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Batch Code: LISUM01

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Submitted to: [https://github.com/FancyWhale69/scores\\_webapp](https://github.com/FancyWhale69/scores_webapp)

App.py:

```
1  import json
2  import pickle
3  import numpy as np
4  import pandas as pd
5  from sklearn.linear_model import LinearRegression
6  from sklearn.pipeline import Pipeline
7  from sklearn.preprocessing import MinMaxScaler
8  from flask import Flask
9  from flask import Flask, request, jsonify, render_template
10 import joblib
11
12 app = Flask(__name__)
13
14 # load model
15 model = joblib.load('../models/model.pkl')
16
17 @app.route('/')
18 def index():
19     # render web page
20     return render_template('index.html')
21
22
23 @app.route('/predict', methods=['POST'])
24 def predict():
25     ...
26     For rendering results on HTML GUI
27     ...
28
29     # retrieving values from form
30     init_features = [float(x) for x in request.form.values()]
31     final_features = [np.array(init_features)]
32
33     prediction = model.predict(final_features) # making prediction
34
35
36     return render_template('index.html', prediction_text='Post-test score: {}'.format(np.round(prediction[0], 2)))
37
38 def main():
39     app.run(port=5000, debug=True)
40
41 if __name__ == '__main__':
42     main()
```

index.html:

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4   <meta charset="UTF-8">
5   <title>ML Deployment</title>
6   <link href="https://fonts.googleapis.com/css?family=Pacifico" rel="stylesheet" type="text/css">
7   <link href="https://fonts.googleapis.com/css?family=Arimo" rel="stylesheet" type="text/css">
8   <link href="https://fonts.googleapis.com/css?family=Hind:300" rel="stylesheet" type="text/css">
9   <link href="https://fonts.googleapis.com/css?family=Open+Sans:Condensed:300" rel="stylesheet" type="text/css">
10  <link rel="stylesheet" href="{{ url_for('static', filename='css/style.css') }}">
11
12 </head>
13 <body>
14   <div class="login">
15     <h2>Predict student score</h2>
16
17     <!-- Main input for receiving Query to our ML -->
18     <form action="{{ url_for('predict')}}" method="post">
19
20       <input type="text" name="pretest_score" placeholder="pre test score from 0 to 100" required="required" />
21       <input type="text" name="school_area_suburban" placeholder="school_area_suburban: 0(no)/1(yes)" required="required" />
22       <input type="text" name="school_area_urban" placeholder="school_area_urban: 0(no)/1(yes)" required="required" />
23       <input type="text" name="school_type_Public" placeholder="school_type_Public: 0(no)/1(yes)" required="required" />
24       <input type="text" name="teaching_method_Standard" placeholder="teaching_method_Standard: 0(no)/1(yes)" required="required" />
25       <input type="text" name="qualifies_for_free/reduced_lunch" placeholder="qualifies_for_free/reduced_lunch: 0(no)/1(yes)" required="required" />
26
27       <button type="submit" class="btn btn-primary btn-block btn-large">Predict</button>
28     </form>
29
30     <br>
31     <br>
32     {{ prediction_text }}
33   </div>
34 </body>
35 </html>
36
37
```

Deploying webapp:

```
\Users\Me\Desktop\Projects\student_score_webapp\app>python run.py
Serving Flask app "run" (lazy loading)
Environment: production
WARNING: This is a development server. Do not use it in a production deployment.
Use a production WSGI server instead.
Debug mode: on
Restarting with windowsapi reloader
Debugger is active!
Debugger PIN: 120-400-928
Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

Webapp page:

## Predict student score

pre test score from 0 to 100

school\_area\_suburban: 0(no)/1(yes)

school\_area\_urban: 0(no)/1(yes)

school\_type\_Public: 0(no)/1(yes)

teaching\_method\_Standard: 0(no)/1(yes)

qualifies\_for\_free/reduced\_lunch: 0(no)/1(yes)

Predict

Prediction:

## Predict student score

pre test score from 0 to 100

school\_area\_suburban: 0(no)/1(yes)

school\_area\_urban: 0(no)/1(yes)

school\_type\_Public: 0(no)/1(yes)

teaching\_method\_Standard: 0(no)/1(yes)

qualifies\_for\_free/reduced\_lunch: 0(no)/1(yes)

Predict

Post-test score: 90.27