

Project Design Phase
Proposed Solution Template

Date	27 June 2025
Team ID	LTVIP2025TMID60628
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	ABC Company's analysts and executives struggle with fragmented housing data spread across multiple spreadsheets. This causes time-consuming manual analysis (20+ hrs/week), delayed decisions, and pricing without visual evidence, reducing efficiency and competitiveness.
2.	Idea / Solution description	Create an interactive Tableau platform that integrates housing data and offers: <ul style="list-style-type: none">• KPI dashboards (average price, records, basement area)• Renovation analysis (ROI plots, trend histograms)• Age distribution (pie & donut charts)• Feature analysis (bar charts, heatmaps)• Role-based dashboards (Analysts, Marketing, Executives)• Web access via Flask• Mobile-friendly views
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• Tailored dashboards per role (data depth vs strategic views)• Interactive Renovation ROI Calculator• Age–Feature Correlation Heatmap• Smart filtering (updates all visuals together)• Story mode: guided, presentation-ready insights
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">• 90% time saved for analysts• Data-backed decisions replace gut feeling• 60% improvement in client trust via visuals• Faster market response improves competitiveness

		<ul style="list-style-type: none"> • Non-technical users can access insights easily • Cuts \$50K/year in research consultant costs
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> • Up to \$75K saved annually by streamlining analyst workflow and reducing consultant dependency • Estimated \$200K in improved revenue through data-backed pricing decisions • \$50K+ worth of time savings from faster decisions • Expected ROI ~400% in Year 1 (Projected return: \$325K; Cost: \$80K including dev, training, and maintenance)
6.	Scalability of the Solution	<ul style="list-style-type: none"> • Supports 100–500+ users via cloud scaling • Handles 1M–10M+ records efficiently • Can expand to national housing data • Modular: ready for ML, predictions, external APIs • Fits other markets (commercial, rental) and real estate firms