Data Glacier

Week 4

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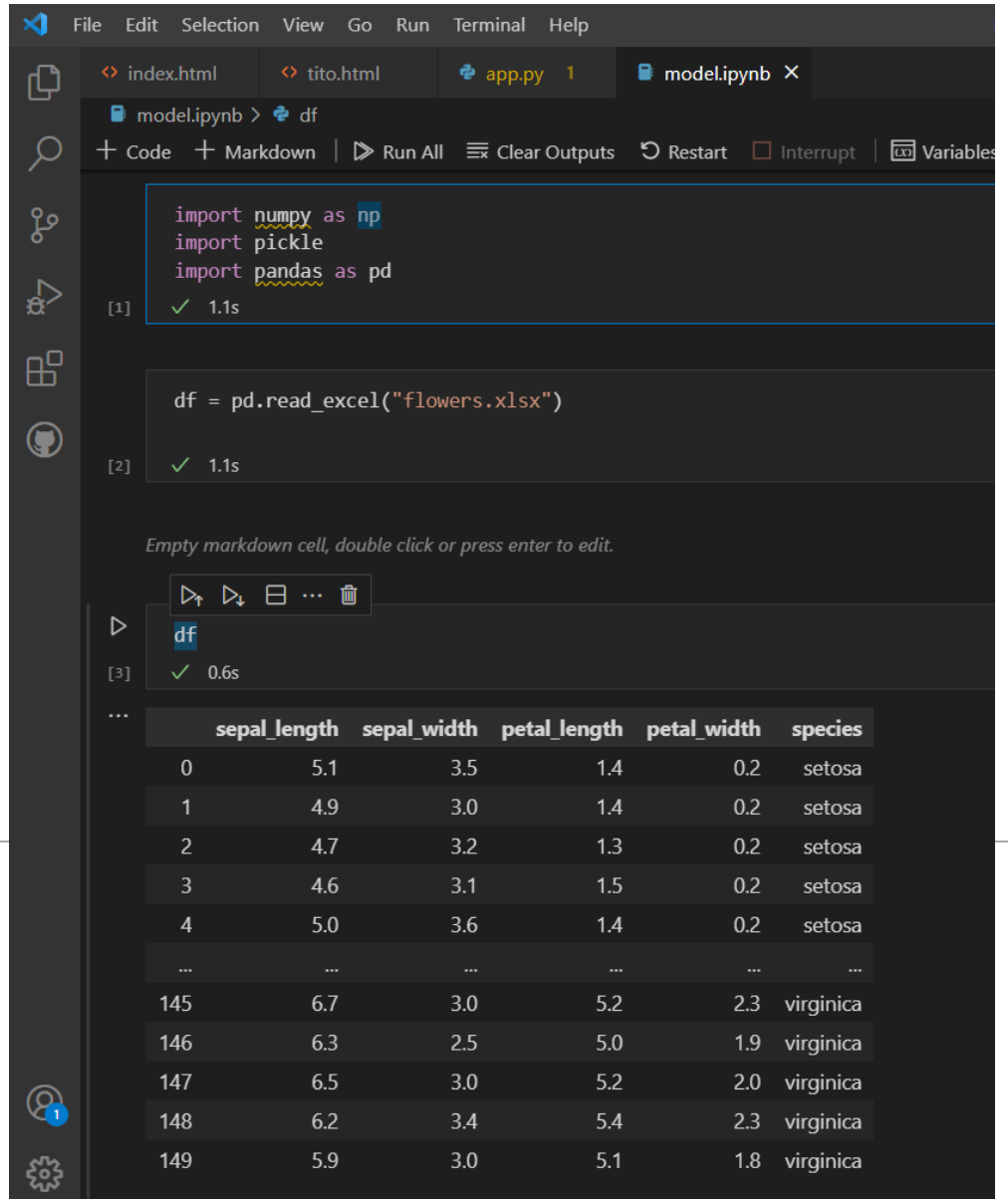
Submitted to : Github (week 4 Folder)

Step #1 :

