

Project Title: Residential Real Estate Price Prediction

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Business Problem:

The Real Estate Investment Trust (REIT) plans to expand its portfolio by investing in **residential real estate**.

Accurate property valuation is critical because incorrect price estimates can lead to:

- **Financial risk** (overpaying for properties)
- **Missed opportunities** (underestimating high-value assets)
- **Inefficient capital allocation**

The Trust requires a **data-driven approach** to estimate the market price of residential houses based on property characteristics.

Project Objective:

Build a predictive pricing framework to estimate the **market price of a house** using property features such as:

- Square footage
- Number of bedrooms
- Number of bathrooms
- Number of floors
- Property condition and quality indicators
- Location-related attributes
- Any additional relevant features

The final goal is to:

- Estimate the fair market value of residential properties
- Identify key factors that influence house prices
- Support REIT **investment and valuation decisions** with data-backed insights

PACE FRAMEWORK:

Stages	Tasks	PACE stages	Deliverables
1	Understand the business scenario and define the problem	Plan	Project Proposal
2	Data understanding and exploration	Plan, Analyze	Data Understanding Report
3	Exploratory data analysis	Analyze	EDA Summary
4	Feature engineering	Analyze, Construct	Feature Engineering Report
5	Model selection and evaluation	Analyze, Construct	Model Selection Report
6	Confirm model assumptions and diagnostics	Analyze	Model Validation Report
7	Present actionable insights	Execute	Final Insights Report