

CM3035 Advanced Web Development

Lesson 5

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Cascading style sheet (Css)

Navigation menu with css

```
51 </style>
52 </head>
53
54 <body>
55   <ul>
56     <li><a href="#home">Home</a></li>
57     <li><a href="#news">News</a></li>
58     <li><a href="#contact">Contact</a></li>
59     <li><a href="#about">About</a></li>
60   </ul>
61
```

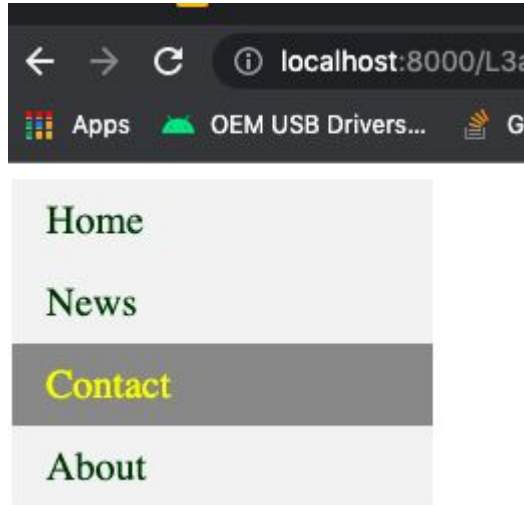
```
ul {
  list-style-type: none;
  margin: 0;
  padding: 0;
  width: 210px;
  background-color: #f2f2f2;
}

li a {
  display: block;
  color: #030;
  padding: 9px 17px;
  text-decoration: none;
}

/* Change the link color on hover */
li a:hover {
  background-color: #888;
  color: yellow;
}
```

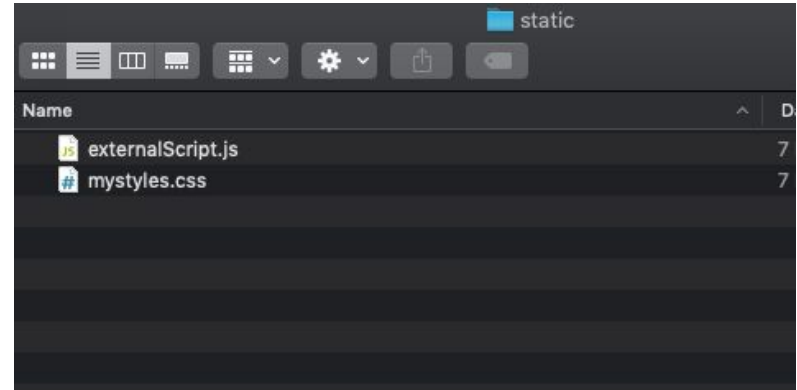
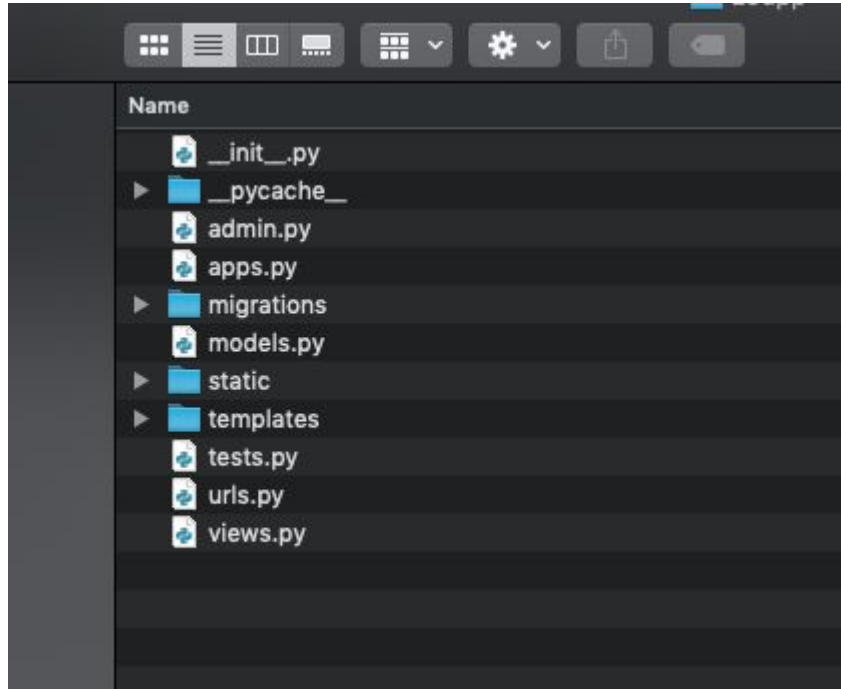
Cascading style sheet (Css)

