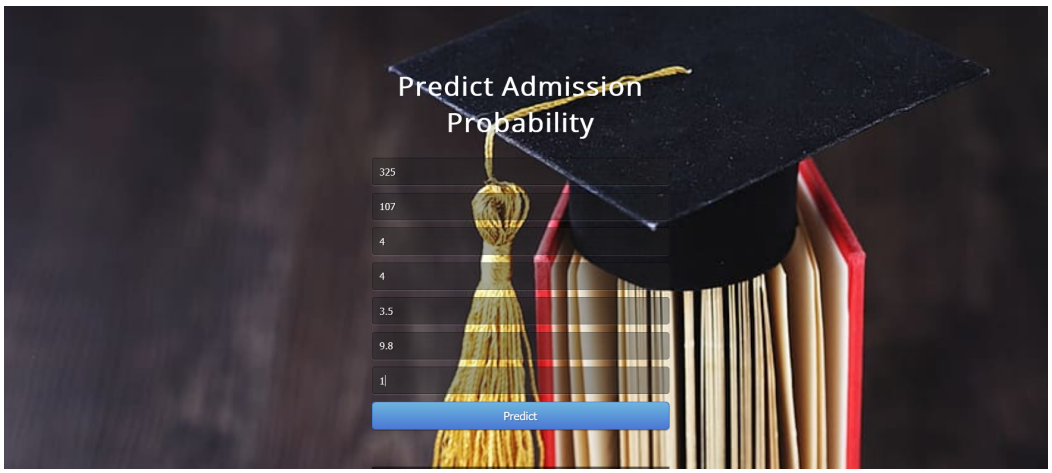
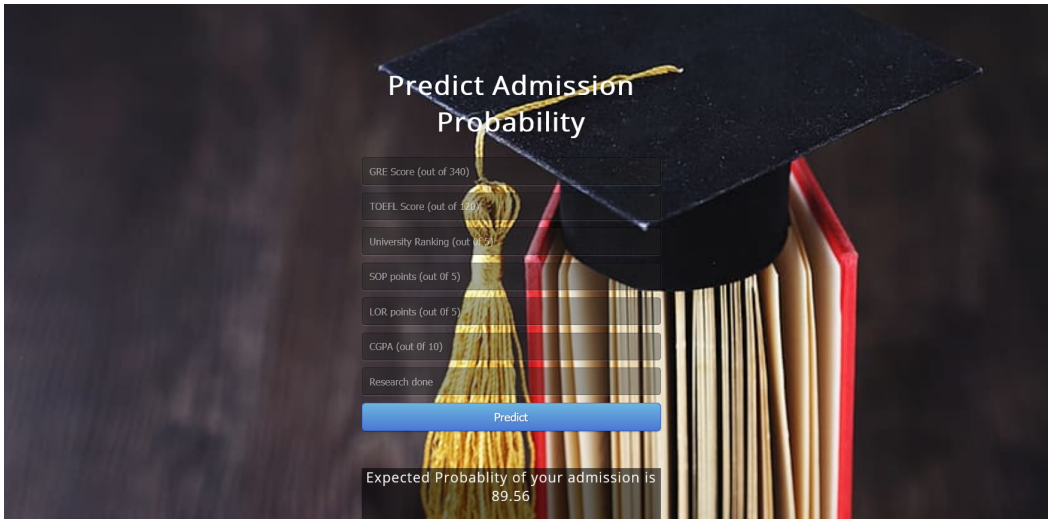
Name: Vaishnavi Dixit
Batch code: LISUM02
Submission date: 15th August 2021
Submitted to:

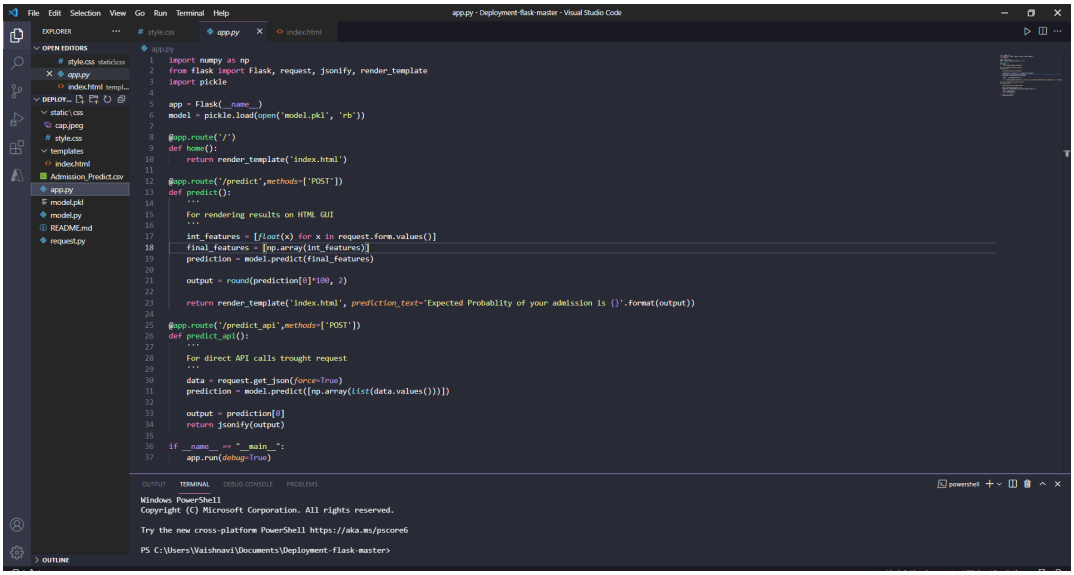
WEB APPLICATION:





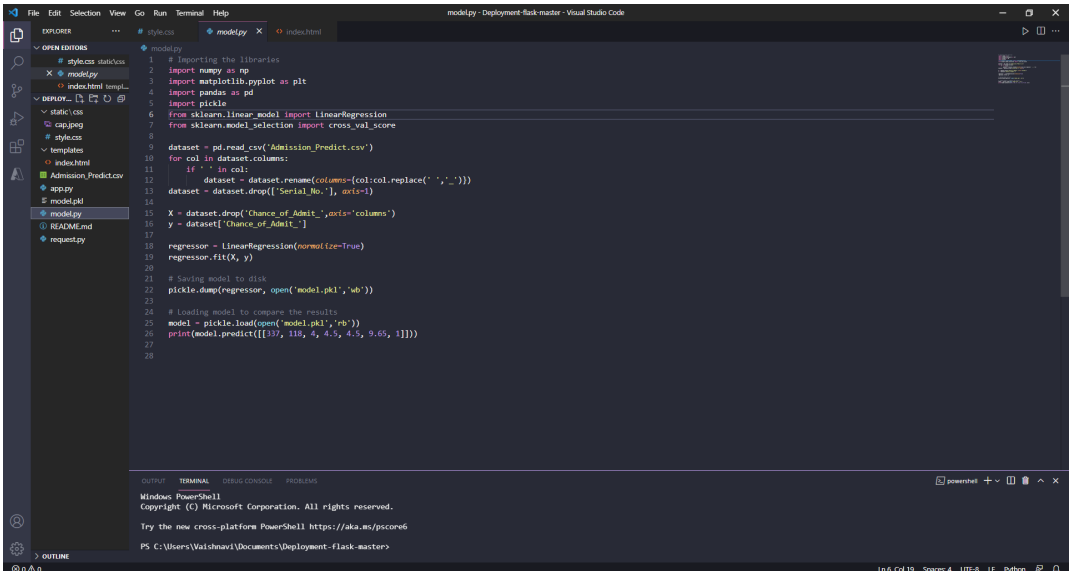
GRE (out of 340)
TOEFL (out of 120)
University Rank (out of 5)
SOP (out of 5)
LOR (out of 5)
CGPA (out of 10)
Research

app.py



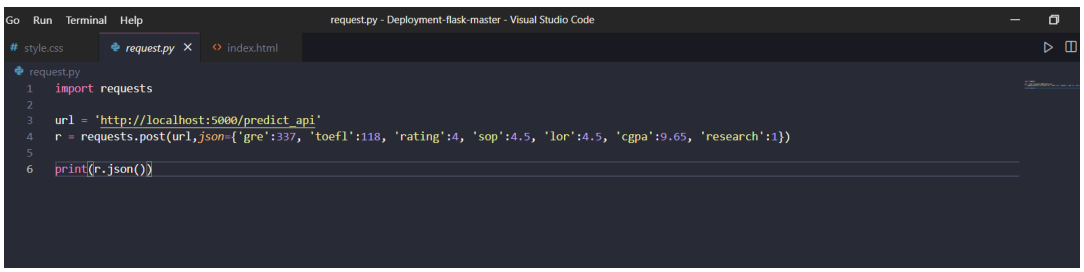
```python
import numpy as np
from flask import Flask, request, jsonify, render_template
import pickle

app = Flask(__name__)
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 = [float(x) for x in request.form.values()]
    final_features = [np.array(int_features)]
    prediction = model.predict(final_features)

    output = round(prediction[0]*100, 2)

    return render_template('index.html', prediction_text='Expected Probability of your admission is {}'.format(output))

@app.route('/predict_api',methods=['POST'])
def predict_api():
    '''
    For direct API calls trought request
    '''
    data = request.get_json(force=True)
    prediction = model.predict([np.array(list(data.values()))])

    output = prediction[0]
    return jsonify(output)

if __name__ == "__main__":
    app.run(debug=True)
```

model.py



```python
# Importing the libraries
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
import pickle
from sklearn.linear_model import LinearRegression
from sklearn.model_selection import cross_val_score

dataset = pd.read_csv('Admission_Predict.csv')
for col in dataset.columns:
    if ' ' in col:
        dataset = dataset.rename(columns={col:col.replace(' ','_')})
dataset = dataset.drop(['Serial_No.'], axis=1)

X = dataset.drop('Chance_of_Admit_',axis='columns')
y = dataset['Chance_of_Admit_']

regressor = LinearRegression(normalize=True)
regressor.fit(X, y)

# Saving model to disk
pickle.dump(regressor, open('model.pkl','wb'))

# Loading model to compare the results
model = pickle.load(open('model.pkl','rb'))
print(model.predict([[337, 118, 4, 4.5, 4.5, 9.65, 1]]))
```

request.py



```python
import requests

url = 'http://localhost:5000/predict_api'
r = requests.post(url,json={'gre':337, 'toefl':118, 'rating':4, 'sop':4.5, 'lor':4.5, 'cgpa':9.65, 'research':1})

print(r.json())
```