ML Deployment (LOCAL)

Ankita Manna Week 4 LISUM 45

Date: 28/05/2025

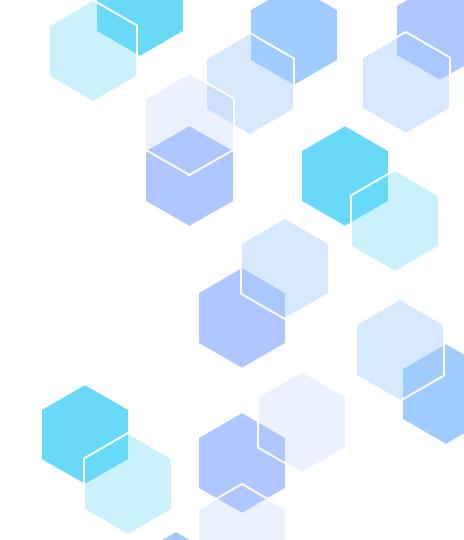


Table of contents

O1 Introduction

You can describe the

Files Needed

02

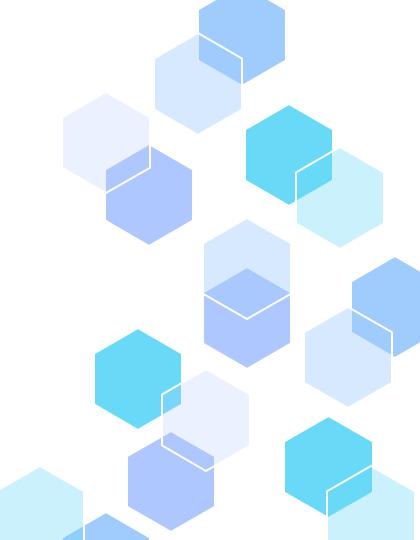
03

Deploy Models

O4 Output

O1 Introduction

You can enter a subtitle here if you need it



Introduction

n machine learning, "modeling" refers to the process of creating a mathematical representation (called a "model") that can learn patterns from data and make predictions or classifications on new, unseen data by using algorithms to identify relationships within the dataset

Deploying a model refers to integration of trained model into a production environment where it can process real time data and provide output for practical applications and decision makings.

Steps



Background



About

Company XYZ is a real estate firm specializing in property sales and investment advisory services. With an increasing demand for data-driven insights, the company aims to improve its offerings by leveraging machine learning to predict house prices more accurately.



Predictors

Area (square feet): Larger homes typically cost more.

Bedrooms: More bedrooms add value but vary by location

Bathrooms: Similar to bedrooms; more bathrooms

generally increase value

Stories: Multi-story homes may affect price differently

than single-story homes

Parking: Availability of parking can significantly impact property desirability and price.

Files Needed



app.py

This is the main Flask application file that serves as the backend for the house price prediction model.



Model.pkl

This file contains the pre-trained machine learning model serialized with Pickle.



index.html

This is the frontend HTML template for the web app, providing the user interfacest

Deploying Model

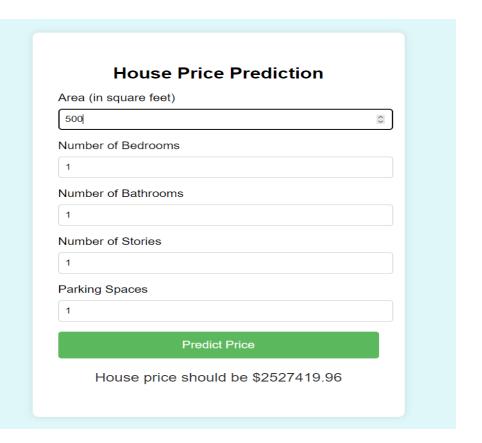
Open IDE (vs code)

Create folder (Contains app.py model.pkl, index.html)

Run (app.py in IDE

Get Result (Nevigate to the local server http://127.0.0.1:5000)

Example Output



Thanks!

CREDITS: This presentation template was created by <u>Slidesgo</u>, and includes icons by <u>Flaticon</u>, and infographics & images by <u>Freepik</u>