SPRINT 3 -APPLICATION BUILDING

PYTHON CODE :

App.py

```
import os
if __name__=='__main__':
    os.environ.setdefault('FLASK_ENV','development')

from flask import Flask, request, render_template
import pickle
import pandas as pd
import numpy as np
import joblib
scaler = joblib.load("my_scaler.save")



app = Flask(__name__)
model = pickle.load(open('model.pkl', 'rb'))

@app.route("/home")
@app.route("/")
def hello():
    return render_template("home.html")

@app.route("/predict", methods = ["GET", "POST"])
```

```
def predict():
   if request.method == "POST":
      input_features = [float(x) for x in request.form.values()]
      features_value = [np.array(input_features)]

      feature_names = ["ph", "Hardness" , "Solids", "Chloramines", "Sulfate",
                  "Conductivity", "Organic_carbon","Trihalomethanes", "Turbidity"]

      df = pd.DataFrame(features_value, columns = feature_names)
      df = scaler.transform(df)
      output = model.predict(df)

      if output[0] == 1:
         prediction = "safe"
       return render_template('predict.html', prediction_text= "Water is pure and
in good condition .It contains good level of all the characherisitic .so it is good for
human and {} to drink.Its predicted value is ".format(prediction)+str(output[0]))
else:
         prediction = "not safe"
         return render_template('predict.html', prediction_text= "Water is pure and
in good condition .It contains good level of all the characherisitic .so it is good for
human and {} to drink.Its predicted value is ".format(prediction)+str(output[0]))
```

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

output:

```
Serving Flask app "__main__" (lazy loading)
 * Environment: development
 * Debug mode: off
 * Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```