Front-end | CSS

Session 2

- Introduction
- Selectors
- How to
- Example

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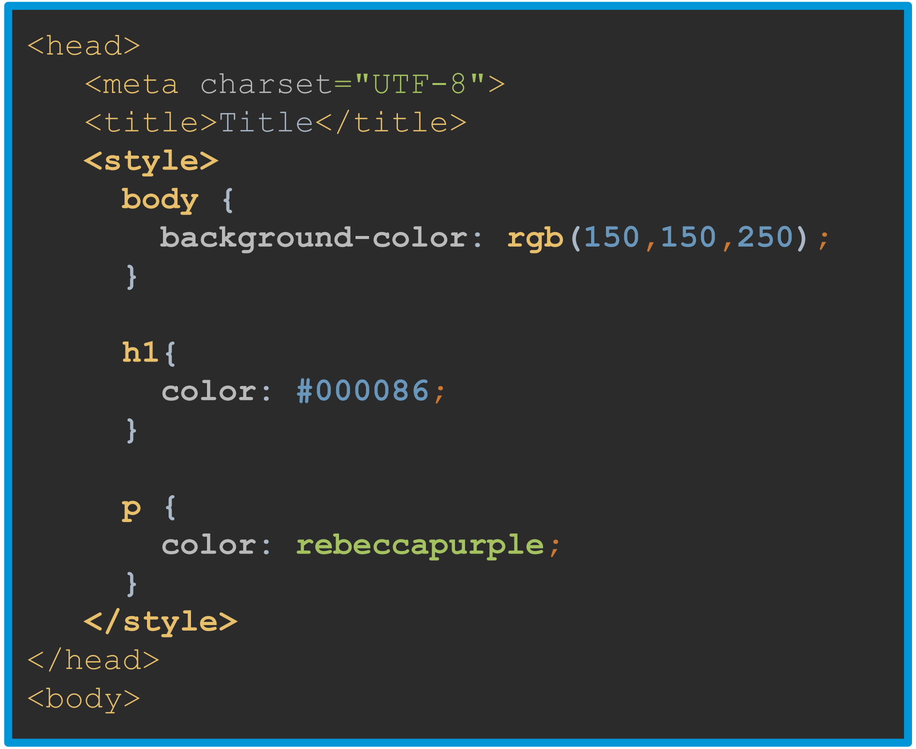
Introduction

Intro

What is CSS?

CSS is the language we use to style a Web page.

- CSS stands for Cascading Style Sheets
- CSS describes how HTML elements are to be displayed on screen, paper, or in other media
- CSS saves a lot of work. It can control the layout of multiple web pages all at once
- External stylesheets are stored in CSS files



```
<head>
   <meta charset="UTF-8">
   <title>Title</title>
   <style>
     body {
       background-color: rgb(150,150,250);
     }

     h1{
       color: #000086;
     }

     p {
       color: rebeccapurple;
     }
   </style>
</head>
<body>
```

Intro

Syntax

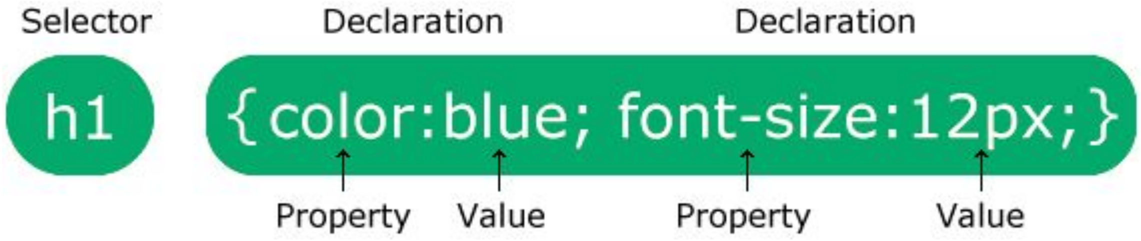
A CSS rule consists of a selector and a declaration block.

The **selector** points to the HTML element you want to style.

The declaration block contains one or more declarations separated by semicolons.

Each declaration includes a CSS property name and a value, separated by a colon.

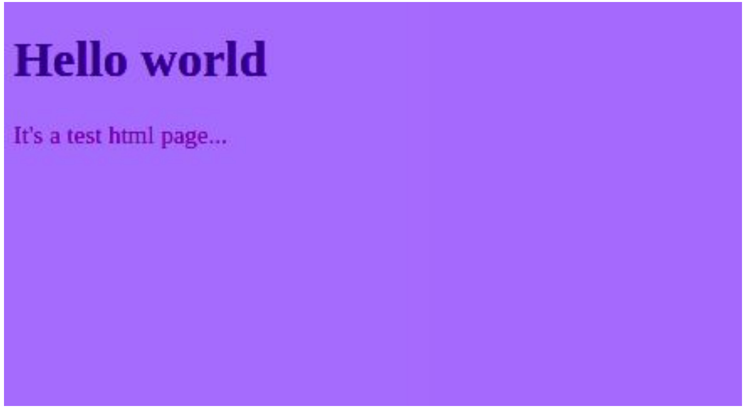
Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.



