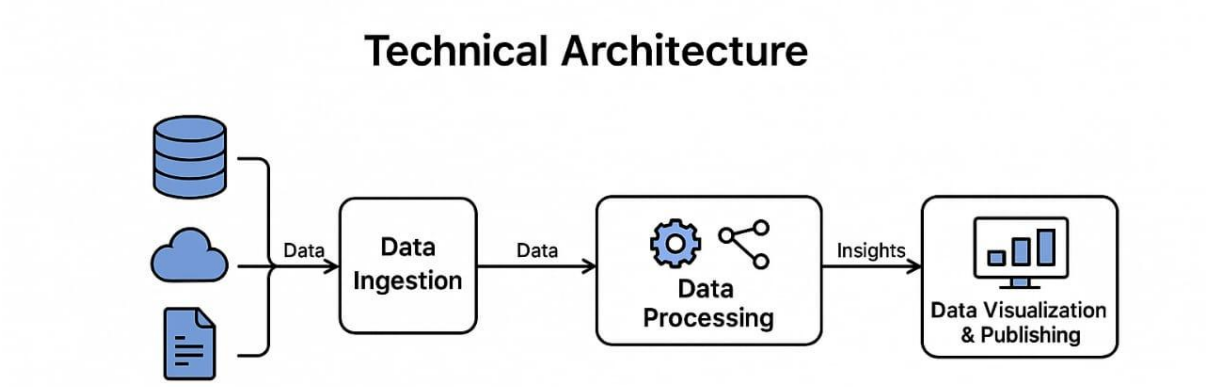
Project Design Phase-II

Technology Stack (Architecture & Stack)

Date	28 June 2025
Team ID	LTVIP2025MID48289
Project Name	Visualising housing market trends: An analysis of sales prices and features using tableau
Maximum Marks	4 Marks

Technical Architecture

The deliverable shall include the architectural diagram and the information as per the table below. This architecture supports data ingestion, processing, visualization, and publishing of insights for housing market trends analysis.



Component	Description
Data Sources	Various sources of housing market data, including databases, cloud services, and files
Data Ingestion	Components or services to import and collect data
Data Processing	Components or services to transform, analyze, and store data
Data Visualization & Publishing	Components or services to visualize and share insights

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Table-1: Components & Technologies

S.No	Component Description	Technology	Remarks
1	User Interface	Tableau Public / Tableau Desktop	Interactive Dashboards for Visualization
2	Application Logic	Tableau Calculated Fields	Feature engineering and derived metrics
3	Database	CSV / Excel files	Structured housing data input
4	Cloud Database	Google Drive / OneDrive (optional)	For shared dataset storage
5	File Storage	Local File System	Stores source and processed data
6	Infrastructure (Server / Cloud)	Local System / Tableau Public	Dashboard development and publishing

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Table-2: Application Characteristics

S.No	Characteristics	Description	Technology
1	Open-Source Frameworks	Frameworks used for data analysis and visualization	Tableau Public
2	Security Implementations	Restricted access to published dashboards, data protection	Tableau sharing controls
3	Scalable Architecture	Flexible to work with large datasets or real-time data via APIs	Tableau & Python scalability
4	Availability	Tableau dashboards hosted online via Tableau Public	24/7 access via cloud hosting
5	Performance	Optimized dashboards using data extracts, filters	Tableau Extract Engine, Browser Cache