HTML Introduction

Create web pages with HTML

LAURENCE SVEKIS



Course instructor: Laurence Svekis

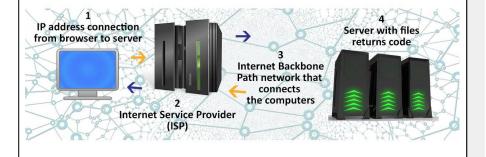
- Over 300 courses in technology and web applications.
- 20 years of web programming experience
- 1000,000+ students across multiple platforms
- Digital instructor since 2002

READY TO HELP YOU LEARN and ANSWER ANY questions you may have.

How websites work

The internet is a connected network of computers, transferring info between each other.

IP address is the unique identifier of every computer that is connected, like a phone number helps to determine the path from one computer to another.



Computer which accesses the internet and requests information, your computer is known as the client

Computer which serves information and provides information to clients is the **server**.

EXERCISE:

Type in 'what is my ip' in search.

Go to https://dnschecker.org/ type in your favorite website. Copy the IP address and paste in the browser. Now you are connected to that server 172.217.12.142 = Google in Holtsville NY, United States

G 172.217.12.142

Check out the Code

We use browsers on our computers to interpret the **HTML CSS** and **JavaScript** code sent by the server.

Browsers run HTML CSS and JavaScript code. You can see this even if the file is on your computer and you are not connected to the internet.

Inspect the code - http://info.cern.ch/ first website!

They needed a way to provide some page structure and send it across the network = birth of HTML

We need a way to write the code try codepen.io https://codepen.io/pen/

EXERCISE:

Go to your favorite website and check out the code. Go to http://info.cern.ch/ get the source in the body and copy it to codepen pen.



Website boilerplate

4 tags every web page should have! Tags can be nested in other tags to create tree like structure of hierarchy.

html head title body

DOCTYPEs are required for legacy reasons. When omitted, browsers tend to use a
different rendering mode that is incompatible with some specifications. Including the
DOCTYPE in a document ensures that the browser makes a best-effort attempt at
following the relevant specifications. Case-insensitively. <!DOCTYPE html>
https://html.spec.whatwg.org/multipage/syntax.html#syntax-doctype

```
<html><head></head><body><header>
<title>http://info.cern.ch</title>
</header>
<hl><hl><hr/>
<hl><hr/>
From here you can:
<a href="http://info.cern.ch/hypertext/W</a>
<a href="http://ine-mode.cern.ch/www/hy</li><a href="http://ine-mode.cern.ch/www/hy</li><a href="http://ine-mode.cern.ch/www/hy</li><a href="http://home.web.cern.ch/topics/cli><a href="http://home.web.cern.ch/about"><a><a></body></html>
```

```
<!DOCTYPE html>
<html>
<head>
<title>Web Page Title</title>
</head>
<body>
CONTENT GOES HERE
<h1>Laurence Svekis</h1>
This is my website
</body>
</html>
```

EXERCISE:

Update your index file placing the existing content between the body tags. Create a new file called boilerplate.html with just the 4 elements needed for an html page.

Open the file using a browser

Browser no matter which one HTML is the foundation of all websites Websites can be with just HTML Might no look right HyperText Markup Language - All share common history Markup is used by editors to let them know how the layout and structure Codepen.io - try out html code Plain text has no structure HTMI lays out with Structure Copy HTML structure Largest heading H1 List items When you open you should close them - apply structure

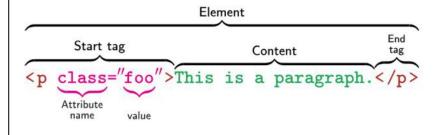
What are tags

HTML is content with tags that indicate the structure of that content. https://devdocs.io/html-elements/ - list of page elements (tags)

.https://developer.mozilla.org/en-US/docs/Web/Guide/ HTML/HTML5 mdn HTML guides.

Note that different tags have different display properties of the content.

This is structure that breaks the content into chunks that can then be output more meaningfully onto the page.