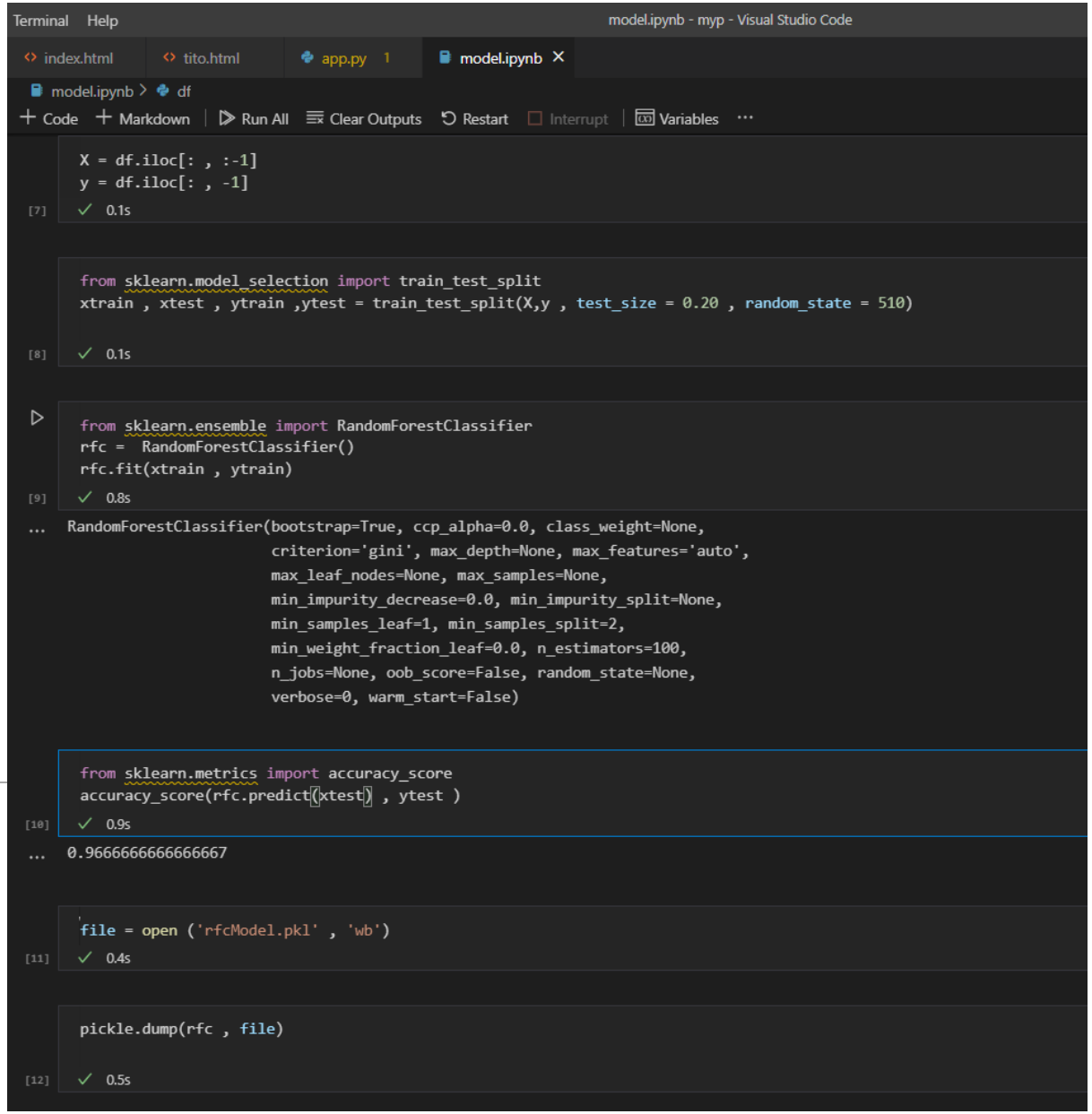
Getting the data and preparing the model (flowers classification Model)



	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa
...	...	...	...	...	...
145	6.7	3.0	5.2	2.3	virginica
146	6.3	2.5	5.0	1.9	virginica
147	6.5	3.0	5.2	2.0	virginica
148	6.2	3.4	5.4	2.3	virginica
149	5.9	3.0	5.1	1.8	virginica