Intro

Example

```
<!DOCTYPE html>
<html lang="en">
<head>
   <title>HTML/CSS Test</title>
   <style>
     body {background-color: rgb(150,150,250);}
     h1 {color: #000086;}
     p {color: rebeccapurple;}
   </style>
</head>
<body>
<h1>Hello world</h1>
<p>It's a test html page...</p>
</body>
</html>
```



Hello world

It's a test html page...

Selectors

Intro

CSS Selectors

CSS selectors are used to "find" (or select) the HTML elements you want to style.

We can divide CSS selectors into five categories:

- **Simple selectors (select elements based on name, id, class)**
- Combinator selectors (select elements based on a specific relationship between them)
- Pseudo-class selectors (select elements based on a certain state)
- Pseudo-elements selectors (select and style a part of an element)
- Attribute selectors (select elements based on an attribute or attribute value)

Selectors

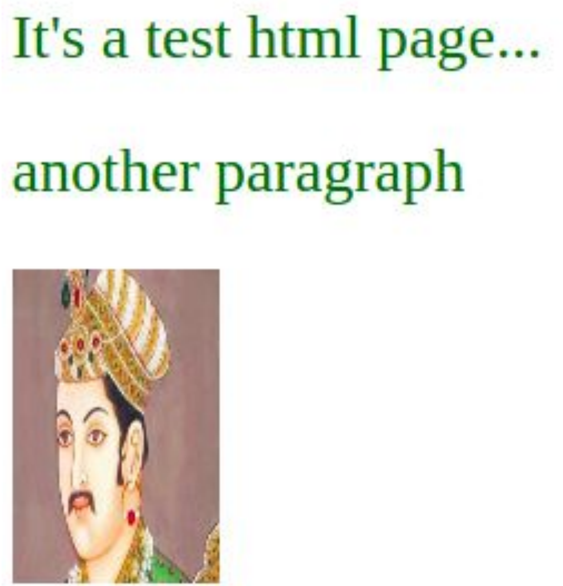
Element Selector

The element selector selects HTML elements based on the element name.

tag_name { declaration }

```
p {
 font-size: 40px;
 color: darkgreen;
}

img {
 width: 100px;
 height: 150px;
}
```

```
<p>It's a test html page... </p>
<p>another paragraph </p>
<img src="/akbar.jpg" >
```



It's a test html page...

another paragraph

Selectors

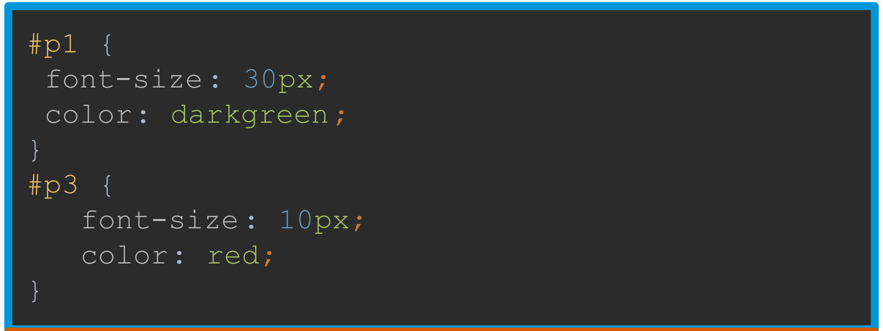
id Selector

The id selector uses the id attribute of an HTML element to select a specific element.

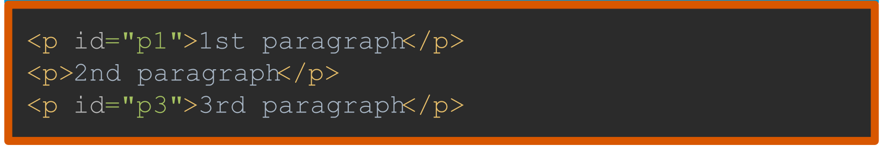
The id of an element is unique within a page, so the id selector is used to select one unique element!

To select an element with a specific id, write a hash (#) character, followed by the id of the element.

