Lab 1: Create a website

Introduction to Geospatial Technology
COURSE T GIS 502
URBAN STUDIES

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Assignment 1 Create your own website

Read this document carefully!

During the duration of this course, you will be creating your own online portfolio in the form of your own professional website. This online geospatial technology portfolio will be housed on a website hosted by UW. The majority of the lab assignment you complete in this course will be submitted via your personal website.

In this first lab, you will be creating your own website by downloading a template and manipulating the HTML, CSS and adding some JavaScript. There are multiple ways of creating a website. You will not be graded on your code, but you will be graded on the ease of use of your website. In these directions, I guide you through one way of creating a website, there are numerous other ways of creating a website so you may know of an easier or better way. You may choose your own adventure to create your website.

Here I provide the resources to create/modify an HTML 5 and CSS3 website. Using these HTML 5 templates will ensure that your website renders well on a number of different screen sizes (think mobile!!). By the end of this lab you will have a functioning, live website that you have manipulated and altered the source code.

I will not be providing much detail or background about the fundamentals of HTML and CSS. I provided some links on Canvas if you wish to gain more understanding of HTML and CSS on your own. You will not be graded on your knowledge of HTML and CSS, you will be graded on how your website looks and functions.

Goals The educational outcomes of this lab will be to develop:
1. The ability to create and manipulate a website
2. The ability to post content to the Internet
3. Develop an understanding of the fundamentals of HTML and CSS
Demonstrate the ability to:
·   Change images in template (not using Content Management System (CMS) such as Drupal or WordPress)
·   Change text in template
·   Create home page and map page
·   Change colors in the CSS file

Software Required
·   Text Editor: I recommend Sublime Text. Other alternatives include Notepad ++, DreamWeaver (not free), Kompozer
 http://www.kompozer.net/

·   Image Resizing: GIMP   http://www.gimp.org/ or Photoshop, paint will do

Resources from University of Washington IT Connect

Basic information about Web Publishing using UW resources can be found here

http://www.washington.edu/itconnect/connect/web-publishing/

Guidelines for Publishing on the UW Web site can be found here
http://www.washington.edu/webguides/
Appropriate Use of web space guidelines and legal issues can be found here.
http://www.washington.edu/itconnect/work/appropriate-use/

UW Design and Branding

The University of Washington encourages you to use their logos and formatting systems so that you look as professional as possible and to maintain a coherent experience with the UW system of websites. While you are not required to use their standardized system, you are welcome to use their logo and specs (specifications)

A few tips before you get started

· Organization is key! Keep your files organized, backup, and coherently named.

· Working "locally" means working on files that are saved on your local hard drive rather than the files that are live on the web. When I say working or saving locally I mean your D drive

· Index.html is your default home page. Copy the Index.html to back up the original in case you make a mistake to the version you are manipulating

· CASE SENSITIVE – HTML and CSS are case sensitive! Remember this! Close tags in the order that you open them

· Examples of tags <p> to open a paragraph </p> closes a paragraph o <p> Design by Link to this guys

- website!</p>
- If you have any questions about HTML CSS or anything else, first Google IT!! Typically, you will be able to find the answers online.
- What to look at other people's code? Check this out
- In Chrome right click anywhere on the page view page source
- This will open the code for the page so you can see how others
- choose to design and code their website. You can learn a lot by looking at other people's code.

Tips for Staying Organized and Manipulating Files

It is really easy to quickly lose track of file names and where files are located, stay organized! Backup often!

Manipulate images

Industry standard for manipulating (resizing) images is Adobe Photoshop ($$$$) but you can download GIMP for free here
http://www.gimp.org/downloads/

For Vector graphics the industry standard is Adobe Illustrator but we can use Inkscape   http://www.inkscape.org/en/

Getting Started!

