

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

| | |
|---------------|--|
| Date | 10 February 2026 |
| Team ID | LTVIP2026TMIDS90490 |
| Project Name | Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau |
| Maximum Marks | 3 Marks |

Technical Architecture:

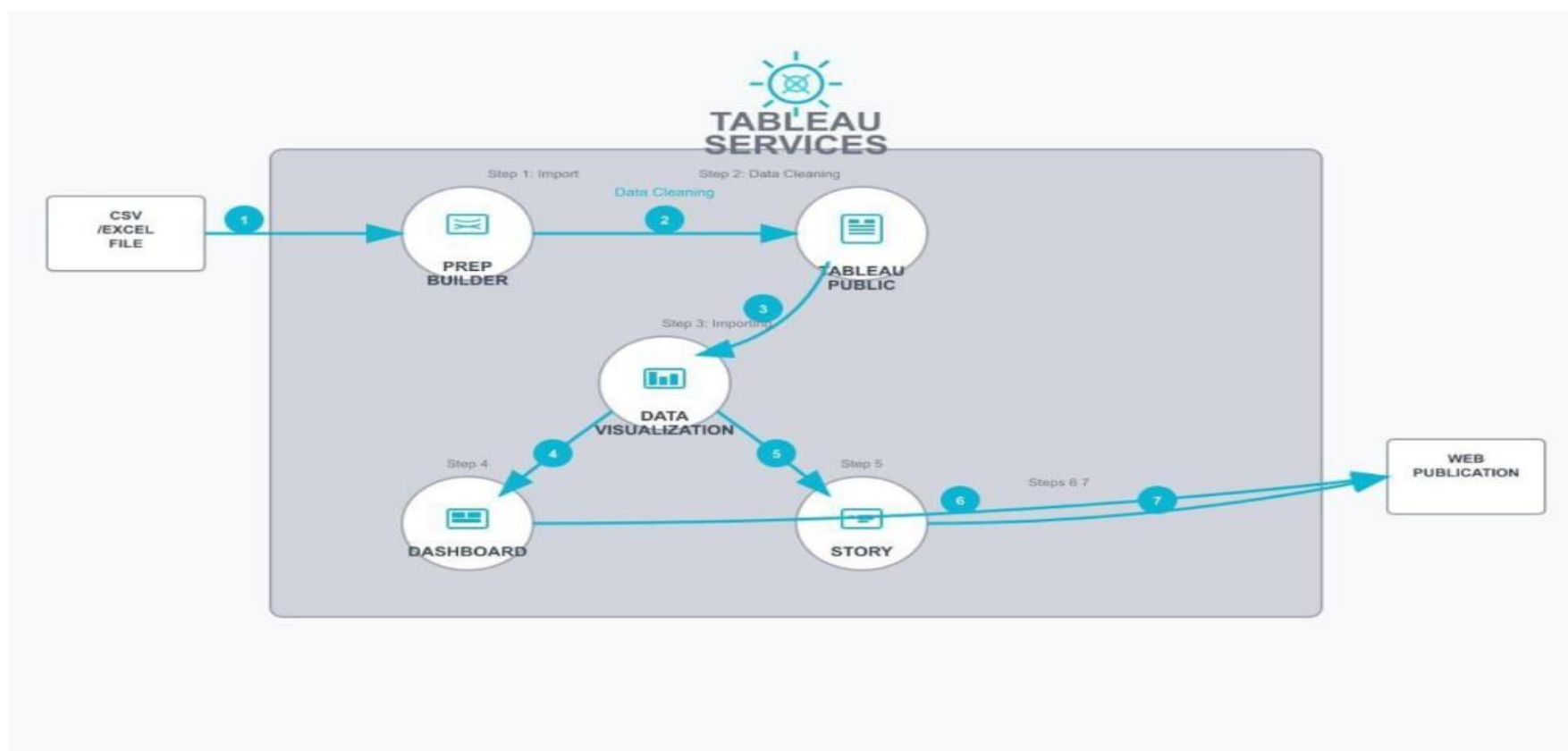


Table-1 : Components & Technologies:

| S.No | Component | Description | Technology |
|------|---------------------------------|--|---------------------------------|
| 1. | User Interface | How user interacts with application e.g. Web UI, Mobile App, Chatbot etc. | Flask |
| 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. | - |
| 6. | Cloud Database | Database Service on Cloud | - |
| 7. | File Storage | File storage requirements | Local Filesystem |
| 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. | Tableau | Purpose of Machine Learning Model | Tableau Desktop/Public 2025.3.2 |
| 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 public, Flask, VS code, Tableau prep Builder |

| S.No | Characteristics | Description | Technology |
|------|--------------------------|---|----------------------------------|
| 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) | - |
| 4. | Availability | Justify the availability of application (e.g. use of load balancers, distributed servers etc.) | Available whenever server runs |
| 5. | Performance | Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc. | Fast data processing and loading |