

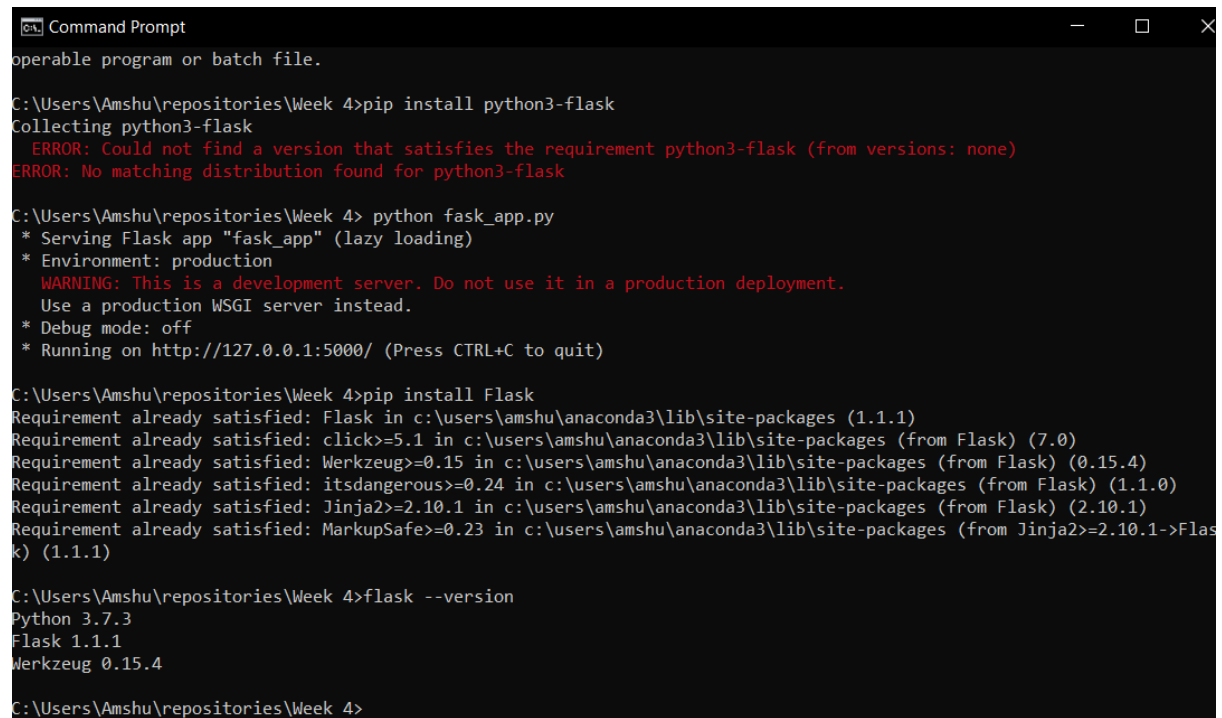
Flask Deployment:

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Batch: LISUM02

Submission Date: 17th Aug 2021

Step 1: Checking and installing flask on local server



```
Command Prompt
operable program or batch file.

C:\Users\Amshu\repositories\Week 4>pip install python3-flask
Collecting python3-flask
  ERROR: Could not find a version that satisfies the requirement python3-flask (from versions: none)
ERROR: No matching distribution found for python3-flask

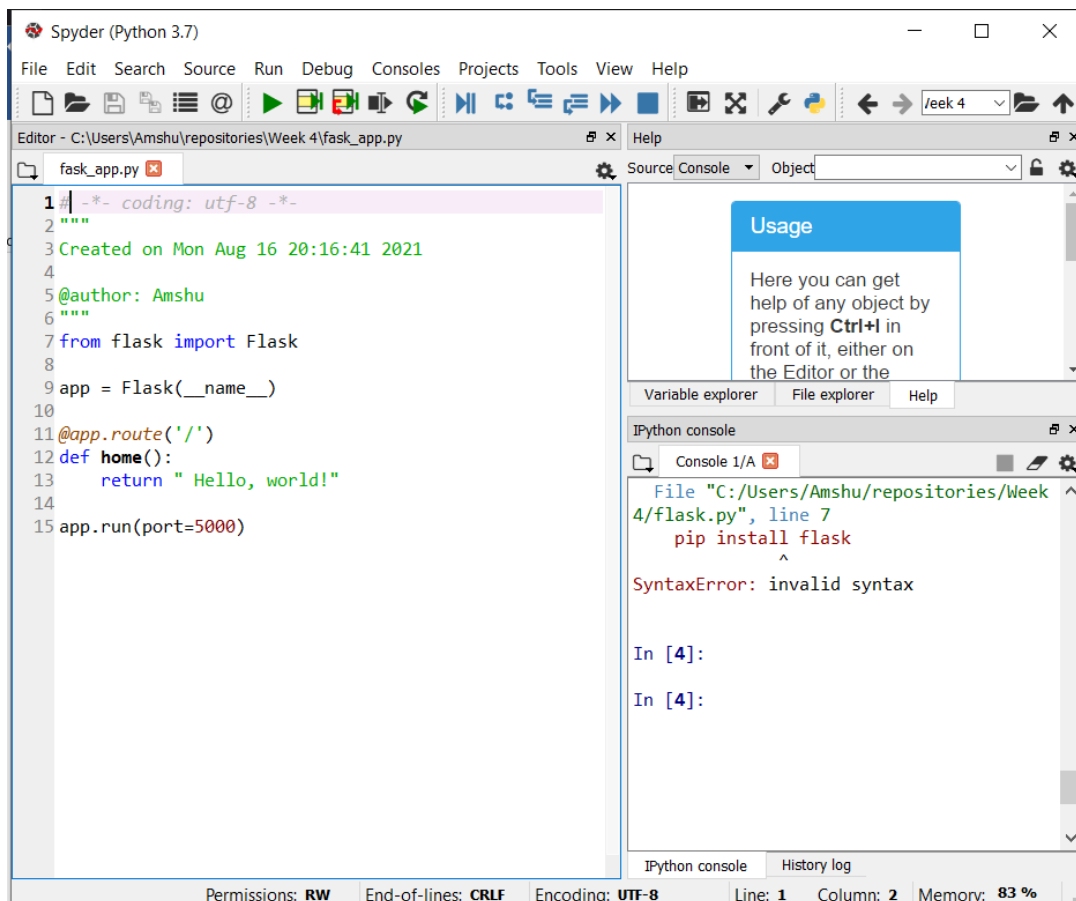
C:\Users\Amshu\repositories\Week 4> python fask_app.py
* Serving Flask app "fask_app" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

C:\Users\Amshu\repositories\Week 4>pip install Flask
Requirement already satisfied: Flask in c:\users\amshu\anaconda3\lib\site-packages (1.1.1)
Requirement already satisfied: click>=5.1 in c:\users\amshu\anaconda3\lib\site-packages (from Flask) (7.0)
Requirement already satisfied: Werkzeug>=0.15 in c:\users\amshu\anaconda3\lib\site-packages (from Flask) (0.15.4)
Requirement already satisfied: itsdangerous>=0.24 in c:\users\amshu\anaconda3\lib\site-packages (from Flask) (1.1.0)
Requirement already satisfied: Jinja2>=2.10.1 in c:\users\amshu\anaconda3\lib\site-packages (from Flask) (2.10.1)
Requirement already satisfied: MarkupSafe>=0.23 in c:\users\amshu\anaconda3\lib\site-packages (from Jinja2>=2.10.1->Flask) (1.1.1)

C:\Users\Amshu\repositories\Week 4>flask --version
Python 3.7.3
Flask 1.1.1
Werkzeug 0.15.4

C:\Users\Amshu\repositories\Week 4>
```