<h1>Laurence Svekis</h1>
This is my website

EXERCISE:

In codepen Update the H1 tag with your name Update the p tag with your message Remove rest of html tags

Code Editor IDE

To create html files on your computer you need a code editor, and save the file with html as the extension.

Text Editor - used to write code. Brackets - http://brackets.io/

EXERCISE:

Create a folder on your computer that you will use for this course. Connect the folder in the editor. Create a new file and save as index.html. This is your page starting point.

<h1>Laurence Svekis</h1>
This is my website

EXERCISE:

Copy the code from codepen or the http://info.cern.ch/ website source and paste it in your index.html file. Save the file. Open the file using your browser.

Tags Heading and Paragraphs line breaks

Get code examples from

https://developer.mozilla.org/en-US/docs/Web/HTML/E

lement/Heading Elements and

https://devdocs.io/html/element/heading_elements

The HTML element represents a paragraph

https://developer.mozilla.org/en-US/docs/Web/HTML/E

<u>lement/p</u>

The HTML **
** element produces a line break in text (carriage-return) notice no additional padding of the content. Horizontal Rule **<hr>>** Self Closing Tags



```
<h1>Heading level 1</h1>
<h2>Heading level 2</h2>
<h3>Heading level 3</h3>
<h4>Heading level 4</h4>
<h5>Heading level 5</h5>
<h6>Heading level 6</h6>

Hello<br/>br>Welcome to my page
<h1>Laurence Svekis</h1>
<hr>Hello<br/>br>Welcome to my page
```

EXERCISE:

Open https://devdocs.io/html-elements/ explore the heading tags. Update the h1 adding other heading elements.

Create a new paragraph and try the
br> line break. Add a Horizontal Rule between your name and the content.

Make sure your index page looks like mine

Text Formats

https://developer.mozilla.org/en-US/docs/Web/HTML/E lement/strong https://developer.mozilla.org/en-US/docs/Web/HTML/E lement/i <i>

EXERCISE:

Update your introduction with different text formats. Use emphasis on words and other text formats.

```
Hello
<br>Welcome to my page. This page is about <strong>Laurence
Svekis</strong>. It's going to list some important
<br/><b>information</b> about me.
Creating HTML pages you probably <em>think</em> to yourself
<i>This can't be real!</i>.
<strong>strong </strong> <b>bold</b> - bolds text
<em>emphasized</em> <i>italicized</i> - italicized text
<tt>typewriter</tt> - typewriter style text
<code>source code</code> - source code
<cite>cite>citation</cite> - Creates a citation
<address>address section</address> - Creates address section
<del>deleted</del> - Deleted text
<ins>inserted</ins> - Inserted text
<sub>subscript</sub> - Subscript text
<sup>superscript</sup> - Superscript text
<small>Small</small> - smaller text
<br/><big>Big</big> - Big text
```

Content holders

Format your text to make it easier to read and structure so that when you apply styling it is easier to select the blocks of content.

<div> </div> - Block Content with CSS

 - Inline content with CSS

<article>

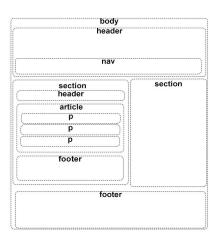
<aside>

<footer>

<header>

<nav>

<section>



```
<header id="header">Header for website</header>
<div id="main">
   <nav>Menu
       <l
           <a href="index.html">Home</a>
           <a href="about.html">About</a>
       </nav>
   <article>This is my main content of my website</article>
   <aside>You can put some ads here.</aside>
</div>
<footer id="footer">Footer</footer>
```

Lists

Lists are a collection of list items nested within the list tag. 2 Types ordered and unordered. Both contain list items

The HTML <Ii> element is used to represent an item in a list.

- Creates an unordered list

- Ordered list

- list item

Description lists

<dl> </dl> - Definition list <dt></dt> - Definition term <dd></dd> - Definition

Laurence Svekis

Hello Welcome to my page

Skills

- HTML
- CSSJavaScript

Favorite Animals

- 1. Dogs 2. Cats
- 2. Cats
- 3. Horse

EXERCISE:

Using the h2 add a title to the list, list out some of your skills in an unordered list and your favorite animals in an ordered list.

