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Process:

1. Select a data set:
   I chose a data set named ‘iris’, which is contained in Python. Then I separate the data set in two parts, 80% of which is for training the model and 20% of which is for testing.

```python
from sklearn.datasets import load_iris
from sklearn.model_selection import train_test_split
import pandas as pd

#load the data set
iris = load_iris()
X = iris.data
y = iris.target

# 20% for testing and 80%for training
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
```

2. Build a model:
   I chose to build a Random Forest model to predict the species of iris.

```python
from sklearn.ensemble import RandomForestClassifier
# random forest
model = RandomForestClassifier(random_state=42)
model.fit(X_train, y_train)

import pickle
pickle.dump(model, open('model.pickle','wb'))
```

3. Use Flask application:

```python
from flask import Flask,jsonify,request
app=Flask(__name__)
@app.route('/',methods=['GET','POST'])
def home():
    if(request.method == 'GET'):
        data = 'Hello World!'
        return jsonify({'data':data})
@app.route('/predict/')
def class_predict():
    model=pickle.load(open('model.pickle','rb'))
    sepal_length=request.args.get("sepal_length")
    sepal_width=request.args.get('sepal_width')
    petal_length=request.args.get('petal_length')
    petal_width=request.args.get('petal_width')
    test_df=pd.DataFrame({'sepal_length':[sepal_length],'sepal_width':[sepal_width],'petal_length':[petal_length],'petal_width':[petal_width]})
    pred_class=model.predict(test_df)
    return jsonify({'Species':str(pred_class)})
if __name__=='__main__':
    app.run(debug=True)
```

4. Run the python file:

```
D:\programming\Python\Anaconda\python.exe C:\Users\Hyste\Downloads\app.py
 * Serving Flask app 'app'
 * Debug mode: on
WARNING: This is a development server. Do not use it in a production deployment. Use a production WSGI server instead.
 * Running on http://127.0.0.1:5000
Press CTRL+C to quit
 * Restarting with watchdog (windowsapi)
 * Debugger is active!
 * Debugger PIN: 523-706-781
```

5. Use postman and input the variables and values: