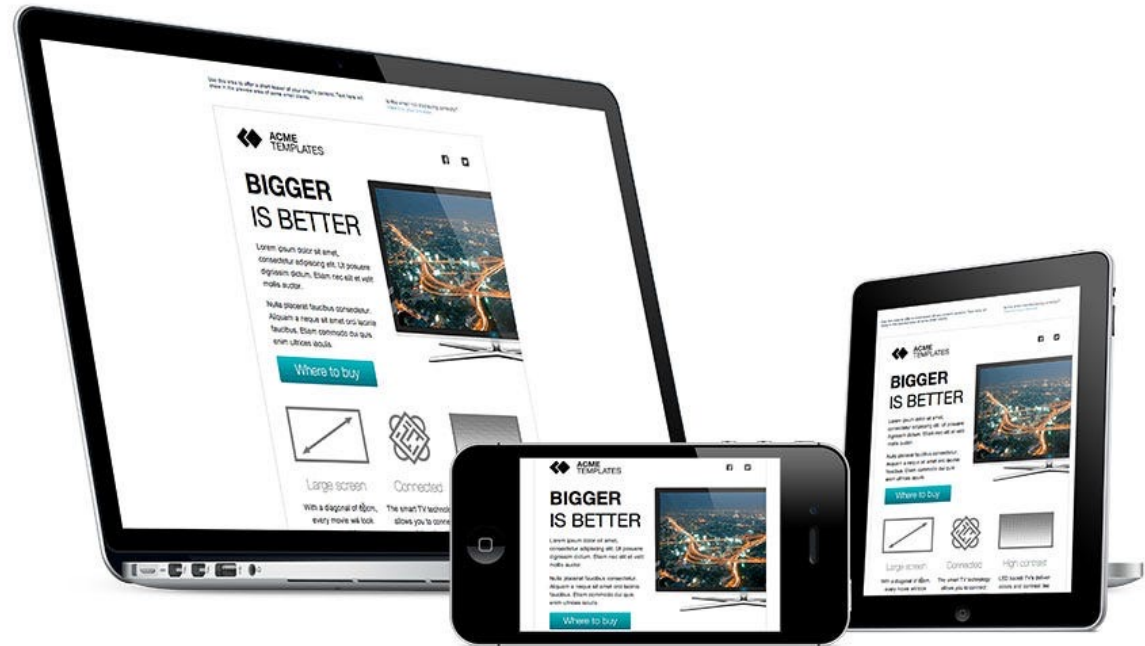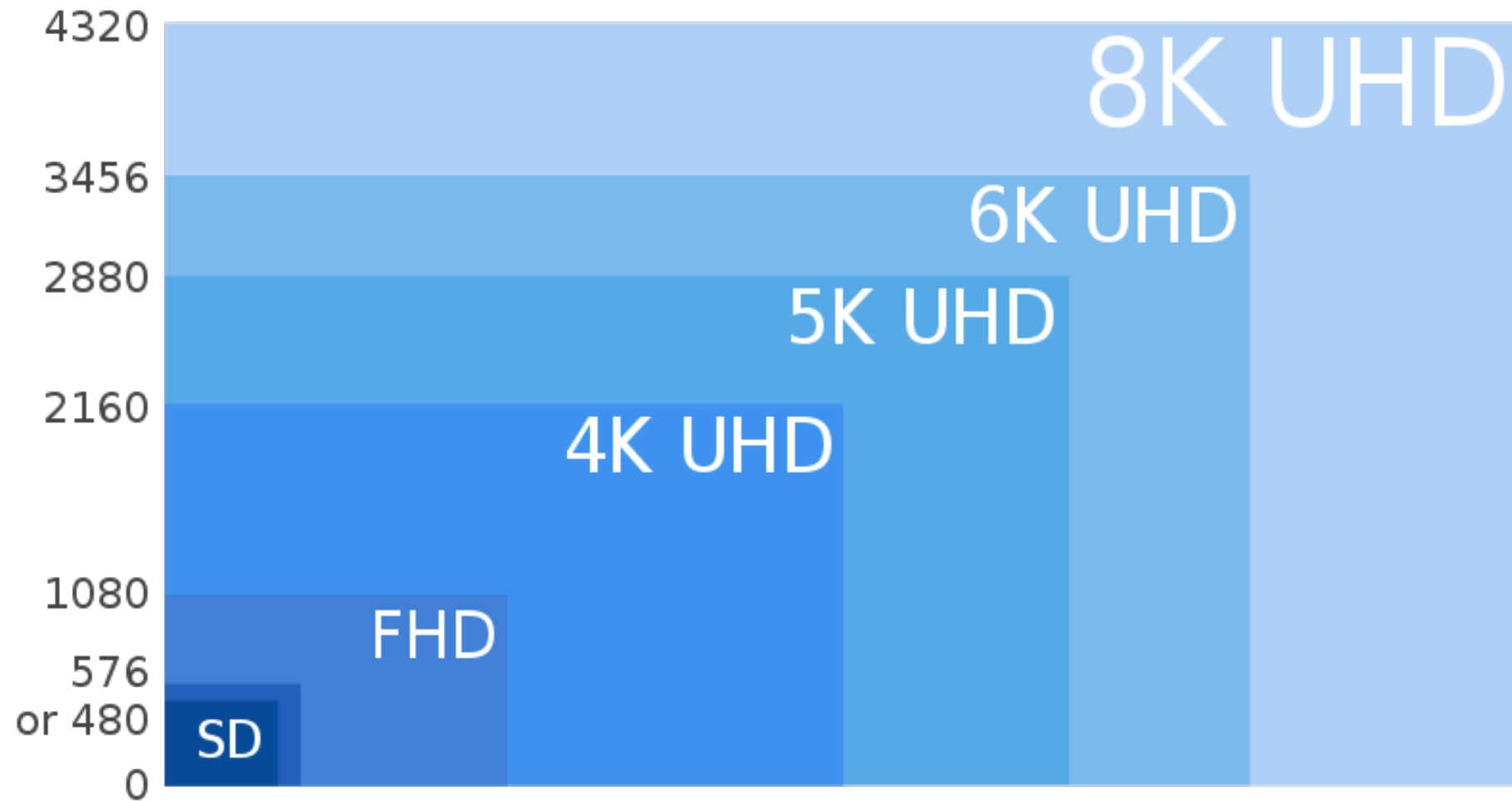# Responsive web pages

