

INFO3180 Lab 2

Due Date: **Sunday, February 5, 2017**

Note: Because all Python and all the relevant development tools are already installed at <http://c9.io> , it is recommended that you use c9.io for this lab, you will need to sign up for an account. At a later date you can setup a similar environment on your computer.

Exercise 1 - Using the flask_starter

For this tutorial use the **flask_starter** as your starting point, you can get it here:

https://github.com/uwi-info3180/flask_starter

Step 1 - Clone the repository

If working with Cloud9 then do the following to clone the repository to the C9 workspace:

The screenshot shows the 'Create a new workspace' form in Cloud9. Red arrows and text annotations highlight the following steps:

- 1. Enter the name of your workspace.** Points to the 'Workspace name' field containing 'info3180-lab2'.
- 2. If given the option to select a team, ensure this is set to 'Don't Set a team for this workspace.'** Points to the 'Team' dropdown menu.
- 3. Make your workspace Public.** Points to the 'Public' radio button under the 'Hosted workspace' tab.
- 4. Enter the Github URL for the flask_starter repository.** Points to the 'Clone from Git or Mercurial URL (optional)' field.
- 5. Ensure you select 'Python' as your workspace template.** Points to the 'Python' template card in the 'Choose a template' section.

The form includes fields for 'Workspace name', 'Description', 'Team', and 'Clone from Git or Mercurial URL (optional)'. It also has tabs for 'Hosted workspace', 'Clone workspace', 'Remote SSH workspace', and 'Salesforce'. The 'Hosted workspace' tab is selected, showing 'Private' and 'Public' options. The 'Public' option is selected. The 'Choose a template' section shows various templates like HTML5, Node.js, PHP, Python, Django, Ruby, C++, Wordpress, Rails Tutorial, Blank, and Harvard's CS60.

or if working on your own local computer then do the following:

```
git clone https://github.com/uwi-info3180/flask_starter info3180-lab2
```

Step 2 - Create your own info3180-lab2 repository in Github

You can do this by removing the **.git** folder and initializing git again:

```
cd info3180-lab2 #not needed if you are working on Cloud9
rm -rf .git/
git init
git add .
git commit -am 'initial commit'
```

Then login to your Github account and visit <http://github.com/new> . Create a repository with the name "**info3180-lab2**". Ensure you don't create this repository with a **README** or any other files initially. Next add this new repository as a remote repository to your workspace and then push your code to it.

```
git remote add origin https://github.com/{yourusername}/info3180-
lab2.git
git push -u origin master
```

Exercise 2 - Creating a new route in Flask

Create a route in Flask that displays your "fake" profile information. Later on this will need to be a database driven application but for now we just want to have a placeholder.

Profile



Obi-Wan Kenobi

Today's date is Fri, 27 Jan 2017

Username: Obi-1

ID Number: 620099999

Age: 57

Gender: Male

I am a legendary Jedi Master.

Steps you'll need to take:

1. Create a new method and route in your **app/views.py** file. Call your route **"/profile"** and your method **"profile()"**
2. Create a new template in your **app/templates** directory, call it **"profile.html"** and customize it to look like the screenshot above.
 1. You may use your own image and information, but ensure you save your image in your **'app/static'** folder and reference it in your template using the **url_for()** Flask method. Also ensure that your template extends the **base.html** template.
3. Create a separate method called **"timeinfo"** which returns the current date in the format **Day, Date Month Year (for example Wed, 1 Feb 2017)**.
4. Use that method to pass the time to your template and output it using the Jinja2 **{{ variablename }}** template syntax.

