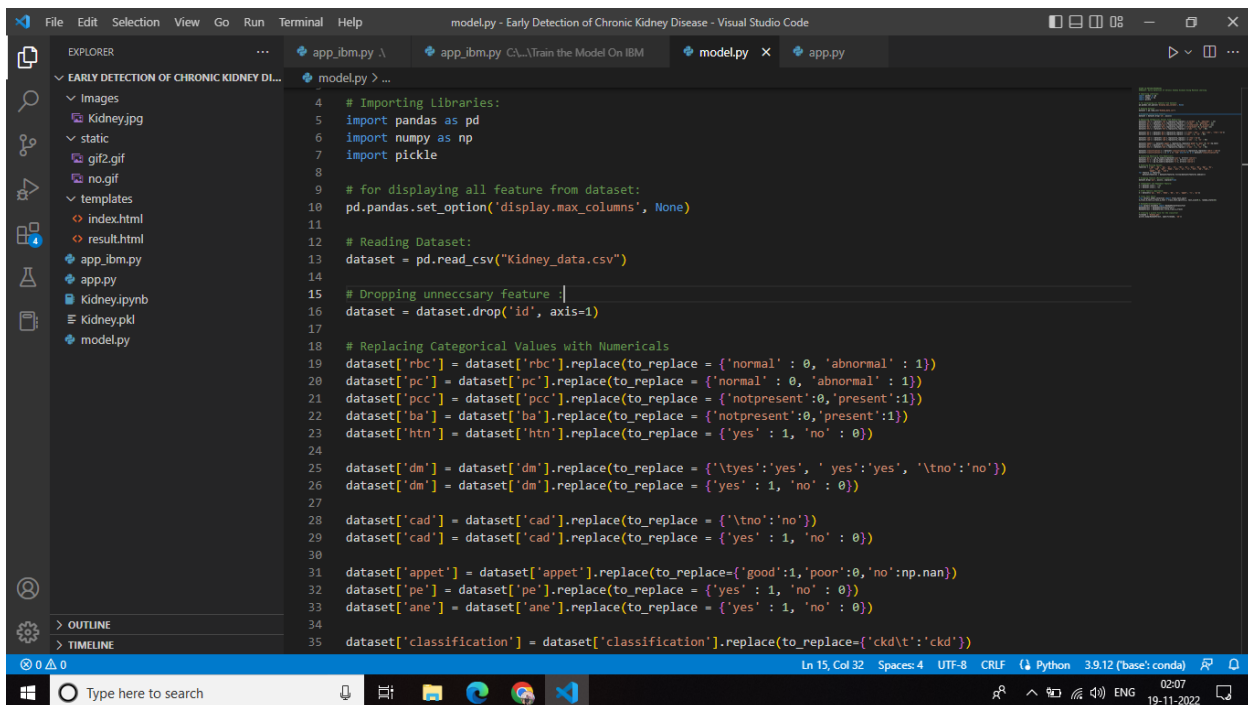


## LOCAL DEPLOYMENT

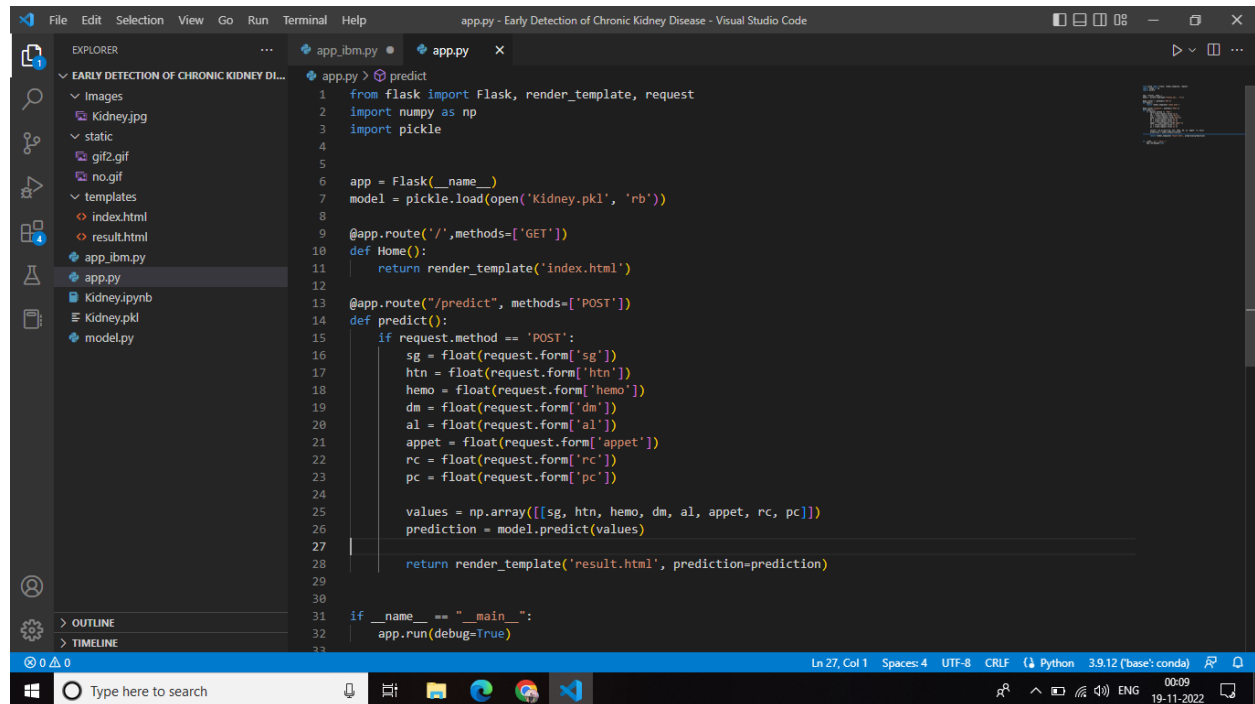
Date	19 November 2022
Team ID	PNT2022TMID04381
Project Name	Project - Early Detection of Chronic Kidney Disease Using Machine Learning

