Static to Trivial CI

tutorial #ci-basic01

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Tutorial Goals

This tutorial will walk you through converting a static HTML website into a CodeIgniter webapp.
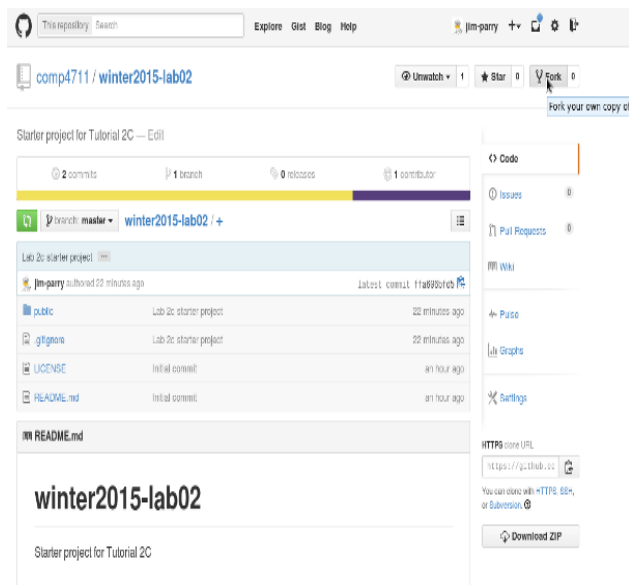
The approach taken is not the only one possible, or even the best one, but it suits "baby steps".

Suggestion: you may want to skim the slideshow first, before working your way through it.

Get The Starter

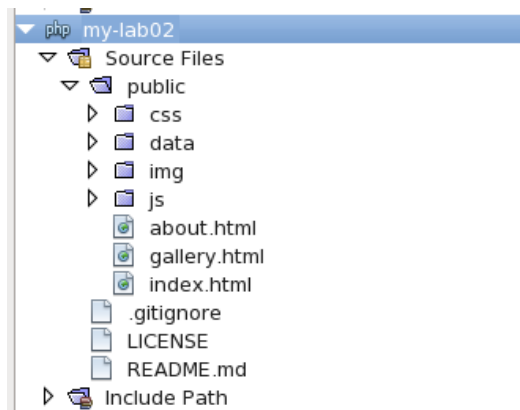Fork the <u>tutorial starter</u> project, and clone it to your local system.

You can clone it to any folder inside your htdocs, as long as you have a virtual host mapping to it for testing. I will assume "comp4711.local" for this writeup. If you want to change the destination folder name, that will be the "project name" on the third dialog in the git clone wizard of NetBeans.

What Do You Have?

I cloned mine to a "my-lab02" project/folder on my system. Substitute your choice whenever I refer to my folder.
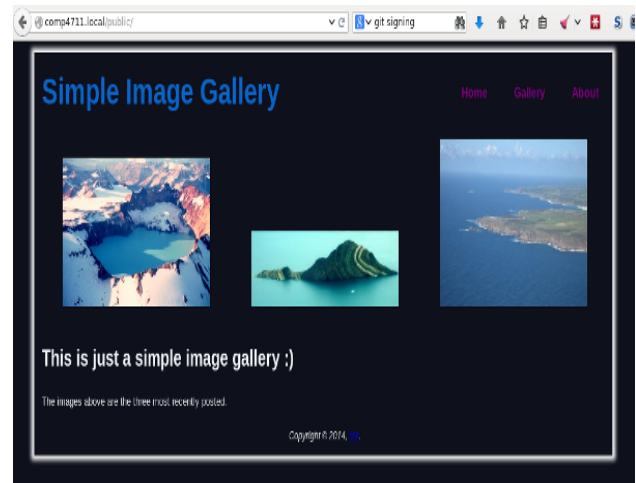
You should see a "public" folder, which contains an entire static website.

What Does It Look Like?

Assuming that your new project is mapped to "comp4711.local", then the URL "comp4711.local/public" should give you the homepage of the static site, shown right.

