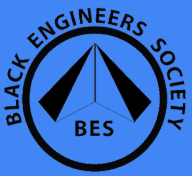


# Creating Your Own Web Application

Part 1 - Python Flask Framework

Repo Link: <https://ter.ps/blackhackweb>



# What is Flask?




# Flask

- Web Development “Microframework”
- Very easy to setup and run
- Allows you to choose how you want to implement most things

Repo Link: <https://ter.ps/blackhackweb>


# Getting Started







- Download the link on the GitHub repo



9 commits    1 branch    0 releases    1 contributor

Branch: master ▾    New pull request    Create new file    Upload files    Find file    Clone or download ▾

 **codemastermd** Update README.md    Latest commit e8b6b4c 20 days ago

 <a href="#">app</a>	updating for tutorial	21 days ago
 <a href="#">.gitignore</a>	Adding base files	24 days ago
 <a href="#">README.md</a>	Update README.md	20 days ago
 <a href="#">config.py</a>	Adding base files	24 days ago
 <a href="#">requirements.txt</a>	Adding base files	24 days ago
 <a href="#">run.py</a>	Adding base files	24 days ago

## Getting Started (cont.)

- Open the Zip File
- Open Terminal
- Type `cd Downloads`
- `cd blackhack\_webdev`

```
archangel~$ cd Downloads/  
archangel~/Downloads$ cd blackhack_webdev-master  
archangel~/Downloads/blackhack_webdev-master$ ls  
README.md*      config.py*      run.py*  
app/             requirements.txt*  
archangel~/Downloads/blackhack_webdev-master$
```

# Installing Pip

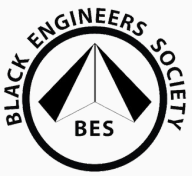
```
archangel~/Downloads/blackhack_webdev-master$ curl https://bootstrap.pypa.io/get-pip.py -o get-pip.py
% Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
           % Done    %         Dload  Upload   Total   Spent    Left   Speed
100 1622k  100 1622k    0     0  5445k      0 --:--:-- --:--:-- --:--:-- 5445k
archangel~/Downloads/blackhack_webdev-master$ python get-pip.py
```

# Installing Dependencies

```
pip install -r requirements.txt
```

```
archangel~/Downloads/blackhack_webdev-master$ pip install -r requirements.txt
```

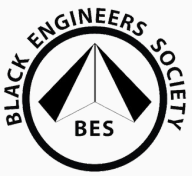
- Pip is python's package manager
- This installs all the libraries we need from the requirements file



# Virtualenv (optional)

- Isolated environment for python packages
- Useful for not clogging your system with unnecessary files

```
1. chrissul@chrissul: ~/Documents/dev (bash)
chrissul@chrissul:~/Documents/dev$ virtualenv env
New python executable in /Users/chrissul/Documents/dev/env/bin/python
Installing setuptools, pip, wheel...done.
chrissul@chrissul:~/Documents/dev$ source env/bin/activate
(env) chrissul@chrissul:~/Documents/dev$
(env) chrissul@chrissul:~/Documents/dev$ deactivate
chrissul@chrissul:~/Documents/dev$
```

