Project Design Phase
Proposed Solution Template

Date	24 june 2025
Team ID	LTVIP2025TMID47753
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features
Maximum Marks	2 Marks

✅ **Proposed Solution Template – Housing Trends Visualization**

S. No.	Parameter	Description
1	Problem Statement (Problem to be solved)	There is a lack of an accessible, real-time, and user-friendly platform for analyzing housing market trends. Homebuyers, investors, planners, and policymakers struggle to make data-driven decisions due to fragmented and non-visual data sources.
2	Idea / Solution Description	The proposed solution is an interactive web platform that aggregates housing data from various sources (e.g., Zillow, Census APIs), visualizes pricing and availability trends on maps and charts, and provides predictive analytics to forecast future trends. Users can filter data by location, time range, property type, and more.
3	Novelty / Uniqueness	Unlike typical real estate platforms, this solution focuses on visual intelligence, trend prediction, and open data integration. It combines geospatial visualization (Mapbox/Leaflet), real-time data ingestion, and machine learning models for housing forecasts, delivering more than just static listings.
4	Social Impact / Customer Satisfaction	The platform empowers users to make informed decisions on housing, which is a critical aspect of financial planning and quality of life. It benefits low-income communities by providing free access to housing trends, and helps governments plan infrastructure and housing policies more effectively.
5	Business Model (Revenue Model)	The core platform can be freemium: free for basic features, with premium access for advanced analytics, custom reports, and API access. Revenue can also be generated from B2B partnerships with real estate agencies, urban planning departments, and property developers. Advertisements and sponsorships may also be integrated.
6	Scalability of the Solution	The system is designed using scalable cloud services and modular architecture. It can easily support additional cities, countries, or data types. The backend is capable of processing large datasets, and the frontend is optimized for high-performance rendering even with millions of data points.