

Responsive Web Design

Web Technologies



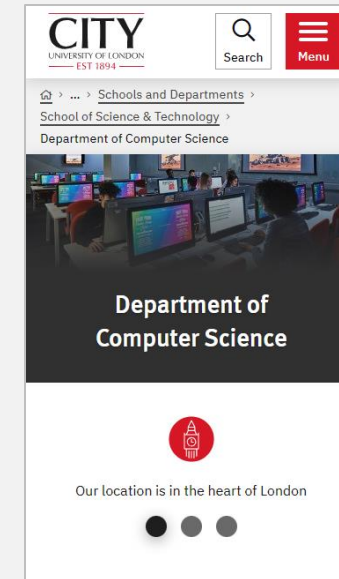
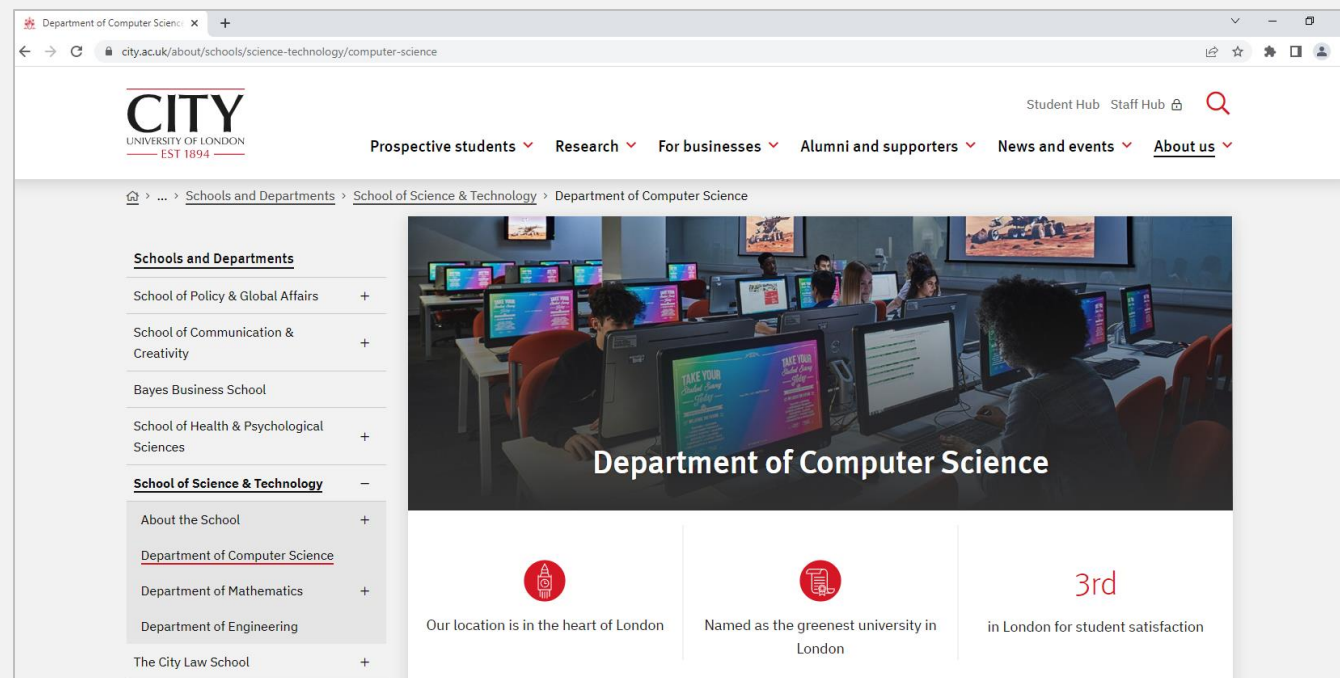
Lecture by
Dr Elahe Kani-Zabihi

```
<!doctype html>
<html>
  <head>
    <title>
      Web Technologies
    </title>
    <style>
      p {
        color: blue;
      }
    </style>
    <script>
      console.log("client-side");
    </script>
  </head>
  <body>
    <p>
      Welcome!
    </p>
  </body>
</html>
```


What we will cover

- **Responsive Web Design components**
- **Media Queries**
- **The Viewport**

Responsive Web Design



Fluid Layout

```
body { width: 90%; }  
header { width: 97%; }  
main { width: 60%; }  
aside { width: 34%; }  
footer { width: 97%; }
```

Font Size

```
body {  
    font-size: 100%; }  
  
h1 {  
    font-size: 1.75em; }  
  
h2 {  
    font-size: 1.5em; }  
  
p {  
    font-size: .75em; }
```

Image

```
<section>
```

```

```

```
</section>
```

```
section img {  
    max-width: 100%;  
    margin-bottom: .5em;}
```

CSS3 Media Queries

```
@media only screen and (max-width: 837px)
{
    h2 {font-size: 1em;}
}
```


CSS Properties for a Media Query

Property:

- width
- min-width
- max-width
- height
- min-height
- max-height
- orientation

@media only screen and (min-width: 481px)
and (max-width: 796px)

```
{...  
}
```

The Viewport

- The `<meta>` element for viewport is added in the `<head>` element:

```
<head>
```

```
<meta name="viewport" content="width=device-width,  
initial-scale=1">
```

```
</head>
```

The Desktop-First Design

```
/*tablet screen layout */
```

```
@media only screen and (max-width: 956px) {...}
```

```
/*mobile landscape screen layout */
```

```
@media only screen and (max-width: 767px) {...}
```

```
/*mobile portrait screen layout */
```

```
@media only screen and (max-width: 479px) {...}
```

The Mobile-First Design

`/*mobile landscape screen layout */`

`@media only screen and (min-width: 480px) {...}`

`/*tablet portrait layout*/`

`@media only screen and (min-width: 768px) {...}`

`/*tablet screen layout */`

`@media only screen and (min-width: 960px) {...}`

Try It Yourself

In this activity, you will practice how to create scalable images for responsive web design. So:

1. Open the `scale_images.html` file from the `WT_w3_6` folder in your browser and you can see the image has a fixed size.
2. Change that in the CSS rule set for the image with the property `max-width` and the value `100%`.
3. Save the CSS file and open the webpage in your browser to see that the image is scalable inside the section.