

## CSS Columns & Web Inspector

So far we have seen the ease of use with CSS Grid and flex box. With these tools we can take elements and easily deploy them into content in a way that any new element that is added will be added as a new item with ease of use and management. These tools are great for both dynamic and static content whenever new content is to be added, both of these tools take the guess work out of the equation. There are some further tools we can use to mitigate content within containers to keep things neat if and when needed.

One of those tools we can use is CSS columns. Where Grid is used for layouts or bigger parts of the page and flex box is used for more 1 dimensional content going either across the page or down the page. CSS columns are used in a more simpler way. This method takes a div and just splits it up into columns. This is different from Flex box in the sense that flex box deploys flex items (any elements that are in the flex parent) where as CSS columns just takes the content within the div and splits it up without having child

# div elements.



To use this, we can simply create a div and in the css tell it:

```
columns: 4;
```

The Columns property will split the div into the amount of columns we tell it to. There are extra things we can add to this.

```
column-width: 300px;
```

This can be used in place of a number of columns it will set the column to a set size and make every column the same.

```
column-gap: 50px;
```

This will add space between the columns.

```
column-rule-style: solid | dotted |  
dashed | double | inset | outset |  
groove | none;
```

This will add a border between the columns.

```
column-rule-width: 5px;
```

This will change the size of the border between the columns.

```
column-rule-color: chartreuse;
```

This will change the color of the border between the columns.

```
column-rule: 5px dashed chartreuse;
```

This is the short hand form of width style and color.

```
column-span: none | all | initial |  
inherit;
```

This will span an element within the div over the columns.

