



Attendance:
tiny.cc/event-attendance





App Dev League

Day 1: HTML/CSS

Ice Breakers

- Name
- Grade
- Fun Fact

Type in chat!



Agenda

1. Course Logistics
2. What is Web Dev?
3. Intro to HTML
4. Intro to CSS
5. Web Dev Kahoot



Course Logistics

1



Important Reminders

- June 19 to July 18
- 11:00am – 1:00pm (Pacific Time)
- Please come 2-5 minutes early to every session
- To get a certificate, you must attend at least 80% of sessions
- Attendance form [tiny.cc/event-attendance] at start of every class



Course Instructors

Kabir (Day 1)



Krish (Days 5-6)



Ashwin (Days 2-4)



Kunal (Days 7-8)



Helper 1 (Arjun)



Helper 2 (Matthew)



Rules and General Info

- No disruptive talking and sidechat (including Zoom chat)
- Unless you are asking a question, don't interrupt
- Expected to attend all days unless excused (parent must confirm)
- No formal grade associated with the class!
- It is a learning experience for you (take notes!)
- Recordings will be provided 48 hours after each session



Brief Course Roadmap

Session 1-2

Intro HTML and CSS

Session 3-4

Project and Intro JS

Session 5-6

JS Projects

Session 7-8

MIT App Inventor





Intro to Web Dev

2



What is Web Dev?

- Website development → creation of websites
- Many websites in the world and you see them everyday
- Examples include gmail.com, instagram.com, and appdevleague.org



Front end Development

- Front end - what the user can see
- Includes buttons, images, videos, etc..
- Tools: HTML, CSS, React, Vue, Angular



In this course, we will use HTML and CSS



Back end Development

- Backend - what happens behind the scenes
- The backsides of forms, blogs, uploads
- Tools: Node, Flask, Django, MongoDB

