

## Project Design Phase-II

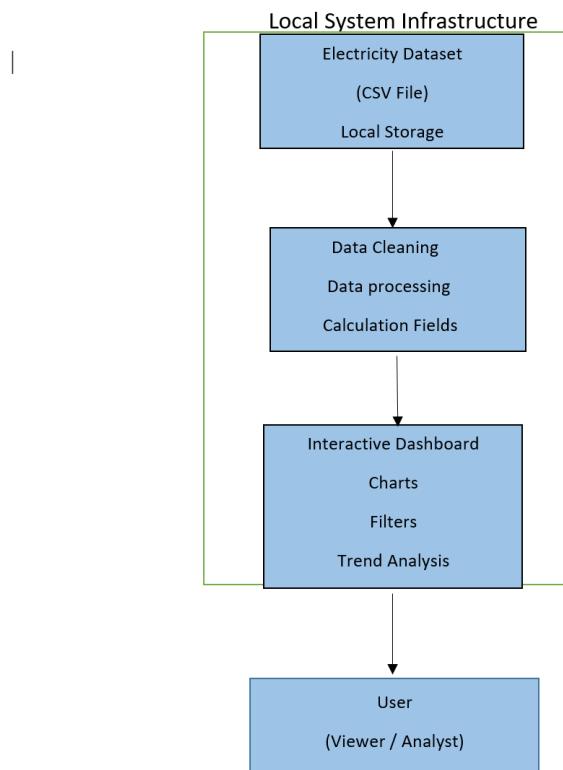
### Technology Stack (Architecture & Stack)

Date	09 February 2026
Team ID	LTVIP2026TMIDS80901
Project Name	Plugging in to the future : An exploration of electricity consumption patterns
Maximum Marks	4 Marks

#### **Technical Architecture:**

The Deliverable shall include the architectural diagram as below and the information as per the table1 & table 2

**Example :** Technical Architecture for Electricity Consumption Analysis Dashboard



S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	python
3.	Application Logic-2	Logic for a process in the application	—
4.	Application Logic-3	Logic for a process in the application	—
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on Cloud	—
7.	File Storage	File storage requirements	Local File system
8.	External API-1	Purpose of External API used in the application	—
9.	External API-2	Purpose of External API used in the application	—
10.	Machine Learning Model	Purpose of Machine Learning Model	Tableau
11.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud Local Server Configuration: Cloud Server Configuration :	Local

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Tableau desktop, Flask, Vs Code
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	—
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	—

<b>S.No</b>	<b>Characteristics</b>	<b>Description</b>	<b>Technology</b>
4.	Availability	Justify the availability of application (e.g. use of load balancers, distributed servers etc.)	Local Deployment
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Tableau Optimization