

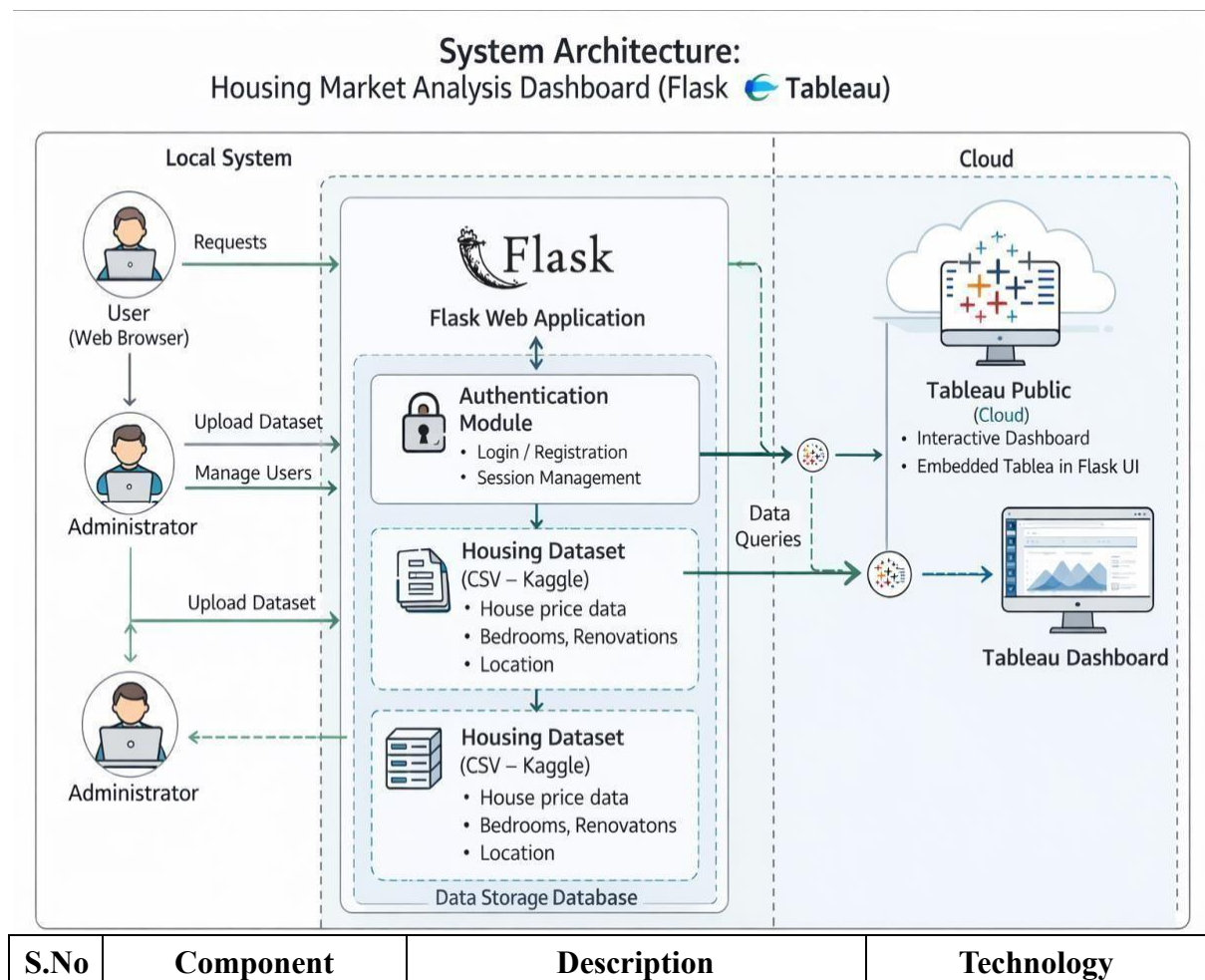
Project Design Phase-II

Technology Stack (Architecture s Stack)

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|---------------|--|
| Date | 20 February 2026 |
| Team ID | LTVIP2026TMIDS35982 |
| 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 C table 2



| | | | |
|----|---------------------------------|--|---------------------------------------|
| 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-2d20cGfdaG0d](https://medium.com/the-internal-startup/how-to-draw-useful-technical-architecture-diagrams-2d20cGfdaG0d)