Step 2: Creating Python file to run flask server



Step 3: Run basic flask python file to see if flask server runs locally

```

File "flask.py", line 7
  pip install flask
    ^
SyntaxError: invalid syntax

C:\Users\Amshu\repositories\Week 4> python flask.py
Traceback (most recent call last):
  File "flask.py", line 7, in <module>
    from flask import Flask
  File "C:\Users\Amshu\repositories\Week 4\flask.py", line 7, in <module>
    from flask import Flask
ImportError: cannot import name 'Flask' from 'flask' (C:\Users\Amshu\repositories\Week 4\flask.py)

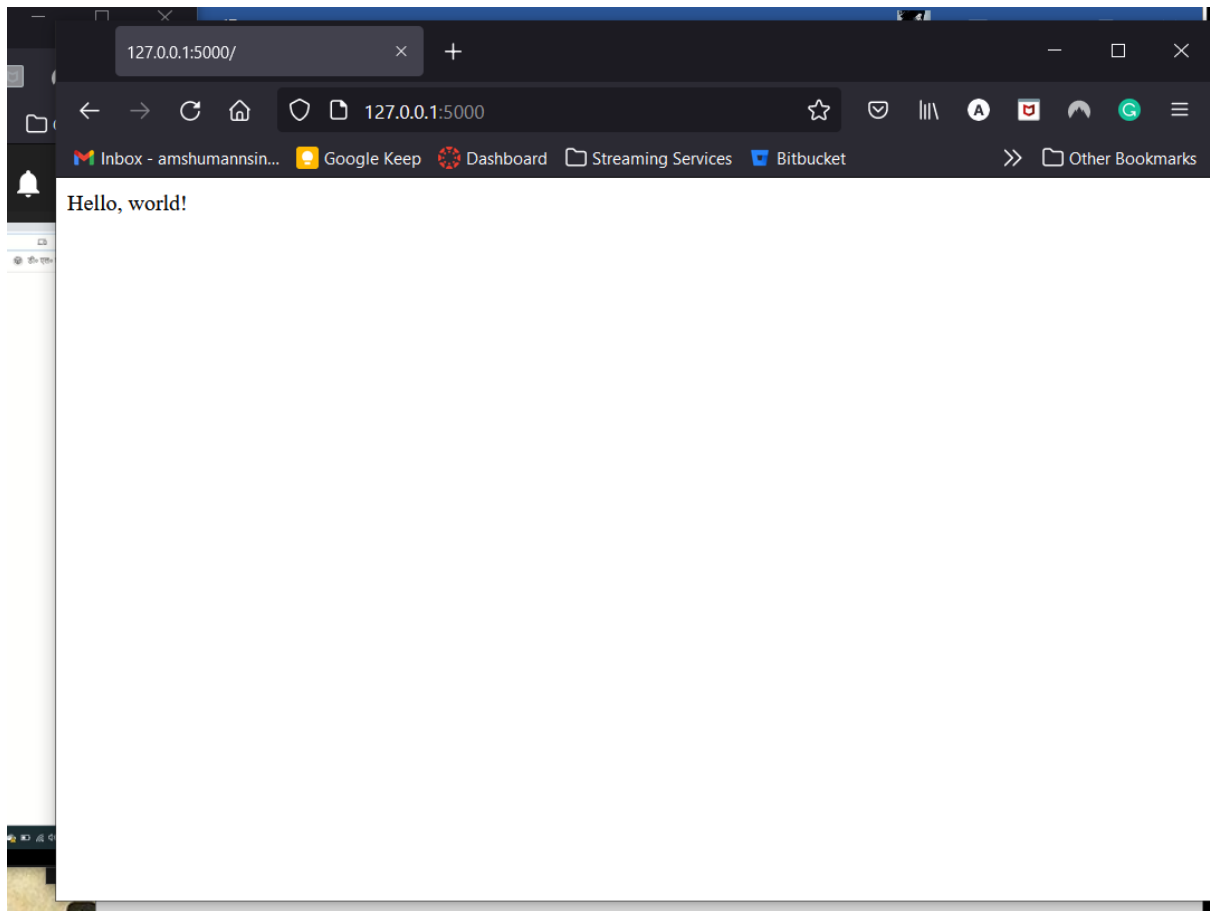
C:\Users\Amshu\repositories\Week 4> apt-get install python3-flask
'apt-get' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\Amshu\repositories\Week 4> pip install python3-flask
Collecting python3-flask
  ERROR: Could not find a version that satisfies the requirement python3-flask (from versions: none)
  ERROR: No matching distribution found for python3-flask

C:\Users\Amshu\repositories\Week 4> python fask_app.py
* Serving Flask app "fask_app" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: off
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)

