#### THE DOM & DEV TOOLS.

Poggie 01.30.2024

// TODO.

Quick Recap

The DOM

More on Dev Tools

**CSS Exercises** 

#### Recap.

Block-level vs inline elements

Inline vs internal vs external styling

Global vs id vs class selectors



#### THE DOM.

#### HTML.

HTML is a markup language used to structure content on the web.

#### DOM.

When the browser parses the HTML, the browser creates a tree of objects. This is what is known as the DOM.

#### HTML.

```
<!DOCTYPE html>
<html lang="en">
<head>

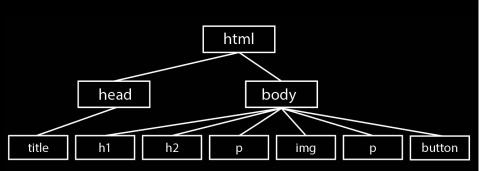
<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Document</title>
</head>
<body>
</body>
</html>
```

#### DOM.

```
html
head
title
body
h1
p
Script
```



#### DOM.

The DOM represents the live, interactive version of the document that can be manipulated through scripts using languages like JavaScript.

HTML provides the initial structure, however the DOM can be modified based on user interactions.

```
const AppWithProviders = () => (
 <ThemeContext.Provider>
   <UserContext.Provider>
    <SomeOtherContext.Provider>
<YetAnotherContext.Provider>
<OneMoreContext.Provider>
         <AndOneMoreContext.Provider>
<AndSoOnContext.Provider>
   <AndSoForthContext.Provider>
   <App/>
       </AndSoForthContext.Provider>
</AndSoOnContext.Provider>
 </AndOneMoreContext.Provider>
</OneMoreContext.Provider>
 </YetAnotherContext.Provider>
```

</SomeOtherContext.Provider>

</UserContext.Provider>
</ThemeContext.Provider>

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                                                             <SomeOtherConte
```

## THE DOM & DEV TOOLS.

#### Why Chrome Dev Tools?

Element Inspection and Modification

Built-in Accessibility User Friendly Interface

Live editing and styling

Inspecting a node.

Exit Full Screen	
Back	
Forward	
Reload	
Save As	
Print	
Cast	
Search Images with Google	
Send to Your Devices	
Create QR Code for this Page	
Translate to English	
Open in Reading Mode NEW	
1Password – Password Manager	>
Block element	
View Page Source	
Inspect	

#### Inspecting a node.

Click the blue-highlighted icon and hover over any element

Selecting an element will reveal the specific styles for that element.

```
Console
    CTYPE html>
<html lang="en" style>
><head> -</head>
▼ <body class="app_layout__Juh3c" style="overflow:
 scroll;">
 ▼ <div id="__next">
   ▼ <div class="note-layout_container_2_FUE">
     ▼ <div class="note-layout_rightContentContain
       er__viL_y"> == $0
       ▼ <header class="note-details header HSKi
        u">
         ▼ <div>
           ▶<span class="text_title__VhrDi"> ••
          <span class="text_subheading_CX02A tex</pre>
          t_italics__Jd8Gn">Introduction to User
          Interfaces</span>
        </header>
       ▼ <div>
         ▼ <div class="note-details mdHeader JpOC
```

#### Inspecting a node.

Notice how the node we are inspecting is highlighted in the DOM tree.

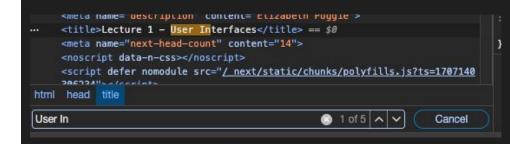
```
<!DOCTYPE html>
<html lang="en" style>
><head> -</head>
▼ <body class="app_layout__Juh3c" style="overflow: scroll;">
  ▼ <div id="__next">
   ▼ <div class="note-layout container 2 FUE"> (flex)
     ▼ <div class="note-layout_rightContentContainer__viL_y">
       ▼ <header class="note-details header HSKiu">
         ▼ <div>
           ▼<span class="text_title_VhrDi"> == $0
              "User Interfaces"
              "Lecture 1"
            </span>
           </div>
          <span class="text_subheading_CX02A text_italics__Jd8Gn">
          Introduction to User Interfaces</span>
         </header>
       > <div> - </div>
   <script src="/ next/static/chunks/react-refresh.js?ts=1707140306234">
   </script>
  ▶<script id="__NEXT_DATA__" type="application/json"> -</script>
  ▶ <div id="__next-build-watcher" style="position: fixed; bottom: 10px; right:
   20px; width: 0px; height: 0px; z-index: 99999;"> - </div>
  ><next-route-announcer> -</next-route-announcer>
   <script src="/ next/static/chunks/pages/notes/%5Bslug%5D.js"></script>
 </body>
</html>
```

# Searching for a node.

Focus your cursor on the Elements panel.

Press Control+F or Command+F (Mac).

The Search bar opens at the bottom of the DOM Tree.



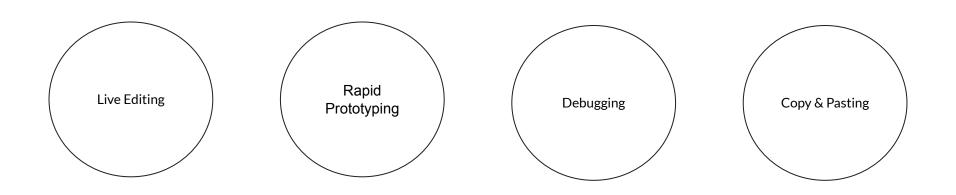
#### Testing styles.

You can experiment with styles directly in the page.

Won't affect source code

