

Project Initialization and Planning Phase

Date	24 June 2024
Team ID	740709
Project Name	House Rent Price Prediction Using Machine Learning
Maximum Marks	3 Marks

Define Problem Statements (House Rent Price Prediction):

In the real estate market, accurate prediction of rental prices is crucial for both tenants and landlords. For tenants, it helps in making informed decisions about housing affordability and budgeting. For landlords and property managers, it aids in setting competitive and fair rental prices to maximize occupancy and revenue.

I am	A homeowner or real estate agent looking to predict rental prices
I'm trying to	Utilize historical and current data to accurately forecast rental prices for properties in different areas
but	There are various factors affecting rent prices, including market trends, location specifics, and property features
because	Having accurate predictions can help set competitive prices, attract tenants quickly, and maximize rental income
which makes me feel	Confident in making data-driven decisions and improving the efficiency of the rental process

Example:

I am	I'm trying to	But	Because	Which makes me feel
Tenant looking for a rental property	Find a reasonably priced rental home	Limited budget and specific location preferences	I am a young professional with a moderate income and need proximity to my workplace	Hopeful about finding an affordable and convenient rental property

Problem Statement (PS)	I am (Data Analyst/Real Estate Analyst)	I'm trying to	But	Because	Which makes me feel
PS-1	A real estate analyst (or data engineer, property manager, etc.) aiming to streamline rental price estimation..	Develop an automated system that uses machine learning to predict house rent prices based on features like city, number of BHKS, bathrooms, square feet per inch, build-up area, type of property, location, and deposit description..	The manual process is time-consuming and prone to errors, and existing automated systems do not account for all critical factors affecting rent prices.	A comprehensive and accurate prediction model is essential for making informed decisions and providing competitive rental prices in the market.	The need for an efficient, reliable, and comprehensive predictive system that can handle the complexities of real estate data.
PS-2	A data analyst (or data scientist, researcher, etc.) looking to develop a predictive model.	Accurately predict monthly rent of a house using its characteristics such as city, number of BHKS, number of bathrooms, square feet per inch, build-up area, type of property, location.	The current predictions are not accurate enough and do not consider all the relevant features, leading to potential pricing errors and customer dissatisfaction.	The available data is complex and requires advanced techniques to extract meaningful patterns and relationships.	The need for a robust predictive model that can handle the complexity and provide reliable rent estimates.