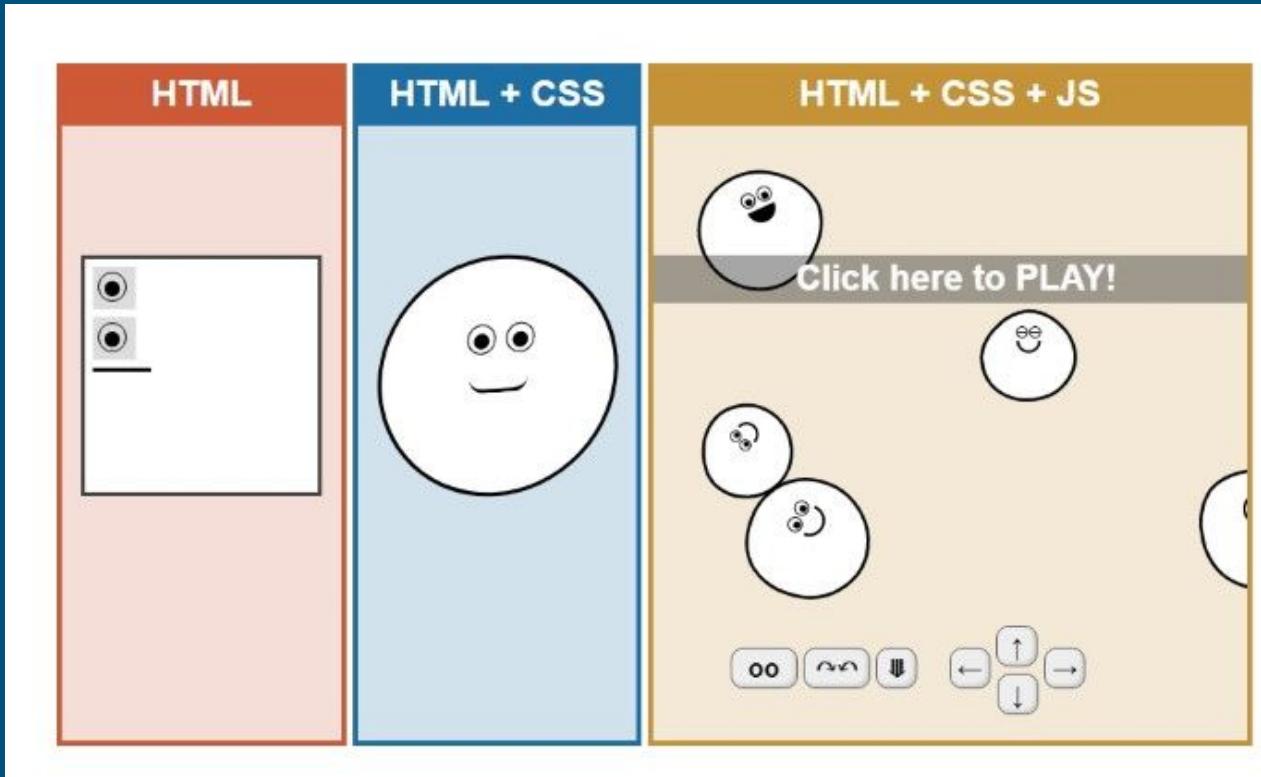


In this course, we will not be covering back-end.



How to Create Websites

→ HTML: layout



→ CSS: styling

→ JS: interaction



How are we going to code?

- Integrated Development Environment (IDE)
- No installing or downloading required
- Works for chromebooks!

<http://repl.it/>





Intro to HTML

3



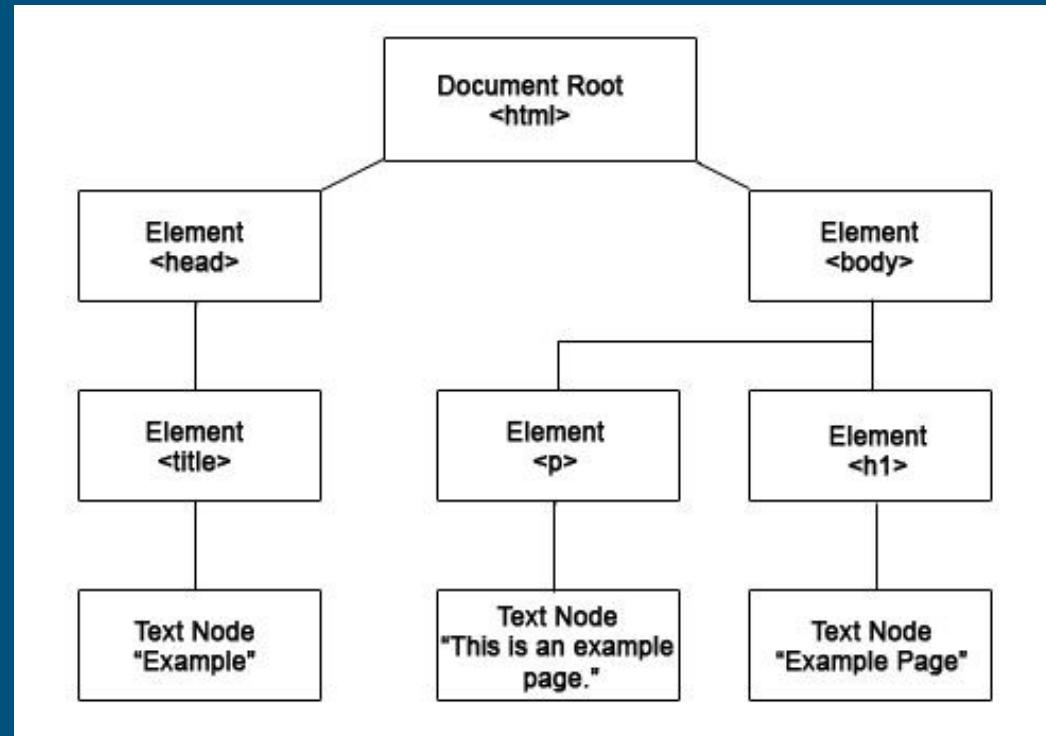
Background

- Hyper Text Markup Language
- HTML is the foundation of website development
- All content (text, images, numbers, etc.) are coded through HTML

