PRINCE SHRI VENKATESHWARA PADMAVATHY ENGINEERING COLLEGE

HOUSE PRICE
PREDICTION USING MACHINE LEARNING

PROJECT NAME :

Predicting House Prices using Machine Learning

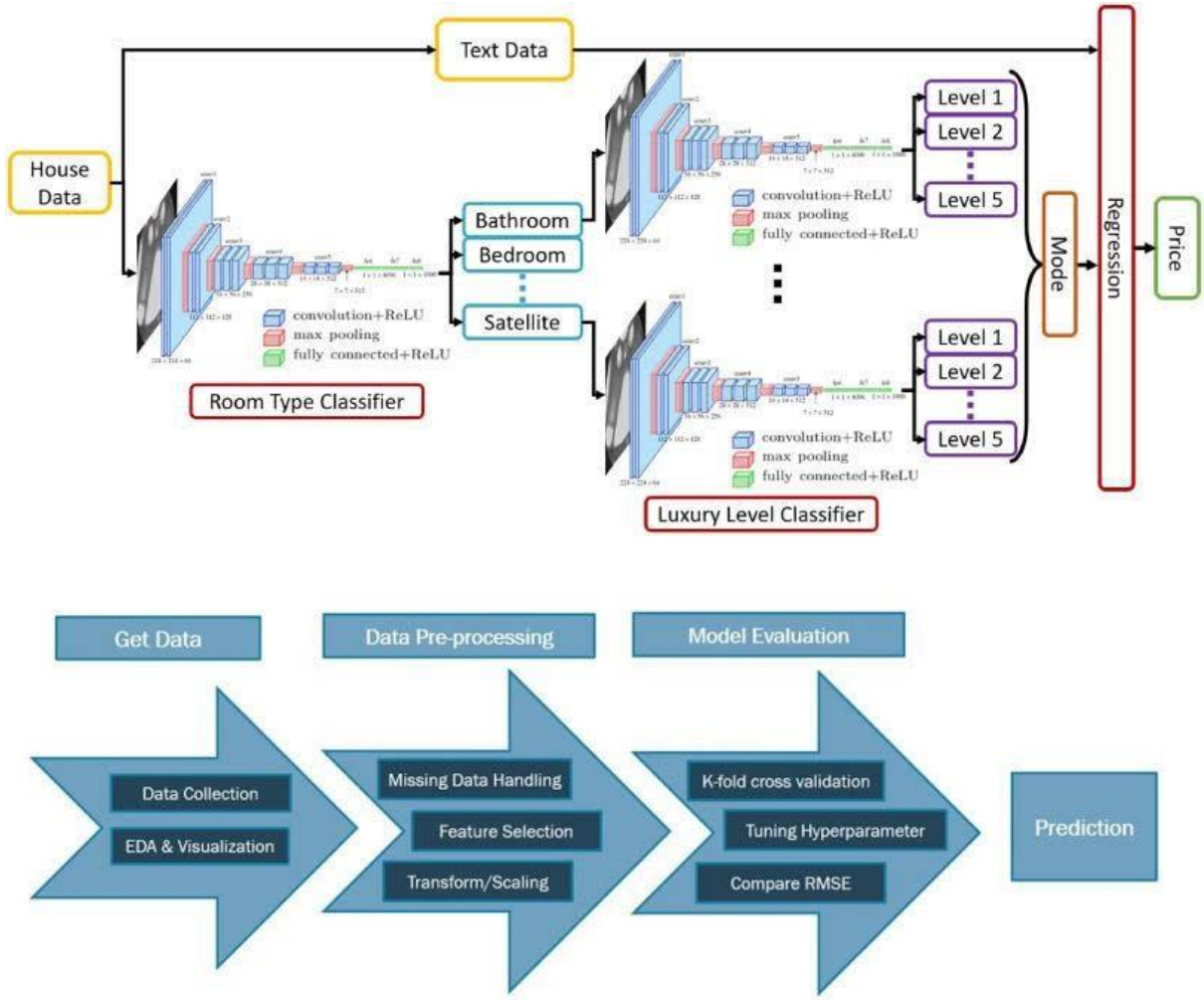
PROBLEM DEFINITION :

The housing market is an important and complex sector that inspects people's lives in many ways. For many individuals and families, buying a house is one of the biggest investments they will make in their lifetime. Therefore, it is essential to accurately predict the prices of houses so that buyers and sellers can make informed decisions. This project aims to use machine learning techniques to predict house prices based on various features such as location, square feet, number of bedrooms and bathrooms, and other relevant factors.

This project also aims to analyze various parameters like average income, average area and predict the house price accordingly. It helps customers to invest in an estate without approaching an agent. It provides best prices to user without getting cheated. This house price prediction can help the developer determine the selling price of a house and can help the customer to arrange the right time to

purchase a house . The house with best price is sure that it is easy to live in that particular area and it does not have any water problem.

Block diagram:



step 1: data collection

The data are collected from the various resources. Data processing techniques and processes are numerous. We collected data for vishwa real estate properties from various real estate websites. The data would be having attributes such as Location, carpet area, built-up area, age of the property, zip code, price, no of bedrooms etc. We must collect the quantitative data which is structured and categorized. Data collection is needed before any kind

of machine learning research is carried out. Dataset validity is a must otherwise there is no point in analyzing the data.

Step 2: Data preprocessing

In the process of cleaning our data set. There might be missing values or outliers in the dataset. These can be handled by data cleaning. If there are many missing values in a variables we will drop those values or substitute it with the average value. In this method we put a average value instants of missing value.The values are replaced and preproced.

Step 3 : Training

Training the model Since the data is broken down into two modules: a Training set and Testset, we must initially train the model. The training set includes the target variable. The decision tree regressor algorithm is applied to the training data set. The Decision tree builds a regression model in the form of a tree structure.

Step 4: Testing

Testing and Integrating with UI The trained model is applied to test dataset and house prices are predicted. The trained model is then integrated with the front end using Flask in python.

CONCLUSION :

Thus the machine learning model to predict the house price based on given dataset is executed successfully . It also helps people looking to sell a house at best time for greater profit. Any house price in any location can be predicted with minimum error by giving appropriate dataset.