Note:

Get the local date and time using Python (NOT Javascript) (this is needed in the fake profile) you might find this code helpful (For more information read: <http://www.cyberciti.biz/faq/howto-get-current-date-time-in-python/>)

```
#!/usr/bin/python
import time

now = time.strftime("%c")
## date and time representation
print "Current date & time " + time.strftime("%c")

## Only date representation
print "Current date " + time.strftime("%x")

## Take a look at the link mentioned for other directives that you
can use to format the time in the appropriate format.
```

Testing the app on C9 or locally

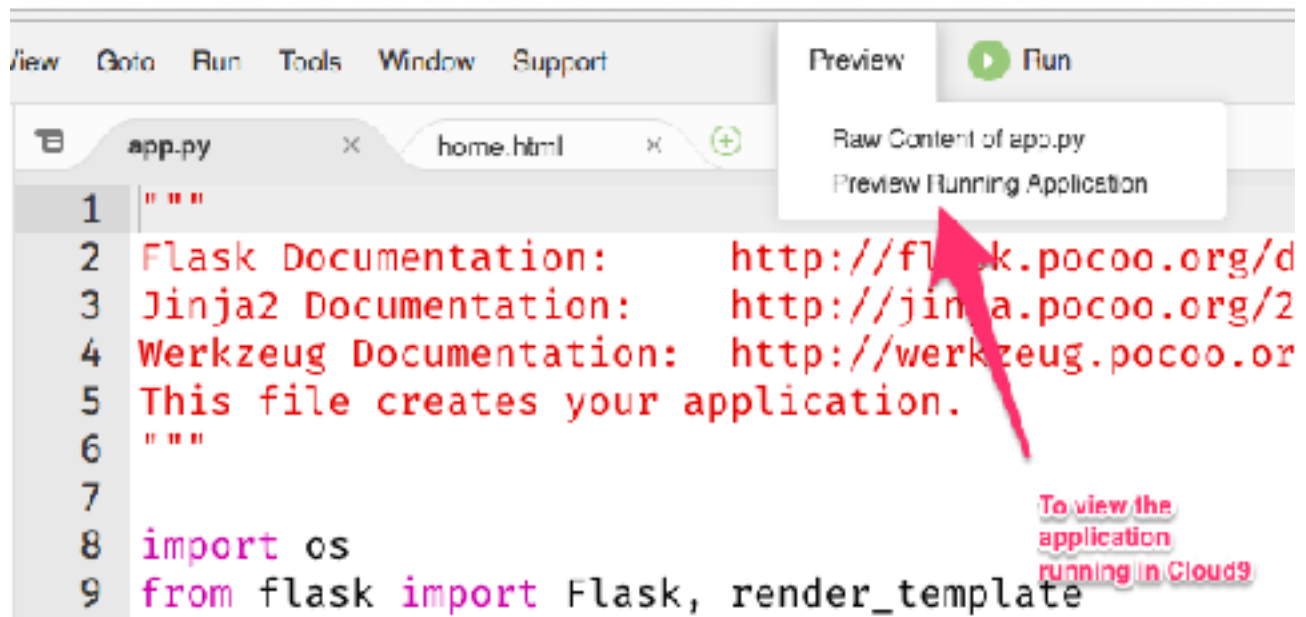
You'll need to activate your virtual environment and install the requirements then use 'python run.py'.

```
$ virtualenv venv
$ source venv/bin/activate
$ pip install -r requirements.txt
$ python run.py
```

You will see output similar to this

```
(venv)ylynfatt:~/workspace (master) $ python run.py
* Running on http://0.0.0.0:8080/ (Press CTRL+C to quit)
* Restarting with stat
* Debugger is active!
* Debugger pin code: 339-249-416
```

You can visit the running app by selecting "Preview Running Application"



Commit your code to your Github repository

Ensure that you add, commit and push your code (including any images used) to your Github repository.

```
git add .
git commit -m 'your commit message'
git push origin master
```

Submission

Submit your code via the "Lab 2 Submission" link on OurVLE. You are NOT required to push your code to Heroku. You should submit the following link:

1. Your Github repository URL for your Flask Exercise e.g. <https://github.com/{yourusername}/info3180-lab2>