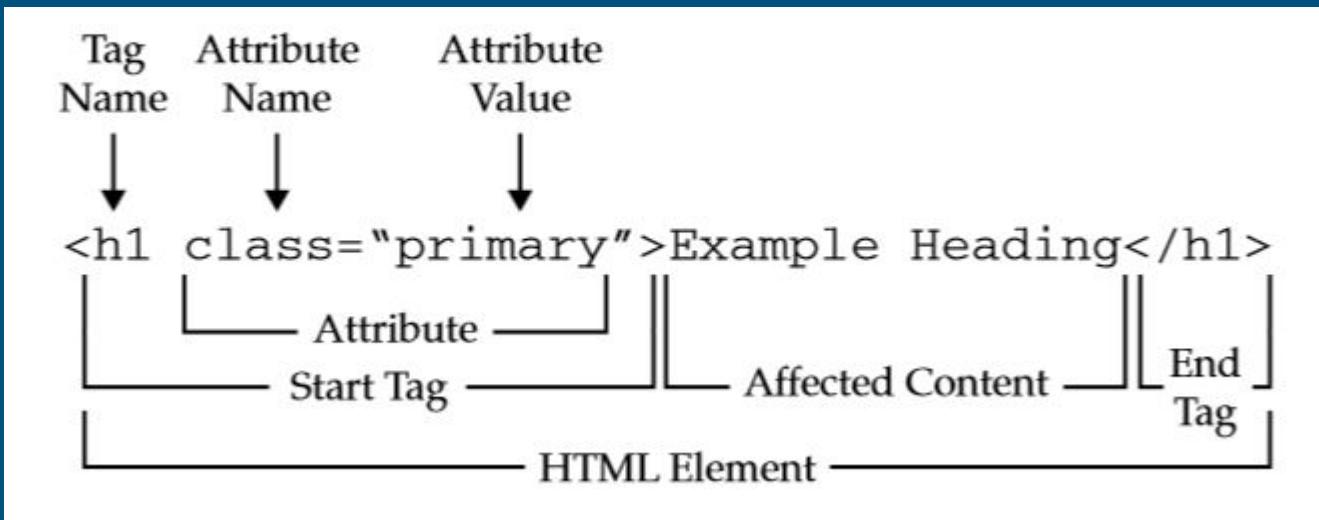


Structure

- Document Object Model
- Tags!
- Main content in body



Tag Structure



List of Tags

Tag	Description
<html> ... </html>	Declares the Web page to be written in HTML
<head> ... </head>	Delimits the page's head
<title> ... </title>	Defines the title (not displayed on the page)
<body> ... </body>	Delimits the page's body
<h <i>n</i> > ... </h <i>n</i> >	Delimits a level <i>n</i> heading
 ... 	Set ... in boldface
<i> ... </i>	Set ... in italics
<center> ... </center>	Center ... on the page horizontally
 ... 	Brackets an unordered (bulleted) list
 ... 	Brackets a numbered list
 ... 	Brackets an item in an ordered or numbered list
 	Forces a line break here
<p>	Starts a paragraph
<hr>	Inserts a horizontal rule
	Displays an image here
 ... 	Defines a hyperlink



Headers

- Creates headers
- 6 different types of headers
- h1 is the biggest, h6 is the smallest

```
<h1>Header 1</h1>
```

```
<h2>Header 2</h2>
```

```
<h3>Header 3</h3>
```

Header



Paragraphs

- Creates paragraphs
- Only one type of paragraph
- Looks like normal text

Paragraph

The screenshot shows a white rectangular box with a thin black border, representing a modal or a callout. At the top right, it says "ABOUT US". Below that is a horizontal line with a blue segment on the left and a grey segment on the right. The main content area starts with a paragraph about the organization's mission to bring computer science education to underrepresented students. It includes a green arrow pointing to the word "WE" in the sentence. Below this are four bullet points: "Foster support for students who lack CS opportunities", "Increase diversity in the technology workforce", and "Empower students to make a social impact in their communities". To the right of the main text, there is a larger block of text about the COVID global pandemic's impact on individuals worldwide and students' education. A green arrow points from the word "WE" in the mission statement to the first bullet point. At the bottom right of the box is a "Learn More" button.

App Dev League, a student-led non profit, is devoted to bringing computer science education to underrepresented students. **WE** help:

- ❖ Foster support for students who lack CS opportunities
- ❖ Increase diversity in the technology workforce
- ❖ Empower students to make a social impact in their communities

The COVID global pandemic has affected billions of individuals worldwide and most importantly students' education. By attending our monthly events and summer/winter programs, these students will have the power to make a global impact right from their homes!

