01 Exercises - Templates

All the following exercises should use Jinja2 Templating. Some of these exercises are variations on exercises from last week, but updated to use templating.

1. Practice creating a new Pycharm project on an **existing** folder containing the files of a Flask app:

   - Download `Rendering_Example.zip` from the resources for this week on the Canvas page. extract the folder "`Rendering_Example`" from the zip file into the folder where you keep all your flask apps. In Pycharm, use "Open" from the "File" menu to open the folder ""`Rendering_Example`" (**IMPORTANT**: do NOT choose the folder above "`Rendering_Example`" to open). Configure the run configuration as usual and ensure that you can run the app.

   - Do the same for the other example code: "`URL_Management.zip`"

   - Use the command line or your File Manager to copy one of the above folders (e.g. "`Rendering_Example`") to a new folder (e.g. "`Rendering_Example2`"), delete the folder "`.idea`" inside the new folder (this removes Pycharm's configuration that was copied from the original project) and then open this new folder in Pycharm and get it running.

2. Using templating, show the date and time of day when the user lands on the home page of the app inside a HTML header on a page

3. Show **three** random quotes from a list of quotes inside an *unordered list* on a page. You can find a suitable list of quotes from, for example, `https://gist.github.com/robatron/a66acc0eed3835119817` or find an alternative list on the web. The list of quotes should be read from a file in the `static` folder of the app when the application starts up.

4. Write an app that uses a dynamic route ending with a positive integer, e.g. "/<int:num>", and generates a page that shows the prime divisors of the integer (which may be just 1 and the integer itself if it is prime). You can use code from the web for primality testing (c.f. Primality_test)

5. Write an app that includes all the functionality of the above apps, showing each functionality on a separate page (date and time on a "time.html" template page, quotes on a "quotes.html" template page, prime divisors on a "divisors.html" template page.

   Uses template inheritance so that these template pages inherit from a base page and put navigation links to all three pages into the base template so that they appear on all pages. Note that, for the divisors link, you should put a hard coded integer into the link for the initial number to show the divisors of (we will do this properly when we get to "Forms" in the module).