

# **Web Engineering**

## **Lecture 19**

### **Webpage Layout**

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**Lecturer**

**Department of Information Technology**

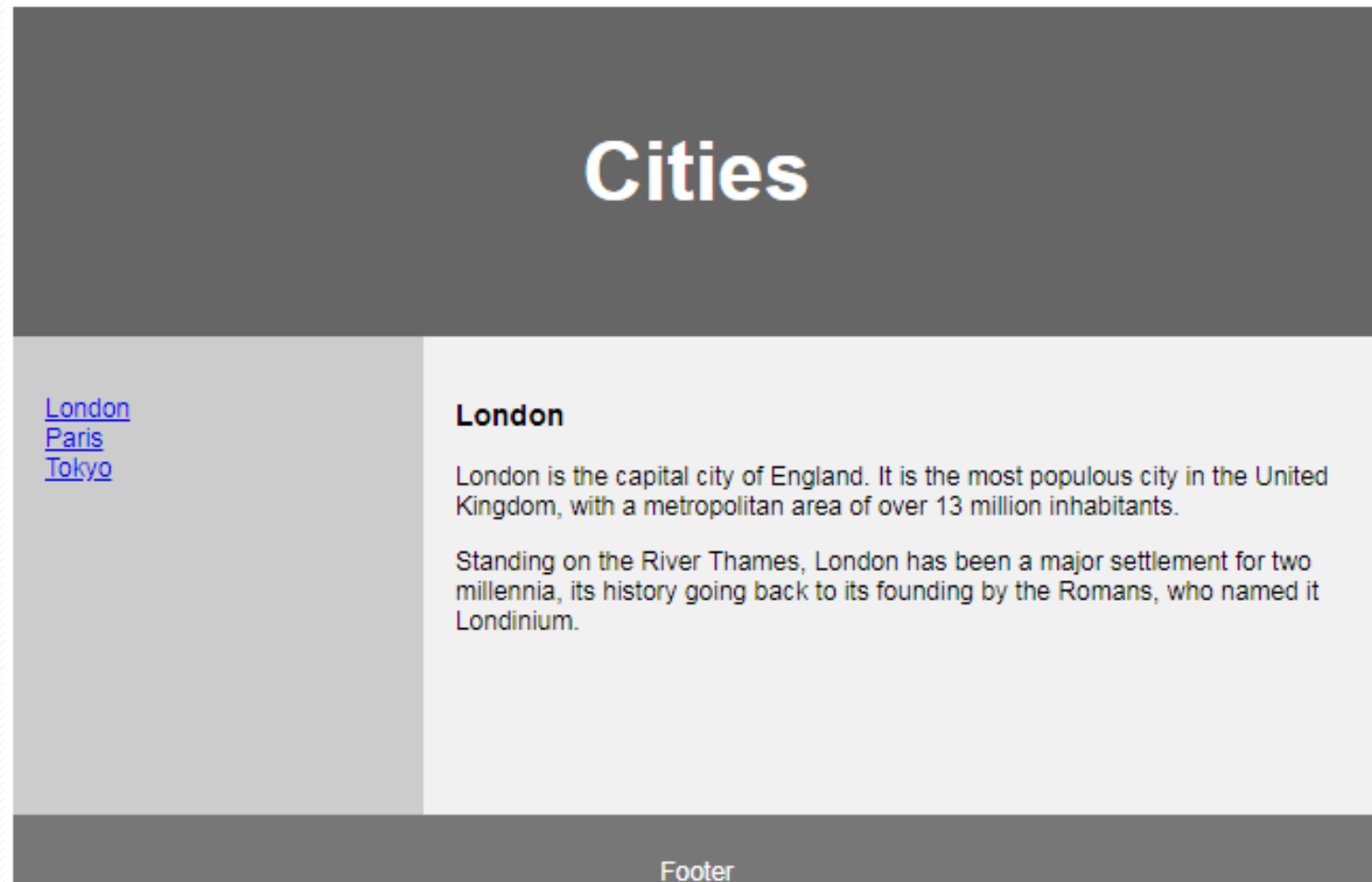
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## CSS Layout Float

In this example, we have created a header, two columns/boxes and a footer. On smaller screens, the columns will stack on top of each other.

