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Batch Code: LISUM06

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Deployment on Flask

Writing Flask Application

```
import numpy as np
    from flask import Flask, request, render_template
2
    import pickle
    import warnings
    warnings.filterwarnings("ignore")
7
    app = Flask(__name__)
    model = pickle.load(open('drugs_model.pkl', 'rb'))
10 @app.route('/')
11 def home():
      return render_template('index.html')
12
13
14
    @app.route('/predict',methods = ['POST'])
15
    def predict():
       int_features = [int(x) for x in request.form.values()]
16
17
        #int_features = [int_features]
       final_features = np.array(int_features)
18
19
       final_features = final_features.reshape(1, 5)
       prediction = model.predict(final_features)
20
        output = prediction[0]
22
       #print(output)
23
       return render_template('index.html',prediction_text = 'The Drug is : '+ output)
24
   if __name__ == '__main__':
25
26 app.run(port= 5000)
```

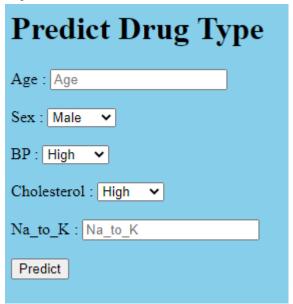
Writing template code

```
<!DOCTYPE html>
<html >
<head>
  <meta charset="UTF-8">
  <title>ML API</title>
<link href='https://fonts.googleapis.com/css?family=Pacifico' rel='stylesheet' type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Arimo' rel='stylesheet' type='text/css'>
<link href='https://fonts.googleapis.com/css?family=Hind:300' rel='stylesheet' type='text/css'>
k href='https://fonts.googleapis.com/css?family=Open+Sans+Condensed:300' rel='stylesheet' type='text/css'>
\label{link} $$ $$ \sim \ensuremath{\text{clink rel}} = \ensuremath{\text{stylesheet}} $$ href="{{ url_for('static', filename='css/style.css') }}"> $$
</head>
<body>
 <div class="login">
        <h1>Predict Drug Type</h1>
     <!-- Main Input For Receiving Query to our ML -->
    <form action="{{ url_for('predict')}}"method="post">
        <label for="Age">Age :</label>
        <input type="text" name="Age" placeholder="Age" required="required" />
        <br><label for="Sex">Sex :</label>
        <select id="Sex" name="Sex">
        <option value=1>Male</option>
        <option value=0>Female</option>
        </select>
       <br><br><label for="BP">BP :</label>
        <select id="BP" name="BP">
        <option value=0>High</option>
        <option value=1>Low</option>
       <option value=2>Normal</option>
       </select>
       <br><label for="Cholesterol">Cholesterol :</label>
       <select id="Cholesterol" name="Cholesterol">
       <option value=0>High</option>
        <option value=1>Normal</option>
        </select>
        <br><br><label for="Na_to_K">Na_to_K :</label>
       <input type="text" name="Na_to_K" placeholder="Na_to_K" required="required" />
       </form>
   <br> <br>>
   {{prediction_text}}
 <img src="/static/images/Original.svg" style="width: 400px;position: absolute;bottom: 10px;left: 10px;" alt="Company Logo"/>
</body>
```

Running Flask Application

```
(base) C:\Users\Saad\Python data\Flask deployment>app1.py
* Serving Flask app 'app1' (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: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [10/Mar/2022 13:06:48] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [10/Mar/2022 13:06:48] "GET /static/css/style.css HTTP/1.1" 404 -
127.0.0.1 - - [10/Mar/2022 13:06:48] "GET /static/images/Original.svg HTTP/1.1" 404 -
```

Open link in Browser



Test Model and Get results