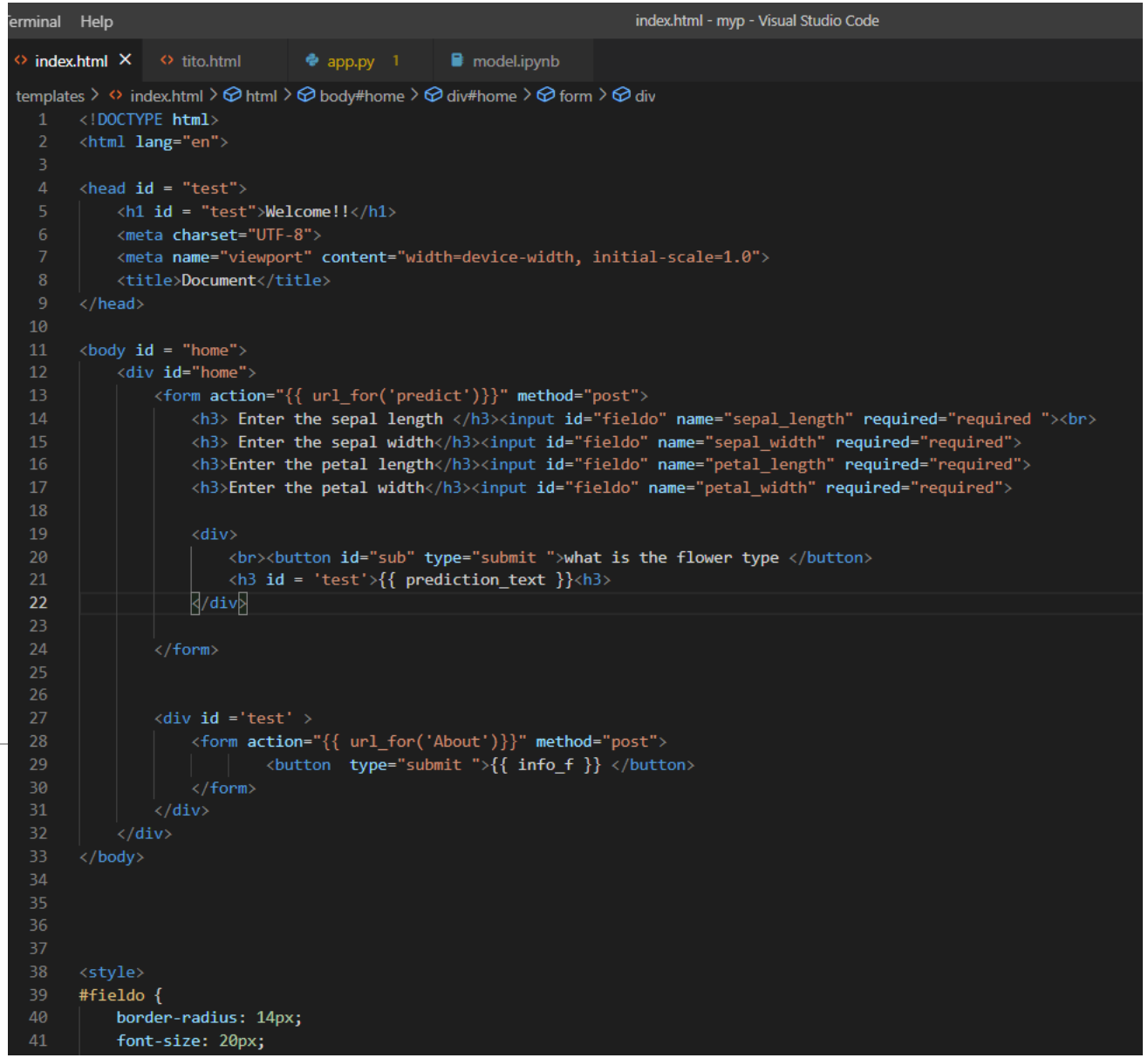
Step #2 :

Finishing and Pickling the Model
(in this case the model is Random Forest Classifier)



Step #3 :

Preparing the HTML file for rendering



Step #4:

Working with flask :

Loading the Model from the .pkl files :

```
app = Flask(__name__)
model = pickle.load(open('rfcModel.pkl' , 'rb'))
@app.route('/',methods=['GET'])
def Home():
    return render_template('index.html')
```

Preparing the home page with Flask :

```
@app.route('/',methods=['GET'])
def Home():
    return render_template('index.html')
```