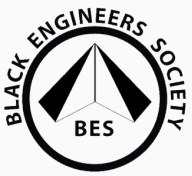


# Running your Flask App

```
export FLASK_APP=run.py
```

```
export FLASK_DEBUG=1
```

```
flask run
```



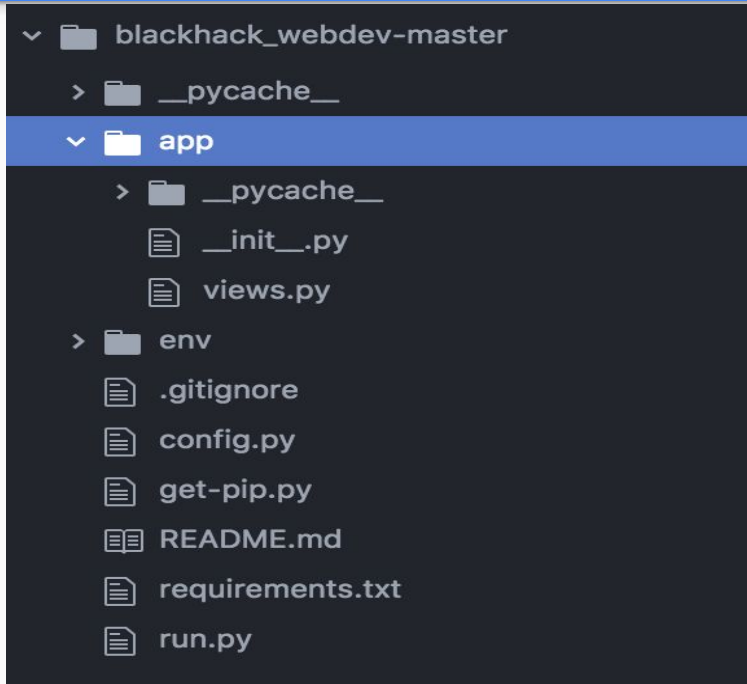


# Download a Text Editor

- Download Atom
- Website -> <https://atom.io>
- After downloading, open Atom
- File -> Open -> Downloads/blackhack\_webdev-master




# Creating necessary folders




- Right click 'app' and select 'New Folder'
- Create a new directory called **"templates"** inside of the "app" folder
- Create another new directory called **"static"** also inside of the app folder

## Project

▼  blackhack\_webdev-master


>  \_\_pycache\_\_

▼  app


>  \_\_pycache\_\_

>  static

>  **templates**


 \_\_init\_\_.py


 .DS\_Store

 views.py


>  env


 .DS\_Store


 .gitignore

 config.py

 get-pip.py

 README.md

 requirements.txt

 run.py

# Creating a Homepage

views.py

```
1 # views.py
2
3 from app import app
4
5 @app.route('/')
6 def index():
7     return "Hello"
8
```

# In views.py

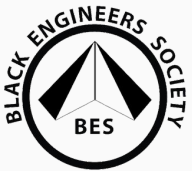
from flask import  
render\_template

# Add

@app.route('/index')

