

# GPS 1.2: HTML

**Due** Jan 3, 2017 by 10am **Points** 30 **Submitting** a website url

## Preparation (To Do Ahead of Time)

You'll be completing this GPS in the `phase-0-tracks/html/gps/index.html` file (you'll need to create the directory and the file). Before we start, navigate to that file on GitHub and submit the URL on this assignment. This is how your guide will give you feedback. The URL should be something like: `https://github.com/[USERNAME]/phase-0-tracks/html/gps/index.html`. Unlike in the first GPS, each person needs to create and submit their own repo.

**Remember:** Although you have one hour with the guide, the challenges will often take longer. This means you will probably need to set aside another time to finish the challenge with your pair or on your own.

## Release 0: Create a Basic HTML Layout

Choose a driver and navigator. Try to do the steps below from memory with the help of the navigator. NOTE: You should decide whether to trade roles in each release or change roles halfway through the session. If you decide to switch from release to release, you'll want to share code easily using a collaborative editor (or even a simple Google doc).

If you get stuck, feel free to look at documentation or your notes.

### DO THE THING

1. Add the basic HTML layout elements that need to be in every HTML document.
2. Open your page in a [validator](https://validator.w3.org/#validate_by_input) (`https://validator.w3.org/#validate_by_input`) to make sure you got the code correct.
3. With your pair, discuss the following:
  - o What is the purpose of the `<!DOCTYPE html >` declaration?
  - o What is an `<html>` tag?
  - o What is a `<head>` tag?
  - o What information should be in the `<head>` tag?
  - o What purpose does the `<title>` tag accomplish?
  - o What information should live in the `<body>` tag?

Once you have gone through this, switch drivers and have the other driver add the layout elements to their document. Again, try to do this from memory as you will need to write these every time you make a new web page.

## Release 1: Use and Edit Sublime Snippets

**NOTE:** If you need to work in a Cloud9 environment, you'll need to modify this release. Cloud9 does not support snippets. Instead you can create a `boilerplate.html` file somewhere on your Cloud9 environment with the reusable snippet of HTML in it.

While it is important to know the elements in an HTML layout, it can get tedious typing them every time we create a new web page. As you've learned, editors like Sublime help by providing snippets of pre-written code that you can insert in a document by typing the snippet key word followed by a tab.

### DO THE THING

Remove the HTML code in your document and type `html[TAB]`. You should see most of the HTML layout code appear in your document. Sweet!

This snippet is not quite complete. What's missing? Sublime allows us to edit snippets or create our own. You can create a new snippet by starting from the template provided when you choose the `Tools > Developer > New Snippet` menu item. Use the template Sublime gives you to create your own snippet. Research how to do this. (If you get absolutely stuck, you can use the one included at the end of this page.) Make sure to save your snippet with the `.sublime-snippet` file extension, or it will not work.



## Release 2: Add HTML5 Semantic Elements

In HTML5, there are several semantic tags that provide meaning to HTML sections and make the page more readable and accessible to people with disabilities. Semantic HTML also creates standardization between development teams. Here are some common HTML5 elements:

```
<main>
<article>
<section>
<nav>
<aside>
<header>
<footer>
```

#### DO THE THING

Use each of these elements to add content to your page. Write some simple content that makes sense with the element (i.e. links in the nav element). You may also use **lorem ipsum** gibberish text which is available in a snippet.


Use [HTML Doctor](http://html5doctor.com/downloads/h5d-sectioning-flowchart.png)  (<http://html5doctor.com/downloads/h5d-sectioning-flowchart.png>) to see a handy flowchart for understanding which HTML5 structural element to use. Also check out [this article](https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/Sections_and_Outlines_of_an_HTML5_document)  ([https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/Sections\\_and\\_Outlines\\_of\\_an\\_HTML5\\_document](https://developer.mozilla.org/en-US/docs/Web/Guide/HTML/Sections_and_Outlines_of_an_HTML5_document)) that explains how to use each element clearly.

Before moving on, [validate](https://validator.w3.org/#validate_by_input)  ([https://validator.w3.org/#validate\\_by\\_input](https://validator.w3.org/#validate_by_input)) the HTML. Discuss and resolve any error messages you get.

## Release 3: Add a Table

Try to do the steps below from memory with the help of the navigator. If you get stuck, feel free to look at documentation or your notes.

#### DO THE THING

1. Add a table with
  1. at least three rows and three columns
  2. a header row
  3. and at least one cell that spans two rows
4. Before moving on, [validate](https://validator.w3.org/#validate_by_input)  ([https://validator.w3.org/#validate\\_by\\_input](https://validator.w3.org/#validate_by_input)) the HTML. Discuss and resolve any error messages you get.

## Release 4: Reflect

You can do this on your own after the pairing session.

At the bottom of your individual HTML page, create a comment where you reflect on the challenge. Answer the following questions within that block comment:

- What is the purpose of HTML5 semantic tags? Which ones do you see as most useful?
- What is the order the browser uses to display elements on a page?
- What did you learn about Sublime in this challenge? Do you think you'll create more handy snippets at a later date?
- What concept in this challenge was most difficult for you? How can you improve your understanding of this concept?

Update your GitHub repository and navigate to the <html/gps/index.html> to verify your changes are there. You should have already uploaded the URL for this file at the beginning of the session.

## Example Sublime Snippet

```
<snippet>
  <content><![CDATA[
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <title>$1</title>
```

```
</head>
<body>

</body>
</html>
]]></content>
  <tabTrigger>html5</tabTrigger>
  <scope>text.html</scope>
</snippet>
```

**GPS 1.2**

Criteria	Ratings				Pts
<p>■ Apply semantic mark up using HTML5 elements  <a href="#">view longer description</a>  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
<p>■ Define HTML tags found in the &lt;head&gt; tag  <a href="#">view longer description</a>  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
<p>■ Define the version of HTML being used in a document  <a href="#">view longer description</a>  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
<p>■ Set up a basic HTML page with the appropriate tags (html, head, title, etc.)  <a href="#">view longer description</a>  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
<p>■ Use HTML tags to present content on a website  <a href="#">view longer description</a>  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
<p>■ Create a code snippet for Sublime Text  <a href="#">view longer description</a>  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
<p>■ Appoint a driver and navigator and swap roles with clear communication  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
<p>■ Ask questions of their pair and guide when confused  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
<p>■ Engage their pair in conversation about the code  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
<p>■ Express opinions and ideas in a considerate way  threshold: 3.0 pts</p>	Exceeds Expectations 5.0 pts	Meets Expectations 3.0 pts	Slightly Below Expectations 1.0 pts	Does Not Meet Expectations 0.0 pts	5.0 pts
Total Points: 50.0					