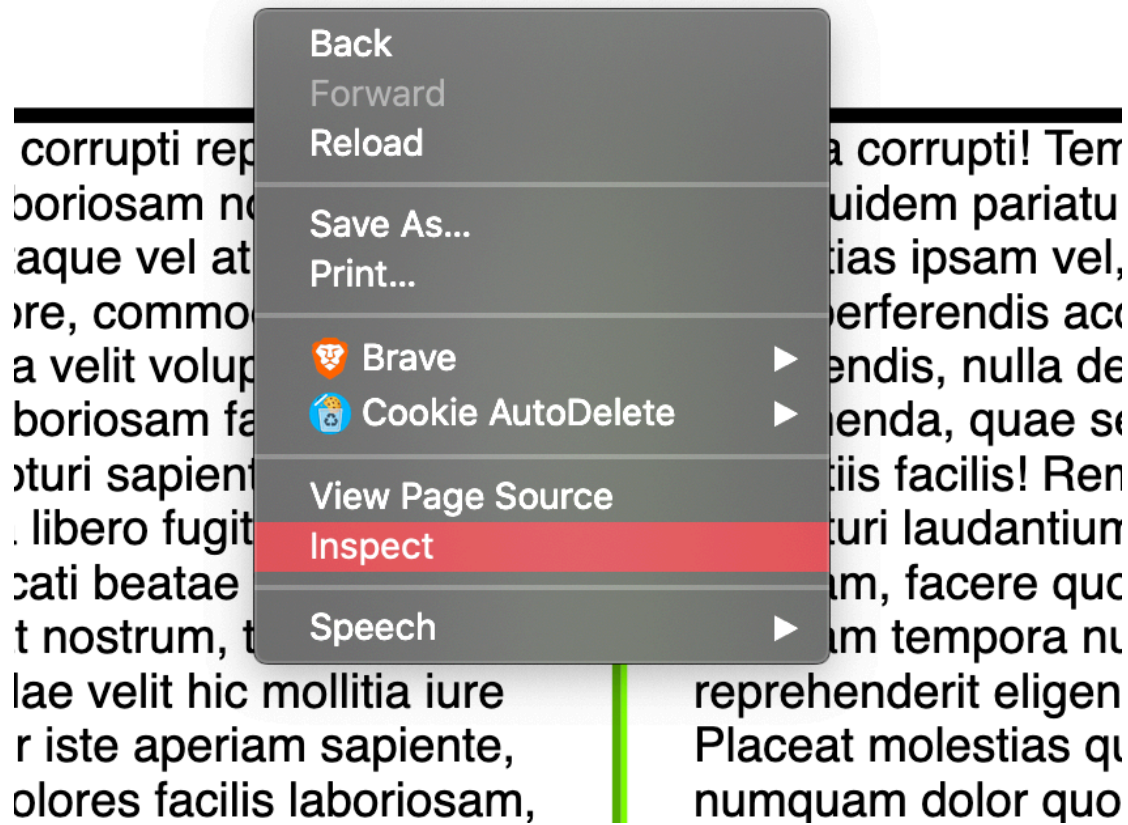
## Intro to Using the Web Inspector

As you probably know by now, part and parcel of being a developer is debugging. As such we use different tools to find issues and see what's wrong with our code so we can fix it more efficiently. One of these things we use is the **Web Inspector**.

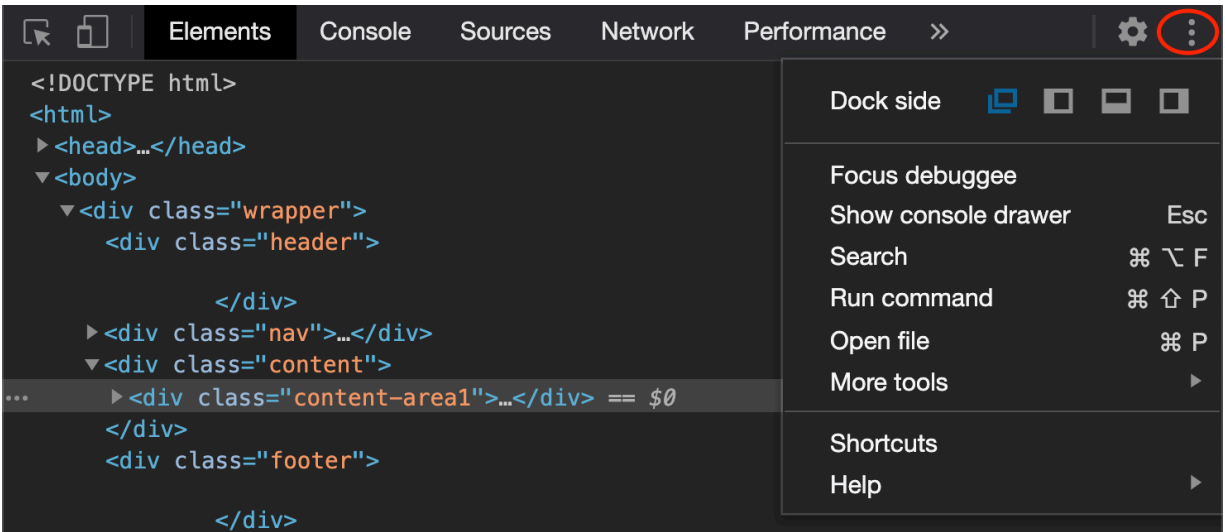
Every browser has one and they are usually very similar, but not all are as good. I recommend using the brave browser.

<https://brave.com/>

To inspect anything that is not working/showing up properly right click on that element and select **“Inspect”**.



Once you do this a panel will open up. That panel can be moved around for convenience. If you click the 3 dots in the top right corner. You can change the “**Dock side**”.



The dock side will pop out the window or dock it to the left bottom or right of the screen.

Next, we can inspect any part or parts of the DOM by mousing over the part within the HTML.

The image shows a browser's developer tools interface. On the left, the DOM tree is visible, with the following structure:

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <div class="wrapper">
      <div class="header">
        ...
      </div>
      <div class="nav">...</div>
      <div class="content">...</div> == $0
      <div class="footer">
        ...
      </div>
    </div>
  </body>
</html>
```

The `<div class="content">...</div>` element is selected and highlighted in blue. Below the DOM tree, the breadcrumb path is `html > body > div.wrapper > div.content`. The **Styles** panel is active, showing the following styles:

- `element.style { }`
- `div { display: block; }` (from `user agent stylesheet`)
- `Inherited from html`
- `html { font-family: sans-serif; }` (from `index.html:9`)

On the right side of the browser, a large green rectangular area is visible, representing the content of the selected `div.content` element. Below this, a snippet of Latin text is visible, including the words "nesciunt corrupti reprehenderit", "porro laboriosam nobis ullam", "fug", "mo", "dict", "per", "ass", "bla", "exc", "sec", "Sit", "rep", "Pla", "nur", "mir", "del".

Note the mouse is over the content section and it is highlighted.

We can expand it as well to see whats inside, to do so, click the little triangle arrows on the side of each element.

