# Project Design Phase Problem – Solution Fit Template

Date	23 June 2025
Team ID	LTVIP2025TMID47753
Project Name	Visualizing Housing Market Trends: An Analysis of Sale Prices and Features
Maximum Marks	4 Marks

# ✓ Problem–Solution Fit Template

WHO IS YOUR CUSTOMER?	EXPLORE LIMITATIONS TO BUY / USE YOUR PRODUCT OR SERVICE	HOW ARE YOU GOING TO BE DIFFERENT THAN COMPETITION?
FOCUS ON FREQUENT, COSTLY OR URGENT PROBLEM TO SOLVE	UNDERSTAND THE CAUSE OF THE PROBLEM	TAP INTO, RESEMBLE OR SUPPORT EXISTING BEHAVIOR
DESIGN TRIGGERS THAT FIT REAL LIFE, SPARK ASSOCIATIONS, MAKE IT FAMILIAR	YOUR "DOWN TO EARTH" SOLUTION GUESS © Daria Nepriakhina / IdeaHackers.nl	BE WHERE YOUR
ADD EMOTIONS FOR STRONGER MESSAGE		CUSTOMERS ARE

#### 1. Problem Statement

### **Target Users:**

- Home buyers
- Real estate investors
- Government planners
- Urban developers
- Policy analysts

#### The Problem:

Users lack **real-time**, **interactive**, and **localized housing trend data** to make informed decisions about **buying**, **investing**, **or planning**. Existing platforms are often static, not user-friendly, or do not

integrate multiple data sources such as pricing trends, geographic distribution, or demographic information.

#### 2. Current Limitations in the Market

- Housing data is scattered across various platforms (Zillow, Realtor, Census, etc.)
- Visualization tools are either too technical (e.g., GIS platforms) or too simplistic
- Most platforms don't support trend forecasting, interactive mapping, or custom filtering
- Limited access to open-source, localized housing data for underserved areas

#### 3. Proposed Solution

#### What We're Building:

An **interactive web-based platform** that aggregates, processes, and visualizes housing data trends through maps, charts, and predictive models.

#### **Key Features:**

- In Dynamic dashboards showing price trends, rental rates, supply/demand ratios
- Map-based visualization using Mapbox/Leaflet with geospatial filtering
- **Time-series analysis** to understand trends over months/years
- Predictive analytics using machine learning for price forecasting
- Custom data import/export options for researchers and planners
- **ii** User authentication to save preferences and access premium features

#### 4. Value Proposition

For Whom	Benefit	
Home buyers	Understand when/where to buy based on trend analysis	
Real estate investors	Identify high-return areas using predictive modeling	
Planners & policymakers Use data for urban planning and policy development		
Researchers	Access clean, structured, visualized housing data	

#### 5. Differentiators

- Combines open data (Census, OSM) with real-time API data (Zillow, etc.)
- Uses geospatial mapping and ML-based forecasting
- Built with modern web technologies for a highly responsive UI

• Tailored specifically for **housing**—not a general-purpose dashboard

## References:

- 1. <a href="https://www.ideahackers.network/problem-solution-fit-canvas/">https://www.ideahackers.network/problem-solution-fit-canvas/</a>
- 2. <a href="https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe">https://medium.com/@epicantus/problem-solution-fit-canvas-aa3dd59cb4fe</a>