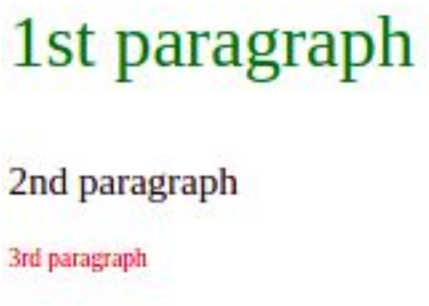
#id { declarations; }



```css
#p1 {
 font-size: 30px;
 color: darkgreen;
}
#p3 {
   font-size: 10px;
   color: red;
}
```



```html
<p id="p1">1st paragraph</p>
<p>2nd paragraph</p>
<p id="p3">3rd paragraph</p>
```



1st paragraph

2nd paragraph

3rd paragraph

Selectors

Class selector

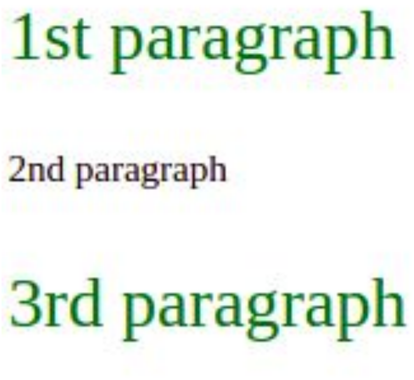
The class selector selects HTML elements with a specific class attribute.

To select elements with a specific class, write a **period (.)** character, followed by the class name.

.class { declarations; }

```
.my-class {
 font-size: 30px;
 color: darkgreen;
}
```

```
<p class="my-class">1st paragraph</p>
<p>2nd paragraph</p>
<p class="my-class">3rd paragraph</p>
```



1st paragraph

2nd paragraph

3rd paragraph

Selectors

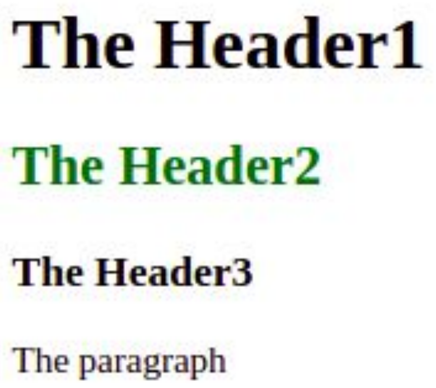
Element.Class selector

You can also specify that only specific HTML elements should be affected by a class.

tag_name.class { declarations; }

```css
h2.my-class {
   color: darkgreen;
}
```

```html
<h1 class="my-class">The Header1</h1>
<h2 class="my-class">The Header2</h2>
<h3 class="my-class">The Header3</h3>
<p class="my-class">The paragraph</p>
```



The Header1

The Header2

The Header3

The paragraph

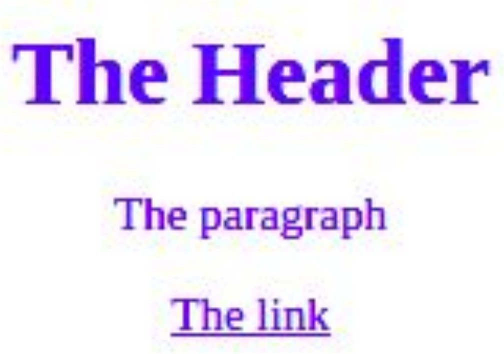
Universal selector (*)

The universal selector (*) selects all HTML elements on the page.

* { declarations; }

```
* {
   text-align: center;
   color: blue;
}
```

```
<h1>The Header</h1>
<p>The paragraph</p>
<a href="#">The link</a>
```