```
        </div>
    ▶ <div class="nav">...</div>
.. ▼ <div class="content"> == $0
    ▶ <div class="content-area1">...</div>
    </div>
    <div class="footer">

        </div>
    </div>
</body>
</html>
```

As we expand more and more into elements it will highlight the thing we mouse over.

When you click on an element it will show you the CSS for that element, you can also toggle on and off the css rules for that element as well as write in new ones.

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <div class="wrapper">
      <div class="header">
        ...
      </div>
      <div class="nav">...</div>
      <div class="content">
        <div class="content-area1"> == $0
          <div class="box">This box is spanned over all columns</div>
          <p>...</p>
        </div>
      </div>
      <div class="footer">
        ...
      </div>
    </div>
  </body>
</html>
```

html body div.wrapper div.content div.content-area1

Styles Computed Event Listeners DOM Breakpoints Properties Accessibility

Filter :hov .cls +

```
element.style {
}

content-area1 {
  columns: 4;
  column-gap: 50px;
  column-rule-style: groove;
  column-rule-width: 5px;
  column-rule-color: chartreuse;
  column-width: 300px;
}

div {
  display: block;
}
```

index.html:43 user agent stylesheet

unt corrupti reprehenderit laboriosam nobis ullam si itaque vel at voluptas labore, commodi natus dita velit voluptatum error laboriosam facere aut mollitia corrupti! Tempe fuga quidem pariatur q molestias ipsam vel, ex dicta perferendis accus perferendis, nulla debi assumenda, quae sed blanditiis facilis! Rem it excepturi laudantium s sed nam, facere quo a Sit ullam tempora num reprehenderit eligendi Placeat molestias quib numquam dolor quo, n minima quas, tempore delectus cum odio reru

You can wright new rules onto any elements here.

The screenshot displays a web browser's developer tools interface. The top section shows the HTML structure, including a `<div class="content-area1">` containing a `<div class="box">` with the text "This box is spanned over all columns". Below the HTML, the 'Styles' panel is active, showing the following CSS rules:

```

content-area1 {
  columns: 4;
  column-gap: 50px;
  column-rule-style: groove;
  column-rule-width: 5px;
  column-rule-color: chartreuse;
  column-width: 300px;
  border: 6px solid red;
}

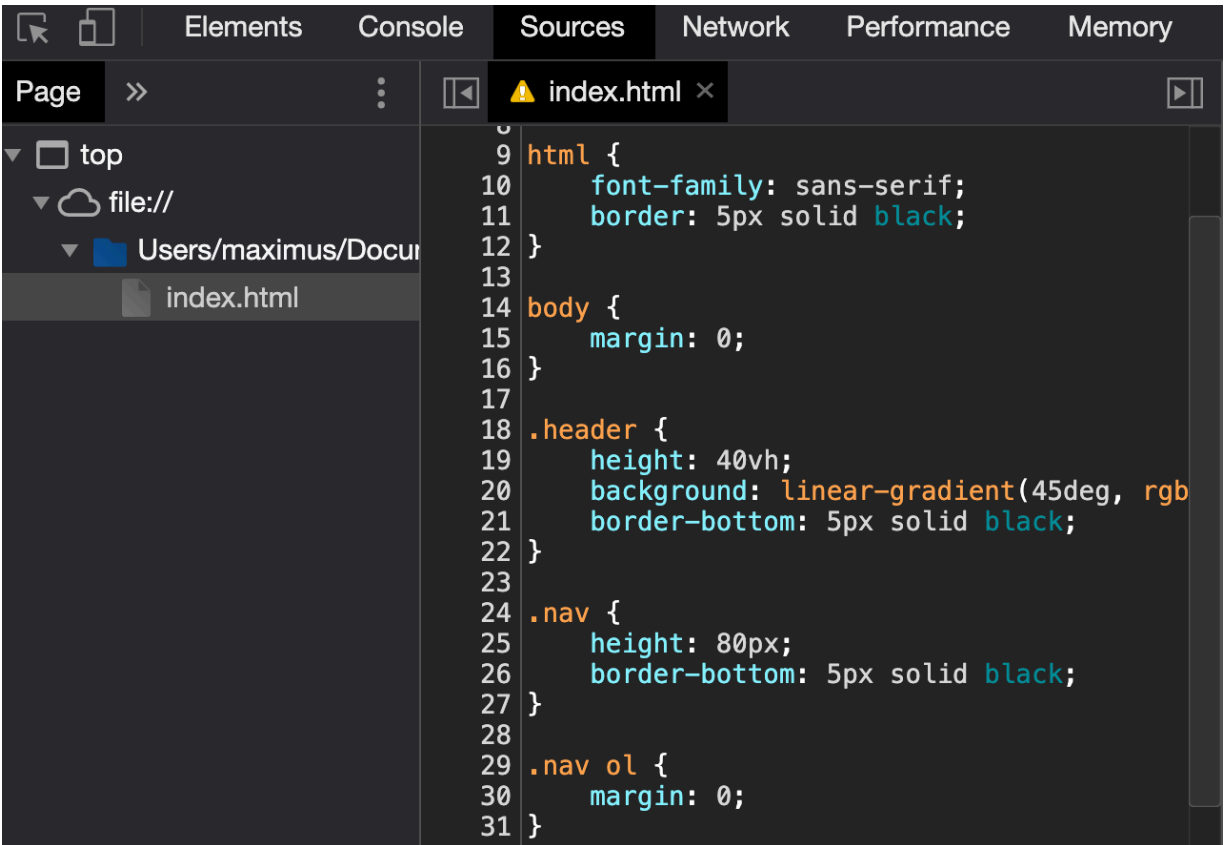
div {
  display: block;
}

