

## Setting Up A Basic Web Site

In this part, we will be using Apache and trying out CGI.

### Changing The Site Index

In the `~/apache/htdocs` directory is `index.html` (and `test.php` from part B and `testMySQL.php` from part C).

Make a backup of `index.html`.

```
cd ~/apache/htdocs
cp index.html index.html.orig
```

Next run HTML Tidy on it to convert it to well-formed XHTML:

```
tidy -asxhtml -i -m index.html
```

Edit the `index.html` file and insert your name in the title. For example,

```
<title>Tim Berners-Lee's Web Site</title>
```

Restart Apache (if you shut it down earlier) and load in the web browser to verify the change:

```
http://localhost:8080/
```

Refresh the page in the web browser to verify the change. To make sure that you are doing a refresh from the Apache server and *not just from the browser's cache*, hold down the **Shift** key when you click on the **Reload** icon.

Also, you can use `wget -O - http://localhost:8080/ | head` to test the title change.

Next, add a clickable image. Choose one of the "apache" image files from your `~/apache/icons` directory and copy it to your `htdocs` directory. Or create a subdirectory called `images` and copy the picture there.

For example:

```
<div align="center"><a href="http://httpd.apache.org/"></a></div>
```

Again, refresh the page in the web browser. Click on the image, it should take you to the Apache web site.

## Testing CGI

In the `~/apache/cgi-bin` directory are two sample CGI scripts. Make these scripts executable (with `chmod +x` ) and then test them out:

```
cd ~/apache/cgi-bin
chmod +x *
```

`http://your-hostname:8080/cgi-bin/test-cgi`

`http://your-hostname:8080/cgi-bin/printenv`

Try

`http://your-hostname:8080/cgi-bin/test-cgi?your-first-name`

and

`http://your-hostname:8080/cgi-bin/test-cgi?your-first-name+your-last-name`

Compare the results.

Get the absolute (i.e., full) path of your home directory using the `pwd` command and include it in the URL:

`http://your-hostname:8080/cgi-bin/test-cgiyour-home-directory-path`

Compare the result with those of the previous URLs.

Now combine the two:

`http://your-hostname:8080/cgi-bin/test-cgiyour-home-directory-path?your-first-name+your-last-name`

Compare the result with those of the previous URLs.

Try the same URL adjustments with `printenv` CGI script.

## Assignment and Hand In #2

Create a web page that incorporates number of XHTML structures (from Dave Raggett's examples) to make the page informative, easy to use, and interactive. Use graphics and XHTML tools to assist in the creation of the home page.

The purpose of this project is to create a good-looking, informative personal home page that follows the W3C standards and is viewable using a range of web browsers.

*What should be included in the home page?*

1. Some personal information (that you don't mind sharing with the world!).
2. A theme of some kind, complete with links to other interesting sites that have additional information on your theme (the conventional attitudes of good taste and College policies may limit what you can include here).
3. An external Cascading Style Sheet (CSS) file.
4. Tables. *You will be given **extra** credit for this if you use CSS to do your page layout.*

Install the home page (and all the required files) in your htdocs directory and test them in L-5 using Apache and Solaris. The main page must be called `index.html` and your site must be installed in `~/apache/htdocs` to replace default Apache `index.html`.

Your site must follow the W3C standards and must pass W3C validation. The URLs for the validation service are posted on the Lab #3 page.

Demonstrate your home page running from your local workstation in L-5.

---

**Due Date:** **Friday, October 22, 2010** (worth 10% of your final mark; *5 days late on Oct. 29*)