The Header

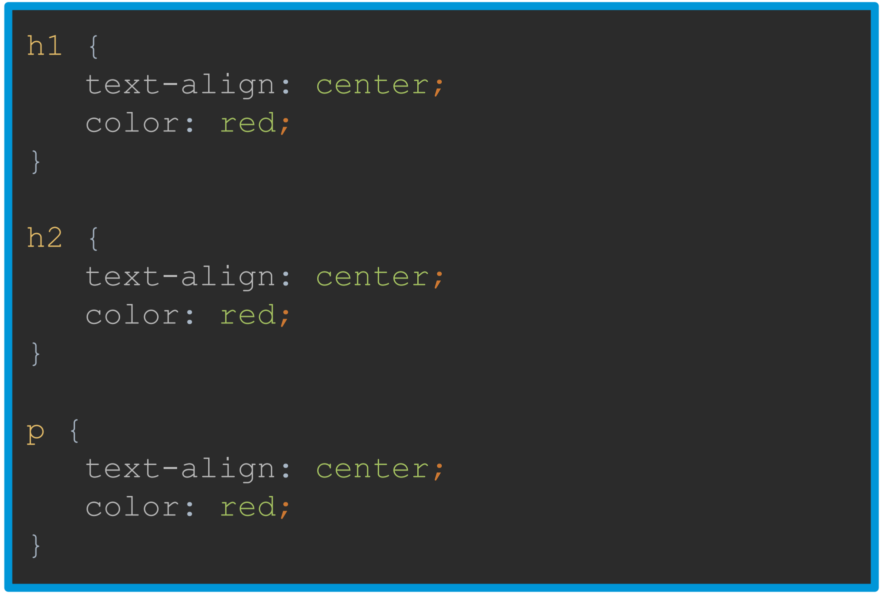
The paragraph

The link

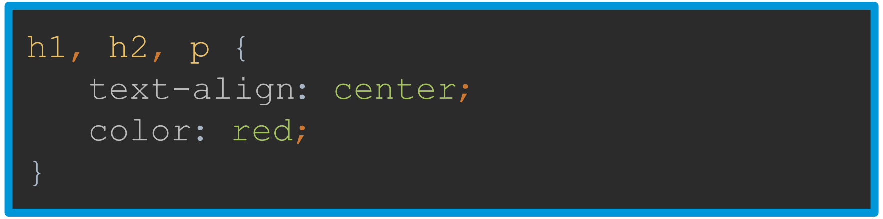
Grouping Selector

The grouping selector selects all the HTML elements with the same style definitions.

selector1, selector2, selector3, … { declarations; }



```
h1 {
   text-align: center;
   color: red;
}

h2 {
   text-align: center;
   color: red;
}

p {
   text-align: center;
   color: red;
}
```



```
h1, h2, p {
   text-align: center;
   color: red;
}
```

How to

How to

Intro

When a browser reads a style sheet, it will format the HTML document according to the information in the style sheet.

Three Ways to Insert CSS

There are three ways of inserting a style sheet:

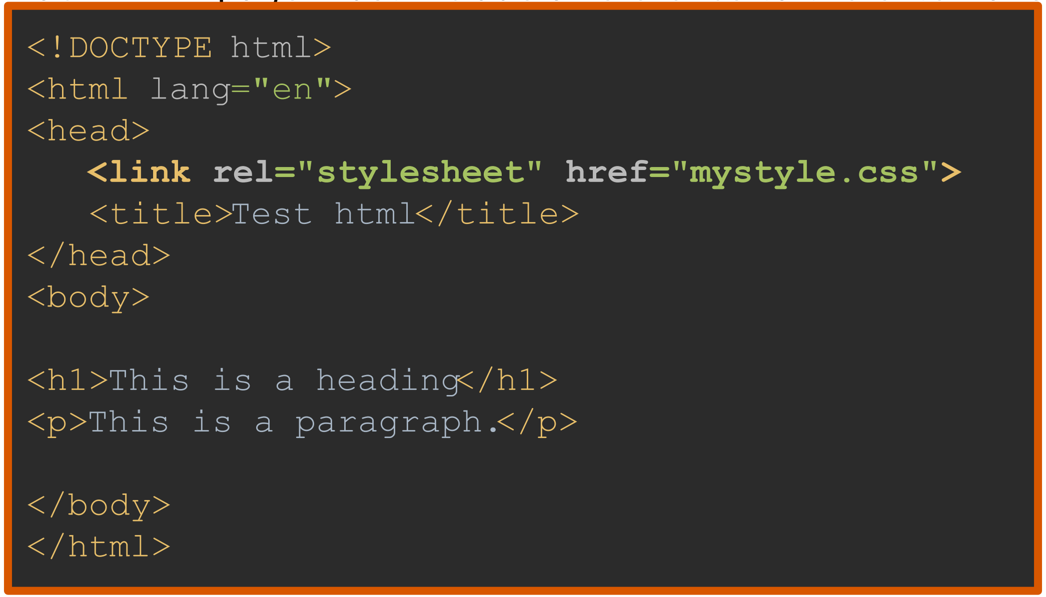
- External CSS
- Internal CSS
- Inline CSS

How to

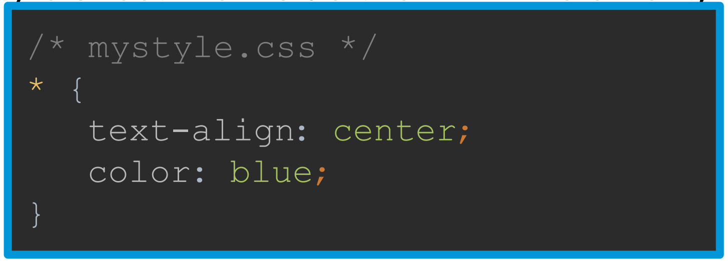
External css

With an external style sheet, you can change the look of an entire website by changing just one file!

