Project Report

Name: bmi flask app

Report Date: 26 March 2022

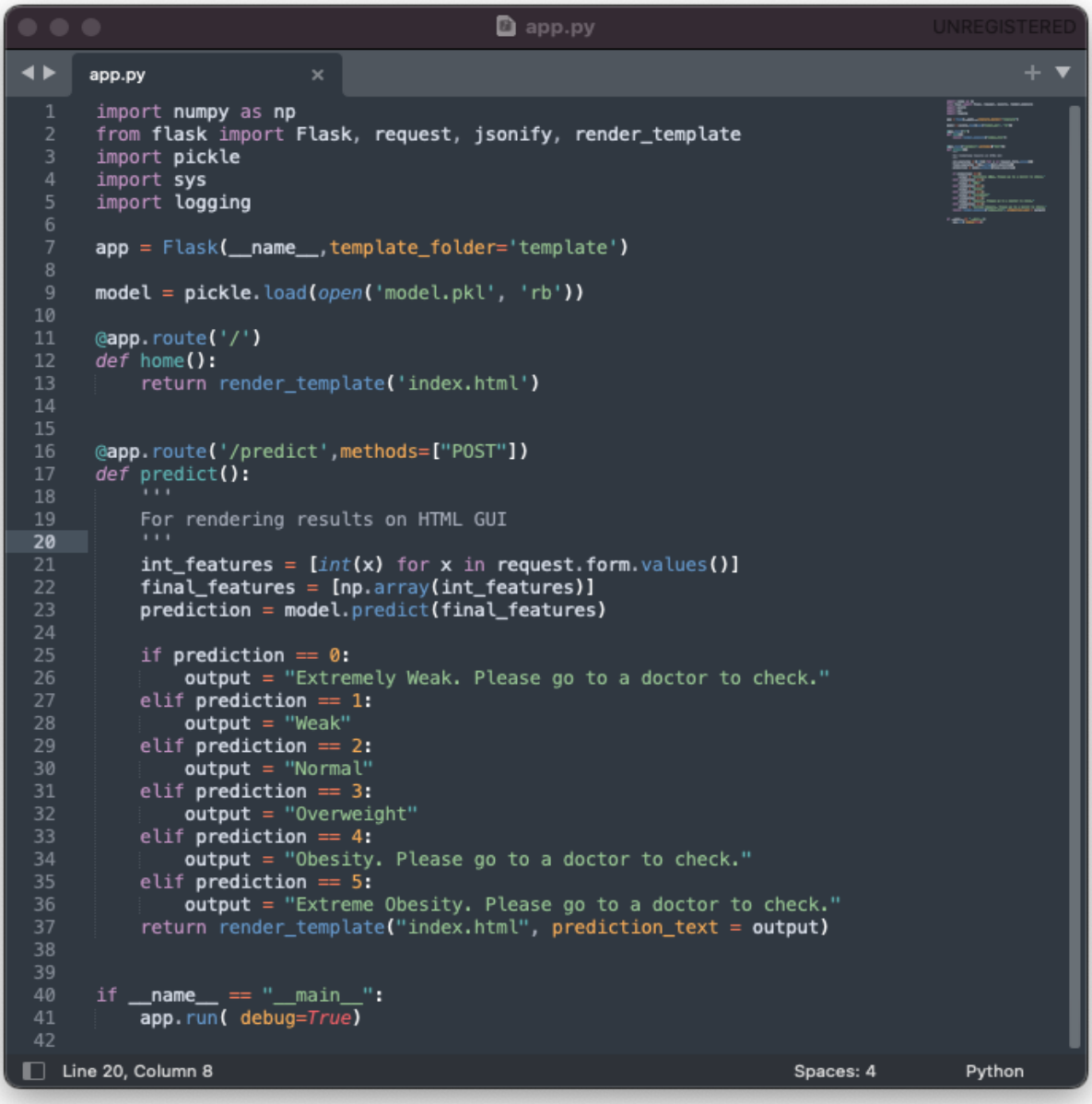
Internship Batch: LISUM07

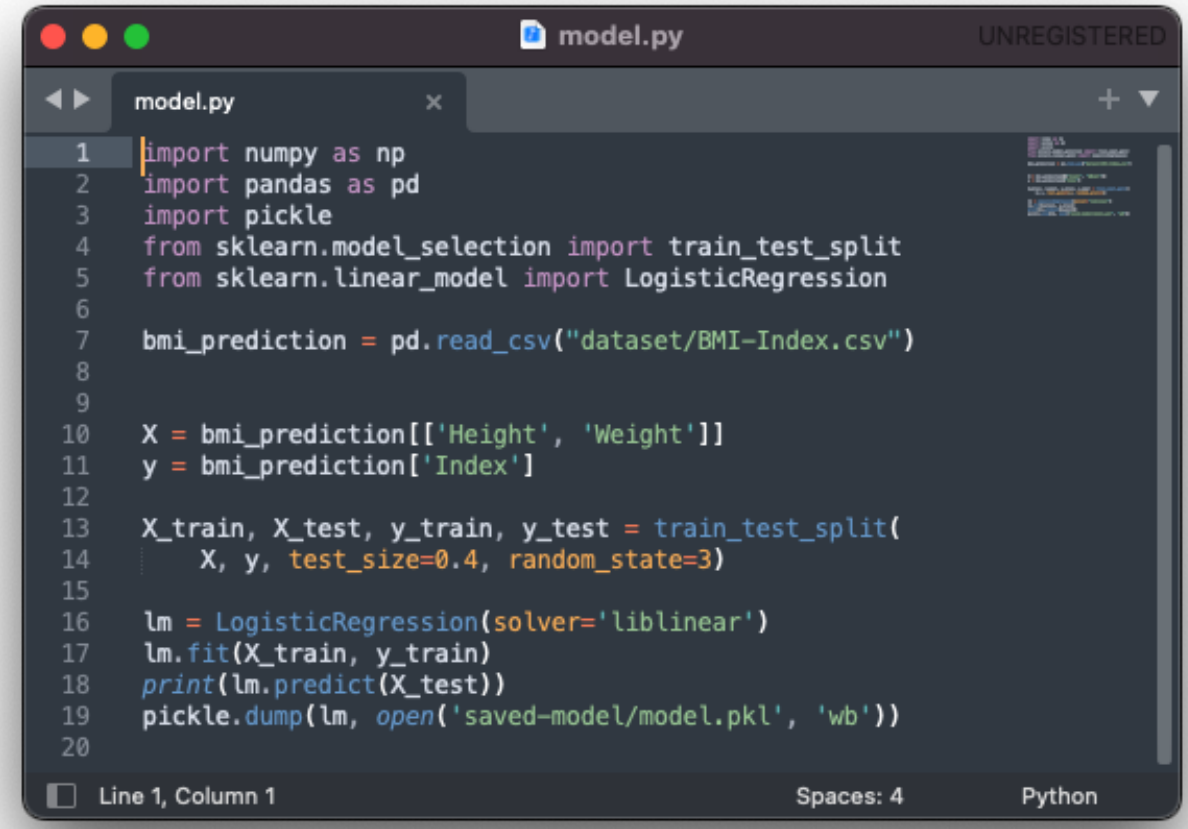
Project by: Emre Yesilyurt

Data Intake Reviewer: Data Glacier

Data Storage Location: https://www.kaggle.com/datasets/yersever/500-person-gender-height-weight-bodymassindex

Project Location: https://github.com/emreyesilyurt/flask_demo_app


app.py
UNREGISTERED
app.py
import numpy as np
from flask import Flask, request, jsonify, render_template
import pickle
import sys
import logging
app = Flask(__name__,template_folder='template')
model = pickle.load(open('model.pkl', 'rb'))
@app.route('/')
def home():
return render_template('index.html')
@app.route('/predict',methods=["POST"])
def predict():
'''
For rendering results on HTML GUI
'''
int_features = [int(x) for x in request.form.values()]
final_features = [np.array(int_features)]
prediction = model.predict(final_features)
if prediction == 0:
output = "Extremely Weak. Please go to a doctor to check."
elif prediction == 1:
output = "Weak"
elif prediction == 2:
output = "Normal"
elif prediction == 3:
output = "Overweight"
elif prediction == 4:
output = "Obesity. Please go to a doctor to check."
elif prediction == 5:
output = "Extreme Obesity. Please go to a doctor to check."
return render_template("index.html", prediction_text = output)
if __name__ == "__main__":
app.run(debug=True)
Line 20, Column 8
Spaces: 4
Python


