IST 263

# Lab 01

## This lab covers:

1. Install Class Software and Connecting to Github
2. Create First Web Page
3. Serving First Web Page to the Web

## What will you Hand IN?

Submit the url for the bio web page you created below to blackboard.

## Install Class Software

### Text Editor

Web pages are text documents. You could open a very basic text editor like Notepad on Windows to create your first web page. We are going to use a free application called VS Code in this class. Why VS Code? VS Code has features that you are going to love the make creating our web pages easier.

1. Go to <https://code.visualstudio.com/download> to download. Make sure to choose the correct version for you operating system.
2. Once the download is complete, launch the installer and follow the steps.

### Git and Github

Git is a version control tool that can manage a development project's source code history. Git is a tool a developer installs locally on their computer, while GitHub is an online service that stores code pushed to it from computers running the Git tool.

**Setting Up Github Account** (skip if you already have an account)

1. Go to github.com
2. Click Signup
3. Your username should be your netid-su, so mine would be laferger-su
4. You can use your SU email
5. Click 'Create an Account'
6. In the next page choose 'Unlimited Public repositories for free' plan.
7. Click 'Continue'
8. Choose the appropriate boxes in the next step
9. Click 'Submit'
10. You should have received an email from GitHub. Open the email and click 'Verify your email address' to complete the process. You now have a GitHub account.
11. You will need your GitHub username and password to access GitHub over the course of the semester, so make a note of them.

**Create your personal GitHub repository** (which you'll use to post homework and project files)

1. While logged in at github.com, click your user icon at the far upper right of the screen.
2. From the menu, choose Your Repositories, then choose New.
3. Enter the name ist263 for your new repository.   
   Important: Use all lowercase, no spaces, no punctuation. Follow this convention for all folders and filenames, including image files. This precaution will save you endless tedious hours debugging your code over the semester.
4. Click the check box before "Initialize this repository with a README"
5. Leave all the other fields as is and click the create repository button.

**Enable GitHub Pages Web Display**

1. With your new GitHub repo displayed on screen, click the sprocket icon at upper right to open repo Settings.
2. Scroll down to the GitHub Pages heading. (Keep scrolling! It's down there.)
3. Under Source, choose the drop-down selector and select 'master branch.'
4. Just under the Github Pages heading you should see:  
   'Your site is ready to be published at https://[your-username].github.io/ist263/
5. Click that link and bookmark the URL.
6. We'll start to put content in your github site later in the lab.

**Installing Git Desktop Client**

1. Go to <http://desktop.github.com>
2. Download the program installer appropriate for your version of the OS.
3. Once the download is complete, launch it and follow the steps to install it
4. After it is installed, launch it connect it to your Github account by logging in
5. Click 'Finish' installation
6. On the "Let's get started!" screen let's clone your repository. This will put a copy of the files from your repository onto your computer.
7. Choose the repository we just made from the list on the right.
8. Click the clone button at the bottom right.
9. Under local path you need to choose the location you want to save the repository. This is the place you will save all your files for the class this semester. Make a note of where you save this and click the clone button.
10. We'll be using this later in the lab so you can leave it open for now.

## Your First Web Page

Your first web page will contain a short bio of yourself. We will create the file in VS Code, put the file on GitHub and view it in your web browser.

### Your Bio

Launch Word-processing software like MS Word and write a professional biography using the guidelines below. Keep in mind you will be posting the bio to your website where the whole world can see it.

Items that must appear in your professional bio:

1. Begin writing your bio with your first and last name.
2. State your current major and what interests you have regarding that major. For example, I'm a data science major interested in examining statistics related to sports.
3. Include at a list of accomplishments or skills.
4. Briefly tell your readers who you are outside of work. Like hobbies, favorite TV shows, movies, or books, information about family life, funny details about habits or interests, or unique personal history.
5. Add anything else you think you need in your bio and make sure it all flows together.

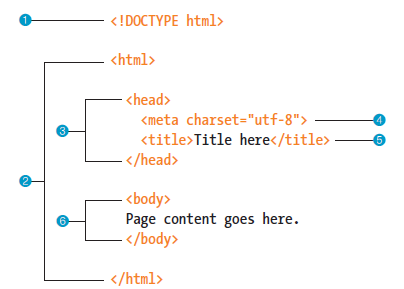
### VS Code

We downloaded and installed VS Code for the purpose of writing our web pages.

1. Launch VS Code
2. Go to File -> Open Folder
3. Located the ist263 folder you cloned above
4. Go to File -> New File

### the code

We are about to write your first web page. A webpage consists of html tags/elements and the content you want to publish to users. Every web page contains the following:



**Decoding the above HTML**

1. version of HTML you are using
2. entire HTML document should be contained in this element
3. info about your html page that will not display in main browser window
4. character encoding for your document.
5. Title that appears at the top of your browser window
6. All the content goes here

For this part type in all the html above into your new file. Where the "Title here" appears type in "[Your name] – Bio", where you replace [Your name] with your actual name. Replace the "Page content goes here." with the bio you wrote. When it is complete go to File -> Save As and type [last name]-bio.html as the file name. Avoid capital letters in filenames.

### Upload to your website

To view our first page on the web we are going to upload it to Github.

1. Launch Github Desktop
2. The file you worked on should be listed on the left. Press the "Commit to master" then "Push Origin" button to send the file to Github.
3. Now we are going to view the page. In your web browser, type the url to your website. It should be: https://[your-username].github.io/ist263/[last name]-bio.html.  
     
   Ugly Page Warning! The text on you web will display as one long paragraph. Don't despair. We will learn how to make web pages look much better in the coming weeks.