Project Design Phase Proposed Solution Template

|  |  |
| --- | --- |
| Date | 29 June 2025 |
| Team ID | LTVIP2025TMID50749 |
| Project Name | Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using  Tableau |
| Maximum Marks | 2 Marks |

Proposed Solution:

|  |  |  |
| --- | --- | --- |
| S.No. | Parameter | Description |
| 1 | Problem Statement | The real estate market involves vast and complex datasets on housing features and sale prices. These datasets are often underutilized due to lack of effective visualization, making it difficult for buyers, sellers, and analysts to draw insights or forecast trends. |
| 2 | Idea / Solution Description | Our solution transforms static housing datasets into interactive, insightful visualizations using Tableau. The project involves cleaning and transforming the data, creating calculated fields and KPIs, and developing a dashboard that highlights key trends, comparisons, and location-based analyses. The solution is deployed via a Flask web app. |
| 3 | Novelty / Uniqueness | This project leverages Tableau's powerful visual capabilities to go beyond basic data analytics. By combining calculated fields, condition segmentation, and geographic mapping, the dashboard offers a dynamic exploration of how features like bedrooms, area, renovation, and location influence housing prices. |
| 4 | Social Impact / Customer Satisfaction | This solution enables real estate buyers, sellers, agents, and market researchers to make informed decisions. It improves housing transparency, supports better urban planning, and enhances user engagement with clear visuals and actionable insights. |
| 5 | Business Model (Revenue Model) | This dashboard can be scaled and offered as a subscription-based SaaS tool to real estate companies, market research firms, or housing consultancies. Advanced forecasting modules, API integrations, and custom dashboards can be monetized as premium features. |
| 6 | Scalability of the Solution | The system is designed to be scalable and adaptable. It can incorporate new datasets (like rental trends or economic indicators), extend to new regions or cities, and integrate with ML models for price predictions, thereby offering long-term growth potential. |