## MODEL.PY



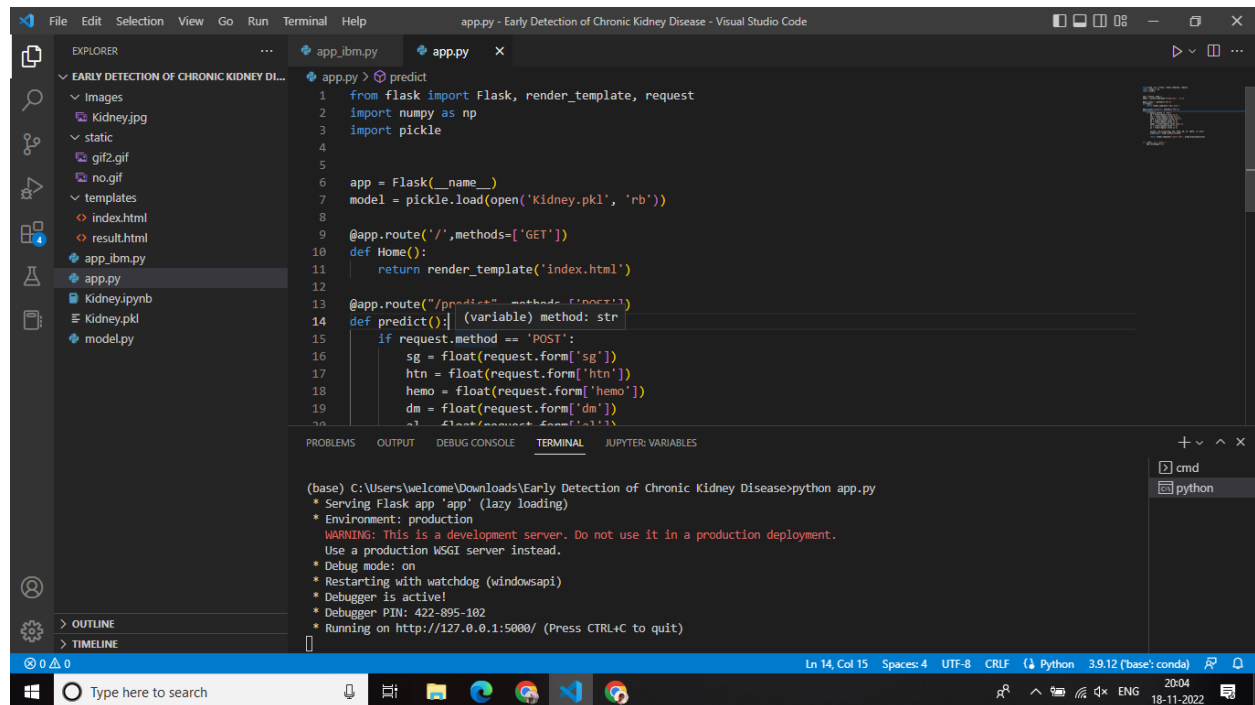
```
model.py > ...
4  # Importing Libraries:
5  import pandas as pd
6  import numpy as np
7  import pickle
8
9  # for displaying all feature from dataset:
10 pd.pandas.set_option("display.max_columns", None)
11
12 # Reading Dataset:
13 dataset = pd.read_csv("Kidney_data.csv")
14
15 # Dropping unnecessary feature :|
16 dataset = dataset.drop('id', axis=1)
17
18 # Replacing Categorical Values with Numericals
19 dataset['rbc'] = dataset['rbc'].replace(to_replace = {'normal' : 0, 'abnormal' : 1})
20 dataset['pc'] = dataset['pc'].replace(to_replace = {'normal' : 0, 'abnormal' : 1})
21 dataset['pcc'] = dataset['pcc'].replace(to_replace = {'notpresent':0, 'present':1})
22 dataset['ba'] = dataset['ba'].replace(to_replace = {'notpresent':0, 'present':1})
23 dataset['htn'] = dataset['htn'].replace(to_replace = {'yes' : 1, 'no' : 0})
24
25 dataset['dm'] = dataset['dm'].replace(to_replace = {'\tyes': 'yes', ' yes': 'yes', '\tno': 'no'})
26 dataset['dm'] = dataset['dm'].replace(to_replace = {'yes' : 1, 'no' : 0})
27
28 dataset['cad'] = dataset['cad'].replace(to_replace = {'\tno': 'no'})
29 dataset['cad'] = dataset['cad'].replace(to_replace = {'yes' : 1, 'no' : 0})
30
31 dataset['appet'] = dataset['appet'].replace(to_replace= {'good':1, 'poor':0, 'no':np.nan})
32 dataset['pe'] = dataset['pe'].replace(to_replace = {'yes' : 1, 'no' : 0})
33 dataset['ane'] = dataset['ane'].replace(to_replace = {'yes' : 1, 'no' : 0})
34
35 dataset['classification'] = dataset['classification'].replace(to_replace= {'ckd\t': 'ckd'})
```