Resize the browser window to see the responsive effect (you will learn more about this in our next chapter - HTML Responsive.)



```

<!DOCTYPE html>
<html lang="en">
<head>
<title>CSS Template</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
* {
    box-sizing: border-box;
}

body {
    font-family: Arial, Helvetica, sans-serif;
}

/* Style the header */
header {
    background-color: #666;
    padding: 30px;
    text-align: center;
    font-size: 35px;
    color: white;
}

/* Create two columns/boxes that floats next to each other */
nav {
    float: left;
    width: 30%;
    height: 300px; /* only for demonstration, should be removed */
    background: #ccc;
    padding: 20px;
}

/* Style the list inside the menu */
nav ul {
    list-style-type: none;
    padding: 0;
}

```

```

article {
  float: left;
  padding: 20px;
  width: 70%;
  background-color: #f1f1f1;
  height: 300px; /* only for demonstration, should be removed */
}

/* Clear floats after the columns */
section:after {
  content: "";
  display: table;
  clear: both;
}

/* Style the footer */
footer {
  background-color: #777;
  padding: 10px;
  text-align: center;
  color: white;
}

/* Responsive layout - makes the two columns/boxes stack on top of each other instead of next to each
other, on small screens */
@media (max-width: 600px) {
  nav, article {
    width: 100%;
    height: auto;
  }
}
</style>
</head>

