

Intro to Web Dev

Part 1



x



Web Development ?

- Create websites
- Websites can be super complex (ex: Amazon. Netflix, Canvas)
- High demanding job opportunities, great pay

Web Developer Salaries

20,761 Salaries Updated Apr 19, 2020

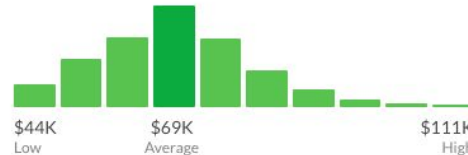
Industries ▾

Company Sizes ▾

Years of Experience ▾

Average Base Pay

\$68,524 /yr



Additional Cash Compensation ?

Average \$3,795

Range \$764 - \$12,202

How much does a Web Developer make?

The national average salary for a Web Developer is \$68,524 in United States. Filter by location to see Web... [More](#)

Frontend, Backend, Full-stack

Website development can be divided into 3 categories: frontend, backend, full-stack

- **Frontend**: work on the user interface of the website (the beauty, the aesthetic side)
- **Backend**: work on the logic behind website (interact with database, authorize users, transactions,...)
- **Full-stack**: Frontend + Backend



Intro to Web Dev Series

What is it about?

- Technical series that will demonstrate all the skills needed to create a fully working website and best coding practices when it comes to web dev

Goal of the series

- Able to create a functional website project from scratch and deploy it

Contents of the series?

- Web Dev 1 (HTML / CSS)
- Web Dev 2 (JavaScript - Svelte)
- ... coming soon

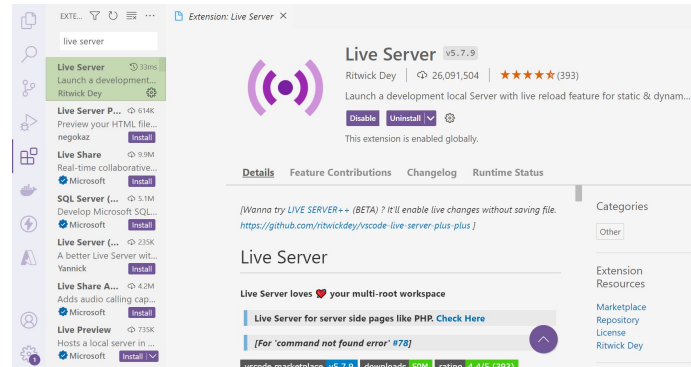
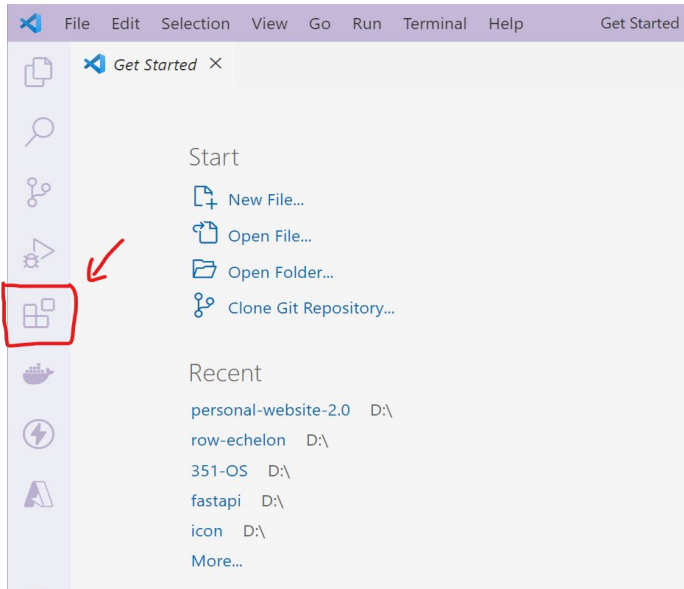
Website Template Explained

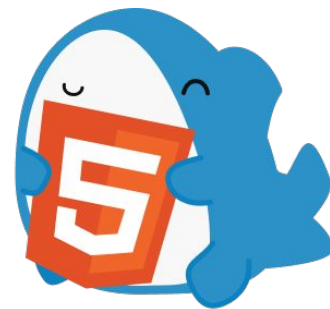
We've cloned the template, what now?

- Svelte uses HTML and CSS so it'll be beneficial to learn the fundamentals first by practicing them
- What we work on during this session will be very easy to transfer into a Svelte file later!

Before We Start

- Install [VSCode](#) (Text Editor - where you will code)
- Install Live Server from VSCode Extensions (help you preview your local website)





HTML Basics

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HTML (HyperText Markup Language)

What is it?

