

מסלול Full Stack

קמפוס ת"א

זום 2022

שם המרצה: דורון אזולאי



ברוכים הבאים



Lesson Agenda

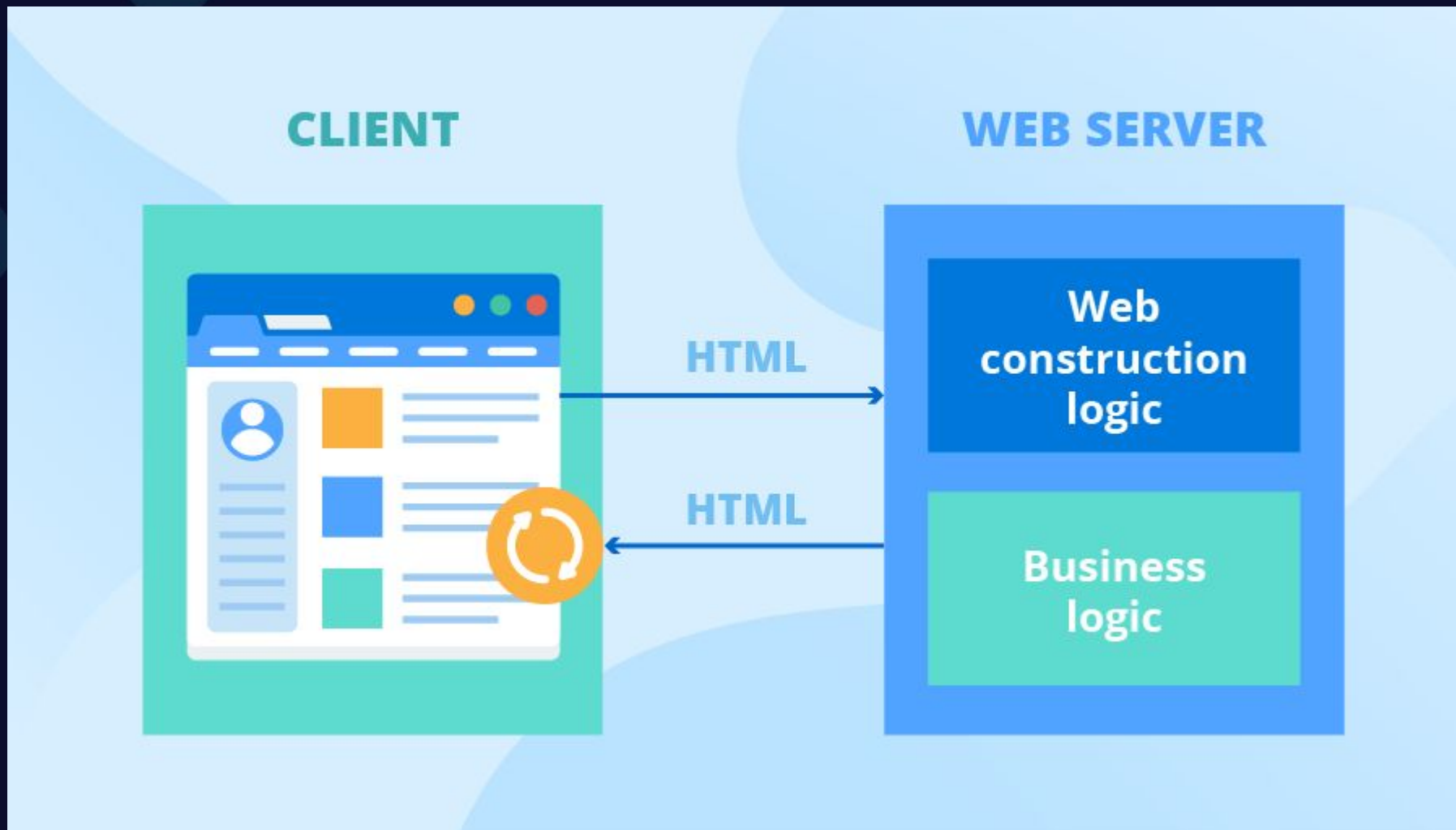
- intro – the web from developers side
- intro – html basics (struct)
- intro – html base tags and attributes

https://www.w3schools.com/html/html_exercises.asp

- headers (sizes)
- paragraph & preserve (span br hr)
- image (dimensions & alt & float)
- link (href target)
- lists

