

# Flask Deployment

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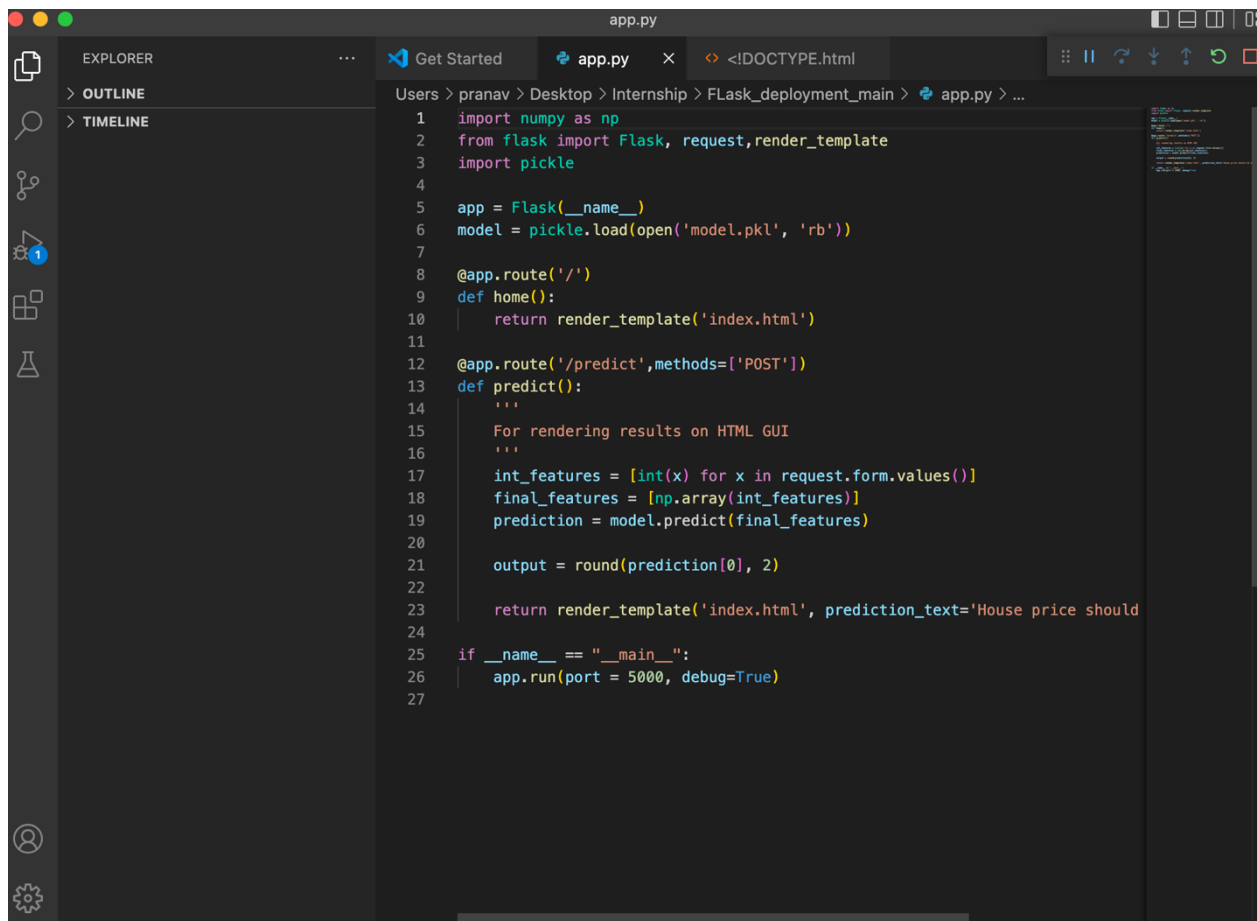
Internship Batch: LISUM 10

Version:<1.0>

Data intake by: Pranav Walia

Data intake reviewer: Pranav Walia

Data storage location: github - <https://github.com/pranav611/DataSets.git>



```
1 import numpy as np
2 from flask import Flask, request, render_template
3 import pickle
4
5 app = Flask(__name__)
6 model = pickle.load(open('model.pkl', 'rb'))
7
8 @app.route('/')
9 def home():
10     return render_template('index.html')
11
12 @app.route('/predict', methods=['POST'])
13 def predict():
14     """
15     For rendering results on HTML GUI
16     """
17     int_features = [int(x) for x in request.form.values()]
18     final_features = [np.array(int_features)]
19     prediction = model.predict(final_features)
20
21     output = round(prediction[0], 2)
22
23     return render_template('index.html', prediction_text='House price should')
24
25 if __name__ == "__main__":
26     app.run(port = 5000, debug=True)
27
```

```
model.py
EXPLORER
OUTLINE
TIMELINE
Users > pranav > Desktop > Internship > Flask_deployment_main > model.py > convert_to_int
1 # Importing the libraries
2 import numpy as np
3 import pandas as pd
4 import pickle
5
6 dataset = pd.read_csv('price.csv')
7
8 dataset['bed_room'].fillna(0, inplace=True)
9
10 dataset['area'].fillna(dataset['area'].mean(), inplace=True)
11
12 X = dataset.iloc[:, :3]
13
14 #Converting words to integer values
15 def convert_to_int(word):
16     word_dict = {'one':1, 'two':2, 'three':3, 'four':4, 'five':5, 'six':6, 's
17                 'nine':9, 'ten':10, 'eleven':11, 'twelve':12, 'zero':0, 0: 0}
18     return word_dict[word]
19
20 X['bed_room'] = X['bed_room'].apply(lambda x : convert_to_int(x))
21
22 y = dataset.iloc[:, -1]
23
24 from sklearn.linear_model import LinearRegression
25 regressor = LinearRegression()
26
27 #Fitting model with training data
28 regressor.fit(X, y)
29
30 # Saving model to disk
31 pickle.dump(regressor, open('model.pkl','wb'))
32
33 # Loading model to compare the results
34 model = pickle.load(open('model.pkl','rb'))
35 print(model.predict([2, 2200, 5]))
```

```
<!DOCTYPE.html
EXPLORER
OUTLINE
TIMELINE
Users > pranav > Desktop > Internship > Flask_deployment_main > <!DOCTYPE.html > html > body >
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <meta charset="UTF-8">
5 <title>ML API</title>
6 <link href="https://fonts.googleapis.com/css?family=Pacifico" rel="stylesheet"
7 <link href="https://fonts.googleapis.com/css?family=Arimo" rel="stylesheet" t
8 <link href="https://fonts.googleapis.com/css?family=Hind:300" rel="stylesheet
9 <link href="https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300"
10 <link rel="stylesheet" href="{{ url_for('static', filename='css/style.css') }}>
11
12 </head>
13
14 <body>
15 <div class="login">
16 <h1>Predict House Price</h1>
17
18 <!-- Main Input For Receiving Query to our ML -->
19 <form action="{{ url_for('predict')}}" method="post">
20 <input type="text" name="no_of_rooms" placeholder="Number of Rooms" r
21 <input type="text" name="area" placeholder="Area (in square feet)" re
22 <input type="text" name="house_age" placeholder="House Age" required=
23
24 <button type="submit" class="btn btn-primary btn-block btn-large">Pre
25 </form>
26
27 <br>
28 <br>
29 {{ prediction_text }}
30
31 </div>
32 
35 </html>
36
```

# Predict House Price

Income

House Age

Number of Rooms

Number of Bedrooms

Area Population

Predict