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Batch code: LISUM03  
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Model from Jupyter -

```
[3] In [3]: y = KC_housing['price']  
          X = KC_housing[['bedrooms', 'bathrooms', 'sqft_living', 'floors', 'condition']]  
  
[4] In [4]: X_train, X_test, y_train, y_test = train_test_split(X, y, train_size = .8, test_size=.2, random_state=1)  
  
[5] In [5]: model = LinearRegression()  
          model.fit(X_train, y_train)  
  
          LinearRegression()  
  
[6] In [6]: pickle.dump(model, open('model.pickle', 'wb'))
```

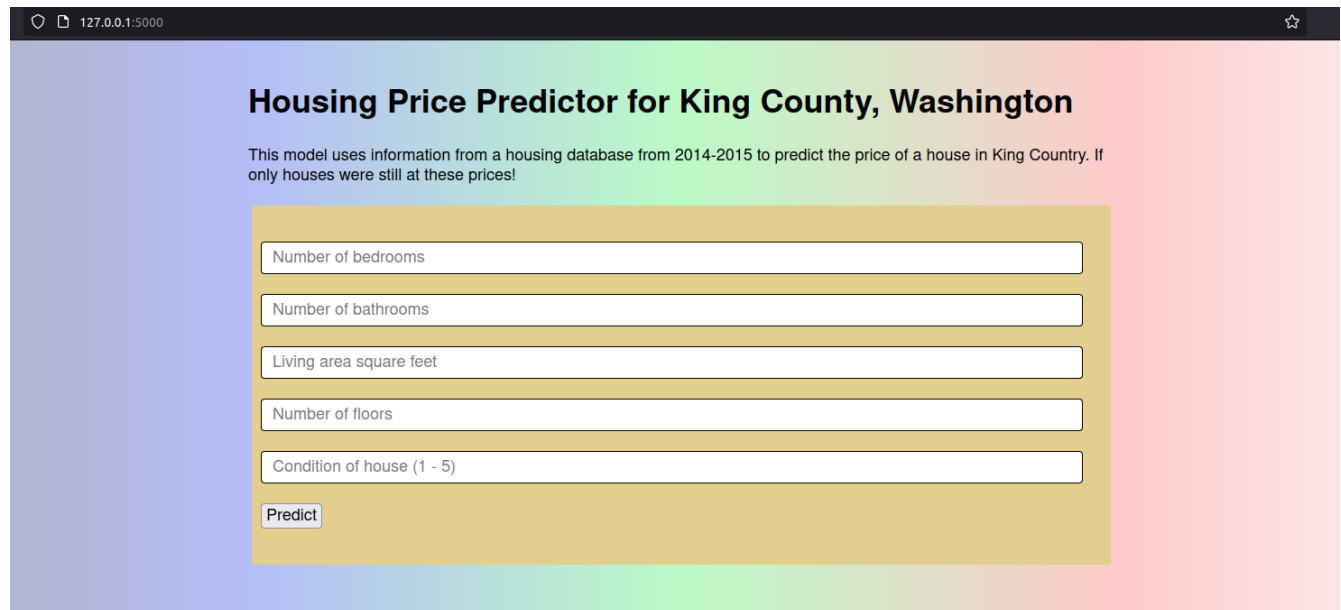
Flask app -

```
1 from flask import Flask, request, render_template  
2 import numpy as np  
3 import pickle  
4  
5 app = Flask(__name__)  
6 model=pickle.load(open('Model/model.pickle', '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     float_features = [float(x) for x in request.form.values()]  
16     final_features = [np.array(float_features)]  
17     pred = model.predict(final_features)  
18  
19     output = round(pred[0], 2)  
20  
21     return render_template('index.html', prediction_text = 'Housing price prediction: ${}'.format(output))  
22  
23 if __name__ == "__main__":  
24     app.run(port=5000, debug=True)
```

## HTML -

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <link rel="stylesheet" href="{{ url_for('static', filename='css/main.css') }}">
5 </head>
6 <body>
7   <div class="container">
8     <h1>Housing Price Predictor for King County, Washington</h1>
9     <p>This model uses information from a housing database from 2014-2015 to predict the price of a house in King County. If only houses were still
10    at these prices!
11  </p>
12  <div class='form-group'>
13    <form action="{{ url_for('predict') }}" method="post">
14      <input type="text" class='form-control' name="bedrooms" placeholder="Number of bedrooms" required="required" /><br>
15      <input type="text" class='form-control' name="bathrooms" placeholder="Number of bathrooms" required="required" /><br>
16      <input type="text" class='form-control' name="sqft living" placeholder="Living area square feet" required="required" /><br>
17      <input type="text" class='form-control' name="floors" placeholder="Number of floors" required="required" /><br>
18      <input type="text" class='form-control' name="condition" placeholder="Condition of house (1 - 5)" required="required" /><br>
19      <button type="submit" class='btn btn-primary btn-block btn-Large'>Predict</button>
20    </form>
21  </div>
22  <br>
23  <br>
24  <h1>{{ prediction_text }}</h1>
25 </div>
26 </body>
27 </html>
```

## Flask Page -



127.0.0.1:5000

## Housing Price Predictor for King County, Washington

This model uses information from a housing database from 2014-2015 to predict the price of a house in King County. If only houses were still at these prices!