- Exercise
- Q&A

Web Application Architecture:



Web Browsers:



Web Browsers:

Use three languages to translate a graphical user interface

HTML



CSS



JS



HTML: HyperText Markup Language

HTML is the most basic building block of the Web. It defines the meaning and structure of web content. Other technologies besides HTML are generally used to describe a web page's appearance/presentation (CSS) or functionality/behavior (JavaScript).

HTML uses "markup" to annotate:

text, images, and other content for display in a Web browser. HTML markup includes special "elements" such as

<head>, <title>, <body>, <header>, <footer>, <article>, <section>, <p>, <div>, , , <aside>, <audio>, <canvas>, <datalist>, <details>, <embed>, <nav>, <output>, <progress>, <video>, , , all tags – <https://www.w3schools.com/TAGs/default.asp>

Anatomy of an HTML element:

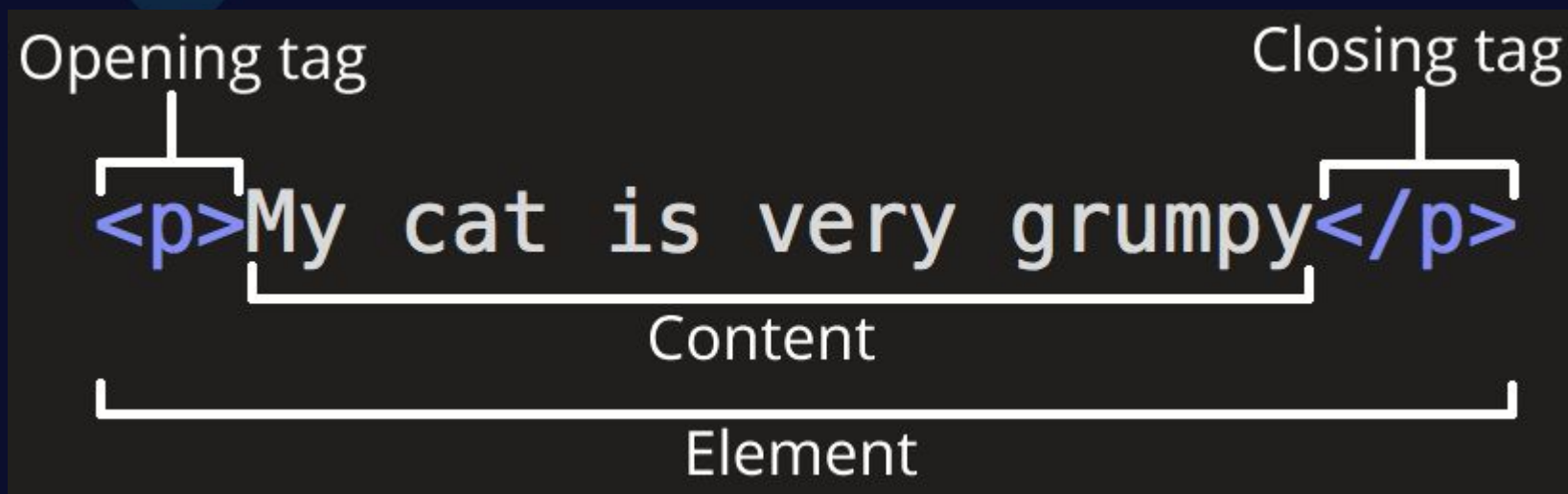


Diagram illustrating an HTML element with an attribute:

The example code is: `<p class="editor-note">My cat is very grumpy</p>`

The label **Attribute** points to the `class="editor-note"` part of the opening tag.