## BUILD PYTHON CODE:



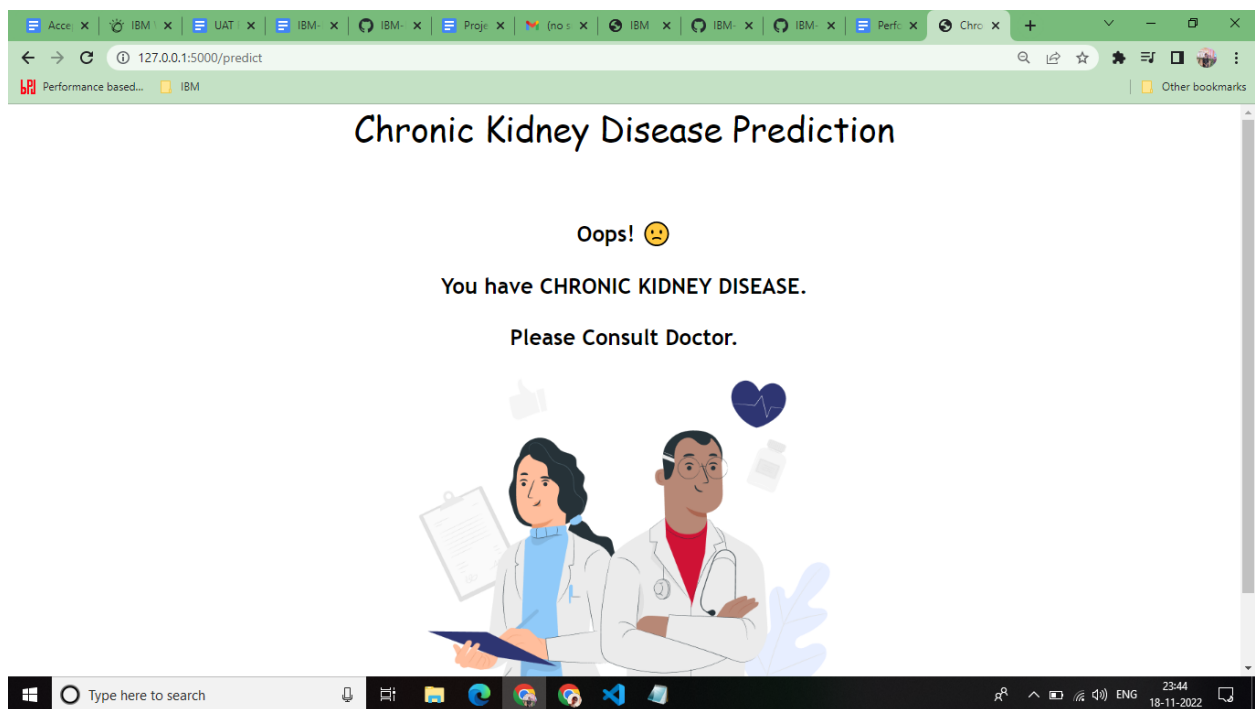
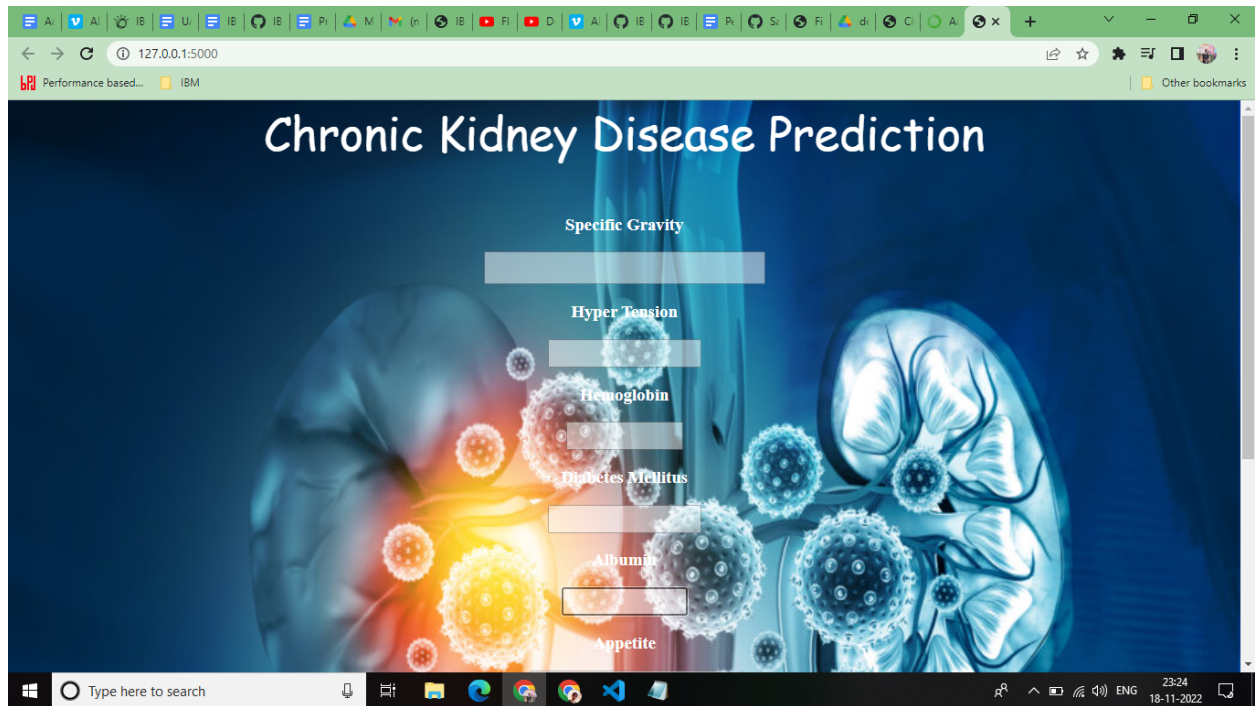
```
1 from flask import Flask, render_template, request
2 import numpy as np
3 import pickle
4
5
6 app = Flask(__name__)
7 model = pickle.load(open('Kidney.pkl', 'rb'))
8
9 @app.route('/', methods=['GET'])
10 def Home():
11     return render_template('index.html')
12
13 @app.route("/predict", methods=['POST'])
14 def predict():
15     if request.method == 'POST':
16         sg = float(request.form['sg'])
17         htn = float(request.form['htn'])
18         hemo = float(request.form['hemo'])
19         dm = float(request.form['dm'])
20         al = float(request.form['al'])
21         appet = float(request.form['appet'])
22         rc = float(request.form['rc'])
23         pc = float(request.form['pc'])
24
25         values = np.array([[sg, htn, hemo, dm, al, appet, rc, pc]])
26         prediction = model.predict(values)
27
28         return render_template('result.html', prediction=prediction)
29
30
31 if __name__ == "__main__":
32     app.run(debug=True)
33
```

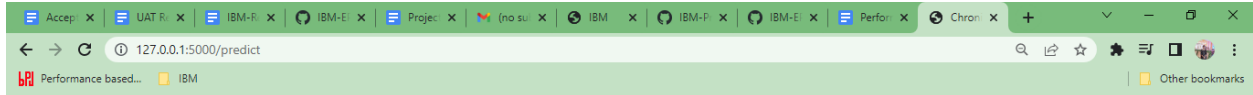
## RUN THE APP:



```
(base) C:\Users\welcome\Downloads\Early Detection of Chronic Kidney Disease>python app.py
* Serving Flask app 'app' (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 watchdog (windowsapi)
* Debugger is active!
* Debugger PIN: 422-895-182
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

## OUTPUT:





# Chronic Kidney Disease Prediction

🎉 Congratulation! 🎉

You DON'T have Chronic Kidney Disease.



Live a Healthy Life

