LAB 1: DESIGN A WEB PORTFOLIO GSP 316

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In this lab we will design a professional portfolio website to display your work. You will use this to submit your assignments throughout the term and have this site to add onto in the future to share your work with potential employers. We will use GitHub as our platform. Increasingly the GIS community is developing and sharing web-based projects using this platform.

GitHub is a powerful repository hosting and source code management service that is used for the majority of open source projects. GitHub also provides free website hosting, which is what we will be using. It is also not tied to your HSU account so you can continue to add/modify this page after you graduate.

Your website will be modeled after one I created using HTML5, CSS, and a few JavaScript libraries: https://dikembe3000.github.io/GSP316

Your website will not require you to write any code, but will require you to modify the template for your own purpose. If you have experience with web design, feel free to venture off in different directions.

Tools: Web browser

Optional: Text Editor

Directions

Read each step carefully and fully.

Setting up your repository

1. Create a GitHub account. https://github.com/
2. Go to your GitHub profile and select repositories. Select **New.**
3. Create a new repository called `cartography`.

Note: Web coding is case sensitive and it is good practice to use lower case.

4. Make this repository public (should be the default – private repositories require a subscription). Select **Create Repository.**
5. Scroll to the bottom and select **import code from another repository.** Copy and paste https://github.com/dikembe3000/GSP316. When imported, click on the **Settings** gear.
6. Under GitHub Pages, set **Source** to **master branch** and click **Save**.
7. Now you have a sample webpage in your website, viewable at https://*username*.github.io/cartography/, ready for you to modify. Your repository is accessed from www.github.com/*username*/cartography - note the subtle differences. It can be helpful to have both of these open in separate tabs.

Customizing your site

8. First let's look at what is in your repository. The assets folder is all the CSS and JavaScript files. This controls the layout and functionality of the website. Don't do anything to these files unless expressly instructed. The only things we will have to change for the most part are `index.html` and the `images` folder.

*Note: In GitHub, after you make changes to a file, you need to select the **Commit Changes** button – this equates to Save in other programs.*

9. First let's change the profile picture. Find a square image you like (400px by 400px) and save it as **Profile.jpg**.

    9.1. Go into the `images` folder in your repository and upload your image. **Commit changes.**

Giving it the same name will overwrite the existing picture – if you don't wish to do this, you'll need to go to your `index.html` and change the title of the profile picture on line 16.

10. Your background image should be subtle, to let your maps take the focus. You can build one, or grab a copyright-free one from the web. Recommended size is 1440px by 2121px at 72dpi. Save it as `BG.jpg`.

11. Repeat step 9 with `BG.jpg`.

    11.1. Open the `assets` folder and then the `css` folder. Open the file `main.css`.

    11.2. Click the pencil to start editing, and scroll down to line 1405. Change the file to `../../images/BG.jpg` to display your background.

    11.3. **Commit changes.**

12. Go back to your website https://*username*.github.io/cartography/ and hit refresh. You should see the beginnings of your personal portfolio.

Note: sometimes it takes a while for the page to update. If you hit refresh and see no change, wait a minute and try again.

13. Now let's edit the page text so it has your information instead of the sample. Open `index.html` and select the **pencil icon** on the top right. Now you can edit this document.

You'll notice a lot of items in brackets <>. These indicate HTML tags that tell the webpage what to do with the information between them. A tag set has a start tag `<tag>` *and an end tag* `</tag>` *that define the content, and it's important not to disturb them while editing your page, as it will cause issues when viewing it in a web browser.*

14. On line 4 you should see `<title>Maps that Matter</title>`. Change the title between the html tags to title your webpage. Be careful not to remove any brackets or other characters.

15. Now update the social media tags on the icons to direct users to these accounts. Look for the tags beginning with `<a href="#"` and change the `#` to your home/profile page

for that media. Look at the GitHub icon as an example. Take notice of the mail icon and update to your email address.

If you don't have the associated accounts, you can delete the appropriate line, or comment it out if you plan to add it later. To comment out a section of code, place `<!--` *in front of the text, and* `-->` *after it, like so:* `<!-- this text is a comment and will not display -->`

16. Scroll to the bottom and **Commit changes**. Now refresh your webpage and see if it updates (it may take a few tries).
17. Now let's look at the map placeholders themselves. After each lab you will upload your completed map in .png form and add it into your website. This is as simple as editing the code chunks below.

```
<section class="thumbnails">
        <div>
                <a href="images/police_map.png">
                        <img src="images/police_map.png" alt="" />
                        <h3>Police Shooting In United States</h3>
                </a>
                <a href="images/Oilspills_map.png">
                        <img src="images/Oilspills_map.png" alt="" />
                        <h3>Crude Oil Spills</h3>
                </a>
        </div>
```

Create block

Full size image

Thumbnail

Map title

Close block

17.1. The first line uses the div tag to define an area for maps.

17.2. The second line is the link to the full size image that appears when you click directly on the image on your webpage.

17.3. The third line is a thumbnail image of your map that displays on this page. It might be the same image, but for large maps, it might be good to make a smaller preview version to use here.

17.4. The forth line is the title of your map (e.g Arcata Marsh Mural)

17.5. In this example, a second map is included in the block.

17.6. The last line closes the block.

18. When you've made all the updates, **Commit changes**.

Notice how there are 3 blocks of this code, to get you started. If you want to expand this page to have more, simply copy and paste from `<div>` *to* `</div>` *to create another one*

19. All you need to do now is upload your map(s) to the images folder, then change the image name in the html to match. Remember html is case sensitive! Remember to **Commit changes** after you update `index.html`.
20. Finally, edit the footer text to reflect your own information.
21. **Commit changes.** Go back to your website and hit refresh. You should have a nice looking webpage now.
22. Submit the link to the Canvas assignment. For each upcoming lab, you will need to submit the link to your webpage in the comments when you submit your map.