APPLICATION BUILDING

Run the APP

Date	10 November 2022
Team ID	PNT2022TMID12917
Project Name	Project - Early Detection Of Chronic Kidney Disease Using Machine Learning

The four html files are created and are stored in a folder called templates. The html files are

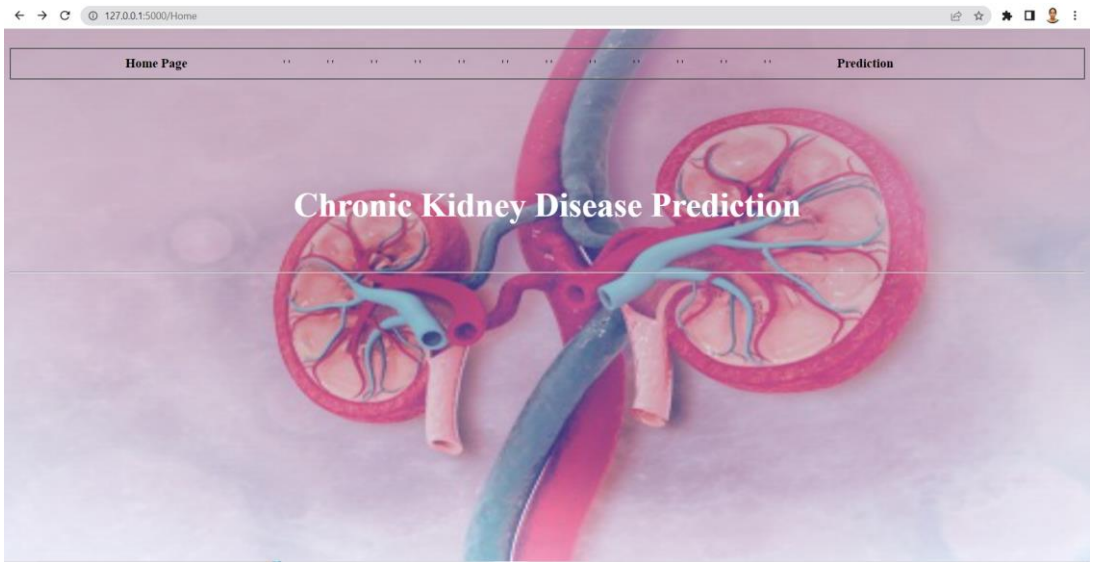
- Home page
- Index page (to get inputs)
- Prediction Yes page
- Prediction No page

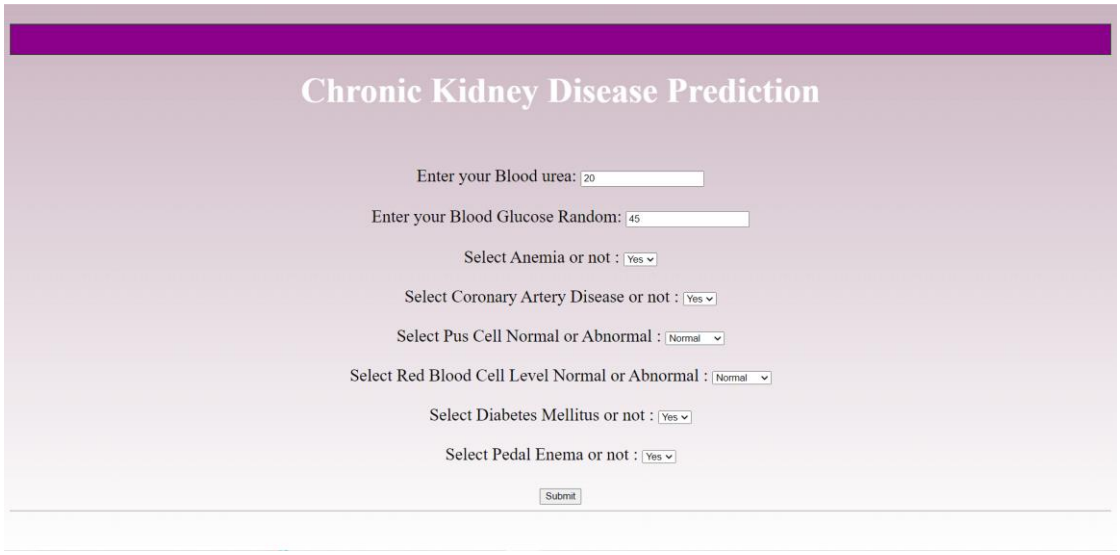
All the html files and the pickle file of the saved model are integrated using a flask file called app.py. The app.py flask file which is a web framework written in python for server-side scripting is coded and run on jupyter notebook.