Each HTML page must include a reference to the external style sheet file inside the <link> element,



```
<!DOCTYPE html>
<html lang="en">
<head>
   <link rel="stylesheet" href="mystyle.css">
   <title>Test html</title>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```



```
/* mystyle.css */
* {
   text-align: center;
   color: blue;
}
```

An external style sheet can be written in any text editor, and must be saved with a .css extension.

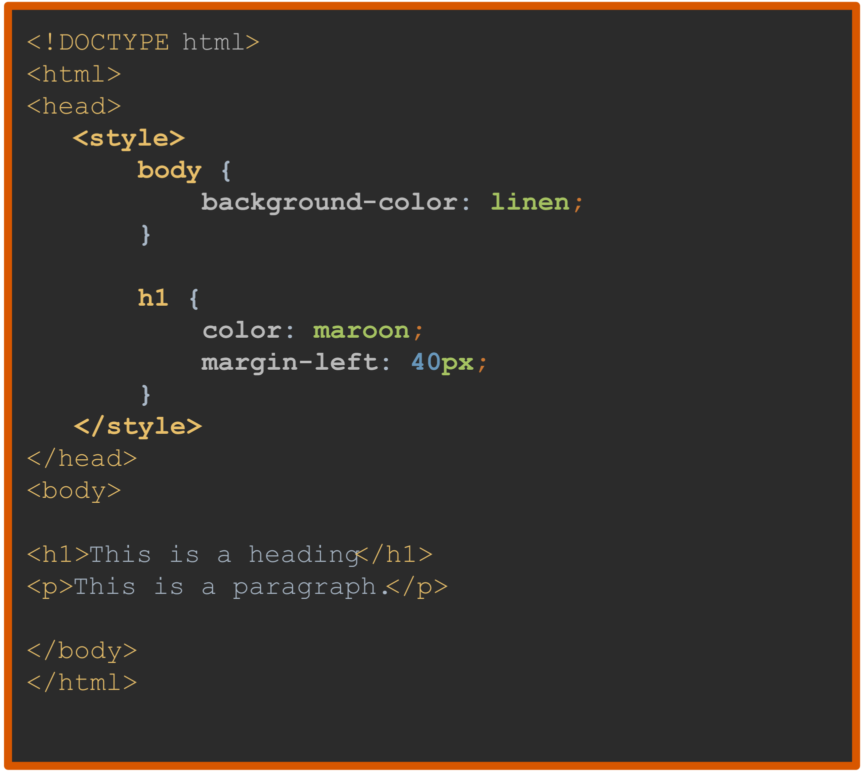
The external .css file should not contain any HTML tags.

How to

Internal CSS

An internal style sheet may be used if one single HTML page has a unique style.

The internal style is defined inside the <style> element, inside the head section.



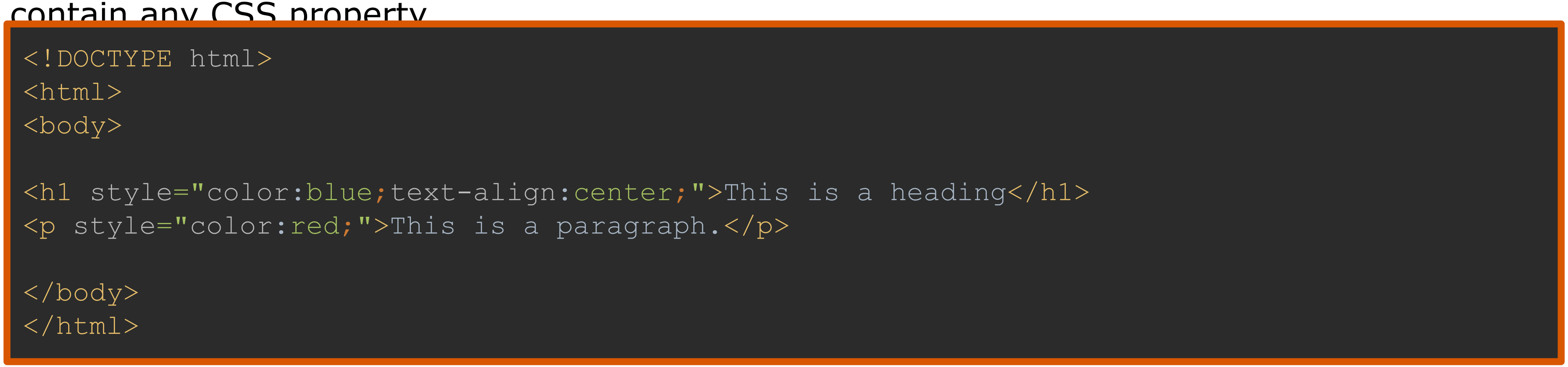
```
<!DOCTYPE html>
<html>
<head>
   <style>
       body {
           background-color: linen;
       }

       h1 {
           color: maroon;
           margin-left: 40px;
       }
   </style>
</head>
<body>