Common attributes:

<https://www.w3.org/TR/2010/WD-html-markup-20100624/common-attributes.html>

Nesting elements:

```
<p>My cat is <strong>very</strong> grumpy.</p>
```

```
<p>My cat is <strong>very grumpy.</p></strong>
```



Empty elements:

```

```

Common Tags: doc

Document Structure

Opening Tag	Closing Tag	Description
<html>	</html>	Opens and closes an HTML document
<head>	</head>	The first of two main sections of an HTML document. The <head> section is used to provide information about the document for use primarily by search engines and browsers.
<title>	</title>	The title of document. This element is nested inside the <head> section. In HTML5, this is the only required tag other than the DOCTYPE declaration.
<body>	</body>	The second of two main sections of an HTML document. The <body> section contains all the content of the web page.

Common Tags: container

Content (Container) Tags

Opening Tag	Closing Tag	Description
<h1> to <h6>	</h1> to </h6>	Headings. H1 is the main heading, H2 is secondary, etc.
<p>	</p>	Paragraph
<div>	</div>	A container for a <i>block</i> of content
		A container for <i>in-line</i> content, such as content inside a paragraph.
		Gives the contained text emphasis (usually as <i>italics</i>).
		Makes the contained text bold .
		Link
		Ordered (numbered) list
		Unordered (bulleted) list
		List item, must be nested inside a list element such as a or
<!--	-->	Comment. Anything between these tags is not displayed on the screen. This is useful for making notes to yourself or to others who may view the source code of the web page.

Common Tags: semantic

HTML5 Semantic Tags

HTML5 introduced several new tags called **semantic** tags. These tags were designed to communicate the function of blocks of content that were common on many web pages. Prior to HTML5, developers just used `<div>` tags for all blocks.

Opening Tag	Closing Tag	Description
<code><header></code>	<code></header></code>	Contains introductory content for a page (e.g., a banner), or a section of a page.
<code><nav></code>	<code></nav></code>	Contains navigation content, such as a website navigation menu.
<code><main></code>	<code></main></code>	Contains the main content of the web page.
<code><aside></code>	<code></aside></code>	Contains content that is tangentially related to the main content of the page (often this is presented in a sidebar).
<code><footer></code>	<code></footer></code>	Contains the footer of a page, or of a section of a page. Typically the footer contains information <i>about</i> the content, such as the author and a copyright statement.

Common Tags: table

Tables

Opening Tag	Closing Tag	Sample Attributes	Description
<code><table></code>	<code></table></code>		Adds a table
<code><tr></code>	<code></tr></code>		Table row (start & end).
<code><th></code>	<code></th></code>	<code>scope="row"</code> <code>scope="col"</code>	When creating a table to display data, use this tag to differentiate the first row or column of cells as heading cells for all the other cells in the same column or row. Browsers typically display this element bold and centered within the table cell. The <i>scope</i> attribute defines whether this is a row header or column header.
<code><td></code>	<code></td></code>		Table data cell.
		<code>colspan="number"</code>	Use with <code><th></code> or <code><td></code> elements. Spans cells across multiple columns.
		<code>rowspan="number"</code>	Use with <code><th></code> or <code><td></code> elements. Spans cells across multiple rows.

Anatomy of an HTML document

```
2
3 <!DOCTYPE html>
4 <html lang="en-US">
5   <head>
6     <meta charset="utf-8">
7     <title>My test page</title>
8   </head>
9   <body>
10    <h1>Hello World</h1>
11  </body>
12 </html>
```

Create Html File:

1. open notepad
2. write html code
3. save as index.html
4. double click on the file


```
*Untitled - Notepad
File Edit View

<!DOCTYPE html>
<html lang="en-US">
  <head>
    <meta charset="utf-8">
    <title>My test page</title>
  </head>
  <body>
    <h1>My main title</h1>
    <p>At Mozilla, we're a global community of</p>

    <ul>
      <li>technologists</li>
      <li>thinkers</li>
      <li>builders</li>
    </ul>

    <p>working together ... </p>
  </body>
</html>

Ln 15, Col 10 180% Windows (CRLF) UTF-8
```



Set Up The Environment :

*template:

```
c:/dev/{dev-state}/{lang}/{unique-name}
```

dev = All your developments

dev-state= FrontEnd/BackEnd

lang = dev language

unique-name = project name

*create this path:

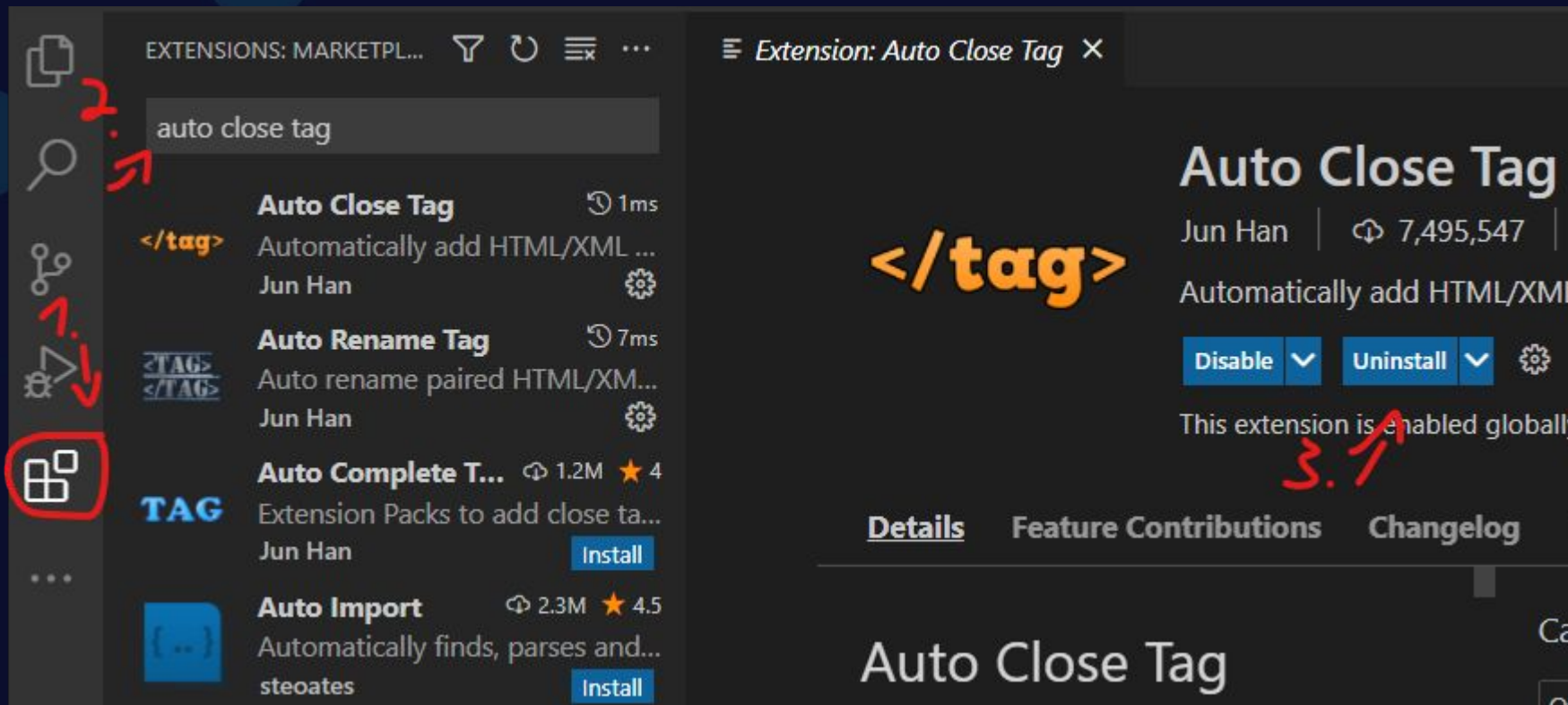
```
c:/dev/frontEnd/html/lesson1
```

Use Real IDE: vs code



<https://code.visualstudio.com/download>

Set Extensions:



1. Auto Close Tag
2. Auto Rename Tag
3. HTML Snippets
4. HTML CSS Support
5. Live Server

Headers:

Heading	Example
<code><h1></h1></code>	h1. Bootstrap heading
<code><h2></h2></code>	h2. Bootstrap heading
<code><h3></h3></code>	h3. Bootstrap heading
<code><h4></h4></code>	h4. Bootstrap heading
<code><h5></h5></code>	h5. Bootstrap heading
<code><h6></h6></code>	h6. Bootstrap heading
<pre><h1>h1. Bootstrap heading</h1> <h2>h2. Bootstrap heading</h2> <h3>h3. Bootstrap heading</h3> <h4>h4. Bootstrap heading</h4> <h5>h5. Bootstrap heading</h5> <h6>h6. Bootstrap heading</h6></pre>	

paragraph & preserve:

Inline text elements

Styling for common inline HTML5 elements.

