Flask deployment
week 4

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Batch code :LISUM12

First: I used the Iris dataset from Kaggle to do the assignment on it
Second: Did model by random forest classifier to predict by inputs which flower species it belongs
Third: Did app.py that will create the web by Flask to deploy it
Fourth: Did the Html file that has been designed for a form that will hold the inputs and will get the predicted value for the flower

The code of Flask deployment

```python
from flask import Flask , request,render_template
import numpy as np
import pickle


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

@app.route('/')
def home():
    return render_template('index.html')


@app.route('/predict',methods=['POST'])
def predict():




    features = [float(x) for x in request.form.values()]
    final_features = [np.array(features)]
    prediction = model.predict(final_features)

    return render_template('index.html', prediction_text='The flower species is {}'.format(prediction))

if __name__ == "__main__":
    app.run(port =5000,debug=True)
```
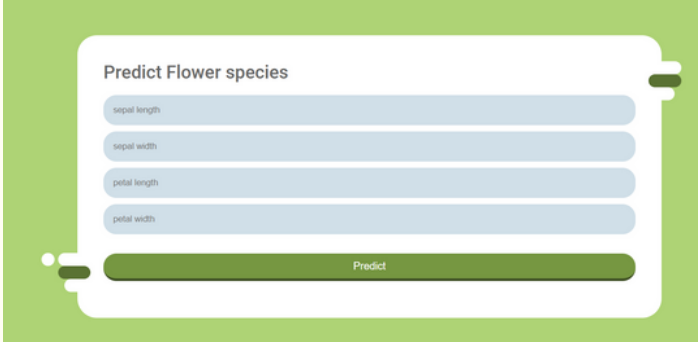
When running app.py will appear HTTP that will copy in the browser and will appear like the second image

```
* 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
* Running on http://127.0.0.1:5000 (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger PIN: 658-818-330
```
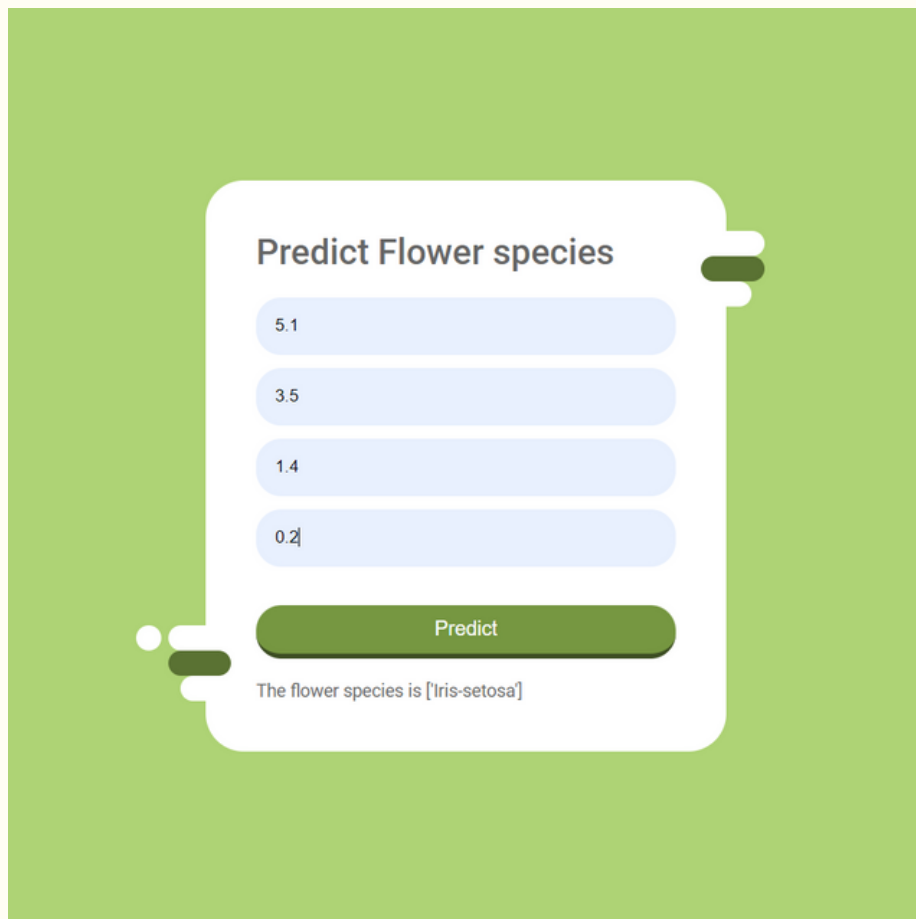

An example of predicting flower species: Give values from the dataset for iris-setosa and predict it correct