A Quick Introduction to Websites, HTML5, and CSS

The objective of this supplemental material is to help you quickly set up a website. The easiest way to do this is to go through a company such as Wordpress. A basic webpage with Wordpress is free, and this option does not require you to know any HTML. If instead you are interested in adding your webpage to an existing domain name (e.g. through your university or advisor), then hopefully this supplemental material will help you get started.

I have provided you with two versions of a template from html5up.net. The first version is the original, unmodified template (html5up-stellar). The second version is one that I have modified to highlight places where you need to make changes to customize the page (html5up-stellar-adele). The presentation slides give you a preview of what both templates look like. We will walk through my modified template in order to quickly customize it for your own needs.

There are two primary files that you need to worry about for any well-designed web page. The first is the html file. This is the file where you put all of your content. The second is the css file. This is where you put all of the instructions for the html file about how you want your web page to look. Let's first go through an html file.

There are three html files in each template folder: elements.hmtl, generic.html, and index.html. Generic.html is the template for a basic webpage, index.html is the template for the fancy layout webpage, and elements.html gives sample code for many different features that you may want to add to your page. All three pages can be opened in an internet browser (to see how they appear) or a basic text editor (to see the code; more about text editors below). When editing a webpage, I recommend having the file open in both a browser and a text editor. This way you can make changes to the code, save them, and then refresh the browser to see if the changes look the way you want them to.

Here I am showing code from generic.html as an example. There are two main sections in any html file:

1. The <head> section

```
<head>
    <title>Generic - Stellar by HTML5 UP</title>
    <meta charset="utf-8" />
    <meta name="viewport" content="width=device-width, initial-scale=1" />
    <!--[if lte IE 8]><script src="assets/js/ie/html5shiv.js"></script><![endif]-->
    <link rel="stylesheet" href="assets/css/main.css" />
    <!--[if lte IE 9]><link rel="stylesheet" href="assets/css/ie9.css" /><![endif]-->
    <!--[if lte IE 8]><link rel="stylesheet" href="assets/css/ie8.css" /><![endif]-->
</head>
```

This section is mostly for information about your file. It starts with <head> and ends with </head>. There are two important pieces of information that I will draw your attention to. The first is <title>. This is the text that appears on your browser tab when the webpage is open. The second is <link rel="stylesheet" …>. This tells the webpage

where the CSS file is that will control how your page looks. Do NOT add any additional lines of code to this section unless you know what you are doing.

2. The <body> section
   This section is where you put everything that will appear on your webpage – text, images, etc. It starts with <body> and ends with </body>.

   Now let's look at the some of the first lines of code in <body>.

```
<!-- Header -->
    <header id="header">
        <h1>Your Name</h1>
        <p>Your Position</p>
    </header>

<!-- Main -->
    <div id="main">

        <!-- Content -->
            <section id="content" class="main">
                <h2>About Me</h2>
                <p>Put a short bio here</p>
                <h2>Education</h2>
                <p>
                    Degree #1
                    <br>
                    Degree #2
```

   There are several features to point out here.

   a. Different elements of the webpage start with <element name> and end with </element name>. For example, <h1> starts a heading and </h1> ends the heading. Headings have larger font sizes. Only the text between <h1> and </h1> will have the larger font size. h2 is another heading with a slightly smaller font size, but still bigger than the standard font. The characteristics of the headings are controlled in the CSS file. <p> is for a paragraph.
 forces the text to start on a new line. The nice thing about using a template is that you don't necessarily need to know all of this. Just replace the text that you want to change. If you want to insert another feature, find the HTML code for it in elements.html and copy and paste!
   b. Text that appears in red ('id','class') set the format style that the webpage should use for the associated section. These format styles are defined in the CSS file. If you want to change the way the <section> section appears, then you would search for 'section', 'content', and 'main' in the CSS file to find all of the formatting that is associated with these style. Formatting associated with 'section' applies to all html section elements, whereas formatting associated with 'content' and 'main' will only apply to those html elements that have set their 'id' and 'class' attributes to those styles, respectively.

Now let's look at the CSS file. It's in the folder assets/css and called main.css. It's long and complicated. This template is fully responsive, meaning that the layout can change depending on the device being used to view it. Good thing we don't have to make this page from scratch! In the template 'html5up-stellar-adele', I've put in some comments about how to change the page and logo colors. Just search "Adele" to find these places in the file.

Here is the part of the CSS file that modifies the background color and font sizes. In the first section of this code snippet, the colors apply to the <body> section (i.e., essentially the entire page). There are lots of predefined color names (I've chosen BurlyWood). You can also use HTML color codes. I've also set icon style 1 to have the BurlyWood color. This formatting will apply only to html elements that have 'class' set to 'icon' and 'style1' (elements can have more than one class). The font properties apply to body, input, select, and textarea.

```
body {
    background-color: BurlyWood;
    color: rgba(255, 255, 255, 0.65);
}

body, input, select, textarea {
    font-family: "Source Sans Pro", Helvetica, sans-serif;
    font-size: 17pt;
    font-weight: 300;
    line-height: 1.65;
}
```

```
/*Adele - chanage icon colors here*/
    .icon.style1 {
        color: BurlyWood;
    }
```

Finally, a note about text editors. You will want to edit the HTML and CSS files in an ordinary text editor, not a word processing program such as Word. Word processing programs will often add hidden (invisible) characters to your file that can interfere with the way your page displays in internet browsers. Finding these hidden characters can be challenging! A good text editor will recognize that your file is written in HTML code and will automatically color the text for you to make reading it easier. I used Notepad++ (Windows) for the examples in this document. Other options include vi and emacs (Linux command line programs) and macvim (GUI version of vi for Mac), but many others exist.

The best way to learn HTML and CSS is to jump right in. My favorite website to learn these languages is w3schools.com, but there are many available. Good luck!