Analyzing Google App Store

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Objective:

Finding key metrics and factors and show the meaningful relationships between attributes present in the dataset.

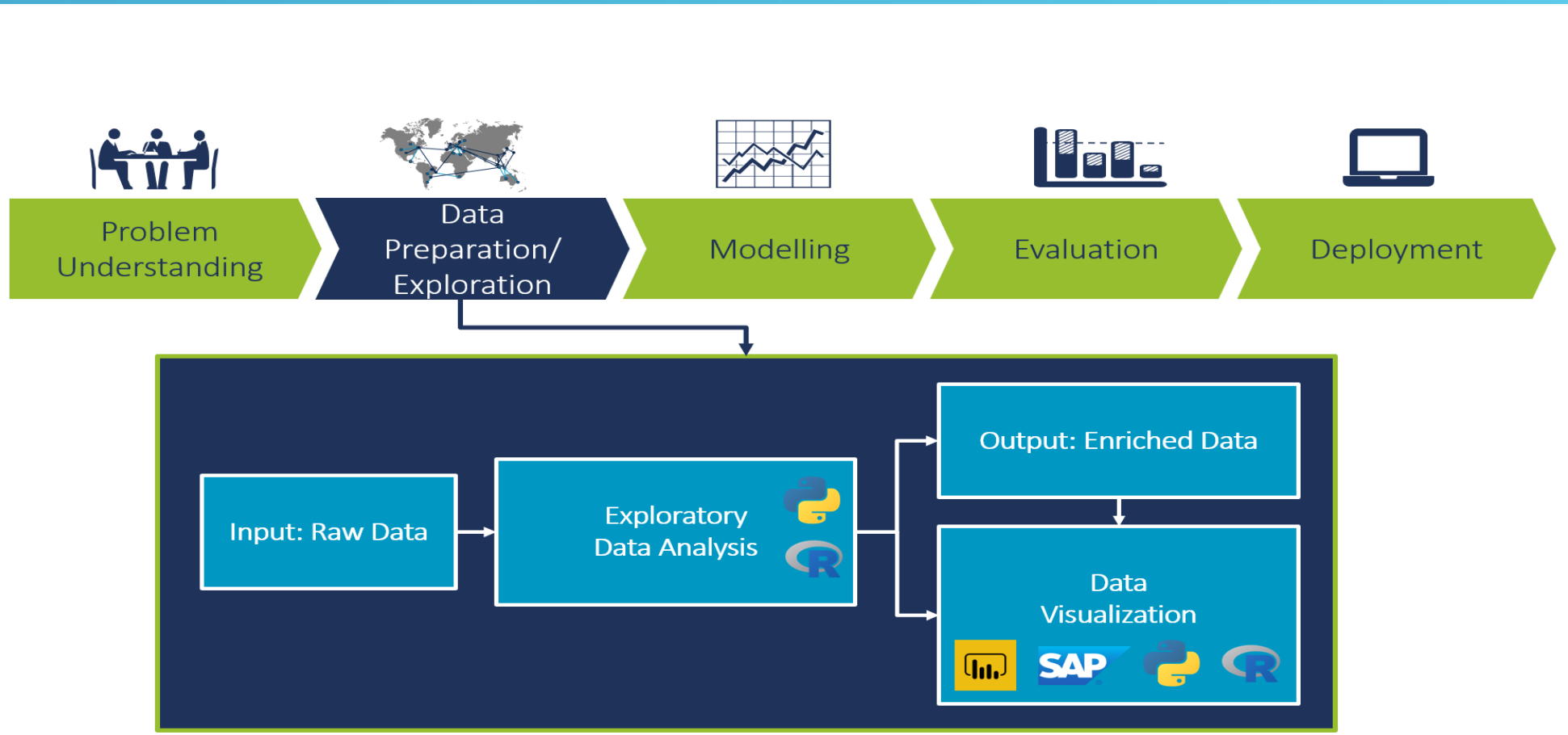
Benefits:

- Most famous app in the category
- Average app size
- Relation between category and reviews ➢ Installs in every category. ➢ Content rating and count.
- Top genre and their number of installs.
- Distribution of rating
- Ratio of paid and free apps in each category ➢ Sentiment review count in each category.

Data Sharing Agreement :

- Sample file name (Google app store, Google app store user review)
- Column names(App, Category, Review, Size, Install, Type, etc.)
- Length of time stamp(6 digits)
- Column data type(Object, Float64, int64)

Architecture



Data Validation and Data Transformation :

- Name Validation - Validation of files name as per the DSA.
- Number of Columns – Validation of number of columns present in the files.
- Name of Columns - The name of the columns is validated and should be the same as given in the schema file.
- Data type of columns - The data type of columns is given in the schema file
- Null values in columns - If any of the columns in a file have all the values as null or missing it is filled or cleaned by python codes mainly with the help of Pandas and Numpy library.

Data Insertion in Database:

- Table creation :- Table name “play store apps” is created in the database for inserting the files. If the table is already present then new files are inserted in the same table.
- Insertion of files in the table - All the files in the “Good Data Folder” are inserted in the above-created table. If any file has invalid data type in any of the columns, the file is not loaded in the table.

- Data Preprocessing:
  - Performing EDA to get insight of data like identifying distribution , datatype of each attributes, duplicates handling etc.
  - Check for null values in the columns. If present impute the null values.
  - Encode the categorical values with numeric values.
  - Perform suitable cleansing and transformation operations..

- Data Import to Database:
  - The accumulated data from cleaned dataset is exported in csv encoded in UTF-8 format for running MySQL queries.

- Visualization:
  - Power BI used for data modelling and visualization of apps and sentiment of users.