# In our index function

return render\_template("index.htm



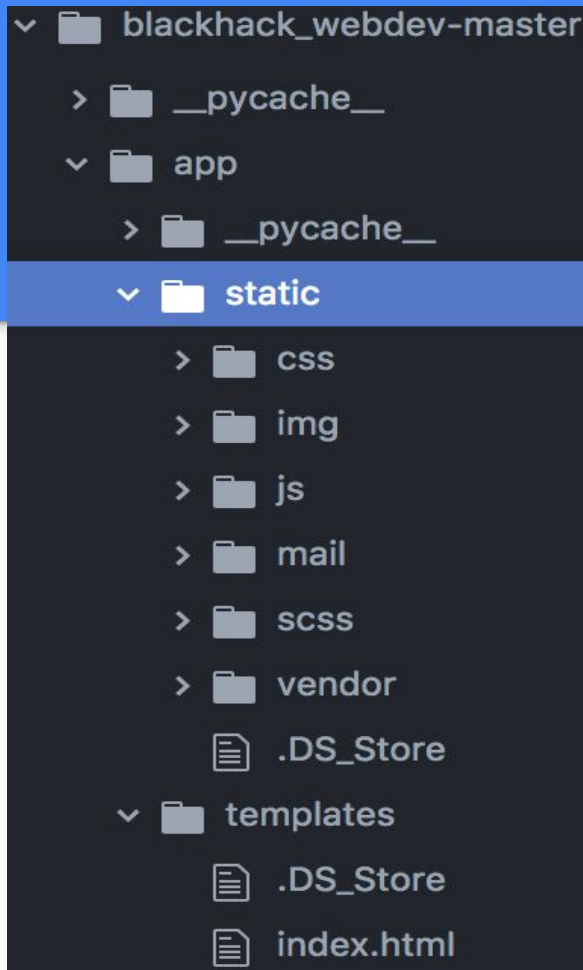
# Now should look like this

views.py

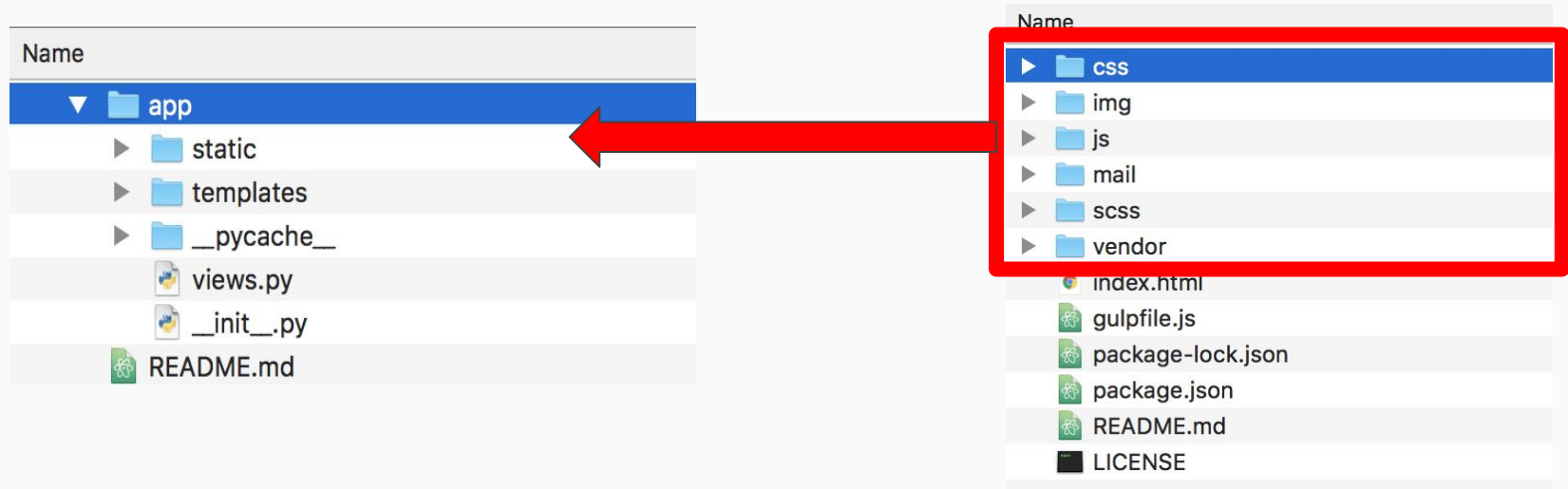
```
1  # views.py
2
3  from flask import render_template
4  from app import app
5
6  @app.route('/')
7  @app.route('/index')
8  def index():
9      return render_template('index.html')
```

# Bootstrap!

- Easy way to create template websites quickly.
- [www.startbootstrap.com](http://www.startbootstrap.com)
- Choose the “Freelancer” template
- Download the template



# Transfer folders over into the static folder





Repo Link: <https://ter.ps/blackhackweb>

# Move the index.html file into the templates folder

Name
▼ folder app
▶ folder static
▶ folder templates
▶ folder __pycache__
views.py
__init__.py
README.md

Name
▶ folder css
▶ folder img
▶ folder js
▶ folder mail
▶ folder scss
▶ folder vendor
index.html
gulpfile.js
package-lock.json
package.json
README.md
LICENSE

# Now to make it work

- Open the index.html file
- Add **"/static/"** everywhere that you see a file path

```
<!-- Custom styles for this template -->  
<link href="css/freelancer.min.css" rel="stylesheet">
```



```
<!-- Custom styles for this template -->  
<link href="/static/css/freelancer.min.css" rel="stylesheet">
```

# HACK DAY

10/20 KEB110.5 9AM-7PM



**NORTHROP  
GRUMMAN**

**Appian**

**Google**

**STRAVA**

