

HTML Introduction

Create web pages with HTML

INSTRUCTOR:

LAURENCE SVEKIS



Course instructor : Laurence Svekis

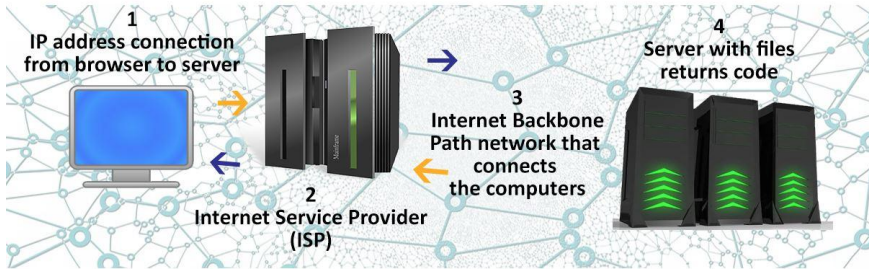
- Over 300 courses in technology and web applications.
- 20 years of web programming experience
- 750,000+ students across multiple platforms
- Digital instructor since 2002

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.



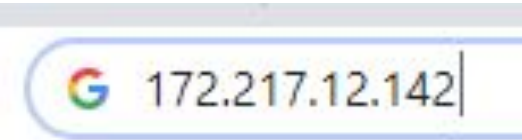
Computer which accesses the internet and requests information, your computer is known as the **client**

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



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/>

Google Chrome

Click the menu icon Menu on the browser toolbar.
Select More tools, then View Source.

or

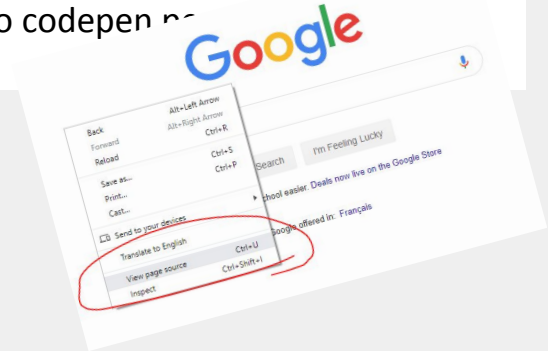
Press **Ctrl+U** (Windows) (Control+U)

⌘-Option-U (Mac). (Command+Option+U)

EXERCISE :

Go to your favorite website and check out the code.

Go to <http://info.cern.ch/> get the source code body and copy it to codepen



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>

<h1>http://info.cern.ch - home of the first
<p>From here you can:</p>
<ul>
<li><a href="http://info.cern.ch/hypertext/w
<li><a href="http://line-mode.cern.ch/www/hy
<li><a href="http://home.web.cern.ch/topics/
<li><a href="http://home.web.cern.ch/about">
</ul>
</body></html>
```

```
<!DOCTYPE html>
<html>
<head>
<title>Web Page Title</title>
</head>
<body>
CONTENT GOES HERE
<h1>Laurence Svekis</h1>
<p>This is my website</p>
</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 not 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
HTML lays out with Structure
Copy HTML structure
Largest heading H1
List items
When you open you should close them - apply structure

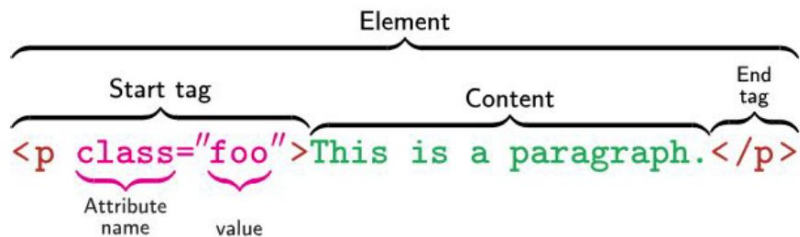
What are tags

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>
<p>This is my website</p>
```

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>
<p>This is my website</p>
```