Don't forget to include the port you assigned to Apache in the URL, if yours is other than 80.

How Do We Make This Into a Webapp?

The basic steps we will follow are shown to the right. This tutorial will address the first two steps, and each of the next two tutorials will address two additional steps.

This isn't the only way to do this job, but is one that makes sense. After each stage of the conversion, we should still have a working site.
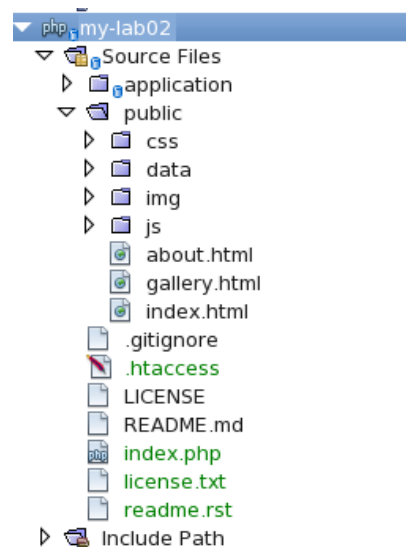
Er, it will behave like it is working, even though it won't be a proper webapp until we are done.

1. Copy our CI starter into our project
2. Do a trivial conversion
3. Setup base controller and view template
4. Fix the pages to use these
5. Add a model
6. Revisit the pages

Copy Our CI Starter

Copy the contents of your CodeIgniter starter project (from tutorial "setup04") into your project folder.

Now, asking for comp4711.local in your browser should give you the "Welcome to CodeIgniter!" page.

```
▼ php  my-lab02
    ▽ 📁 Source Files
        ▷ 📁 application
        ▽ 📁 public
            ▷ 📁 css
            ▷ 📁 data
            ▷ 📁 img
            ▷ 📁 js
                📄 about.html
                📄 gallery.html
                📄 index.html
            📄 .gitignore
            📄 .htaccess
            📄 LICENSE
            📄 README.md
            📄 index.php
            📄 license.txt
            📄 readme.rst
    ▷ 📁 Include Path
```

Create Trivial Controllers

Our static site has 3 pages, index.html, gallery.html and about.html. We can make trivial controllers for each of these, which simply load the corresponding "view".

Fix application/controllers/Welcome.php (your homepage) to load the "welcome" view. Create similar controllers Gallery.php and About.php, which load the "gallery" and "about" views, respectively.

```php
class Welcome extends CI_Controller {

        /**
         * Index Page for this controller.
         */
        public function index()
        {
                $this->load->view('welcome');
        }
}
```
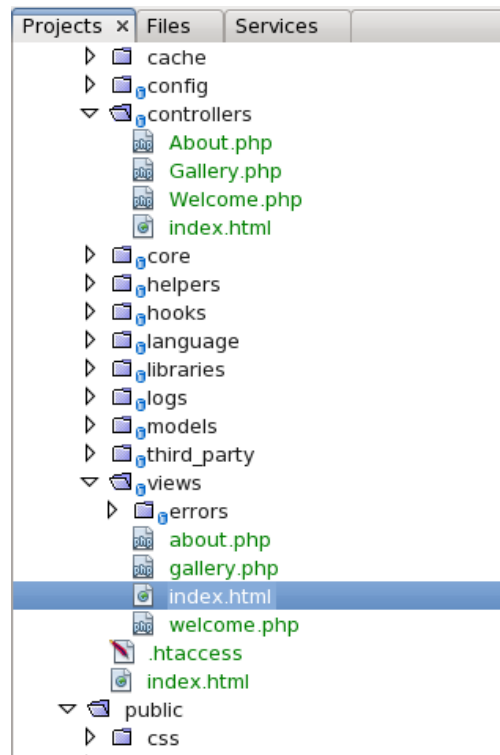
Create Trivial Views

We can make trivial views for each of the static pages, by copying the static html files to our application/views folder, and renaming them to have a ".php" extension. Note that index.html would become welcome.php.

