**SmartBridge  
Internship Project Report**

**Team ID :** LTVIP2025TMID48977

# Requirement Analysis Phase Report

## Project Title:

Visualizing Housing Market Trends: An Analysis of Sale Prices and Features using Tableau

## 1. Introduction

This phase outlines the detailed data, functional, and non-functional requirements for building Tableau dashboards.

## 2. Dataset Overview

* Source: CSV file with housing data
* Fields: Year Built, Year Renovated, Sale Price, Bedrooms, Bathrooms, Floors, Basement Area

## 3. Functional Requirements

* Display KPIs: Total houses, average sale price, total basement area
* Histogram of sales vs. renovation age
* Pie chart for renovation status by house age
* Grouped bar chart showing house age by bathrooms, bedrooms, and floors
* Interactive filters by region, renovation, and features

## 4. Non-Functional Requirements

* User-friendly dashboard design
* Load time under 5 seconds
* Compatible on desktop and tablet devices
* Professionally formatted visuals with legends and tooltips

## 5. KPIs Defined

* Total Houses
* Average Sale Price (₹)
* Total Basement Area (sq ft)

## 6. Visualization Requirements

|  |  |  |
| --- | --- | --- |
| **Scenario** | **Visualization Type** | **Purpose** |
| Overall Summary | KPI Cards, Text Table | Display dataset scale and key metrics |
| Sales by Renovation Age | Histogram | Show impact of renovation on pricing |
| House Age by Renovation | Pie Chart | Show proportion of renovated vs. non-renovated homes |
| Age by Features | Grouped Bar Chart | Compare aging trends across features |

## 7. Tools & Technologies

* Tableau Public/Desktop
* Microsoft Excel
* Microsoft Word/PowerPoint for documentation

## 8. Conclusion

The requirements defined here will guide the implementation phase, ensuring the dashboard meets ABC Company’s analytical needs with clarity and efficiency.