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

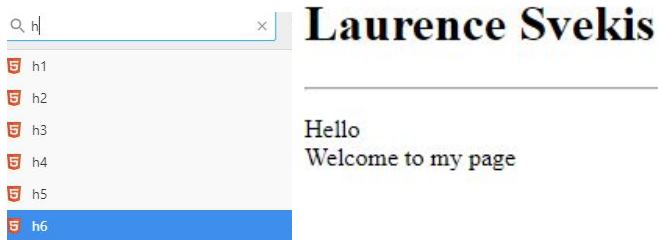
https://developer.mozilla.org/en-US/docs/Web/HTML/Element/Heading_Elements and

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

The HTML `<p>` element represents a paragraph

<https://developer.mozilla.org/en-US/docs/Web/HTML/Element/p>

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>
```

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

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 `
` 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/Element/strong>

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

EXERCISE :

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

```
<p>Hello  
<br>Welcome to my page. This page is about <strong>Laurence  
Svekis</strong>. It's going to list some important  
<b>information</b> about me.</p>  
<p>Creating HTML pages you probably <em>think</em> to yourself  
<i>This can't be real!</i>.</p>
```

```
<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>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  
<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>`

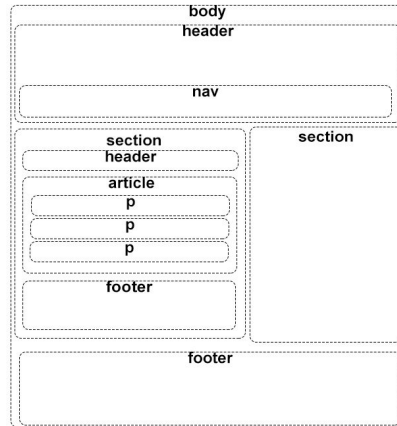
`<aside>`

`<footer>`

`<header>`

`<nav>`

`<section>`



```
<header id="header">Header for website</header>
<div id="main">
  <nav>Menu
    <ul>
      <li><a href="index.html">Home</a></li>
      <li><a href="about.html">About</a></li>
    </ul>
  </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 `` element is used to represent an item in a list.

`` `` - Creates an unordered list

`` `` - Ordered list

`` `` - list item

Laurence Svekis

Hello
Welcome to my page

Skills

- HTML
- CSS
- JavaScript

Favorite Animals

1. Dogs
2. Cats
3. Horse

```
<h2>Skills</h2><ul>
  <li>HTML</li>
  <li>CSS</li>
  <li>JavaScript</li>
</ul>
<h2>Favorite Animals</h2><ol>
  <li>Dogs</li>
  <li>Cats</li>
  <li>Horse</li>
</ol>
<dl> <dt>One</dt> <dt>One #2</dt>
  <dd>Whatever you use to describe the item</dd> <dt>Two</dt>
  <dd>Whatever you use to describe the item</dd> <dt>Three</dt>
  <dd>Whatever you use to describe the item</dd>
</dl>
```

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>
  <p>Hello
    <!-- Needs Image -->
    <br>Welcome to my page. This page is about
  <strong>Laurence Svekis</strong>. </p>
  <!-- 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.

```
<hr>
<h2>Social Profiles</h2>
<ul>
  <li><a href="https://twitter.com/lsvekis"
target="_blank">Twitter Profile</a></li>
  <li><a href="https://ca.linkedin.com/in/svekis"
target="_blank">Linkedin Profile</a></li>
</ul>
```

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

Social Profiles

- [Twitter Profile](#)
- [Linkedin Profile](#)

Top Skills

1. HTML code

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>
<h2>Contact</h2>
<p> <a href="mailto: gappscourses@gmail.com">Send Email</a></p>

<a href="contact.html">Contact Me</a>
```

Contact

[Contact Me](#)

[Send Email](#)

EXERCISE :