You may have to rename these using your file manager, if your IDE won't let you change the extension.
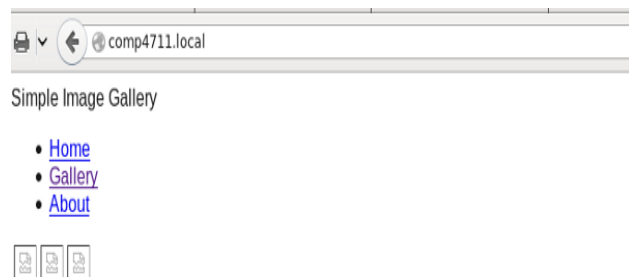
We no longer need the views/welcome_message.php from your CI starter.

We Now Have a Trivial Site

Checkout your site now, using the comp4711.local URL.

Oops, our image links are broken!
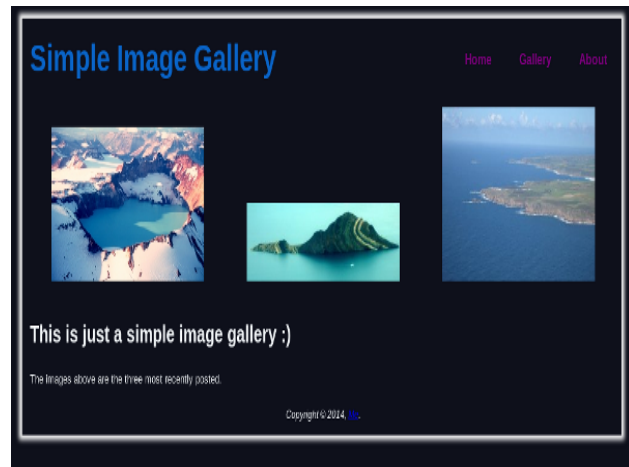
Fix Our Image Links

Examining views/welcome.php, you can see that the image references no longer work. We can solve this by copying/moving those folders up one level, alongside "applications".

A better practice is to keep your "assets" (like these) in a separate folder, which could be called "public" or "assets". We can address the better practice in a later refactoring.

For now, let's copy the folders up one level.

Fix Our Menu

Yay, our site *looks* better, but what about the menu? It still refers to the original HTML files. Fix this by changing the menu links to refer to our CI controllers instead. Apply this change to each of our three views. These menu links will be found inside the views/template.php

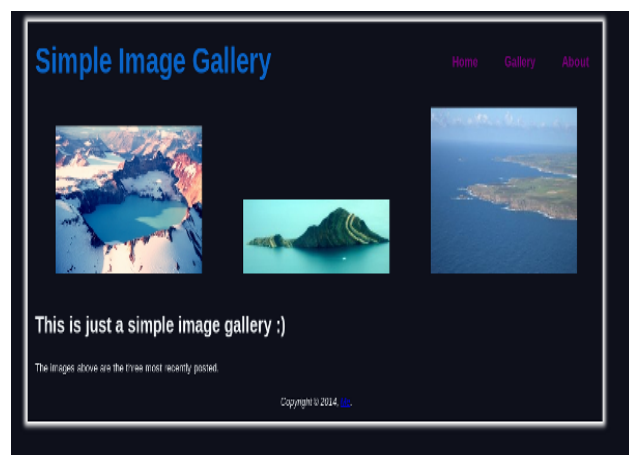Notice that the homepage is referred to as just "/", and that each of the other references start with a slash.

Are We There Yet?

So far, so good ... the website looks the same as the original, but it has been partially transformed into a (trivial) CodeIgniter webapp.

The next tutorial will take the website to the next level.

This would be an appropriate point to push your local changes to your github repo.

Congratulations!

You have completed tutorial #ci-basic01: Static to Trivial CI

If you would take a minute to provide some feedback, we would appreciate it!

The next activity in sequence is: ci-basic02 Trivial CI to Basic CI

You can use your browser's back button to return to the page you were on before starting this activity, or you can jump directly to the course homepage, organizer, or reference page.