Comments and meta

Stuff you don't see

Comments help you and others understand your code increases code readability and good practice to add comments

<!-- A Comment → Comments can appear anywhere in a document, HTML parser will ignore them no matter where they appear so long as they are not inside other HTML tag structures. '<!--' and '-->'

Meta information

https://developer.mozilla.org/en-US/docs/Web/HTML/Element/meta

<meta charset="utf-8"> This attribute declares the
page's character encoding.

```
<!DOCTYPE html>
<html><head>
      <meta charset="utf-8">
      <title>Web Page Title</title>
</head>
<body>
      <!-- add details about myself -->
      <h1>Laurence Svekis</h1>
      <hr>>
     Hello
            <!-- Needs Image -->
            <br>Welcome to my page. This page is about
<strong>Laurence Svekis</strong>. 
      <!-- List Projects -->
</body>
</html>
```

EXERCISE:

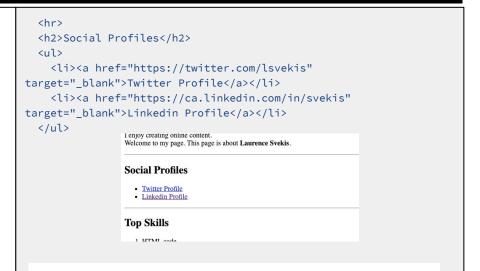
Update adding comments for planning of what you want to add to your website. Add some comments.

Hyperlinks

The HTML <a> element (or anchor element) creates a hyperlink to other web pages, files, locations within the same page, email addresses, or any other URL.

https://developer.mozilla.org/en-US/docs/Web/HTML/ Attributes

target = where to open the linked document href = where the URL of the page the link goes to title = Text to be displayed in a tooltip when hovering over the element.



EXERCISE:

Create Hyperlinks to your social profiles. Link out with target blank.

Hyperlinks

absolute URL vs relative URL:

relative URL will point to different places depending on the actual location of the file you refer from — for example if in index.html and you link to about.html needs to be in the same folder. Location matters.

absolute URL: Points to a location defined by its absolute location on the web, including protocol and domain name.

https://www.discoveryvip.com/index.html will always be the same end location.

<hr>
<hr>
<h2>Contact</h2>
 Send Email
Contact Me

Contact
Contact Me

EXERCISE:

Send Email

Create second html page called contact and link to it. Within the contact page add a mailto link to your email.

Images

Placeholder images - https://placeholder.com/

The HTML element embeds an image into the document.

https://developer.mozilla.org/en-US/docs/Web/HTML/Element/img

src attribute is required, and contains the path to the image you want to embed.

alt attribute holds a text description of the image, which isn't mandatory but is incredibly useful for accessibility

<img width="100px"
src="https://pbs.twimg.com/profile_images/1098618483900903429/iFfEL
9qD_400x400.png">

About



I enjoy creating online content. Welcome to my page. This page is about **Laurence Svekis**.

EXERCISE:

Locate your image from a social media profile and add it to your html.

HTML Character Codes

https://dev.w3.org/html5/html-author/charref

You can add html characters to your HTML code.

Social Profiles

- · Twitter Profile
- Linkedin Profile

✓ Top Skills

- 1. HTML code
- 2. Web Page Design
- 3. Online Courses

☆Education

University of Web Development 2001-2006

<h2>☎ Contact</h2>
<h2>✓ Top Skills</h2>
<h2>☆ Education</h2>

EXERCISE:

Add some cool characters to your resume.

