Project Design Phase-II
Technology Stack (Architecture & Stack)

Date	24 June 3035
Team ID	LTVIP2025TMID50532
Project Name	Cosmetic Insights : Navigating Cosmetics Trends and Consumer Insights with Tableau
Maximum Marks	4 Marks

Technical Architecture:

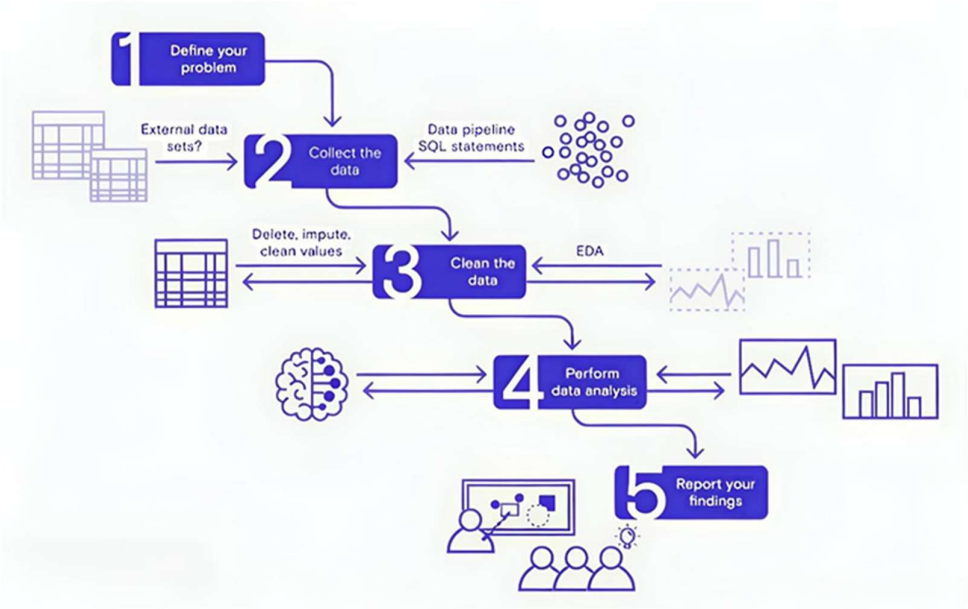

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web interface for viewing dashboards and insights	HTML, CSS, JavaScript, Tableau Public Embedding
2.	Data Processing Logic	Data cleaning & preprocessing scripts	Python (Pandas, NumPy)
3.	Data Storage	Stores raw data and cleaned datasets	CSV files, Google Sheets, or simple SQL/NoSQL DB (e.g., MySQL, MongoDB)
4.	Visualization Layer	Creates interactive visual dashboards and charts	Tableau Public / Tableau Desktop
5.	Infrastructure (Server / Hosting)	Hosts any scripts and serves embedded dashboards	Local Machine or Cloud VM (Render, Railway, or simple shared hosting)

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Uses open-source Python libraries for data processing	Python (Pandas, NumPy)
2.	Security	Secure storage and access to Tableau dashboards with controlled sharing	Tableau permissions, secure hosting
3.	Scalable Architecture	Justify the scalability of architecture (3 – t ier, Micro-services)	Technology used
4.	Availability	Dashboards accessible anytime via Tableau Public or Cloud link	Tableau Public, Render, Railway
5.	Performance	Dashboards use Tableau Extracts for faster load; small datasets for demo	Tableau Data Extracts, Python ETL