



# **CODING 101**

## **Web Development Essentials**

**HTML, CSS, Javascript**

# Coding101 will cover:



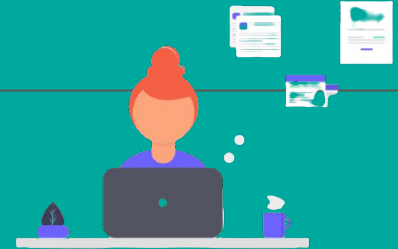
- ❖ Tags
- ❖ Attributes
- ❖ Tables
- ❖ Lists
- ❖ Form
- ❖ ...



- ❖ Classes & Selectors
- ❖ Layout & Positions
- ❖ Media queries
- ❖ FlexBox & Grid
- ❖ ...



- ❖ Variables
- ❖ Comparisons
- ❖ Loops
- ❖ Array Methods
- ❖ Object & Classes
- ❖ Function
- ❖ DOM(Document Object Model)
- ❖ ...



- ❖ BMI Calculator
- ❖ Color Generator
- ❖ Search Pokemon App
- ❖ Countries Info
- ❖ Personal Website (portfolio)



# Today's Agenda

- Introduction to Web Development
- Setting up tools
- HTML Basics



# What is Web development

Web development is the coding or programming that enables website functionality, per the owner's requirements. It mainly deals with the non-design aspect of building websites, which includes coding and writing markup.

Web development ranges from creating plain text pages to complex web-based applications, social network applications and electronic business applications.

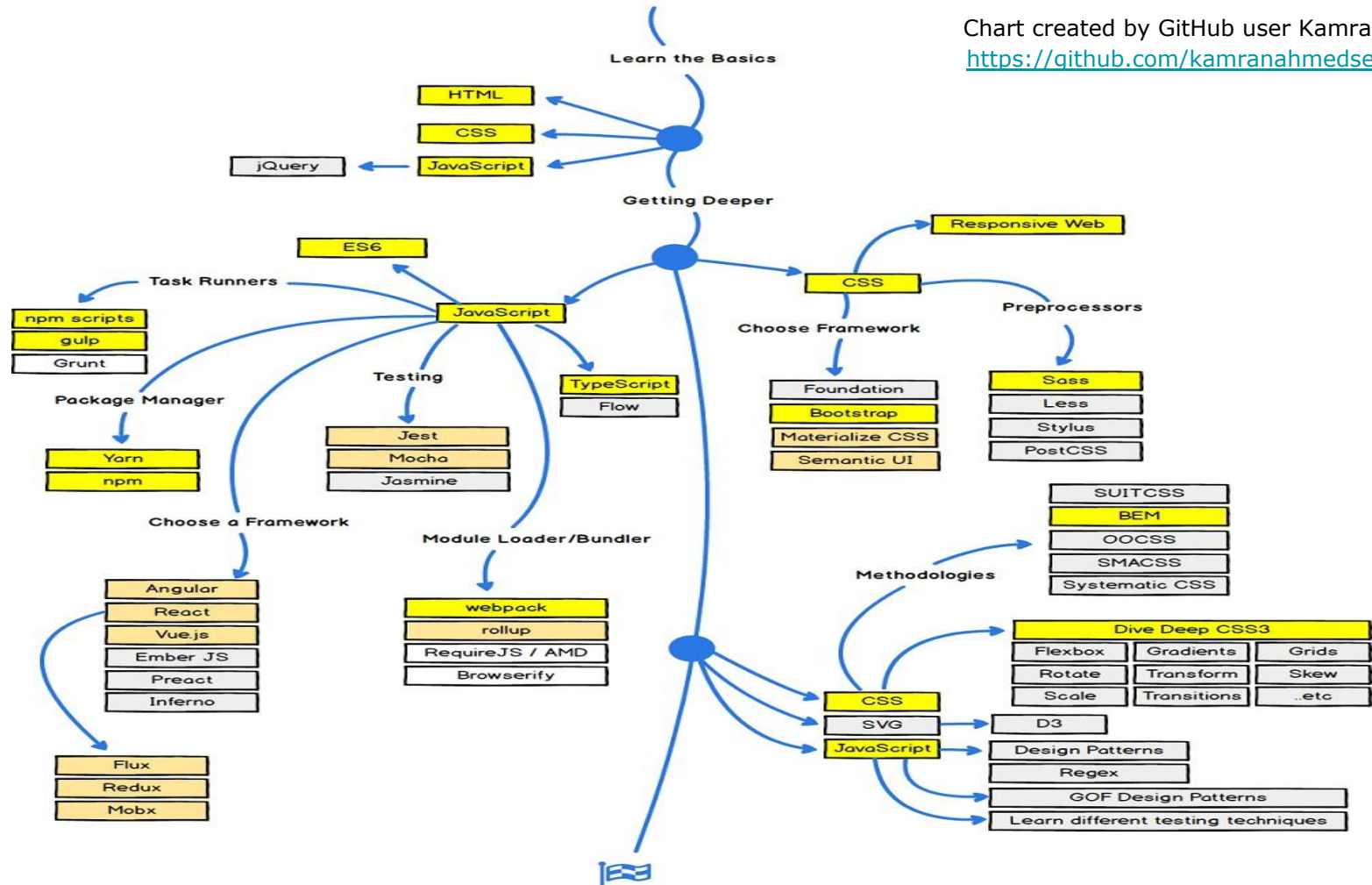
The web development hierarchy is as follows:

- Client-side coding
- Server-side coding
- Database technology

-- Techopedia

Chart created by GitHub user Kamranahmedse:

<https://github.com/kamranahmedse>





# What do we need ?

**Text Editor (IDE):  
VSCode**



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

**Browser:  
Google Chrome**



<https://www.google.com/chrome>



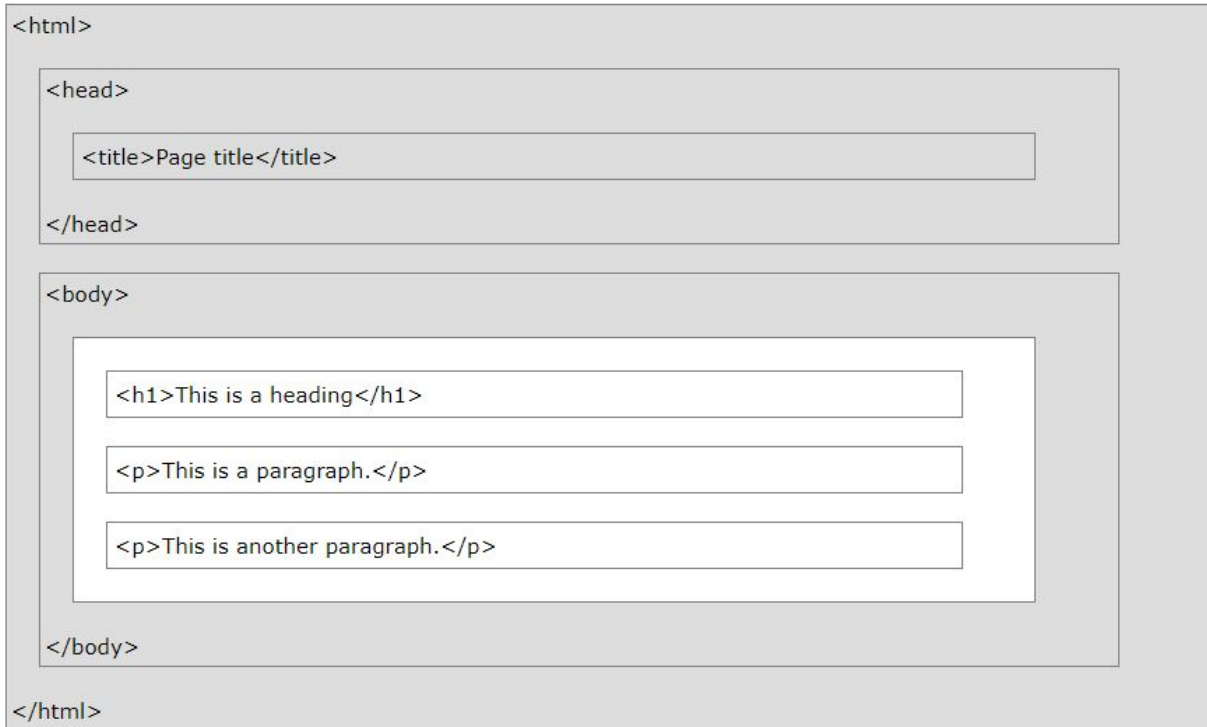
# What is HTML?