HTML Tables

https://developer.mozilla.org/en-US/docs/Web/HTML/Element/table

The **HTML element** represents tabular data — that is, information presented in a two-dimensional table comprised of rows and columns of cells containing data.

```
<thead>

The table header

</thead>

The table body
```

EXERCISE:

Add a table to contain your Content

HTML Element Attributes

https://developer.mozilla.org/en-US/docs/Web/HTML/Element/table

☆Education

Name Major		Year	
University of Web Deve	elopment Canada 20	001-2006	
HTML school	Canada 19	995-1999	

EXERCISE:

Add some inline style attributes to your elements

```
<thead>
 Name Major
  Year
 </thead>
University of Web Development
  Canada
  2001-2006
 >
  HTML school
  Canada
  1995-1999
```

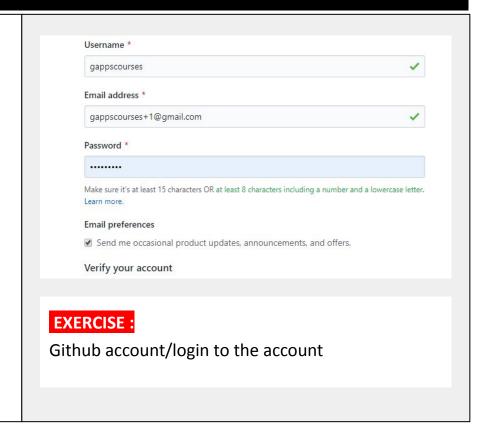
Signing up at GitHub

https://github.com/join

Free Plan

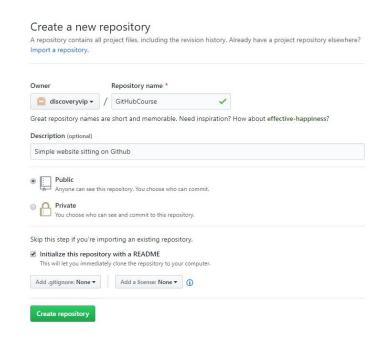
GitHub basics for every developer

- Unlimited repositories
- 3 collaborators/private repository
- 2,000 Action minutes/month
- 500MB of GitHub Packages storage
- Automated security updates



Start a Project

https://github.com/new

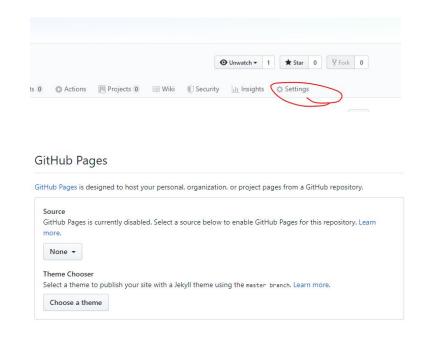


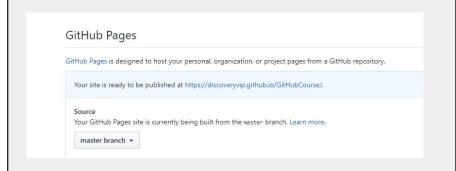
EXERCISE:

- Create new project with name
- Open in GitHub
- Edit readme to state what the project is for

Share your site to the world

Under settings go to GitHub Pages.





EXERCISE:

- Under settings select the branch you want to share.
- Get URL in GitHub pages section and try in a browser

Example Source Code

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>Web Page Title</title>
</head>
<body>
  <!-- add details about myself -->
  <h1>Laurence Svekis</h1> <big>You found me online!!!!</big>
  <hr>>
  <h2>&cirE; About</h2> <img width="100px"
src="https://pbs.twimg.com/profile images/1098618483900903429/iFfEL
9qD 400x400.png">
  <i>I enjoy creating online content.</i>
    <br/>dr>Welcome to my page. This page is about <strong>Laurence
Svekis</strong>. 
  <hr>
  <h2>&xodot; Social Profiles</h2>
  <l
   <a href="https://twitter.com/lsvekis"</a>
target=" blank">Twitter Profile</a>
    <a href="https://ca.linkedin.com/in/svekis"</li>
target="_blank">Linkedin Profile</a>
  <hr>>
```

```
<h2>&check; Top Skills</h2>
 HTML code
  Web Page Design
 <hr>>
 <h2>&star; Education</h2>
 <thead>
   Name Major
    Year
   </thead>
  University of Web Development
    Canada
    2001-2006
   <hr>
 <h2>&phone; Contact</h2> <a href="contact.html">Contact Me</a>
  <a href="mailto: gappscourses@gmail.com">Send Email</a>
</body></html>
```

Congratulations on completing the course!

Thank you for your support