Screen resolution

Different devices and resolutions

- What is the resolution of the browser viewport?

Different devices and resolutions

- What is the resolution of the browser viewport?
  Check yours at mydevice.io

Type	Name	Viewport Size PX	Device Resolution PX	Screen Size	Pixel Ratio	Density PPI	CSS PPI
	Apple iPad 10.2"	810 x 1080	1620 x 2160	10.2"	2.0	264	132
	Apple iPad Air	834 x 1112	1668 x 2224	10.5"	2.0	264	132
	Apple iPad Air (2020)	820 x 1180	1640 x 2360	10.9"	2.0	264	132
	Apple iPad Mini	768 x 1024	1536 x 2048	7.9"	2.0	324	162
	Apple iPad Pro 11"	834 x 1194	1668 x 2388	11.0"	2.0	264	132
	Apple iPad Pro 12.9"	1024 x 1366	2048 x 2732	12.9"	2.0	264	132
	Apple iPhone 11	414 x 896	828 x 1792	6.1"	2.0	326	163

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Different devices and resolutions

- What is the resolution of the browser viewport?

We don't know for sure; we can only guess…

There are 4 common solutions to deal with this problem:

1. One fixed layout design
2. One fluid layout design
3. Adaptive design
4. Responsive design

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FIXED [f.e. 960px]

FLUID [width = X%]

ADAPTIVE [different fixed width version 960px, 720px, 360px etc..]

RESPONSIVE [Content is changing depending the resolution, device, orientation]

Responsive CSS

With media queries, we can write CSS for specific resolutions:

```css
/* Use a media query to add a breakpoint at 800px: */
@media screen and (max-width: 800px) {

}
```

Media queries

A framework like Bootstrap has 5 resolution breakpoints.