```

The page content is rendered in a grid layout with a red border and a green background. It includes a paragraph "This box is spanned over all columns" and several columns of Lorem Ipsum text.

You can also see the CSS file as well and edit it as long as it is in its own CSS file, if the CSS is written in the HTML you will not be able to edit it.





The image shows a browser's developer tools interface. The 'Sources' tab is active, displaying the file 'index.html'. The left sidebar shows a file tree with 'index.html' selected. The main area shows the following CSS code:

```
9  html {
10     font-family: sans-serif;
11     border: 5px solid black;
12 }
13
14  body {
15     margin: 0;
16 }
17
18  .header {
19     height: 40vh;
20     background: linear-gradient(45deg, rgb
21     border-bottom: 5px solid black;
22 }
23
24  .nav {
25     height: 80px;
26     border-bottom: 5px solid black;
27 }
28
29  .nav ol {
30     margin: 0;
31 }
```

The inspector also shows you if there is margin, border, padding and the width and height of elements.

```
▼ <div class="content">
...
  ▼ <div class="content-area1"> == $0
    <div class="box">This box is spanned over all columns</div>
    ▶ <p>...</p>
    </div>
  </div>
  <div class="footer">
    </div>
</div>
</body>
</html>
```

```
column-rule-style: groove;
column-rule-width: 5px;
column-rule-color: chartreuse;
column-width: 300px;
border: 6px solid red;
padding: 6px;
}

div {
  user agent styles
  display: block;
}

Inherited from html
html {
  index.ht
  font-family: sans-serif;
  border: 5px solid black;
}
```

Note at the bottom of the inspector it shows you the breadcrumb path of the DOM.

```
<!DOCTYPE html>
<html>
  <head>...</head>
  <body>
    <div class="wrapper">
      <div class="header">
        </div>
      <div class="nav">...</div>
      <div class="content">
        <div class="content-area1"> == $0
          <div class="box">This box is spanned over all
            </div>
            <p>...</p>
          </div>
        </div>
        <div class="footer">
          </div>
        </div>
      </div>
    </body>
  </html>
```

html body div.wrapper div.content div.content-area1

There is also a button that can toggle on and off a phone simulator. When this is toggles on you can select what phone you want to emulate.