<h1>This is a heading</h1>
<p>This is a paragraph.</p>

</body>
</html>
```

How to

InLine CSS

An inline style may be used to apply a unique style for a single element.

To use inline styles, add the style attribute to the relevant element. The style attribute can contain any CSS property



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

<h1 style="color:blue;text-align:center;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>

</body>
</html>
```

How to

Cascading?

The name ***cascading*** comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.

```
/* cards.css */
.card-container {
   display: flex;
   flex-direction: row;
}
.card {
   background-color: white;
   box-shadow: 0 3px 5px 2px gray ;
   border-radius: 10px;
}

/* Update .card style */
.card {
   width: 150px;
   height: 250px;
   margin: 5px;
}

#primary card {
   background-color: #0d0d5c;
}
```

```
<head>
   <link rel="stylesheet" href="cards.css">
   <style>
      .card {
          text-align: center;
          padding: 10px;
      }

      #primary_card {
          color: white;
      }

      p{
          opacity: 0.8;
          font-size: 12px;
      }
   </style>
</head>
<body style="background-color: rgba(64,86,141,0.57)">
```

1

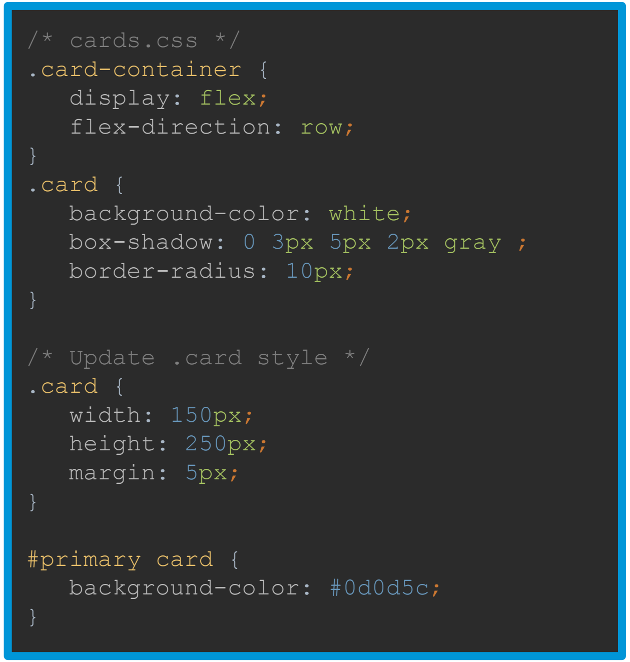
2

3

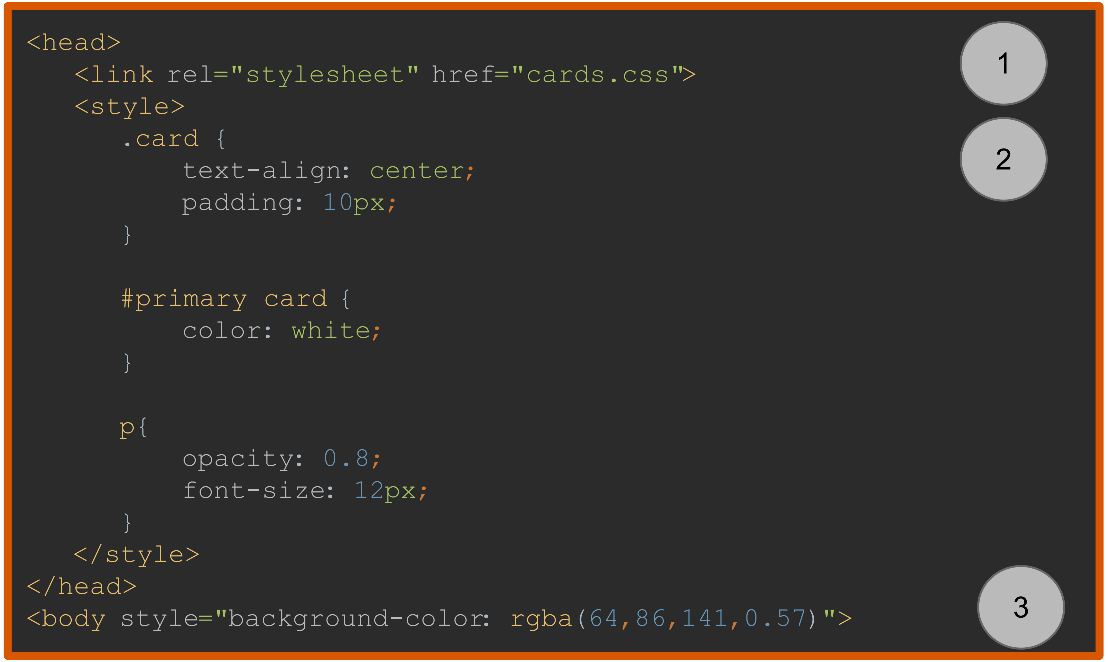