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

```

```

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>&phone; Contact</h2>
<h2>&check; Top Skills</h2>
<h2>&star;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 <table> element** represents tabular data — that is, information presented in a two-dimensional table comprised of rows and columns of cells containing data.

```
<table>
  <thead>
    <tr>
      <th colspan="2">The table header</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>The table body</td>
      <td>with two columns</td>
    </tr>
  </tbody>
</table>
```

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 Development Canada	2001-2006
HTML school	Canada 1995-1999

EXERCISE :

Add some inline style attributes to your elements

```
<table style="border: 1px solid black">
  <thead>
    <tr style="background: black;color:white">
      <th colspan="2">Name Major</th>
      <th>Year</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>University of Web Development</td>
      <td>Canada</td>
      <td style="width:50%">2001-2006</td>
    </tr>
    <tr>
      <td>HTML school</td>
      <td>Canada</td>
      <td>1995-1999</td>
    </tr>
  </tbody>
</table>
```

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

Username *

gappscourses ✓

Email address *

gappscourses+1@gmail.com ✓

Password *

.....

Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter.
[Learn more.](#)

Email preferences

Send me occasional product updates, announcements, and offers.

Verify your account

EXERCISE :

GitHub account/login to the account

Start a Project

<https://github.com/new>

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?
[Import a repository.](#)

Owner / Repository name

Great repository names are short and memorable. Need inspiration? [How about effective-happiness?](#)

Description (optional)

- Public**
Anyone can see this repository. You choose who can commit.
- Private**
You choose who can see and commit to this repository.

Skip this step if you're importing an existing repository.

- Initialize this repository with a README**
This will let you immediately clone the repository to your computer.

Add .gitignore: | Add a license: ⓘ

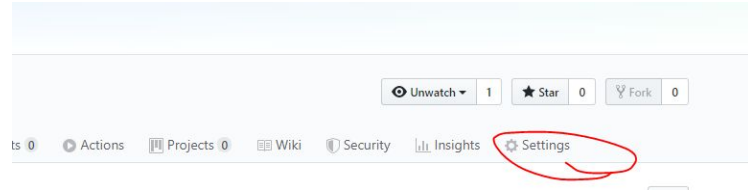
[Create repository](#)

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.



GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Source

GitHub Pages is currently disabled. Select a source below to enable GitHub Pages for this repository. [Learn more.](#)

None ▾

Theme Chooser

Select a theme to publish your site with a Jekyll theme using the master branch. [Learn more.](#)

Choose a theme

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

Your site is ready to be published at <https://discoveryvip.github.io/GitHubCourse/>.

Source

Your GitHub Pages site is currently being built from the master branch. [Learn more.](#)

master branch ▾

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> <i>I enjoy creating online content.</i>
  <br>Welcome to my page. This page is about <strong>Laurence
Svekis</strong>. </p>
  <hr>
  <h2>&xodot; Social Profiles</h2>
  <ul>
    <li><a href="https://twitter.com/lsvekis"
target="_blank">Twitter Profile</a></li>
    <li><a href="https://ca.linkedin.com/in/svekis"
target="_blank">Linkedin Profile</a></li>
  </ul>
  <hr>
```

```
<h2>&check; Top Skills</h2>
<ol>
  <li>HTML code</li>
  <li>Web Page Design</li>
</ol>
<hr>
<h2>&star;Education</h2>
<table style="border: 1px solid black">
  <thead>
    <tr style="background: black;color:white">
      <th colspan="2">Name Major</th>
      <th>Year</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>University of Web Development</td>
      <td>Canada</td>
      <td style="width:50%">2001-2006</td>
    </tr>
  </tbody>
</table>
<hr>
<h2>&phone; Contact</h2> <a href="contact.html">Contact Me</a>
<p> <a href="mailto: gappscourses@gmail.com">Send Email</a></p>
</body></html>
```

Congratulations on completing the course!

Thank you for your support



Course instructor : Laurence Svekis - providing online training to over 750,000 students across hundreds of courses and many platforms.

Find out more about my courses at [DiscoveryVIP](#)

