structuring,
  -Helped in designing the Schema (Pillars of OOPS part).

3) PRATYUSH SINGH (S20210010183)

→ **Handling Database Implementation,**
  - My work was establishing a connection between our project and MySQL and managing DB credentials.
  - Creation of DB schema and Tables with all the necessary columns.

→ **Handling Data Import from CSV files,**
  - Inserting data from CSV FILES using Prepared Statement Class.
  - It also involved extracting data from MySQL in all necessary formats required by other team members to work with.

→ **Implementing Functions to Update Data**
  - Updating Classes and DB tables.

4) Mohd. Rizwan (S20210010150)

→ Managing Packages,
          - Made two Packages Assets Indicators And development Indicators. These are some parameters which
            determine country economy.
          - Made Three Interfaces and Implementing in a different packages.
→ Creating major Classes and Functions,
          - Made Two Abstract Classes; one in Asset Indicator and other in Development Indicator packages.
          - Made a Country Class by using Object Composition .
          - Typecasting of a variable.

5)Rathod Harshan (S20210010189)

→Cleaning CSV,
- The CSV files downloaded from world bank website contains lots of unnecessary data, removing them is a very important step for proper database implementation.

→Assets Indicator,
- I wrote the code of Assets Indicator package that holds data with long values and I helped in writing its respective functions.

→Deletion From Database,
- Made a delete function to implement JDBC which can delete records, tables, and databases.

→Presentation Preparation,
- I made the presentation with all the flowcharts for better understanding for the user.