1. Activate your web hosting account through UW Find directions to do so here http://www.
washington.edu/itconnect/connect/web-publishing/shared-hosting/activating-shared-web-hosting/

In MyUW Manage screen should look like this, showing you your domain name
My domain name is
http://faculty.washington.edu/bricker0/

Next we have to make an HTML (Hyper Text Markup Language) file.
·   Open notepad or Sublime text editor.
Cut and paste or type the following into the text editor (replace my information for your own information!

```
<html>
<h1>Hello World</h1>
<p>I Love Geospatial Technologies!
My Name is Britta Ricker. Contact me at bricker0 at uw.edu
</p>
</html>
```

Save this document as index.html
*****Everything we do from here on is case sensitive*****
****Do not have spaces in the file names use _ when required*******

Moving files onto the server

Directions to do this can be found here
http://www.washington.edu/itconnect/connect/web-publishing/shared-hosting/sftp/

Open Filezilla, and then follow the directions in the link provided above.
You need to drag the file from your local machine onto the server.
In this case, we only need to move the index.html file.
In the future, if you have images and other information you would like to put on your website, you need to make sure you put them on the server as well. They need to be placed exactly where you stated they are located in the directory!

HTML 5 and CSS 3

Now let's download an open source HTML 5 CSS 3 website template and manipulate it to use for our own website.

Here are some places where you can find templates to download (I have not tried every template so I cannot answer all of your questions about each template. Have fun playing with them though, there are some beautiful ones out there.)

Below are Links to Template Repositories, you may find others too! – be sure to try these templates on your mobile device before you make a final decision. Additionally, give credit where credit is due…creative commons…

http://html5up.net/ - Highly recommend **not** using Astral! I used Dope trope in the past and it worked out well.

http://www.designrazzi.net/best-free-html5-css3-website-templates-download/

http://www.smashingapps.com/2014/07/28/40-fresh-yet-free-html5-and-css3-templates.html

http://www.smashingapps.com/2012/12/14/a-beautiful-collection-of-free-html5-and-css3-templates.html

If you would like recommendations and help with color combinations, here are some awesome tools

Simple HTML color pickers

http://www.w3schools.com/tags/ref_colorpicker.asp

http://www.colorpicker.com/

Manipulating the Website Template

First I am going to change the text on my home page (home page file is called index.html). When I do this, the alignment of the text overlaps, thus I move the textbox so they do not overlap. Next I change the image since that is not me! First I must find out the name and the size of the image in the current placeholder. To do this I open the .jpg in GIMP. I navigate to the me.jpg in the images folder that I downloaded, right click and open with GIMP.

I need to find another image that is a similar size, and save it to the images folder. I do this and name it britta. jpg. In Sublime, I replace the line of code
With

You should now change the text in the template to explain the point of your website describing that this website will be an online portfolio. Describe to the visitor what you and this website are all about.

Next we want to change the some of the colors associated with the template. To do this we must change the CSS file. In Sublime, navigate to the CSS file. In the CSS file

you change the font type, the link colors, pretty much anything.

In your Internet browser window, open
 http://colorschemedesigner.com/

 and create a color pallet you like. Copy the color code into your CSS.

The same can be done for the text color. I want my text to be black, not grey so I change this section of the CSS from color: #777; to #000; I used this website to look up the code for black   http://htmlcolor-codes.info/?barva=0000FF
Save and update your file.

Add a map page and a map

Now that you have created your own website, add a new page and add an interactive map to it! You may have your map centered on whatever you would like.

The "map" page is where we will house our map assignments. There are many different ways to do this. You need to figure out the best way to do this based on the template you have chosen. The easiest way is likely to copy your index.html file and rename it map.html and start manipulating that file. Then in your index.html file create path to the map.html file so that you can navigate to the maps page from your home page.

Next change the text on the map page to make sure the user is able to see they are on a new page.
Finally, cut and paste code to insert an interactive map on this site. There are multiple ways and maps to do this.

When you are happy with your index.html and map pages, add them to the server as described in the moving the files to the server section.
I recommend adding a google map, but you may add any of the following
· Google
· Bing Map
· MapQuest
· Leaflet
· MapBox
· Openstreetmap
· Stamen

Marking Rubric
10 points for being the best, 0 being you did not fulfill the skill requirement of the assignment
Description of skill requirement Points

Skill	Points
Manipulated HTML and CSS	
Uploaded site to internet	
Described the purpose of the website on homepage	
Created a maps page with links to and from home (index) page	
Enjoyable understandable experience	
Functioning interactive map on maps page	