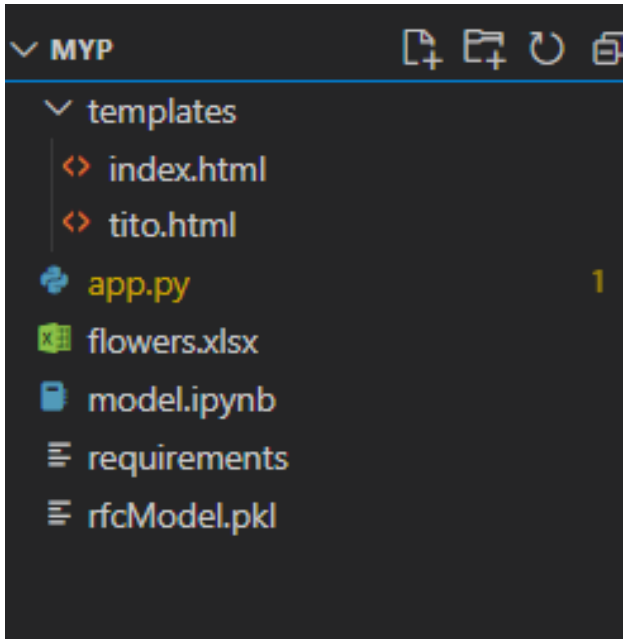
Adding the main function of the app (predict) :

```
@app.route('/predict' , methods = ['POST' ,'GET'])
def predict():
    if request.method == 'POST':
        sepal_length = float(request.form['sepal_length'])
        sepal_width=float(request.form['sepal_width'])
        petal_length = float(request.form['petal_length'])
        petal_width=float(request.form['petal_width'])


        prediction=model.predict([[sepal_length ,sepal_width ,  petal_length,   petal_width  ]])
        if prediction ==0:
                return render_template('index.html',prediction_text="it's Setosa" , info_f = "more about Setosa ?")
        elif prediction == 1:
                return render_template('index.html',prediction_text="it's Versicolor" , info_f = "more about Versicolor ?")
        elif prediction == 2:
                return render_template('index.html',prediction_text="it's Virginica" , info_f = "more about Virginica ?")
        else:
                return render_template('index.html',prediction_text="hata olustu")


    else:
        return render_template('index.html')
```

Step #5 :

launching

Now that we have all the required files



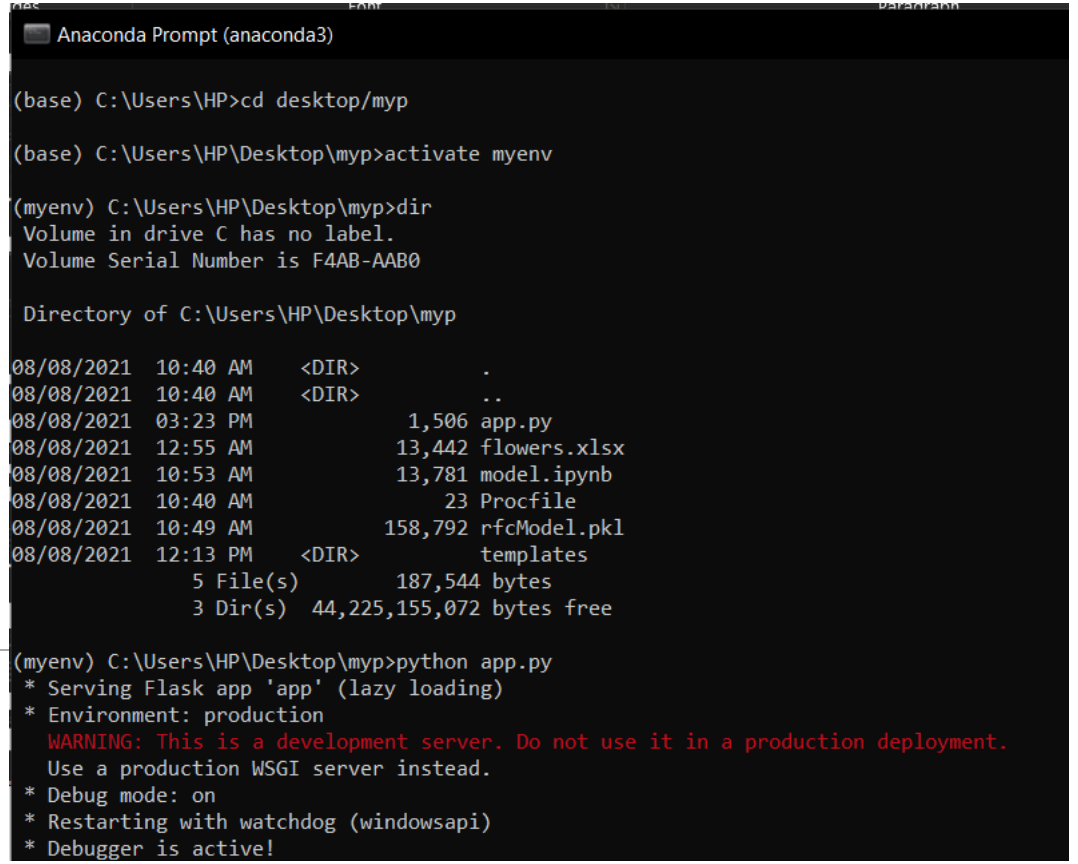
We are ready to launch

```
46
47  if __name__=="__main__":
48      app.run(debug=True)
```

