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

Date	19 June 2025
Team ID	LTVIP2025TMID51504
Project Name	Plugging into the Future: An Exploration of Electricity Consumption Patterns Using Tableau
Maximum Marks	4 Marks

Technical Architecture:

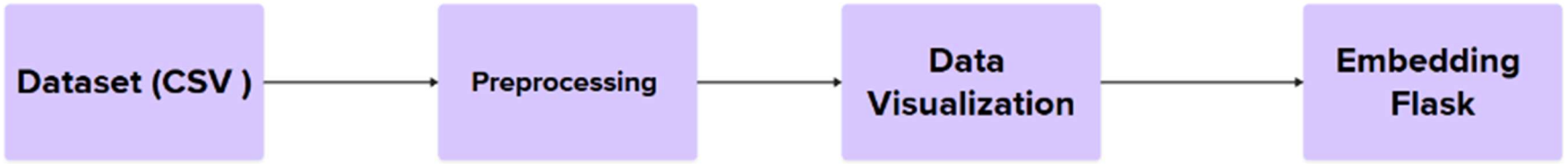

Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	Web interface to display dashboard and story	HTML, CSS, Bootstrap, Flask
2.	Application Logic-1	Logic for a embedding dashboard / Story	Python
3.	Application Logic-2	Dashboard creation and interactivity	Tableau Public
4.	Database	Stores electricity dataset	SQLite / MySQL.
5.	File Storage	File storage requirements	CSV / Excel (Local Filesystem)
6.	External API-1	Embed Tableau Story & Dashboard	Tableau Public Embed URL
7.	Infrastructure (Server / Cloud)	Deployment platform	Local System / Render / GitHub Pages

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Used for frontend and backend development	Flask, Bootstrap, Jinja2
2.	Security Implementations	Restrict access to edit/modify Tableau dashboards	Tableau Public privacy settings
3.	Scalable Architecture	Can add more dashboards or datasets as usage grows	Modular Flask app with dynamic embed
4.	Availability	Dashboard accessible 24/7 through hosted link	Tableau Public + Web Hosting
5.	Performance	Optimized charts for faster rendering & filtered insights	Tableau Optimized Dashboard Design