```
Computed
                    Lavout
                             Event Listeners >>
 Styles
Filter
                       :hov .cls 十. 🖫
element.style {
  color: ;
} color
.t color-interpolation
  color-interpolation-filters
  color-rendering
  color-scheme
  color: black
} color: currentcolor
  color-interpolation: auto
  color-interpolation: linearRGB
• t color-interpolation: linearrgb
  color-interpolation: sRGB
  color-interpolation: srgb
|n||color-interpolation-filters: auto
.n color-interpolation-filters: linearrgb
de color-interpolation-filters: srgb
  color-rendering: auto
  color-rendering: optimizeQuality
} color-rendering: optimizeSpeed
  color-rendering: optimizequality
  color-rendering: optimizespeed
   color: | red:
```

#### Why edit directly in Dev Tools?



Forcing element state.

#### Why?

Elements often have styles associated with "pseudo-classes".

Pseudo-classes are selectors that allow you to style elements based on their state, responding to user interactions and specific conditions.

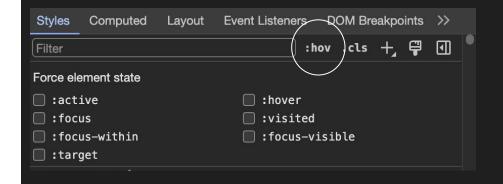
Forcing these states in developer tools allows you to inspect and test the styles applied to an element when it is in a particular state.

#### Styles.

Open up inspector and double-click the element you want to modify

In the "styles" view, select the :hov to open up the "Force element state" panel

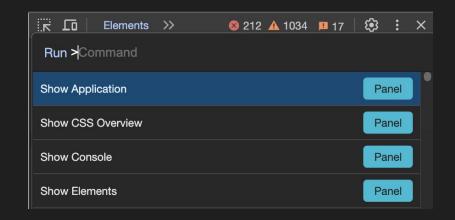
Select the state you want to force on the element



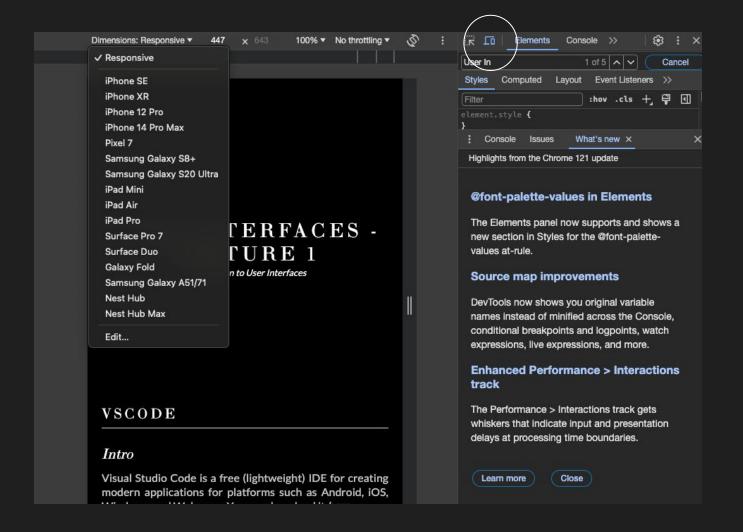
#### Command pallet.

Press Control+Shift+P or Command+Shift+P (Mac) to open the Command menu.

We can directly force the state of an element from here



# Intro to responsive design.



### EXERCISES.