

**Project Name:** Nairobi Residential Property Price Predictor

**Project Lead:** lyke

**Status:** Completed (Phase 1)

## 1. Business Problem

The real estate market in Nairobi suffers from price opacity. Buyers and sellers often rely on subjective estimates, leading to inefficient transactions. There is a need for a data-driven tool to provide baseline valuations based on objective property features.

## 2. Project Objectives

- Standardize a messy dataset containing mixed units (Acres/\$m<sup>2</sup>) and typos.
- Build a regression model to predict property prices with an error rate (MAPE) of less than 25%.
- Identify the primary features (e.g., location vs. size) that drive property value.

## 3. Scope

- **Included:** Residential properties (Apartments, Houses, Townhouses) in Nairobi.
- **Excluded:** Commercial land, industrial properties, and vacant land.

## 4. Success Criteria

- A functional Python pipeline from raw CSV to prediction.
- A Mean Absolute Percentage Error (MAPE) below the 25% threshold
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