Cheat Sheet for 6/24 Class

Tools/Programs that we used during class:

- **Sublime Text 3** (https://www.sublimetext.com/): Text editor (one of many) that allows us to write programs locally.
    - Opening directories in sublime
        - Click “File” and then “Open Folder”
        - Navigate to folder that contains our files and click “select folder”
    - Opening file in browser
        - Right-Click anywhere in the Sublime Text window where the current file is being displayed.
        - Click “Open in Browser”
    - Creating new files/directories
        - Right-Click on directory/folder and select “new file” or “new folder”
        - If creating a new file, a new sublime text file called “untitled” will pop up. Press control + S in order to save the file (HTML files require .html file extension). File will be added inside the directory that was right-clicked.
        - If creating a new directory, a blank will appear at the bottom of the window. Type the directory name here and press enter.
    - Keyboard Shortcuts
        - Copy: Control + C
        - Paste: Control + V
        - Select All: Control + A
        - Indenting: Control +] OR Control + [
        - Auto-Populate tags: write out tag name and then press tab
        - Saving: Control + S
        - Undo: Control + Z
    - Setting up autosave so that the file saves whenever you click outside of the file or switch to a different file, it saves automatically (we did this in class, but if you want to do it at home)
        - Click “Preferences” at the top of the window
        - Click “Settings”
        - Add `“save_on_focus_lost”: true` to the window on the right, between the two curly braces.

- **Command Prompt:** The core program of the computer. It allows us to navigate through all of our files, make new folders, etc. We’ll dive into this more soon.
    - Commands:
        - “mkdir new-folder”: Make folder called new-folder inside current folder
        - “cd new-folder”: Move from current folder into new-folder
        - “cd ..”: Move into the previous folder, one level up in the directory

- **Google Chrome Browser:** Web browser that's really handy for Front-End development, as it allows us access to Chrome Developer Tools. Most computers have Chrome installed already, but it can be installed here if you don't have it yet: https://www.google.com/chrome/
    - Chrome Developer Tools: Allows us to inspect HTML/CSS elements and edit them in real time. To bring them up, either Right-Click on a page in Chrome and click "inspect" or press Control + Shift + I

- **Slack** (https://slack.com/downloads): Messenger system that we're using in class. Can be accessed in the browser or installed as a desktop application. I recommend becoming familiar with it as it's a common tool for development teams. Feel free to join the Chicago Tech Slack channel as well, for updates on events, jobs, etc: http://www.chicagotechslack.com/
    - To access our class in the browser, go here: https://slack.com/signin
    - Type "tibootcamp" and click "continue"
    - You should be prompted to sign in with your email and password

HTML Elements

- **<!DOCTYPE html>:** Declares to the browser what kind of document it's reading. This is a necessary tag and always needs to be included first.

- **<html></html>:** Comes after the doctype declaration and denotes where our HTML begins and ends. All of our HTML should be included between these tags.

- **<head></head>:** One of two elements directly nested inside HTML tags and comes before the body element. Includes all of the "meta" data (code that we don't see on the page). This includes title, meta tags, links to CSS/JavaScript files, external files, etc.

- **<title></title>:** Provides the title for our page, which can be seen on the page tab at the top of our web browser. Titles factor into SEO (Search Engine Optimization), so we want to use keywords. Nested inside head tags.

- **<meta charset="utf-8">:** Meta data tag; this one has a "charset" attribute that tells the browser what character set our HTML file is using. Nested inside head tags.

- **<body></body>:** Counterpart to the head element; it contains all of the content on our page.

- **<header></header>:** Contains all of our "header" content; usually this will be the name of the person, or organization that our website is for. Also usually includes the navigation bar. This element rarely changes from page to page. Nested inside body tags.

- **<main></main>:** Contains the page-specific content. If we're on an "About Me" page, for example, all of the "about me" info should be included between these tags. This is the element that typically changes between each page. Nested inside body tags.

- **<footer></footer>:** Counterpart to the heading element; usually stays the same on each page. Includes copyright information, social media links, maybe a secondary navigation bar, etc. Nested inside body tags.
- **<section></section>:** Often used between main tags to separate different sections of content.
- ** :** Similar to section tags, but used more casually. These will make more sense when we get into IDs and Classes.
- **<h1></h1>, <h2></h2>, <h3></h3>, <h4></h4>, <h5></h5>, <h6></h6>:** Heading elements that vary in size and importance, moving from h1 (most important) to h6 (least important).
- ** :** Paragraph element. Keeps our paragraphs separate. Use one for each paragraph. Also used for casual text throughout websites.
- **<img src="" alt="" title="">:** Image tag. Links to an image either on the web or locally. "src" attribute tells the browser what file path to follow to find the image; "alt" attribute provides a description of the image in the event the image doesn't appear; "title" attribute factors into SEO (search engine optimization), so we should use keywords. This attribute also provides a title when we hover over the image.
- **
:** Unordered list element (bullet points). Everything that is part of a list (navigation links, portfolio projects, social icons, etc.) should be structured as a list. In order to add items, nest list items (
) inside.
- **
:** Ordered list. See above.
- **
:** List item. Nested inside "ol" or "ul" tags to add to the list.
- **:** Anchor element. The "href" attribute allows us to add a hyperlink to the words/images/icons that are nested between the "a" tags.
- **<nav></nav>:** Contains the navigation bar, usually as an unordered list.

Languages/Terms:

- HTML: Hypertext Markup Language, currently on version 5. Provides the structure and content for a webpage.
    - HTML Elements: Individual component of HTML page. Usually has a <start tag> and a </closing tag> with content in between. Elements are "nested" inside one another, which essentially means we have elements inside elements. For example, a list item element (
) is typically nested inside an unordered list element (
).
    - HTML Tags: Components of an HTML element. Structured like so: <html>. Usually an opening tag is followed by a closing tag: </html>. Some tags are self-closing, so they don't have a counterpart closing tag (examples: <img>, <meta>)

    - HTML Element Attribute: Included inside of a tag, structured like <img src=””> where src is the attribute. It's always followed by an equals sign (=) and double-quotes (“”) where the value is inserted.

- CSS: Cascading Style Sheets, currently on version 3. Allows us to style our HTML elements (we'll learn more about this soon).
    - Inline CSS: CSS that is included within the “style” attribute of an HTML element. We saw an example of this with the image element:

      ```
      <img src=”images/mitch-lake-michigan” style=”max-width: 100%”>
      ```

    - External CSS: CSS files that are linked to inside the head element. We'll learn about creating these files and linking to them in the next class.

JavaScript: Coding language that allows us to animate and dynamically change our HTML and CSS. We'll learn more about this in the classes ahead.

Typical structure of an HTML document:

```
<!DOCTYPE html>
<html>
	<head>
		<title>Page Title</title>
		<meta charset=”utf-8”>
	</head>

	<body>
		<header>
			<h1>My name or my organization’s name</h1>
			<h2>Subtitle</h2>
			<nav>
				<ul>
					<li><a href=”page.html”>Link to other page</a></li>
					<li><a href=”page.html”>Link to other page</a></li>
					<li><a href=”page.html”>Link to other page</a></li>
				</ul>
			</nav>
		</header>

		<main>
			<section>
				<img src=”images/image-one.png”>
				<h3>Section Heading</h3>
				<p>First Paragraph</p>
				<p>Second Paragraph</p>
			</section>
		</main>

		<footer>
		</footer>
	</body>
</html>
```