Navigation menu with css



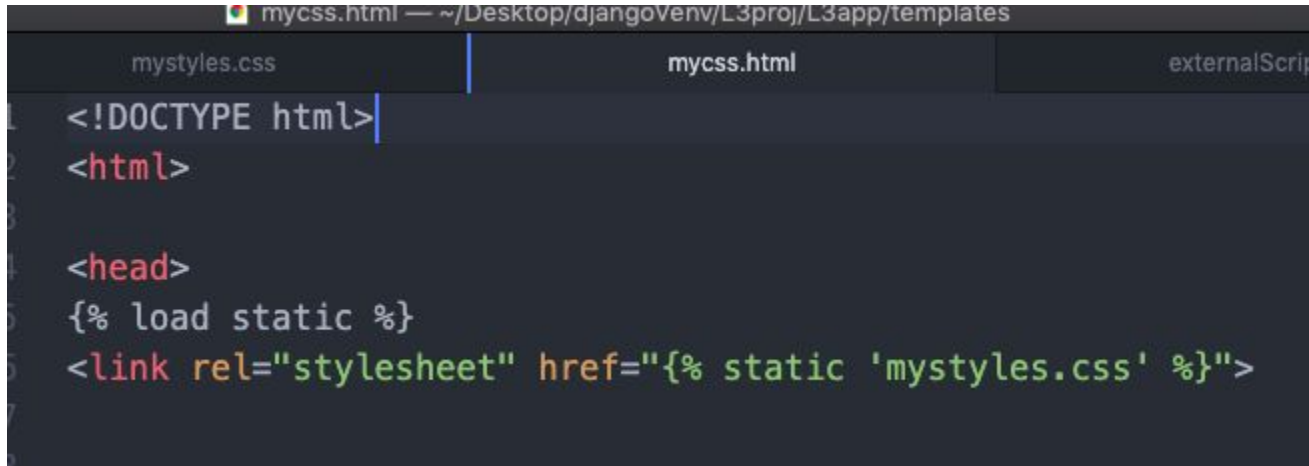
External Css

Create a static folder in L3app folder and put external css file inside.



External Css

Link external css to html



```
mycss.html — ~/Desktop/djangoVenv/L3proj/L3app/templates
mystyles.css | mycss.html | externalScript
<!DOCTYPE html>
<html>

<head>
{% load static %}
<link rel="stylesheet" href="{% static 'mystyles.css' %}">
```

External Css

Link external css to html

```
mystyles.css — ~/De
mystyles.css
1
2  /* External css defined
3
4  .try {
5      color: blue;
6  }
7
```

```
<div class = "try">
  <p>{{ name }}: I am fine</p>
</div>
```

Tom: I am fine

Internal Css

Hello Tom, how are you?

```
90  
91 <h1>Hello {{ name }}, how are you?</h1>  
92  
93  
94 <br>
```

```
1  
2 <style>  
3 h1 {  
4     background-color: lightblue;  
5     color: white;  
6     text-align: center;  
7     font-family: verdana;  
8     font-size: 40px;  
9 }  
0  
1
```

Css Box Model

```
1 #mypara{  
2   background: pink;  
3   padding: 50px;  
4   margin: 70px;  
5   border: 10px solid #4CAF50;  
6   float: left;  
7 }
```

```
<div id = "mypara">  
  <p>This is a paragraph for id selector using internal css</p>  
</div>  
  
<div id = "mypara">  
  <p>This is 2nd paragraph for id selector using internal css</p>  
</div>
```

This is a paragraph for id selector using internal css

This is 2nd paragraph for id selector using internal css

Javascript

Button onclick function

```
169 </p>
170
171 <p id="message">My first javascript.</p>
172 <button type="button" onclick="document.getElementById('message').innerHTML = 'Hello'">Click Me!</button>
173
174 <br>
```

My first javascript.

Click Me!

Hello

Click Me!