model.py
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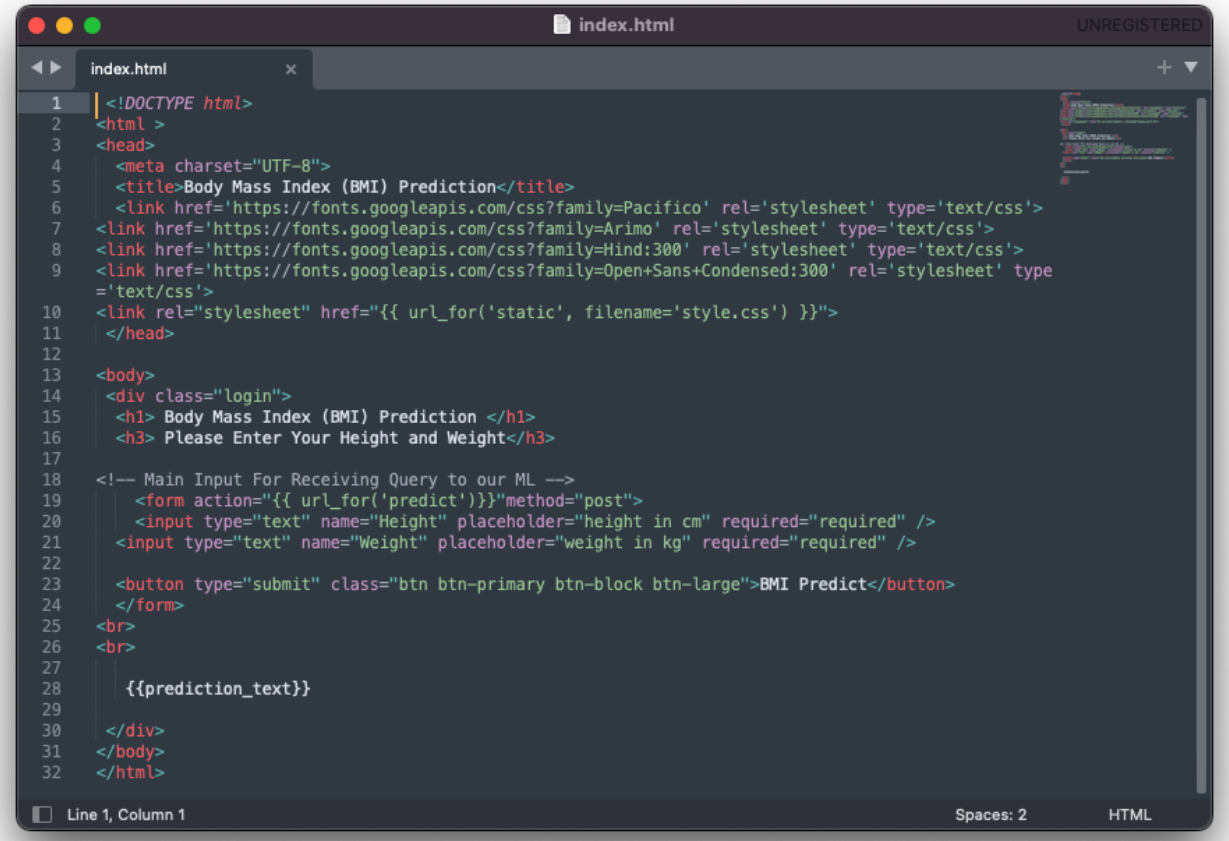
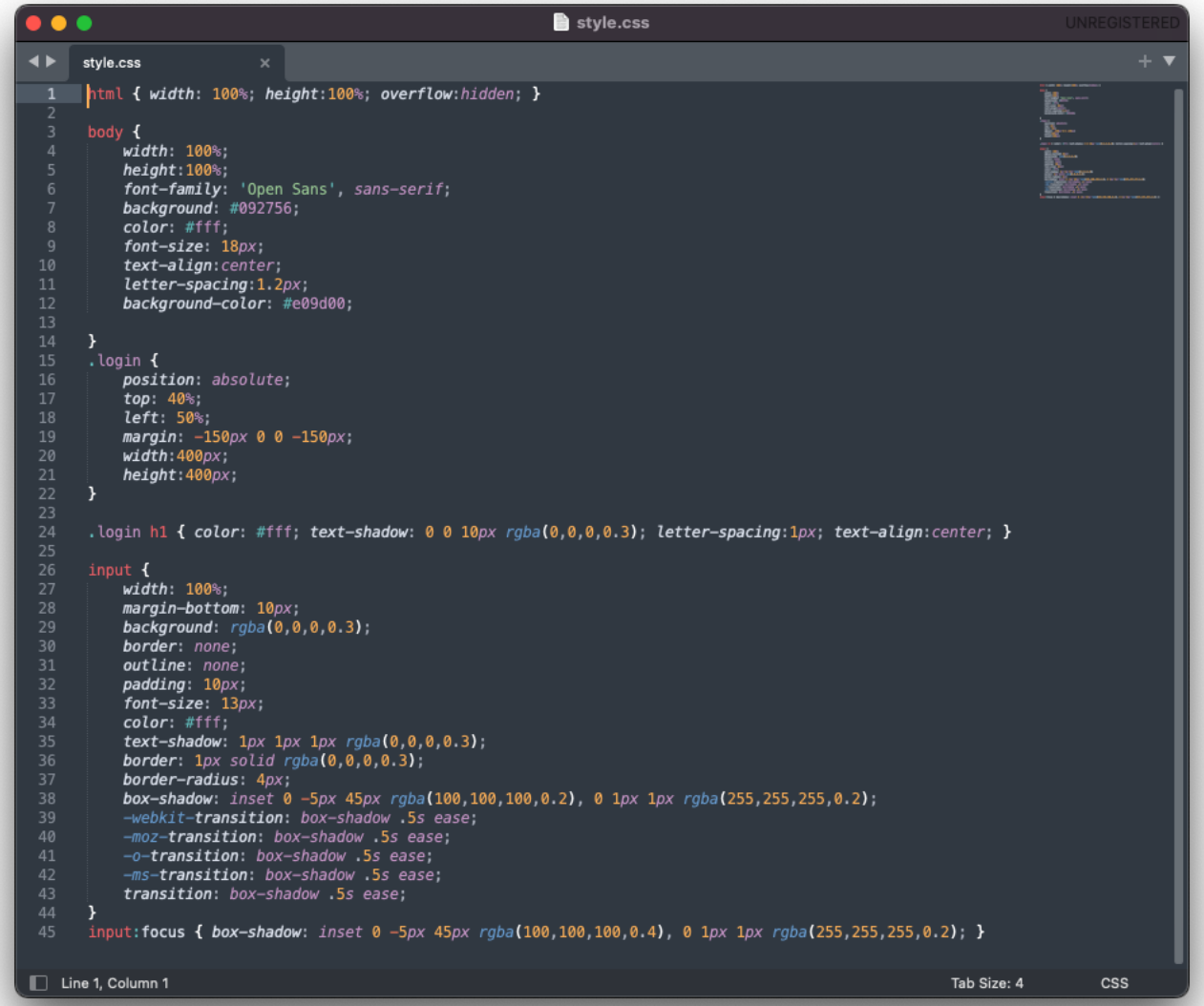
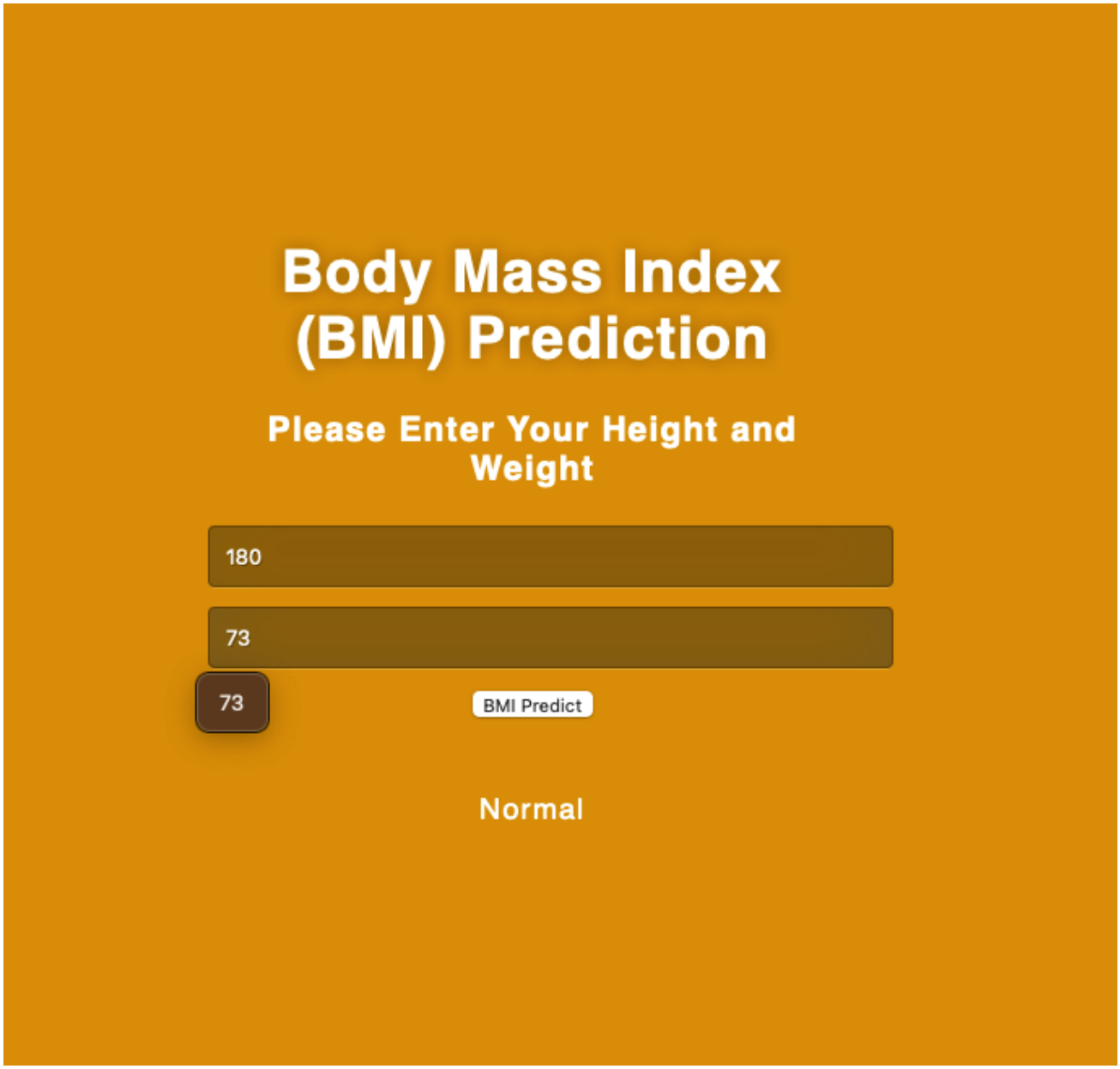
model.py
import numpy as np
import pandas as pd
import pickle
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LogisticRegression
bmi_prediction = pd.read_csv("dataset/BMI-Index.csv")
X = bmi_prediction[['Height', 'Weight']]
y = bmi_prediction['Index']
X_train, X_test, y_train, y_test = train_test_split(
X, y, test_size=0.4, random_state=3)
lm = LogisticRegression(solver='liblinear')
lm.fit(X_train, y_train)
print(lm.predict(X_test))
pickle.dump(lm, open('saved-model/model.pkl', 'wb'))
Line 1, Column 1
Spaces: 4
Python