How to

Cascading?

The name ***cascading*** comes from the specified priority scheme to determine which style rule applies if more than one rule matches a particular element. This cascading priority scheme is predictable.



```
/* cards.css */
.card-container {
   display: flex;
   flex-direction: row;
}
.card {
   background-color: white;
   box-shadow: 0 3px 5px 2px gray ;
   border-radius: 10px;
}

/* Update .card style */
.card {
   width: 150px;
   height: 250px;
   margin: 5px;
}

#primary card {
   background-color: #0d0d5c;
}
```

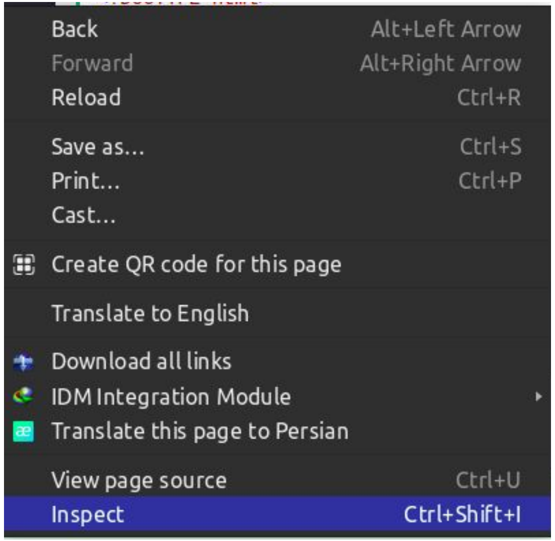


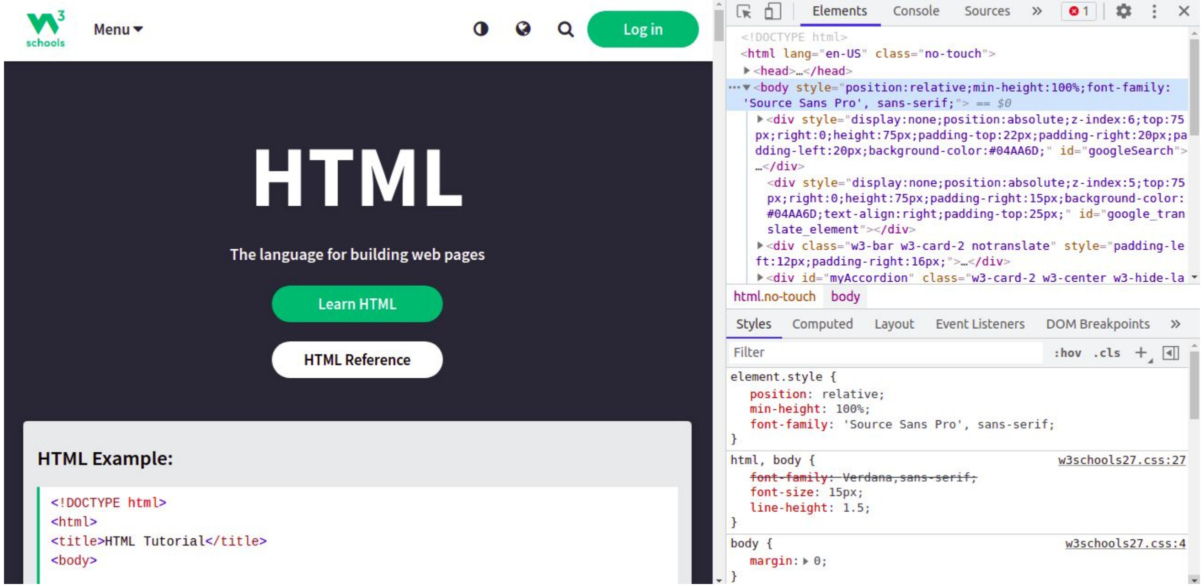
```
<head>
   <link rel="stylesheet" href="cards.css">
   <style>
      .card {
         text-align: center;
         padding: 10px;
      }

      #primary_card {
         color: white;
      }

      p{
         opacity: 0.8;
         font-size: 12px;
      }
   </style>
</head>
<body style="background-color: rgba(64,86,141,0.57)">
```

How to

Browser inspector

Every modern web browser includes a powerful suite of developer tools. These tools do a range of things, from inspecting currently-loaded HTML, CSS and JavaScript to showing which assets the page has requested and how long they took to load. This article explains how to use the basic functions of your browser's devtools.