- The very basic markup language to help you build the skeleton of your website

Get Started

- Create an index.html file in VSCode
- In the file, type html:5 and press Enter for autocomplete

```
index.html > ...
1  <!DOCTYPE html>
2  <html Lang="en">
3  <head>
4      <meta charset="UTF-8">
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <meta name="viewport" content="width=device-width, initial-scale=1.0">
7      <title>Document</title>
8  </head>
9  <body>
10
11 </body>
12 </html>
```

← It'll look like this as the result

HTML – Tags <> </>

What is it?

- In HTML we use **tag** to define website elements, syntax is <open tag> </close tag> (Ex: for image , <p> for paragraph </p>),

Tags are everywhere

- Go to any website > right click > inspect elements

```
<!DOCTYPE html>
<html lang="en" coupert-item="9AF8D9A4E502F3784AD24272D81F0381">
  <head>...</head>
  <body class="dark">
    <div id="svelte">
      <nav class="svelte-4ywhbv">...</nav> flex
      <main class="svelte-ck2lms">
        <div style="display: contents; --min:175px; --med:200px; --max:200px;">
          <div class="svelte-23s1bo"></div> == $0
        </div>
        <section class="svelte-111bkk5">...</section> flex
        <div style="display: contents; --min:120px; --med:175px; --max:200px;">...</div>
        <section class="svelte-172yho">...</section> flex
        <div style="display: contents; --min:120px; --med:175px; --max:200px;">...</div>
        <section class="svelte-2tomoo">...</section> flex
        <div style="display: contents; --min:120px; --med:175px; --max:200px;">...</div>
        <section class="svelte-zfljyw">...</section> flex
        <div style="display: contents; --min:75px; --med:100px; --max:120px;">...</div>
      </main>
```

acmcscuf.com

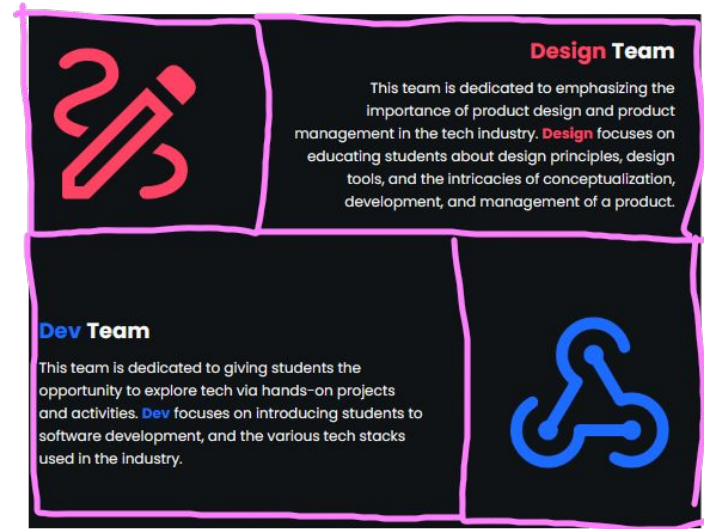
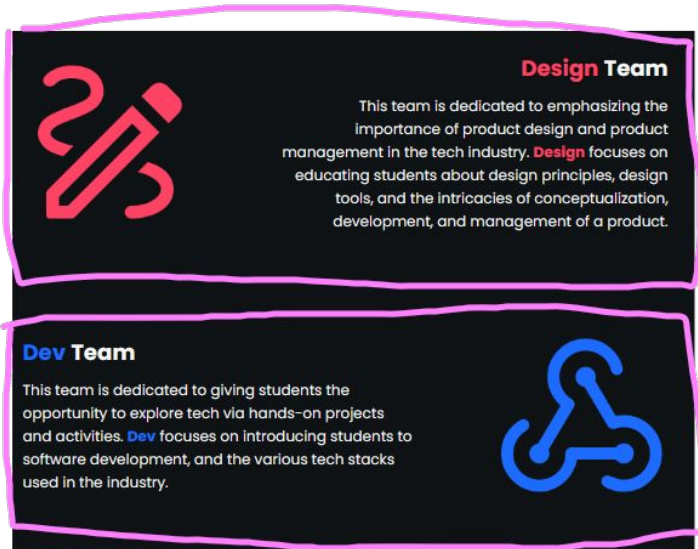
Common tags

- **<title> </title>** : Website title (show on navigation bar)
- **<body> </body>** : Defines body elements (should be wrap around all elements)
- **<h1> </h1>**: Website most important heading (heading size/importance order h1 -> h6)
- **<p> </p>**: Defines a paragraph
- **<div> </div>**: Defines division/block/container of element
- ** **: Defines image
- **link**: Defines hyperlink

The power of <div> </div>

- Understand how <div> </div> works = Understand the website layout

Example:



Ordered and Unordered Lists

**** and **** are tags used to create lists of items. Ordered lists are numbered while unordered lists are just bullet points. **** tags are used to define the contents of the lists.