You can use the mark tag to highlight text.

~~This line of text is meant to be treated as deleted text.~~

~~This line of text is meant to be treated as no longer accurate.~~

This line of text is meant to be treated as an addition to the document.

This line of text will render as underlined.

This line of text is meant to be treated as fine print.

This line rendered as bold text.

This line rendered as italicized text.

```
<p>You can use the mark tag to <mark>highlight</mark> text.</p>
<p><del>This line of text is meant to be treated as deleted text.</del></p>
<p><s>This line of text is meant to be treated as no longer accurate.</s></p>
<p><ins>This line of text is meant to be treated as an addition to the document.</ins></p>
<p><u>This line of text will render as underlined.</u></p>
<p><small>This line of text is meant to be treated as fine print.</small></p>
<p><strong>This line rendered as bold text.</strong></p>
<p><em>This line rendered as italicized text.</em></p>
```


preserve:

```
<!DOCTYPE html>
<html>
<body>

<h1>The pre element</h1>

<pre>
Text in a pre element
is displayed in a fixed-width
font, and it preserves
both      spaces and
line breaks
</pre>

</body>
</html>
```

The pre element

Text in a pre element
is displayed in a fixed-width
font, and it preserves
both spaces and
line breaks

Definition and Usage

The `<pre>` tag defines preformatted text.

Text in a `<pre>` element is displayed in a fixed-width font, and the text preserves both spaces and line breaks. The text will be displayed exactly as written in the HTML source code.

Also look at:

`<code>` – Defines a piece of computer code

`<samp>` – Defines sample output from a computer program

link: target

```
<!DOCTYPE html>
<html>
<body>

<h2>The target Attribute</h2>

<a href="https://www.w3schools.com/" target="_blank">Visit W3Schools!</a>

<p>If target="_blank", the link will open in a new browser window or tab.</p>

</body>
</html>
```

The target Attribute

[Visit W3Schools!](https://www.w3schools.com/)

If target="_blank", the link will open in a new browser window or tab.

HTML Links – The target Attribute

By default, the linked page will be displayed in the current browser window. To change this, you must specify another target for the link.

The **target** attribute specifies where to open the linked document.

The **target** attribute can have one of the following values:

- **_self** – Default. Opens the document in the same window/tab as it was clicked
- **_blank** – Opens the document in a new window or tab
- **_parent** – Opens the document in the parent frame
- **_top** – Opens the document in the full body of the window

link: link & img

```
<!DOCTYPE html>
<html>
<body>

<h2>Image as a Link</h2>

<p>The image below is a link. Try to click on it.</p>

<a href="default.asp"></a>

</body>
</html>
```

Image as a Link

The image below is a link. Try to click on it.



Exercise: create product details page

- 1.create html file name as – {product-name}-details.html
- 2.write the base html struct
- 3.add first header with the product name as text
- 4.add image of the product and set dimensions to width=500 height=300
5. add paragraph description for product
- 6.add list of product details

MacBook Pro

MacBook Pro



Supercharged for pros.

The most powerful MacBook Pro ever is here.

With the blazing-fast M1 Pro or M1 Max chip — the first Apple silicon designed for pros — you get groundbreaking performance and amazing battery life.

Add to that a stunning Liquid Retina XDR display, the best camera and audio ever in a Mac notebook, and all the ports you need. The first notebook of its kind, this MacBook Pro is a beast.

Details.

- Up to 10-core CPU
- Up to 16-core GPU
- Up to 32GB of unified memory
- Up to 200GB/s memory bandwidth

Q&A