Javascript

Assign value to id selector

```
08  
09 <p id="secondJv"></p>  
10 <script>  
11 document.getElementById("secondJv").innerHTML = "My 2nd JavaScript";  
12 </script>  
13
```



Apps



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My 2nd JavaScript

Javascript

External Javascript file




```
externalScript.js — ~/Desktop/djangoVenv/L3proj/L3app/static
externalScript.js      mycss.html
1  function externalJV(){
2      document.getElementById("thirdJv").innerHTML = "Paragraph changed to other NEW content.";
3  }
4  |
```

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This is 3rd javascript

Try it

```
09
10 <script src="{% static 'externalScript.js' %}"></script>
11
12 <p id="thirdJv">This is 3rd javascript</p>
13
14 <button type="button" onclick="externalJV()">Try it</button>
15
```

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Paragraph changed to other NEW content.

Try it

Javascript

Arithmetics with Javascript

```
<p id="numbers"></p>

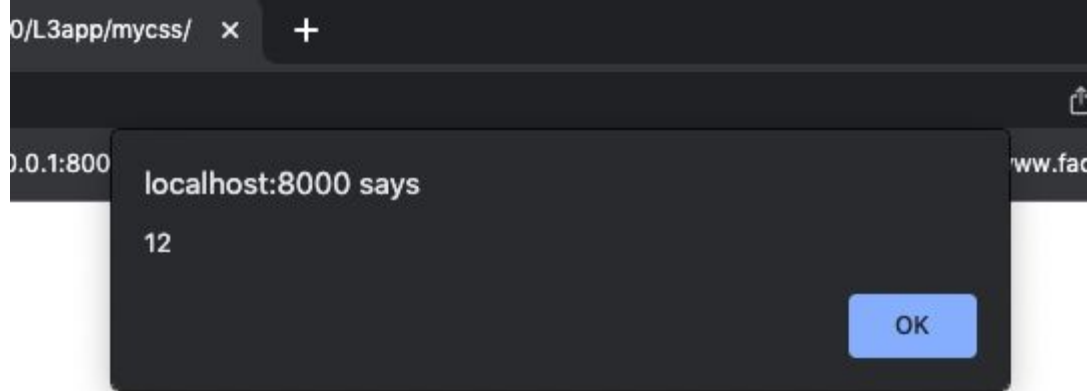
<script>
document.getElementById("numbers").innerHTML = 3 + 6;
</script>
```



Javascript

Window popups

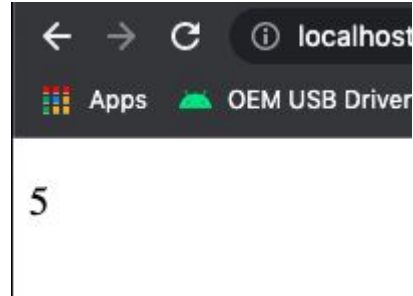
```
55 <script>  
56 window.alert(6 + 6);  
57 </script>  
58
```



Javascript

Division with Javascript

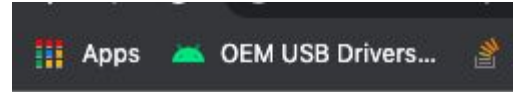
```
<script>  
let a, b, c;  
a = 30;  
b = 6;  
c = a / b;  
document.write(c);  
</script>
```



Javascript

Multiplication with Javascript

```
05  
06 <script>  
07 // How to create variables:  
08 var x;  
09 let y;  
10 var text = 'Total:';  
11  
12 // How to use variables:  
13 x = 10;  
14 y = 9;  
15 let z = x * y;  
16 document.write(text + z);  
17 </script>  
18
```

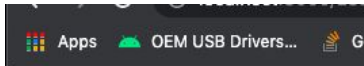


Total:90

Javascript

Using function

```
33  
34 <p id="functionResult"></p>  
35  
36 <script>  
37 function myFunction(p1, p2) {  
38     return p1 * p2;  
39 }  
40 document.getElementById("functionResult").innerHTML = myFunction(2, 15);  
41 </script>  
42
```



Javascript

Create and assign objects

```
56  
57 <p id="person"></p>
```

```
58  
59 <script>
```

```
60 //create objects
```

```
61 const person = {  
62   firstName: "Sam",  
63   lastName: "Tan",  
64   age: 30,  
65   eyeColor: "brown"  
66 };  
67
```

```
68 // Display object:
```

```
69 document.getElementById("person").innerHTML =  
70 person.firstName + " is " + person.age + " years old.";
```

```
71  
72 document.write('Read from id:' + document.getElementById("person").innerHTML);  
73
```

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Sam is 30 years old.