It's common to have at least:

- Mobile
- Tablet
- Desktop

But what min-width would you use for each of these?

```
// Small devices (landscape phones, 576px and up)
@media (min-width: 576px) { ... }

// Medium devices (tablets, 768px and up)
@media (min-width: 768px) { ... }

// Large devices (desktops, 992px and up)
@media (min-width: 992px) { ... }

// X-Large devices (large desktops, 1200px and up)
@media (min-width: 1200px) { ... }

// XX-Large devices (larger desktops, 1400px and up)
@media (min-width: 1400px) { ... }
```

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```css
@media screen and (max-width: 719px)
    {
    body
        {
        width : 100%;
        background-color: #FCC;
        }
    #simsalabim
        {
        background-image: url("../img/mobile.png");
        }
    #tablet , #pc
        {
        display: none;
        }
    }
```
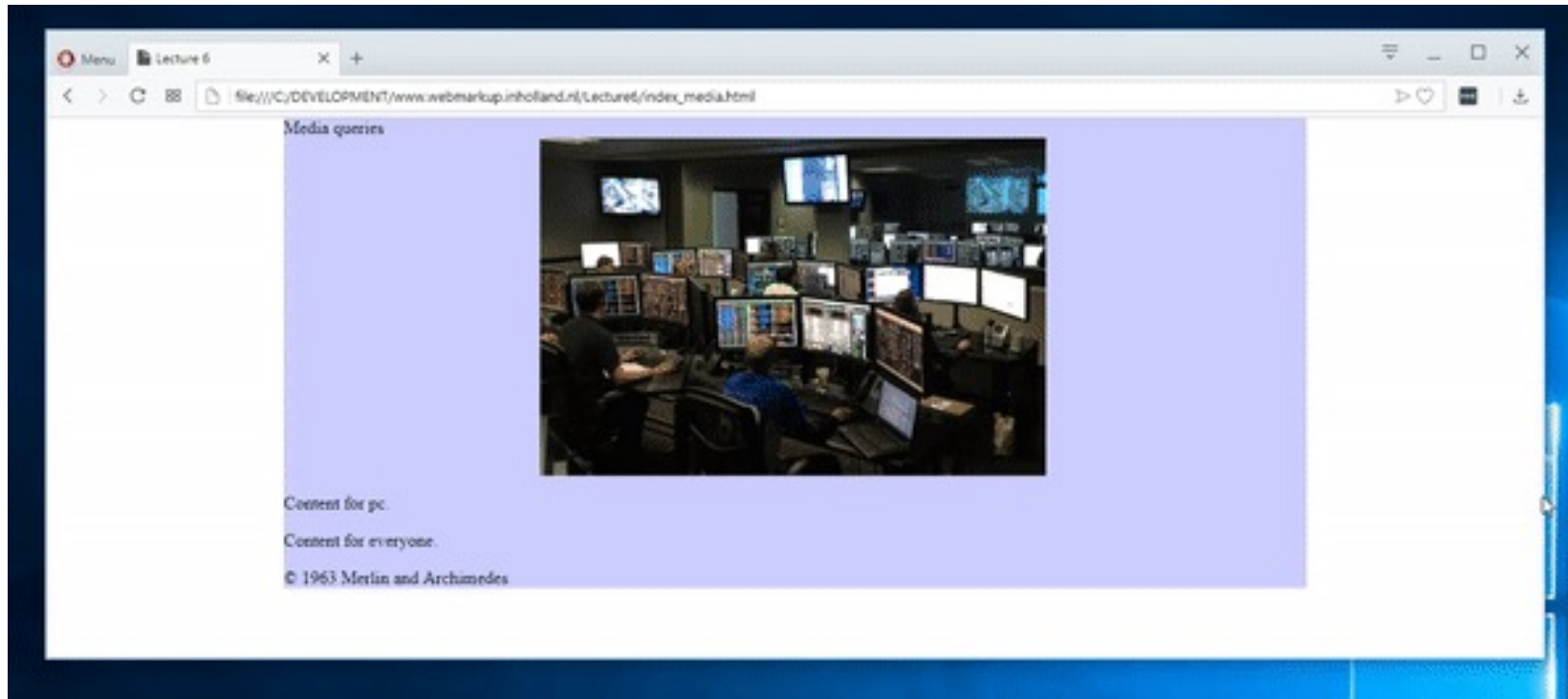
```css
@media screen and (min-width: 720px) and (max-width: 929px)
    {
    body
        {
        width : 720px;
        background-color: #CFC;
        }
    #simsalabim
        {
        background-image: url("../img/tablet.png");
        }
    #mobile , #pc
        {
        display: none;
        }
    }
```

