INTERNATIONAL DEBT STATISTICS

DETAILED PROJECT REPORT

PROJECT DETAILS

Project Title	**Analyze International Debt Statistics**
Technologies	**Business Intelligence**
Domain	**Finance**
Project Difficulties level	**Intermediate**
Tools used	**Jupyter Notebook, tableau**

Objective and Benefits

■ **Objective:**

The goal of this project is to analyze international debt data collected by The World Bank.

■ **Benefits:**
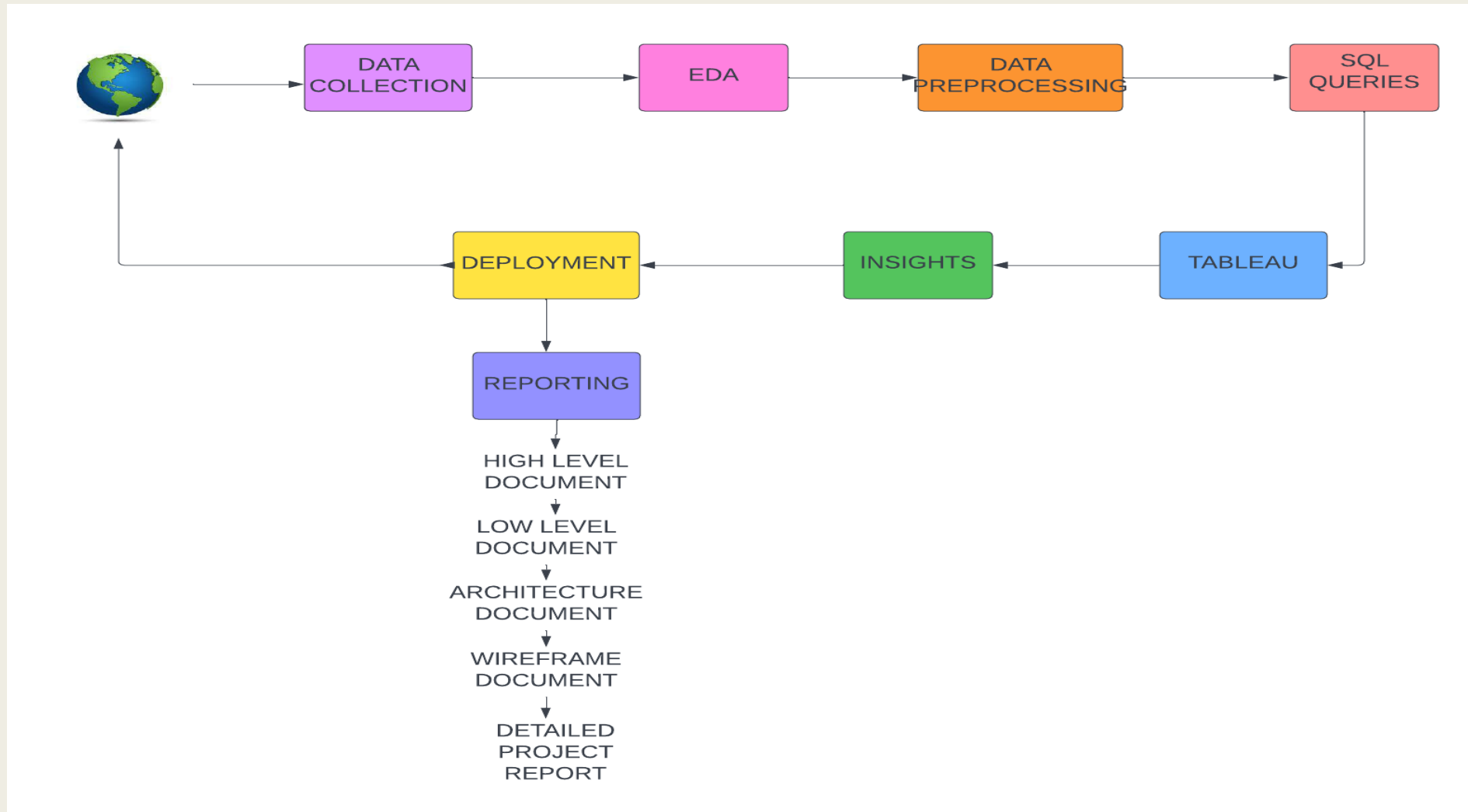
Gives better insight of international debt.

Helps in easy flow for managing resources.

Data visualizations will enhance the understanding of the debt data.

The data analysis will reveal some common and unique patterns in the dataset related to international debt.

Architecture:

■ **Data collection:**

The dataset used for analysis is international debt statistics which is provided by The World Bank. It contains both national and regional debt statistics for several countries across the globe.

■ **EDA and Data preprocessing :**

Exploratory Data Analysis is carried out on the dataset to get deep insights about the data.

Then data preprocessing is done since the dataset contain missing values, outliers and other dublicate values.

■ **SQL queries:**

SQL to access, read, manipulate, and analyze the data stored in a database and generate useful insights which allows to prepare reports and to take decisions.

■ **Tableau:**

The dataset is loaded into the tableau desktop software and data analysis is performed for various parameters provided in the dataset.

Based on the patterns, we try to draw approximate inferences about the data provided on the basis of visualizations created.

- **DEPLOYMENT:**

   All the different worksheets that have been created are compiled together into a Tableau workbook. Each worksheet is named based on the type of visualization performed in the chart.

   When we save all the worksheets on Tableau software, it connects to the Tableau Public Software via personal email id and credentials. The dashboard is uploaded onto the Tableau Public Software on personal profile and this is visible to public.

INSIGHTS

- The international debt dataset contains 77,384 records and 65 fields.

- The number of distinct countries shown in Data are 136. But the data also contains some regions like East Asia & pacific, etc,. By excluding those regions the total number of distinct countries are 126.

- China is the country with the highest debt amount.

- DT.AMT.DLFX.CD is the series code for principal repayments. China is the country with the highest amount of principal repayments.

Q & A

Q 1) What's the source of data?

      The Dataset was taken from iNeuron's Provided Project Description Document.

Q 2) What was the type of data?

      The data was the combination of numerical and Categorical values.

Q 3) What's the complete flow you followed in this Project?

      Refer the architecture diagram in the previous silde.

Q 4)How is data preprocessing done?

      The data preprocessing is done by removing missing values and outliers and other duplicate values.

Q 5) What were the libraries that you used in Python?

Pandas, numpy, sqlite3, itertools ,matplotlib.pyplot were the libraries used in this project.

Q 6) what is this project is about?

In this project we analyse international debt to get better insights about the statistics and visualize them for easy understanding.

THANK YOU.