

How to create AI model to predict house price using Scikit-Learn and Streamlit user interface

Enter House Details

Area (sqft)  
1000

Number of Bedrooms  
2

Number of Bathrooms  
1

Property Age (Years)  
8

Location  
Andheri

Predict Price

Predicted House Price: ₹ 7570402.93

model2.py :-

```
import streamlit as st
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression

# Load dataset
df = pd.read_csv("house_prices.csv")
df = df.dropna()

# Encode categorical column
df = pd.get_dummies(df, columns=['location'], drop_first=True)

# Split features and target
X = df.drop("price", axis=1)
y = df["price"]

# Train model
X_train, X_test, y_train, y_test = train_test_split(
    X, y, test_size=0.2, random_state=42
)

model = LinearRegression()
model.fit(X_train, y_train)

# Streamlit UI
st.title("House Price Prediction Model")
```

```

st.header("Enter House Details")

# Input fields
area = st.number_input("Area (sqft)", min_value=200, max_value=5000, step=50,
value=1200)
bedrooms = st.number_input("Number of Bedrooms", min_value=1, max_value=10,
step=1, value=3)
bathrooms = st.number_input("Number of Bathrooms", min_value=1, max_value=10,
step=1, value=2)
age = st.number_input("Property Age (Years)", min_value=0, max_value=50,
step=1, value=8)

# Location options from your dataset
location_list = sorted(df.filter(like="location_").columns)
location_choice = st.selectbox("Location", ["Andheri", "Bandra", "Borivali",
"Juhu", "Thane", "Powai"])

# Prepare input row
input_data = [area, bedrooms, bathrooms, age]

# One-hot match
for col in location_list:
    if col == f"location_{location_choice}":
        input_data.append(1)
    else:
        input_data.append(0)

# Predict button
if st.button("Predict Price"):
    predicted_price = model.predict([input_data])
    st.success(f"Predicted House Price: ₹ {round(predicted_price[0], 2)}")

```

Run:-

streamlit run model2.py

Output to check:-

You can now view your Streamlit app in your browser.

Local URL: <http://localhost:8501>