```css
@media screen and (min-width: 930px)
    {
    body
        {
        width : 930px;
        background-color: #CCF;
        }
    #simsalabim
        {
        background-image: url("../img/pc.png");
        }
    #mobile , #tablet
        {
        display: none;
        }
    }
```


12

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Assignment

Copy the code from:
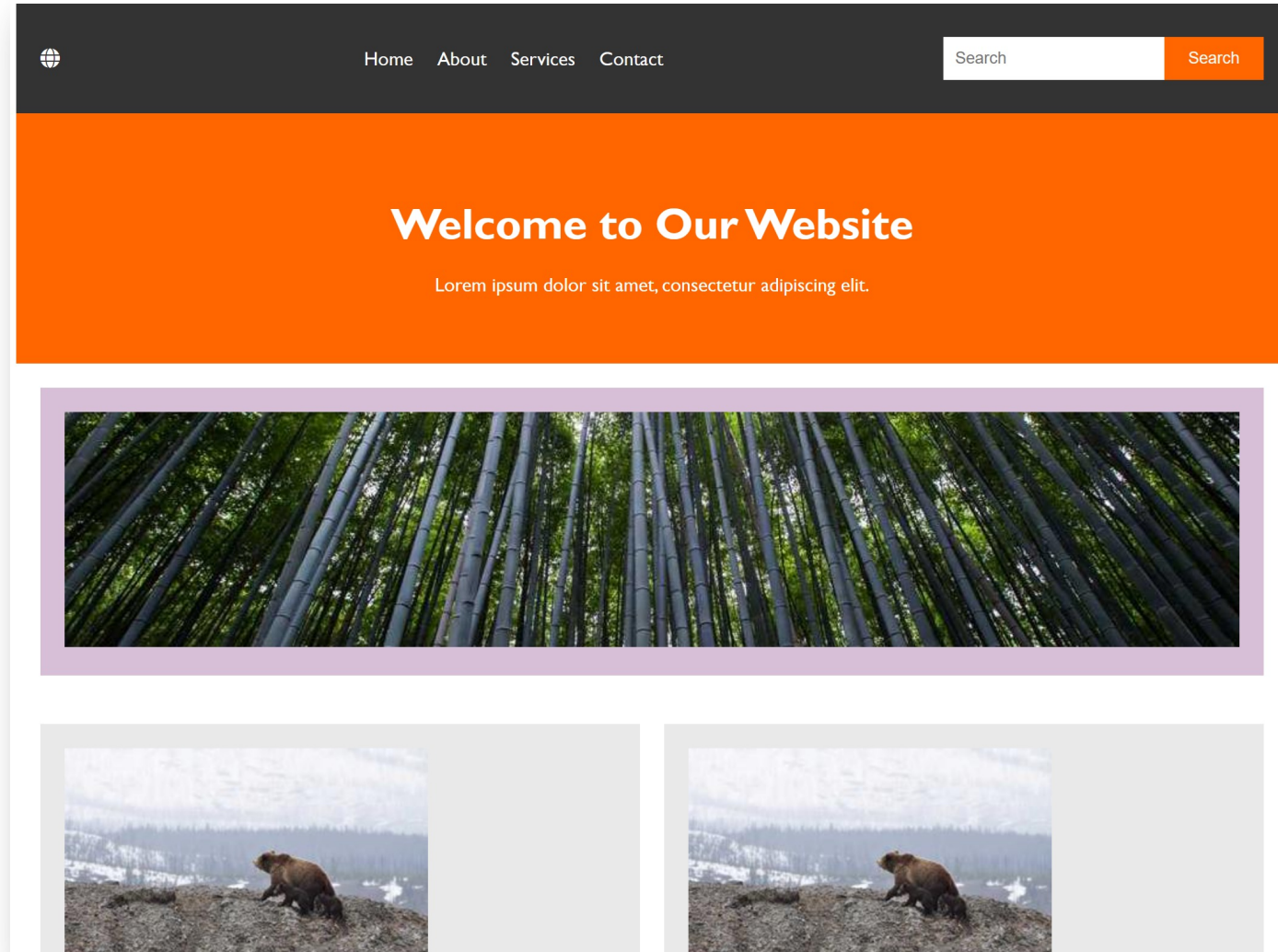
https://pastebin.com/DaLhMtsm

into a new HTML and new CSS file

Modify the CSS so that on mobile:

- The search box is hidden

- The large image banner is hidden

- Articles appear below each other at 100% width (not side by side)

- The logo in the footer is hidden

Use media queries!