Read from id:Sam is 30 years old.

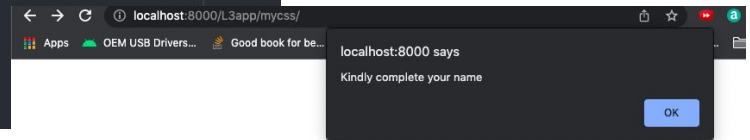
Javascript

Validate form

```
1 <script>
2 function validateForm() {
3   let x = document.forms["memberForm"]["name"].value;
4   if (x == "") {
5     alert("Kindly complete your name");
6     return false;
7   }
8 }
9 </script>
10
11 <form name="memberForm" action="" onsubmit="return validateForm()" method="post">
12   Name: <input type="text" name="name">
13   <input type="submit" value="Submit">
14 </form>
15
```

Name:

Submit



Name:

Submit

Javascript

Count number of paragraphs

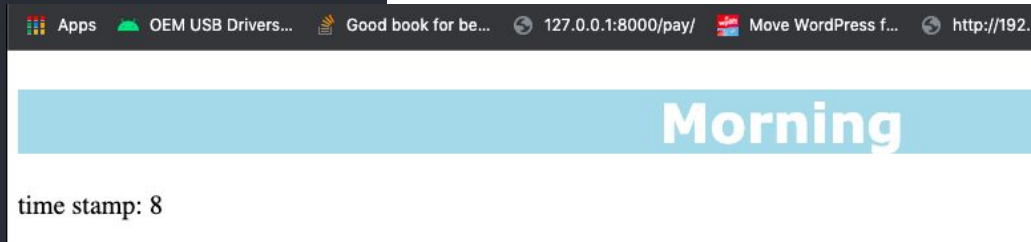
```
9 <p id="paracounter"></p>
10
11 <script>
12 const myCollection = document.getElementsByTagName("p");
13
14 document.getElementById("paracounter").innerHTML = "There are " + myCollection.length + " paragraphs.";
15
16 </script>
17
```

There are 12 paragraphs.

Javascript

Time Object

```
41
42 <h1 id="timeclock"></h1>
43
44 <script>
45   const time = new Date().getHours();
46   document.write("time stamp: " + time);
47   var greeting;
48   if (time < 10) {
49     greeting = "Morning";
50   } else if (time < 20) {
51     greeting = "Afternoon";
52   } else {
53     greeting = "Evening";
54   }
55   document.getElementById("timeclock").innerHTML = greeting;
56 </script>
57
```



Javascript

For loop

```
<p id="cars"></p>

<script>
const vehicals = ["Benz", "Honda", "Toyota", "Tesla"];
|
let i = 0;
let len = vehicals.length;
let carResult = "";

for (; i < len; ) {
    carResult += vehicals[i] + "<br>";
    i++;
}
document.getElementById("cars").innerHTML = carResult;
</script>
```



Benz
Honda
Toyota
Tesla

Javascript

Search function

```
00 <p id="searchString"></p>
01
02 <script>
03 let tempText = "It is as easy as + String(123)";
04 let n = tempText.search("123");
05 document.getElementById("searchString").innerHTML = n;
06 </script>
07
```

 Apps  OEM

Javascript

Javascript Class

```
<p id="bikeInfo"></p>
```

```
<script>
```

```
class Bike {
```

```
  constructor(brand, year) {
```

```
    this.brand = brand;
```

```
    this.year = year;
```

```
  }
```

```
  make() {
```

```
    let date = new Date();
```

```
    return date.getFullYear() - this.year;
```

```
  }
```

```
}
```

```
const myBike = new Bike("Shimano", 2021);
```

```
document.getElementById("bikeInfo").innerHTML =
```

```
myBike.brand + " " + myBike.year + ". " + "My bike is " + myBike.make() + " years old.";
```

```
</script>
```

Shimano 2021. My bike is 1 years old.

End of Lesson 5