[Learn More](#)

< p > This is a paragraph </ p >

Attributes

- Attributes give more information about the tag
- Used in most tags and are helpful

```
<tagname attribute=property>           </p>
```

...

```
</tagname>
```

```
<p class="text" id="myparagraph">  
    This is a paragraph
```

Empty Tags

- No need for closing tags (/)

- Tags without labels <hr>
- Line breaks, lines, images, videos
- <tagname [insert attributes]>

Lists

List

- Create lists of items
- creates the list
- is the list item
- There is also for ordered lists

The COVID global pandemic has affected billions of individuals worldwide and most importantly students' education. By attending our monthly events and summer/winter programs, these students will have the power to make a global impact right from their homes!

[Learn More](#)

List item 1

List item 2

List item 3

Hyperlinks

Links



Home About Events Contact

- Hyperlinks redirect a website to another
- <a> creates the hyperlink (or anchor tag)
- Attributes are required for hyperlinks

```
<a href="http://google.com">
```

This takes you to google

```
</a>
```

```
<a href="#">
```

This takes you nowhere :'(

```
</a>
```

Images

- Creates images in your website
- is an empty tag
- Attributes are required for images
- There are two ways to load an image

Image



```

```

```
<img src= [insert image link]>
```

Embedding Videos

- Add other webpages/videos in website
- <iframe> is an empty tag
- Attributes are required for this tag
- Embed link is available on youtube

```
<iframe width="300" height="300"  
src=[insert youtube video embed link]>
```

Transforming Text

- Many tags used in HTML to transform the text
- Bold, Italicize, Underline, Highlight, etc..
- CSS is a better alternative

` `

` `

`<i> </i>`

` `

`<mark> </mark>`

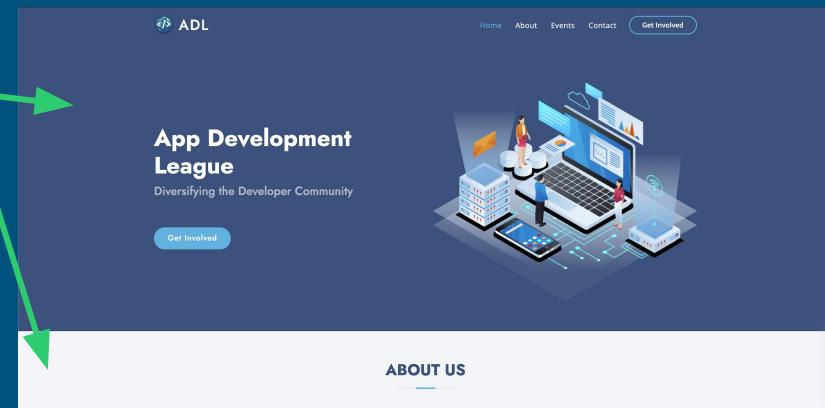
` `

``

``

Grouping

Containers



- Grouping is a way to organize your HTML code

```
<div class="container">  
  
  <h1>...</h1>  
  <p>...</p>  
  
</div>
```