```

```

<body>

<h2>CSS Layout Float</h2>
<p>In this example, we have created a header, two columns/boxes and a footer. On smaller screens, the columns will stack on top of each other.</p>
<p>Resize the browser window to see the responsive effect (you will learn more about this in our next chapter - HTML Responsive.)</p>

<header>
  <h2>Cities</h2>
</header>

<section>
  <nav>
    <ul>
      <li><a href="#">London</a></li>
      <li><a href="#">Paris</a></li>
      <li><a href="#">Tokyo</a></li>
    </ul>
  </nav>

  <article>
    <h1>London</h1>
    <p>London is the capital city of England. It is the most populous city in the United Kingdom, with a metropolitan area of over 13 million inhabitants.</p>
    <p>Standing on the River Thames, London has been a major settlement for two millennia, its history going back to its founding by the Romans, who named it Londinium.</p>
  </article>
</section>

<footer>
  <p>Footer</p>
</footer>

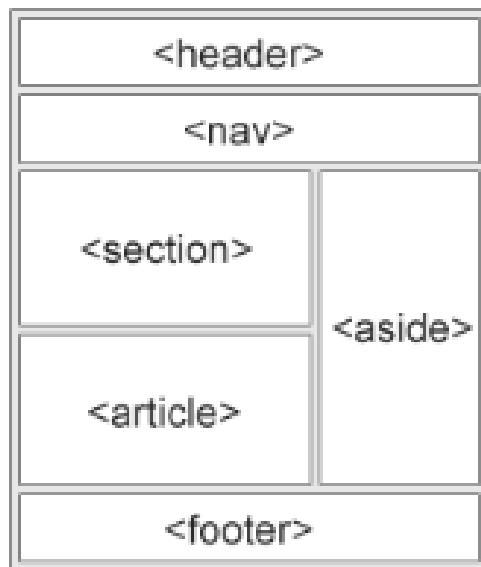
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# HTML Layout Elements

Websites often display content in multiple columns (like a magazine or newspaper).

HTML5 offers new semantic elements that define the different parts of a web page:



- `<header>` - Defines a header for a document or a section
- `<nav>` - Defines a container for navigation links
- `<section>` - Defines a section in a document
- `<article>` - Defines an independent self-contained article
- `<aside>` - Defines content aside from the content (like a sidebar)
- `<footer>` - Defines a footer for a document or a section
- `<details>` - Defines additional details
- `<summary>` - Defines a heading for the `<details>` element

# HTML Layout Techniques

There are five different ways to create multicolumn layouts. Each way has its pros and cons:

- HTML tables (not recommended)
- CSS float property
- CSS flexbox
- CSS framework
- CSS grid

## CSS Floats

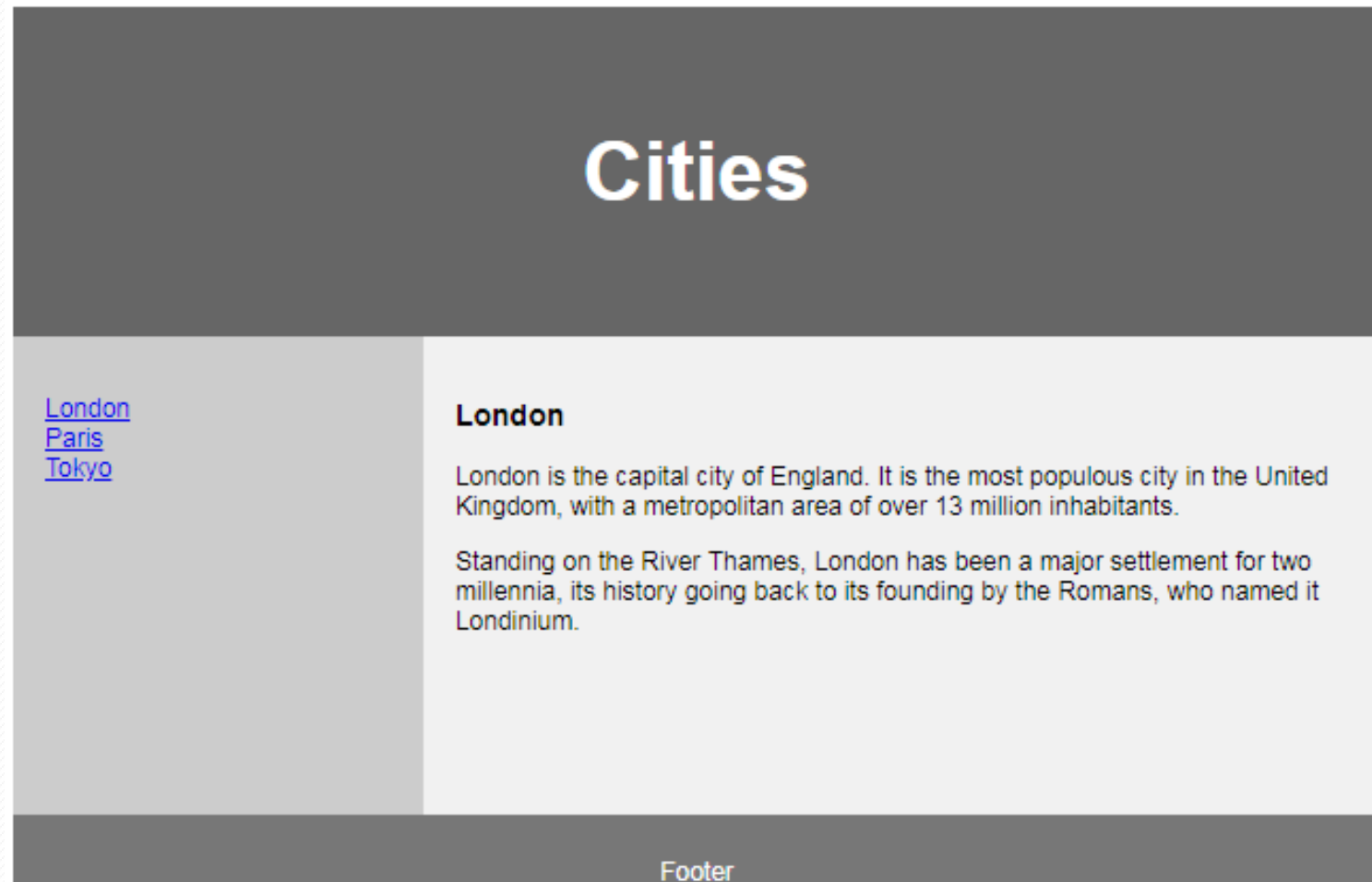
It is common to do entire web layouts using the CSS float property. Float is easy to learn - you just need to remember how the float and clear properties work.

**Disadvantages:** Floating elements are tied to the document flow, which may harm the flexibility.

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