**SmartBridge Virtual Internship – Requirement Analysis**

**Project Title**: Visualizing Housing Market Trends – An Analysis of Sale Prices and Features  
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**1. Project Context**

The housing market is shaped by various attributes like renovation status, structural features, house age, and overall conditions. While this information is embedded in large datasets, end users (buyers, investors, agents) struggle to extract insights due to lack of interactive tools.  
This project aims to create an accessible, web-embedded Tableau dashboard to visualize these trends effectively.

**2. Functional Requirements**

* Upload and clean housing dataset
* Use Tableau to create visualizations such as:
  + Sale price vs. renovation
  + House age vs. price
  + Structural features and pricing
* Build interactive dashboards with filters (e.g., sale bins, neighborhood)
* Embed dashboards and storyboards into a Flask-based web application
* Enable smooth navigation between:
  + Home
  + About
  + Dashboard
  + Story

**3. Non-Functional Requirements**

* The application should work on modern browsers (Chrome, Edge)
* Dashboard should be responsive and easy to use
* No login or user authentication is required
* Should run locally on Flask (localhost:5000)
* Tableau links must remain publicly published for embed support

**4. Tools & Technologies**

* **Tableau Public** – for creating interactive visualizations
* **Python Flask** – for hosting the web interface
* **HTML/CSS** – for layout and styling
* **GitHub** – for project version control and hosting
* **Kaggle Dataset** – [Transformed Housing Data](https://www.kaggle.com/datasets/rituparnaghosh18/transformed-housing-data-2)