

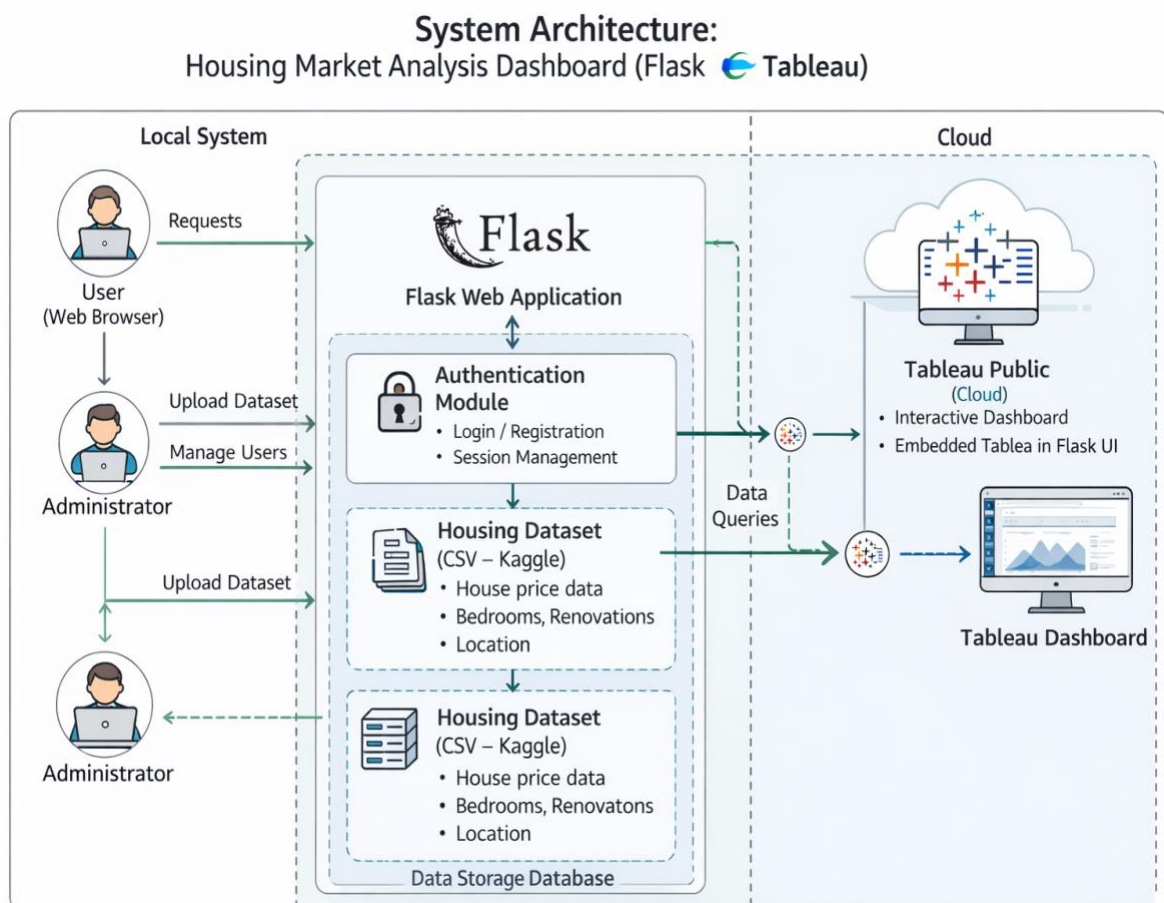
# Project Design Phase-II

## Technology Stack (Architecture & Stack)

Date	20 February 2026
Team ID	LTVIP2026TMIDS35196
Project Name	Empowering India: Analysing the Evolution of Union Budget Allocations for Sustainable Growth
Maximum Marks	4 Marks

### Technical Architecture:

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



S.No	Component	Description	Technology
1	User Interface	Web UI where user logs in and views dashboard	HTML, CSS, Bootstrap
2	Application Logic-1	Handles login, routing and request processing	Python (Flask)
3	Application Logic-2	Data filtering and processing logic	Python (Pandas)
4	Application Logic-3	Embedding and displaying Tableau dashboard	Tableau Public (Embed Code)
5	Database	Stores user login details	SQLite
6	Cloud Database	Not used in this project	Not Applicable
7	File Storage	Stores housing dataset CSV file	Local File System
8	External API-1	Interactive dashboard visualization service	Tableau Public
9	External API-2	Gmail login (if implemented)	Google OAuth API
10	Machine Learning Model	Not used in this system	Not Applicable
11	Infrastructure (Server / Cloud)	Application runs locally and connects to Tableau Cloud	Local Server (Flask) + Tableau Public

**Table-2: Application Characteristics:**

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Backend framework used for development	Flask (Python)
2	Security Implementations	Secure login, password hashing, session control	Flask Session, Werkzeug Security
3	Scalable Architecture	Modular design allowing future data expansion	Flask Architecture
4	Availability	Accessible when server is running	Local Server / Cloud Hosting
5	Performance	Fast dashboard loading and efficient filtering	Pandas + Tableau Rendering

#### References:

<https://c4model.com/>

<https://developer.ibm.com/patterns/online-order-processing-system-during-pandemic/>

<https://www.ibm.com/cloud/architecture>

<https://aws.amazon.com/architecture>

<https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20c9fda90d>