HTML Example:

```
<!DOCTYPE html>
<html>
<title>HTML Tutorial</title>
<body>
```

```
<!DOCTYPE html>
<html lang="en-US" class="no-touch">
 ▸<head>…</head>
…▾<body style="position:relative;min-height:100%;font-family:
  'Source Sans Pro', sans-serif;"> == $0
   ▸<div style="display:none;position:absolute;z-index:6;top:75
   px;right:0;height:75px;padding-top:22px;padding-right:20px;pa
   dding-left:20px;background-color:#04AA6D;" id="googleSearch">
   …</div>
     <div style="display:none;position:absolute;z-index:5;top:75
     px;right:0;height:75px;padding-right:15px;background-color:
     #04AA6D;text-align:right;padding-top:25px;" id="google_tran
     slate_element"></div>
   ▸<div class="w3-bar w3-card-2 notranslate" style="padding-le
   ft:12px;padding-right:16px;">…</div>
   ▸<div id="myAccordion" class="w3-card-2 w3-center w3-hide-la
```

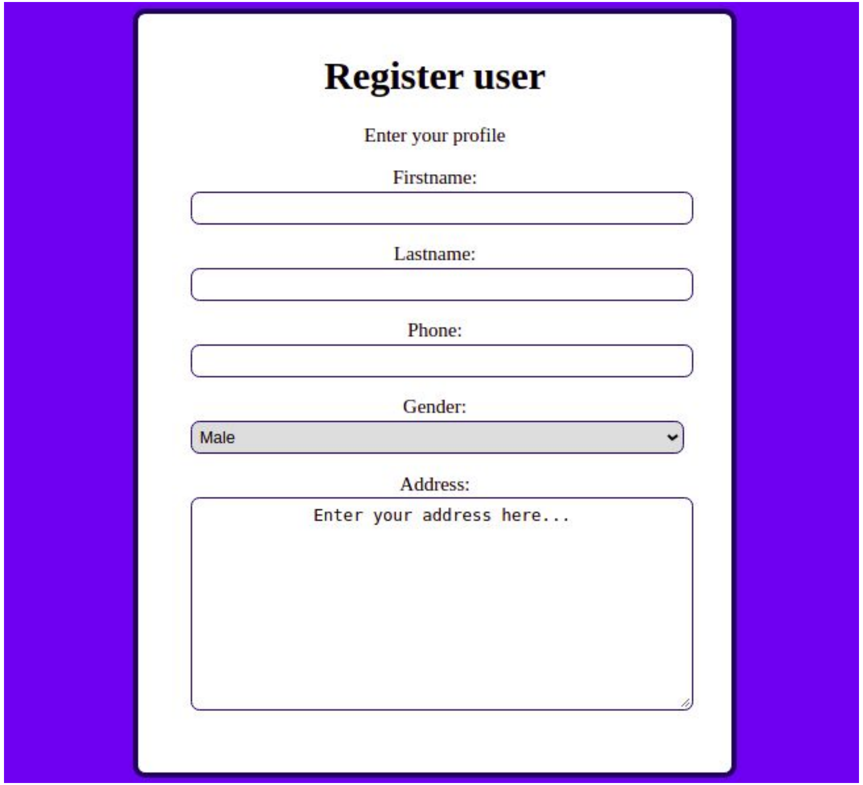
```
element.style {
   position: relative;
   min-height: 100%;
   font-family: 'Source Sans Pro', sans-serif;
}
html, body {                              w3schools27.css:27
   ~~font-family: Verdana,sans-serif;~~
   font-size: 15px;
   line-height: 1.5;
}
body {                                     w3schools27.css:4
   margin: ▸ 0;
}
```

How to

Practice: Registration form

Create a html page like the following sample :

Do it individually



Register user

Enter your profile

Firstname:

Lastname:

Phone:

Gender:

Male

Address:

Enter your address here...

Example

Pre-reading

- Responsive web page
- Bootstrap
- CSS properties