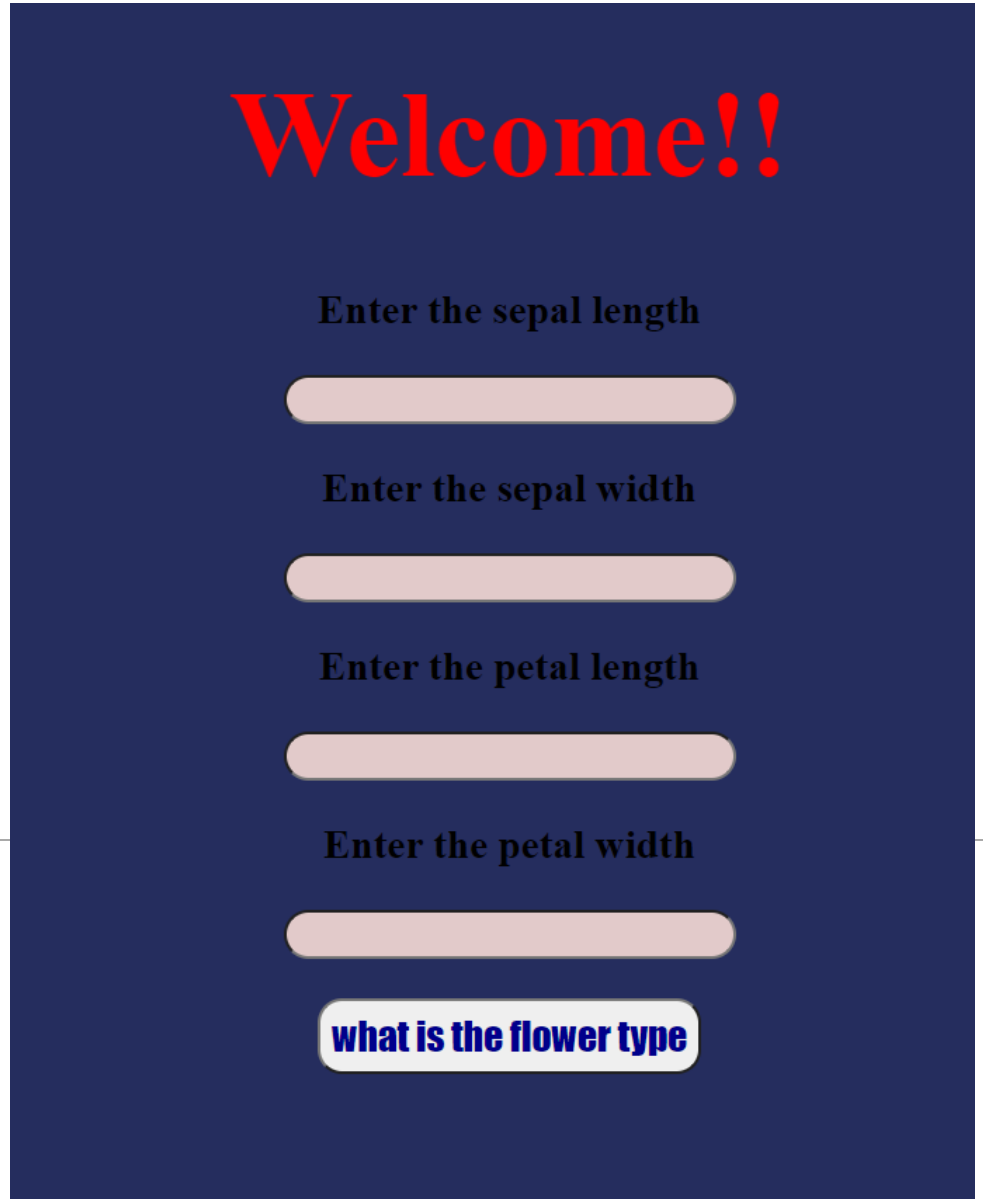
Step #6:

Activating the virtual environment and running the app

Running the App.py file



It’s ready to classify



It’s Setosa!!


Welcome!!
Enter the sepal length
5
Enter the sepal width
2.3
Enter the petal length
1.4
Enter the petal width
6
what is the flower type
it's Setosa