

**Project Design Phase**  
**Proposed Solution Template**

Date	27 June2025
Team ID	LTVIP2025TMID49022
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau
Maximum Marks	2 Marks

**Proposed Solution Template:**

S.No.	Parameter	Description
1.	<b>Problem Statement</b>	Real estate stakeholders (agents, investors, policymakers) lack actionable insights into housing market trends due to fragmented or complex data. Manual analysis is time-consuming, and static reports fail to highlight dynamic correlations (e.g., price vs. location, square footage).
2.	<b>Idea / Solution</b>	Develop an interactive Tableau dashboard to visualize: <ul style="list-style-type: none"><li>- Geographic distribution of sale prices (map view).</li><li>- Price trends over time (line charts).</li><li>- Correlations between price and features like bedrooms/sqft (scatter plots).</li></ul> Enable filters (year, region) for on-demand exploration.
3.	<b>Novelty / Uniqueness</b>	<ul style="list-style-type: none"><li>- <b>Dynamic Insights:</b> Combines multiple datasets (e.g., Zillow, census) into a single intuitive interface.</li><li>- <b>AI Integration (Optional):</b> Use Tableau's "Explain Data" to auto-generate trends.</li><li>- <b>Custom Metrics:</b> Calculated fields (e.g., price/sqft, ROI predictions).</li></ul>
4.	<b>Social Impact</b>	<ul style="list-style-type: none"><li>- Empowers homebuyers with transparent market data.</li><li>- Helps policymakers identify affordable housing gaps.</li><li>- Reduces reliance on anecdotal evidence for pricing decisions.</li></ul>
5.	<b>Business Model</b>	<ul style="list-style-type: none"><li>- <b>Freemium:</b> Free dashboard on Tableau Public with premium features (e.g., API real-time data) for enterprises.</li></ul>

		<ul style="list-style-type: none"> <li>- <b>B2B:</b> License dashboards to real estate firms.</li> <li>- <b>Data Partnerships:</b> Monetize curated datasets (e.g., trend reports).</li> </ul>
6.	<b>Scalability</b>	<ul style="list-style-type: none"> <li>- <b>Data Scalability:</b> Supports CSV/API integrations for larger datasets.</li> <li>- <b>User Scalability:</b> Cloud deployment (Tableau Server) handles concurrent users.</li> <li>- <b>Feature Expansion:</b> Add predictive modeling (e.g., future price trends) via Python scripts.</li> </ul>