Example:

```
<ol>
  <li>Ordered</li>
  <li>List</li>
</ol>

<ul>
  <li>Unordered</li>
  <li>List</li>
</ul>
```

1. Ordered
2. List

- Unordered
- List

Images

We've gotten some different text tags down, but what if we want a picture? We can use the `` tag to reference them. We also include an alt in case the image can't load, so people know what should have been there

Example:

```

```



HTML Challenge Time

- Make a html file and name it whatever you want (ex: danielsohot.html)
- Make the title of the website your name
- Display a BIG cute greeting message
- Display a not so big message under greeting message
- Display an image of whatever you like (ex: Thug Frank)
- Insert your favorite website link such that user will be redirected to that website when they click on your link
- Create a bullet-point list includes anything (facts about yourself, hobbies,...)
- BONUS: An image with link that when user click on the image, they'll be directed to the attached link

CSS Basics

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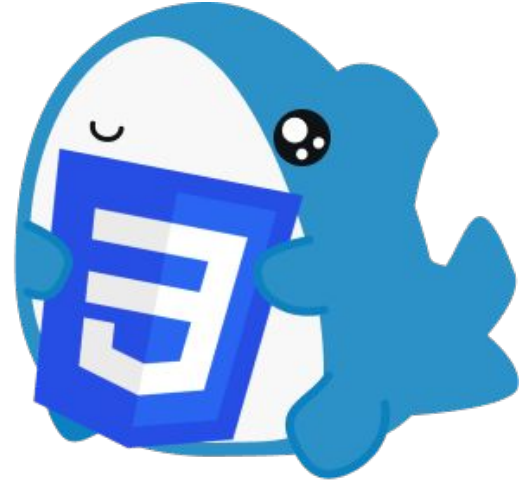
A solid pink decorative bar with a wavy, undulating top edge that spans the entire width of the slide at the bottom.

What is CSS?

- Cascading Style Sheets
- The skin of a website

CSS uses **selectors** to specify which element(s) to style + **props** to declare values

```
selector {  
    prop: value;  
}
```



How to Select Elements

Elements can be selected 3 ways: by **tag**, by **class name**, by **id**

// html

<**h1**>blah blah blah</**h1**>

<**h2** class="blah">blah blah blah</**h2**>

<**h3** id="uniqueBlah">blah blah blah</**h3**>

// css

h1 { color: red; }

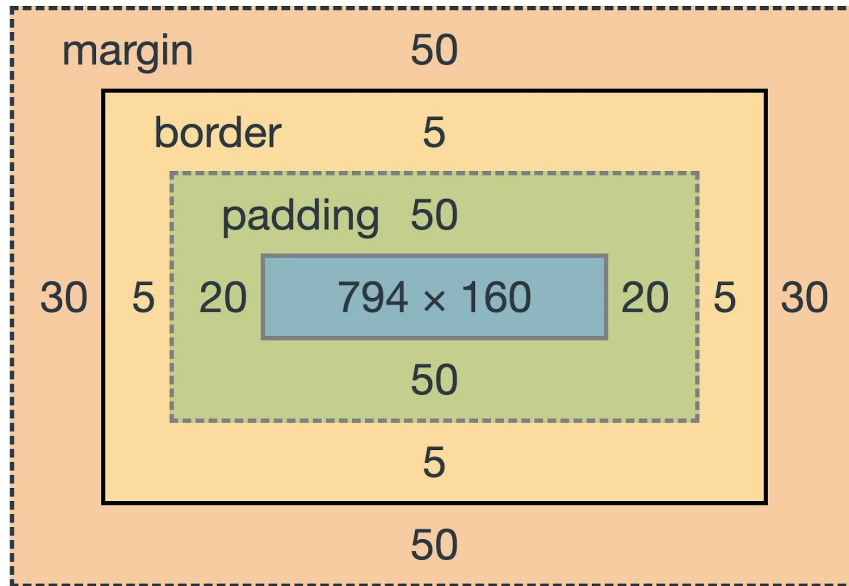
.blah { color: red; }

#uniqueBlah { color: red; }



The Box Model

- Style the spacing around a element you target
- **Blue:** Height x Width of element
- **Green:** Spacing inside of container
- **Yellow:** Optional border sizing
- **Orange:** spacing outside of container