```

Step 4: Check if server is running using the browser



Step 5: Create file which will be used to deploy the model on the server

Spyder (Python 3.7)

File Edit Search Source Run Debug Consoles Projects Tools View Help

C:\Users\Amshu\repositories\Week 4

Editor - C:\Users\Amshu\repositories\Week 4\ask_app.py

ask_app.py index.html

```
1
2 import numpy as np
3 from flask import Flask, request, render_template
4 import pickle
5
6 app = Flask(__name__)
7 model=pickle.load(open('finalized_model.pkl', 'rb'))
8
9 @app.route('/')
10 def home():
11     return render_template('index.html')
12
13 @app.route('/predict',methods=['POST'])
14 def predict():
15     int_features=[int(x) for x in request.form.values()]
16     final_features= [np.array(int_features)]
17     prediction= model.predict(final_features)
18
19     output=prediction
20
21     return render_template('index.html', prediction_text='Did the person survive {}'.format(output))
22
23 if __name__=="__main__":
24     app.run(port=5000,debug=True)
```

```
1|
2 <!DOCTYPE html>
3 <html>
4 <head>
5 <title> ML Flask deployment</title>
6 </head>
7 <body>
8     <div class="Login">
9         <h1> Predict House Price</h1>
10
11         <form action="{{url_for('predict')}}" method="post">
12             <input type="text" name="Age" placeholder="Age" required="required" />
13             <input type="text" name="SibSp" placeholder="SibSp" required="required" />
14             <input type="text" name="Parch" placeholder="Parch" required="required" />
15             <input type="text" name="Fare" placeholder="Fare" required="required" />
16             <input type="text" name="Class 1" placeholder="Class 1" required="required" />
17             <input type="text" name="Class 2" placeholder="Class 2" required="required" />
18             <input type="text" name="Class 3" placeholder="Class 3" required="required" />
19             <input type="text" name="Embarked C" placeholder="Embarked C" required="required" />
20             <input type="text" name="Embarked Q" placeholder="Embarked Q" required="required" />
21             <input type="text" name="Embarked S" placeholder="Embarked S" required="required" />
22             <input type="text" name="Male" placeholder="Male" required="required" />
23             <input type="text" name="Female" placeholder="Female" required="required" />
24
25             <button type="submit">Predict</button>
26         </form>
27         <br>
28         {{ prediction_text }}
29     </div>
30 </body>
31 </html>
32
33
34
```

Step 6: Run python file

```
C:\Windows\System32\cmd.exe - python fask_app.py
C:\Users\Amshu\repositories\Week 4> python fask_app.py
* Serving Flask app "fask_app" (lazy loading)
* 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
* Restarting with stat
* Debugger is active!
* Debugger PIN: 265-740-194
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
[1]
127.0.0.1 - - [17/Aug/2021 14:15:19] "POST /predict HTTP/1.1" 200 -
[1]
127.0.0.1 - - [17/Aug/2021 14:15:51] "POST /predict HTTP/1.1" 200 -
* Detected change in 'C:\Users\Amshu\repositories\Week 4\fask_app.py', reloading
* Restarting with stat
* Debugger is active!
* Debugger PIN: 265-740-194
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
* Detected change in 'C:\Users\Amshu\repositories\Week 4\fask_app.py', reloading
* Restarting with stat
* Debugger is active!
* Debugger PIN: 265-740-194
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [17/Aug/2021 14:17:36] "POST /predict HTTP/1.1" 200 -
* Detected change in 'C:\Users\Amshu\repositories\Week 4\fask_app.py', reloading
* Restarting with stat
* Debugger is active!
* Debugger PIN: 265-740-194
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [17/Aug/2021 14:17:53] "POST /predict HTTP/1.1" 200 -
```

Step 7: Open local server to run the model

Flask Part 2: Model Deployment × ML Flask deployment × +

← → ↺ 🏠

127.0.0.1:5000/predict

☆ 📌 📁 📧 📧 📧 📧

Inbox - amshumannsin... Google Keep Dashboard Streaming Services Bitbucket >> Other Bookmarks

Predict House Price

45	0	0	12	1
0	0	1	0	0
0	<input type="text" value="1"/>	<input type="button" value="Predict"/>		

Did the person survive [0]