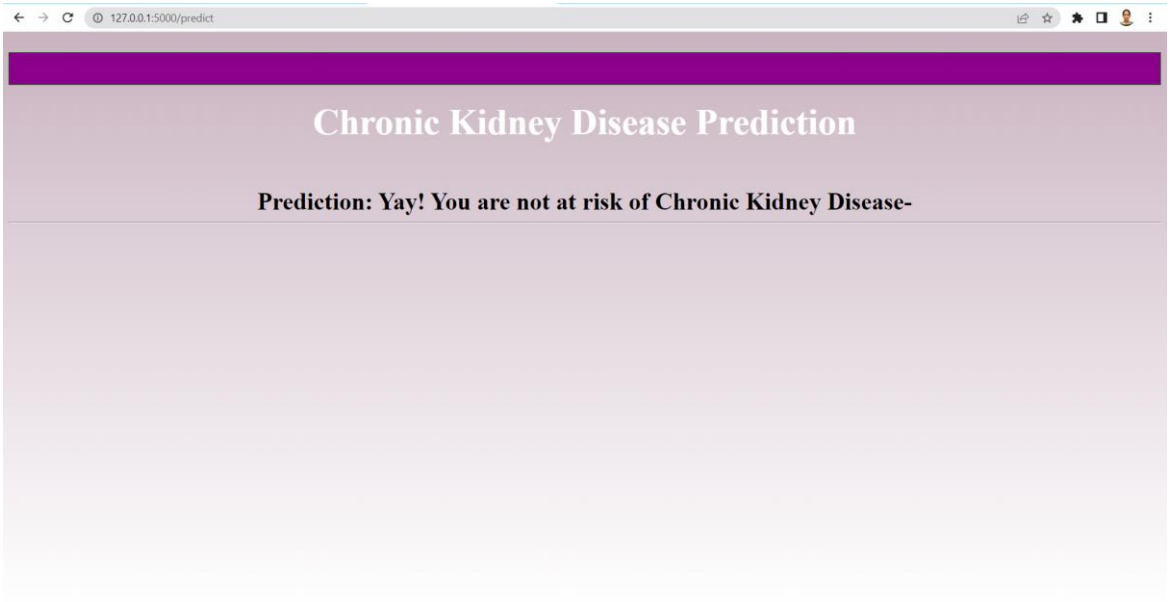
```
import numpy as np
import pandas as pd
from flask import Flask,request,render_template
import pickle as pk
```

```
app=Flask(__name__)
model=pk.load(open('CKD.pkl','rb'))

@app.route('/')
def home():
    return render_template('homepage.html')
@app.route('/Prediction',methods=['POST','GET'])
def prediction():
    return render_template('indexpage.html')
@app.route('/Home',methods=['POST','GET'])
def my_home():
    return render_template('homepage.html')
@app.route('/predict',methods=['POST'])
def predict():
    input_features=[float(x) for x in request.form.values()]
    features_value=[np.array(input_features)]
    features_name=['blood_urea','blood_glucose_random','coronary_artery_disease','anemia','pus_cell','red_blood_cells','diabetesm
    df=pd.DataFrame(features_value,columns=features_name)
    output=model.predict(df)
    if(output==1):
        return render_template('predictionNo.html')
    else:
        return render_template('predictionYes.html')


if __name__ == '__main__':
    app.run(debug=False)
```

The app.py runs on the local host: 5000 and the web page is viewed.


127.0.0.1:5000/Home
Home Page
Prediction
Chronic Kidney Disease Prediction


Chronic Kidney Disease Prediction
Enter your Blood urea: 20
Enter your Blood Glucose Random: 45
Select Anemia or not : Yes
Select Coronary Artery Disease or not : Yes
Select Pus Cell Normal or Abnormal : Normal
Select Red Blood Cell Level Normal or Abnormal : Normal
Select Diabetes Mellitus or not : Yes
Select Pedal Enema or not : Yes
Submit


127.0.0.1:5000/predict
Chronic Kidney Disease Prediction
Prediction: Yay! You are not at risk of Chronic Kidney Disease-