Documentation

Real Estate Valuation Shiny App

Overview

This Shiny web application allows users to input property details and receive an estimation value based on a trained machine-learning model. This is designed as a tool for real estate stakeholders or home users to predict property values based on various property attributes such as location, size, and relevant financial information. This application allows users to estimate their house value through a simple application.

Built With

This project uses Python 3.X and Shiny R to build the application and machine learning model.

Features

This application was developed with a few features in mind: user input, prediction output, visual and clear display, and cloud hosting. This application has input fields for users to input their property features, such as size, location, and other relevant information. Next, the prediction output provides an estimated value of a property based on the inputted values. Next, the predicted property value is presented clearly for clear and simple insights. Finally, this application is deployed on an AWS EC2 instance for easier access through a web browser.

Architecture

The front end of this application was built using Shiny to provide a user-friendly interface and powerful capabilities. The back end of this application is a Python machine learning (XGBoost) model integrated within Shiny. Finally, this application is hotels on AWS EC2 using the Shiny Server.

User Instructions

To access this application, click the URL and enter the property details in the input fields. Following this, the user would receive the property estimate