

**Project Title: Residential Real Estate Price Prediction**

**Prepared By: Akash Raj**

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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:**

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