

## ◆ Project Title:

Flask Application for Housing Price Prediction using Machine Learning

## ◆ Project Description:

This project is a web application that lets you input properties of a house (like area, number of bedrooms, bathrooms, parking, furnishing, etc) and then predicts its selling price.

## ◆ Technology Used:

✓ **Python**

✓ **Flask** (for developing the web application's backend and routing requests).

✓ **Scikit-Learn** (Linear Regression) (for training the regression model).

✓ **Pandas and Numpy** (for data manipulation).

✓ **Jinja2** (Flask's template engine for rendering HTML).

✓ **HTML** (for designing the UI).

## ◆ Features:

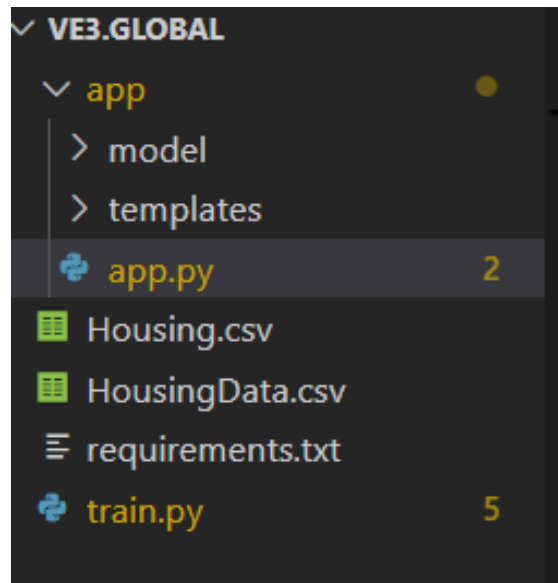
✓ User enters:

- area (square feet)
- number of bedrooms
- number of bathrooms
- number of stories
- main road (yes or no)
- guestroom (yes or no)
- basement (yes or no)
- hotwaterheating (yes or no)
- airconditioning (yes or no)
- parking spaces
- prefarea (yes or no)
- furnishings (furnished, semi-furnished, unfurnished)

✓ The application converts these inputs into a format suitable for the trained regression model.

✓ The regression model then produces a predicted price.

### ◆ File Structure:



### ◆ How it works:

- 1) Model Training (train.py)
- 2) Flask Application (app/app.py)
- 3) HTML Template
  - a. index.html : Provides form for entering all the features
  - b. result.html: Display the predicted result.