- Use `<div>` tags to group elements

- Used for styling with CSS, but we will learn that later



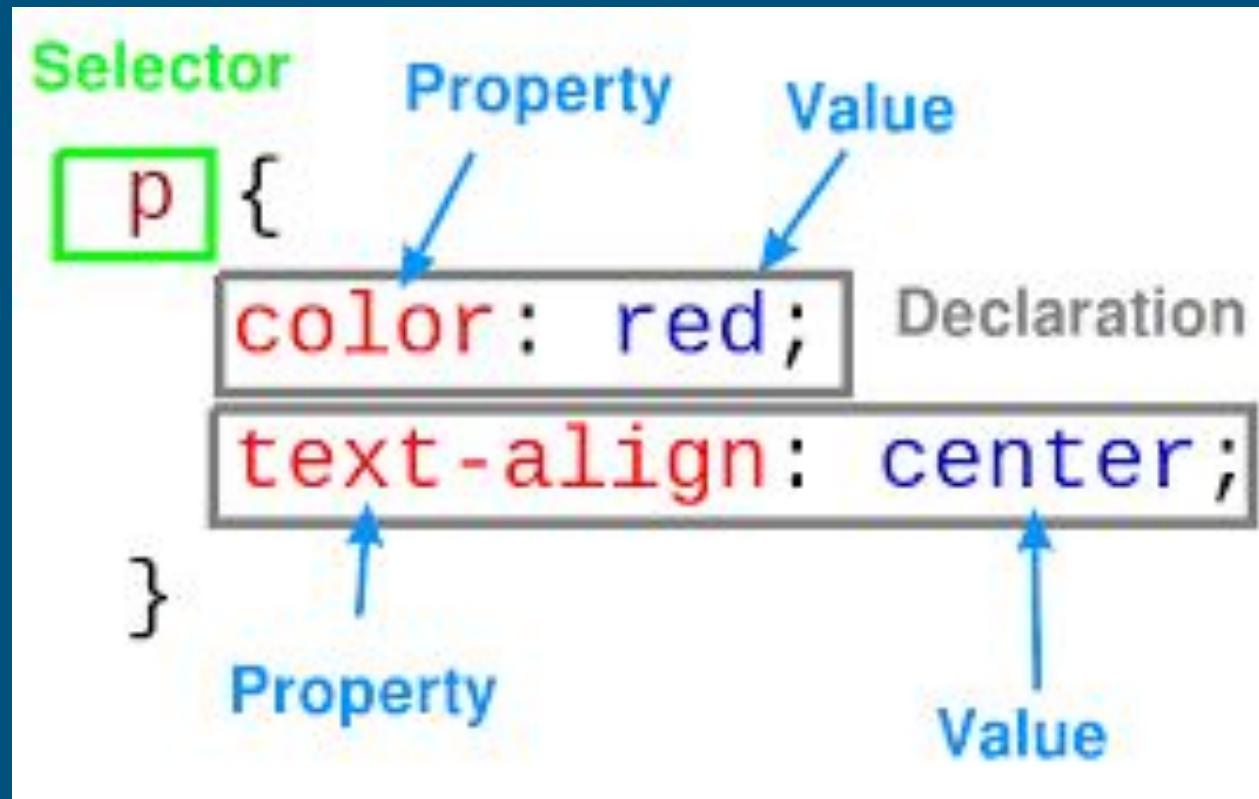
Intro to CSS

Background

- Cascading Style Sheets
- CSS is what makes websites look nice
- Changes color, style, location, etc.. of the website
- Doesn't make any new content



Structure



Selectors

Main
Ones



Basic Selectors

- elementname
- .classname
- #idname
- [attr=value]
- *

Combinators

- selectorA + selectorB Adjacent sibling
- selectorA ~ selectorB General sibling
- parent > child Direct child
- parent descendant Descendent

Pseudo Selectors

- :active
- :hover
- :visited
- :focus

Advanced

Important

Properties

(4) Common CSS properties (by group)		
TEXT:	BACKGROUND:	margin
color	background	border
font	background-attachment	padding
font-family	background-color	cont
font-size	background-image	
font-weight	background-position	
letter-spacing	background-repeat	
line-height		
text-align	DISPLAY:	BOX:
text-decoration	display	border
text-indent	float	border-color
text-transform	clear	border-style
vertical-align	overflow	border-width
	visibility	height
LIST:		margin
list-style		padding
list-style-image	OTHER:	width
list-style-position	cursor	box-sizing
list-style-type		

Types of Styling

→ **Inline styling**

→ **Internal styling**

→ **External styling**

(A) Inline styles

```
<element style="property: value;">
```

(B) In the <style> element

```
<head>
  ...<style>
    .... selectors { property: value; }
  ...</style>
</head>
```

(C) In a dedicated file (style.css) & refer that file via the <link> element

```
<head>
  ...<link rel="stylesheet"
    .... href="style.css" />
</head>
```



Kahoot

5



THANKS!

ANY QUESTIONS?

You can find more info @

- ◊ <https://www.appdevleague.org>
- ◊ <https://linktr.ee/AppDevLeague>