index.html
UNREGISTERED
index.html
1 <!DOCTYPE html>
2 <html >
3 <head>
4 <meta charset="UTF-8">
5 <title>Body Mass Index (BMI) Prediction</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='style.css') }}">
11 </head>
12
13 <body>
14
15 <h1> Body Mass Index (BMI) Prediction </h1>
16 <h3> Please Enter Your Height and Weight</h3>
17
18 <!-- Main Input For Receiving Query to our ML -->
19 <form action="{{ url_for('predict')}}"method="post">
20 <input type="text" name="Height" placeholder="height in cm" required="required" />
21 <input type="text" name="Weight" placeholder="weight in kg" required="required" />
22
23 <button type="submit" class="btn btn-primary btn-block btn-large">BMI Predict</button>
24 </form>
25
26
27
28 {{prediction_text}}
29
30
31 </body>
32 </html>
Line 1, Column 1
Spaces: 2
HTML


style.css
UNREGISTERED
style.css
html { width: 100%; height:100%; overflow:hidden; }
body {
width: 100%;
height:100%;
font-family: 'Open Sans', sans-serif;
background: #092756;
color: #fff;
font-size: 18px;
text-align:center;
letter-spacing:1.2px;
background-color: #e09d00;
}
.login {
position: absolute;
top: 40%;
left: 50%;
margin: -150px 0 0 -150px;
width:400px;
height:400px;
}
.login h1 { color: #fff; text-shadow: 0 0 10px rgba(0,0,0,0.3); letter-spacing:1px; text-align:center; }
input {
width: 100%;
margin-bottom: 10px;
background: rgba(0,0,0,0.3);
border: none;
outline: none;
padding: 10px;
font-size: 13px;
color: #fff;
text-shadow: 1px 1px 1px rgba(0,0,0,0.3);
border: 1px solid rgba(0,0,0,0.3);
border-radius: 4px;
box-shadow: inset 0 -5px 45px rgba(100,100,100,0.2), 0 1px 1px rgba(255,255,255,0.2);
-webkit-transition: box-shadow .5s ease;
-moz-transition: box-shadow .5s ease;
-o-transition: box-shadow .5s ease;
-ms-transition: box-shadow .5s ease;
transition: box-shadow .5s ease;
}
input:focus { box-shadow: inset 0 -5px 45px rgba(100,100,100,0.4), 0 1px 1px rgba(255,255,255,0.2); }
Line 1, Column 1
Tab Size: 4
CSS


Body Mass Index (BMI) Prediction
Please Enter Your Height and Weight
180
73
73
BMI Predict
Normal