**3. Technical Requirements Document (TRD):**

* **Data Sources:** Mall Customers Dataset
  + **Link:** <https://www.kaggle.com/datasets/shwetabh123/mall-customers>
* **Technologies:** Python, Matplotlib, Seaborn, Scikit-learn, Power BI
* **Architecture:**
  + Data preprocessing: Importing the data and cleaning the data is a vital part in the preprocessing of data.
  + Exploratory Data Analysis (EDA): It helps in understanding various patterns and relationships in dataset.
  + Clustering: Dividing the customers based on their characteristics and purchasing behaviour.
  + Visualization: Visualizing the data in the form of various plots in a concise manner for the organisation to understand the trends in the purchase of products by customers.
* **Data Flow:** Import data -> Clean data -> Analyse data -> Segmentation of customers -> Visualizations