## HyperText Markup Language

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.



# HTML Page Structure







# HTML Head

- The **<head>** element is a container for metadata (data about data)
- The **<head>** element is placed between the `<html>` tag and the `<body>` tag
- The **<title>** element is required and it defines the title of the document
- The **<style>** element is used to define style information for a single document
- The **<link>** tag is most often used to link to external style sheets
- The **<meta>** element is typically used to specify the character set, page description, keywords, author of the document, and viewport settings



```
<!DOCTYPE html>
<html>
<head>
  <title>Page title</title>
  <link rel="stylesheet" href="mystyle.css" />
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <style>
    .city {
      background-color: tomato;
      color: white;
      padding: 10px;
      width: 120px;
    }
  </style>
</head>
```



# HTML Attributes

- All HTML elements can have attributes
- The **href** attribute of `<a>` specifies the URL of the page the link goes to
- The **src** attribute of `<img>` specifies the path to the image to be displayed
- The **width** and **height** attributes of `<img>` provide size information for images
- The **alt** attribute of `<img>` provides an alternate text for an image
- The **style** attribute is used to add styles to an element, such as color, font, size, and more
- The **lang** attribute of the `<html>` tag declares the language of the Web page
- The **title** attribute defines some extra information about an element



# HTML Headings

- HTML headings are defined with the `<h1>` to `<h6>` tags.
- `<h1>` defines the most important heading. `<h6>` defines the least important heading:

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

<h1>This is heading 1</h1>
<h2>This is heading 2</h2>
<h3>This is heading 3</h3>
<h4>This is heading 4</h4>
<h5>This is heading 5</h5>
<h6>This is heading 6</h6>

</body>
</html>
```

**This is heading 1**

**This is heading 2**

**This is heading 3**

**This is heading 4**

**This is heading 5**

**This is heading 6**



# HTML Paragraphs

- The HTML `<p>` element defines a paragraph.
- A paragraph always starts on a new line, and browsers automatically add some white space (a margin) before and after a paragraph

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

<p>This is a paragraph.</p>
<p>This is a paragraph.</p>
<p>This is a paragraph.</p>

</body>
</html>
```

This is a paragraph.

This is a paragraph.

This is a paragraph.



# HTML Links

- Use the `<a>` element to define a link
- Use the `href` attribute to define the link address
- Use the `target` attribute to define where to open the linked document
- Use the `mailto:` scheme inside the `href` attribute to create a link that opens the user's email program

```
<!DOCTYPE html>
<html>
<body>
  <h1>HTML Links</h1>

  <a href="https://theshortcut.org"
    title="Go to Theshortcut"
    target="_blank">Visit theshortcut.org!</a>
  <br />
  <a href="mailto:mostafa@theshortcut.org"
    title="send email to mostafa">Send email</a>

</body>
</html>
```

## HTML Links

[Visit theshortcut.org!](https://theshortcut.org)  
[Send email](mailto:mostafa@theshortcut.org)



# HTML Images

- Use the HTML `<img>` element to define an image
- Use the HTML `src` attribute to define the URL of the image
- Use the HTML `alt` attribute to define an alternate text for an image, if it cannot be displayed
- Use the HTML `width` and `height` attributes properties to define the size of the image

```
HTML ▾  
<!DOCTYPE html>  
<html>  
<head>  
  <title>html Image</title>  
</head>  
<body>  
    
</body>  
</html>
```



# HTML Challenge

- Create an html file (me.html).
- Add your image at the top.
- Make one or many paragraph to tell your about yourself.
- Add a link to The shortcut or your favourite website, and it will open in a new tab.
- Send the file to me (DM on Discord).



## I am Mostafa Hazareh

I'm obsessed with making things and even more obsessed with making things better. I've been in the business of creating since I was a schoolboy and worked in my father's workshop.

Currently working as a Tech lead and trainer at The Shortcut.

my specialiaty is web app design and development, my updated skills are vanilla javascript with new features and always ready to learn day by day ...

[my favourite website](#)







# Thank you!

Let's get in touch!

- ❖ Discord channels
- ❖ [mostafa.hazareh@theshortcut.org](mailto:mostafa.hazareh@theshortcut.org)