

Source Code

Python

App.py

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import numpy as np
from flask import Flask, render_template, request
import pickle
app = Flask(__name__)
model = pickle.load(open('wqi.pkl','rb'))
@app.route('/')
def home():
    return render_template("web.html")
@app.route('/about')
def about():
    return render_template("about.html")
@app.route('/info')
def info():
    return render_template("info.html")
@app.route('/login', methods = ['POST'])
def login():
    year = request.form["year"]
    do = request.form["do"]
    ph = request.form["ph"]
    co = request.form["co"]
    bod = request.form["bod"]
    na = request.form["na"]
    tc = request.form["tc"]
    total = [[float (do), float (ph), float (co), float (bod), float (na), float(tc)]]
    y_pred = model.predict(total)
    y_pred = y_pred[[0]]
    if(y_pred >= 95 and y_pred<= 100) :
        return render_template("web.html", showcase = 'Excellent, The predicted value is '+str(y_pred))
    elif(y_pred >= 89 and y_pred <= 94) :
        return render_template("web.html", showcase = 'Very good, The predicted value is '+str(y_pred))
    elif(y_pred >= 80 and y_pred <= 88) :
        return render_template("web.html", showcase = 'Good, The predicted value is '+str(y_pred))
    elif(y_pred >= 65 and y_pred <= 79) :
        return render_template("web.html", showcase = 'Fair, The predicted value is '+str(y_pred))
    elif(y_pred >= 45 and y_pred <= 64) :
        return render_template("web.html", showcase = 'Marginal, The predicted value is '+str(y_pred))
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else :
return render_template("web.html", showcase = 'Poor, The predicted value is '+str(y_pred))
if __name__=='__main__':
app.run(debug = True,port=8000)
HTML
web.html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Home</title>
<link rel="stylesheet" href="../static/css/style.css">
</head>
<body>
<header>
<nav>
<div class="row">
<div class="row1">

</div>
<div class="row2">
<h1>Urban Water Quality Prediction</h1>
</div>
<div class="row3">
<ul>
<li><a href="/info">Info</a></li>
<li><a href="/about">About</a></li>
</ul>
</div>
</div>
</nav>
</header>
<main>
<div class="column">
<form action="/login" method="post">
<label for=""></label>
<input type="text" name="year" id="" placeholder="Enter Year">
<label for=""></label>
<input type="text" name="do" id="" placeholder="Enter D.O">
<label for=""></label>
<input type="text" name="ph" id="" placeholder="Enter PH">
<label for=""></label>

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<input type="text" name="co" id="" placeholder="Enter Conductivity">
<label for=""></label>
<input type="text" name="bod" id="" placeholder="Enter B.O.D">
<label for=""></label>
<input type="text" name="na" id="" placeholder="Enter Nitratenen">
<label for=""></label>
<input type="text" name="tc" id="" placeholder="Enter Total Coliform">
<label for=""></label>
<div class="last">
<input type="submit" value="Predict">
</div>
<div class="bor">
{{showcase}}
</div>
</form>
</div>
</main>
</div>
</body>
</html>
```