Attendance



https://purdue.ca1.qualtrics.com/jfe/form/SV_5zJtm8XqHpTXONU















Software Saturdays Spring 2022 - Lesson 1 HTML/CSS

Review of the Beginner Track

- » 5 Lessons
 - ♦ HTML/CSS
 - JavaScript
 - JSX and Intro to ReactJS
 - More ReactJS
 - APIs and ReactJS
- » 2 Project Days









Help Available

- » Weekly Learning Sessions
 - Every Saturday at 3:30pm EST
- » Recorded Learning Sessions
 - Every Sunday
- » Weekly Open Review Hours
 - Every Wednesday at 6:00pm to 7:00pm
- » Slack Channels
 - Every Day









Teaching Staff

- » Hadi Ahmed
 - ♦ Chair
- » Sam Faber
- » Nishant Suresh
- » Jon Denton









Before We Begin

All attendees will be registered on Brightspace

Join the Software Saturdays Slack! https://softwaresaturdays.slack.com

- 1. #announcements
- 2. #general-discussion
- 3. #spring-2022-reactjs









Before We Begin

- » Please have a text editor to open and edit code files
 - If you do not have one, Visual Studio Code is a good choice
 - https://code.visualstudio.com/download
- » Demo files and examples are on GitHub
 - https://github.com/SoftwareSaturdays/2022-Spring
 -ReactJS







Before We Begin

- » We need to install NodeJS and NPM
 - https://nodejs.org/en/download/
- » NodeJS is a very customizable JavaScript toolbox
- » NPM is a JavaScript package installer









Part 1: HTML









What is HTML?

- » HTML is HyperText Markup Language
- » Uses the ideas of 'tags' to represent each element on a web site
 - Each 'tag' has an open (<>) and close (</>)









HTML describes layouts

- » HTML defines the location, styles, and content of each web site
- » HTML can use CSS to add stylings like color, font, borders, etc.
- » HTML can use JavaScript to add more user interactivity









Basic HTML syntax

```
<!DOCTYPE html>
<html>
    <head>
   </head>
   <body>
    </body>
</html>
```

- 1. Defines HTML
- 2. Starts HTML
- 3. Start Browser info
- 4. End Browser info
- 5. Starts Layout
- 6. Ends Layout
- 7. Ends HTML

Some Basic HTML Tags

- » <div></div>: Invisible groups of other tags
- » <h#></h#>: Big heading text, 1 (big) through 6 (small)
- » : Paragraph text









Some Basic HTML Tags

- » : Bullet point list
- » : Numbered list
- >> : List text (Used with the above)









Demo Program #1









Some More HTML Tags

- » : Shows an image on the page
- » <button></button>: Adds a clickable button
- »
: Adds a line break
- » <a>: Links to other sites









The <head> Tag

- » It defines properties for the browser
- » Tags in head:
 - < <title></title> Title of the web site
 - < Link>: Links CSS and JS files









HTML Attributes

- » Attributes provide additional information that allows us to control the behaviour of the element.
- » Defined in the starting tag of the element
- » <tag attribute_name="value">









href

» href: Stands for Hypertext Reference. specifies the location of an external resource, which is opened when the element is clicked.

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src and alt

- » src: Specifies location of the external resource that is embedded in the page at the element's location.
- » alt: Provides alternative information in case the element does not load for the user.

```
<img src="street.jpg" alt="Lakefront" width="500" height="600">
```







Demo Program #2









Other Resources: HTML

- » We only went over the basics
- Other tags include videos, formatting, frames, etc.

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









Checkpoint #1

Create a website with a list of tasks. Each task should have text and a link. Include at least 1 image.









Part 2: CSS









What is CSS?

- CSS stands for Cascading Style Sheets
- » It describes how to style HTML tags
- » Makes formatting simple and easy to read









How to use CSS

- CSS consists of groups of similar HTML tags with the same styles
- » Each group is given styling instructions









Classes and IDs

- » An ID is used to give a unique name to an element. Only one element can have that id.
- » A class can be used to identify a group of elements. These elements will share the style instructions defined for the class.







How to use CSS

- » CSS has three types of groups
 - ♦ 'Tag' groups consist of every HTML element by that name
 - 'Class' groups are multiple different HTML elements
- » HTML elements can belong to multiple CSS groups









How to use CSS

» Use a link /> tag to add a CSS file to your HTML file. Also need the 'rel' and 'href' properties.

```
<link rel="stylesheet" href="file1.css" />
```







CSS Syntax

- » Name of the group to style
- » Open bracket
- » All the style instructions
- » Closing bracket

```
h1 {
   color: blue;
}
```







CSS Syntax









Some Style Options

- » color: Color of the text
- » background-color: Color of the background
- » font-size: Size of the font in px
- » font-family: What font is used
- » text-align: Text alignment
- » margin: Margin space for 4 sides of an element in px





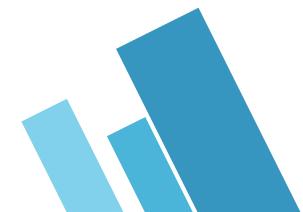


Demo Program #3









Checkpoint #2

Use CSS to style the list you made in Checkpoint 1









Other Resources: CSS

- » There are a lot of CSS properties, we only went over the basics
- » Other options include underlines, borders, margin, etc.

https://www.w3schools.com/css/

https://www.w3schools.com/cssref/default.asp









Thanks for coming!

Please give us some feedback!

https://purdue.ca1.qualtrics.com/jfe/form/SV_0950hPyXsSNWvLU

- » Any Questions?
 - Open review hours on Wednesdays, 6pm to 7pm
 - Ask a mentor during the meeting or on Slack