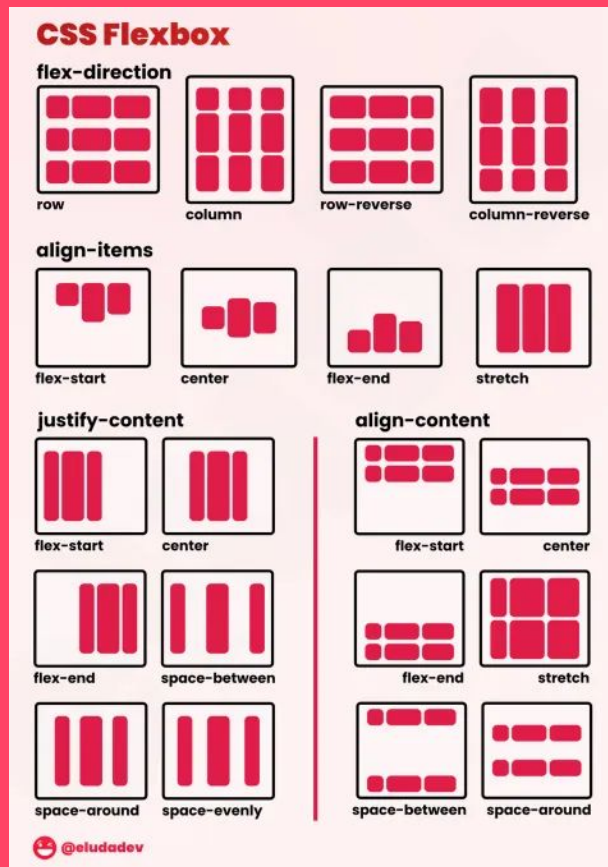


[Visualize Example](#)

Flexbox

This is a crazy positioning tool and I can not cover it in 5 minutes 🙄

- To the right is a graph of a summary on how flexbox can organize content in a container 😬
- [Click here](#) for a game to understand flexbox 🎮



More Cool Properties

- **margin:** [units];
- **padding:** [units];
- **width:** [units];
- **height:** [units];
- **border:** [color] [thickness] [style];
- **border-radius:** [units];
- **text-align:** [position];
- **box-shadow:** [x-axis] [y-axis] [blur in units] [color];
- **color:** [color];
- **background-color:** [color];
- **font-family:** [font family];
- **font-size:** [units];
- **font-style:** [italic / bold / etc];
- **font-weight:** [units in base 100];
- **font-shadow:** [x-axis] [y-axis] [blur in units] [color];

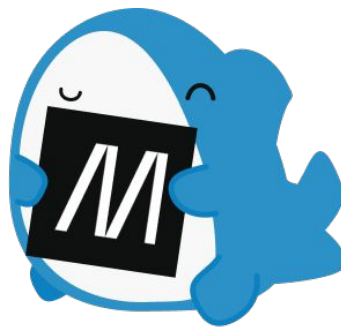
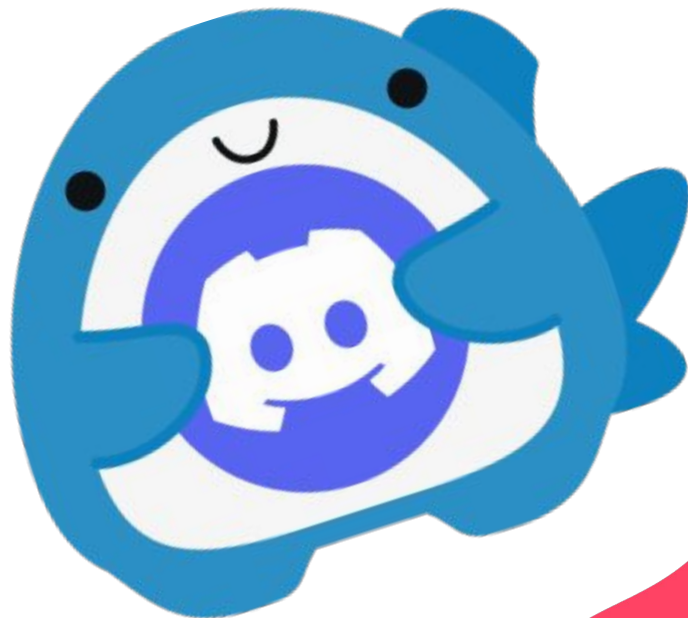
and more...

CSS Challenge Time

- Make a **style tag** inside of your <head> tag ✨
- **apply classes or id's** inside of the html tags (slide 17) ID
- target html **classes, id's, or html** tags inside of the style tag (slide 17) 🎯
- **apply properties** inside of the targeted element (slide 18-20) 🎉
- play around with spacing like **margin or padding** (slide 18) 🌃
- **BONUS**: adjust the position of the elements using flexbox (slide 19) 🤖

CSS Resources

- [Kevin Powell on Youtube](#)
- [Box Model Docs](#)
- [MDN CSS Docs](#)
- [Flexbox Guide](#)
- #design-team or #dev-team



Reminder

Please register
on Discord to
access all
channels

