

Week 6

Responsive Design

2017, Fall

Web Application Programming

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Before we start

- Click the responsive link and download wp_week6.zip file on the lecture site;
<http://lik.pusan.ac.kr/WP/2017/WP2017Fall.html>
- Unzip and open extracted folder
- You can see responsive and navbar folders

Simulate Mobile Devices with Device Mode

The screenshot shows the Google Developers website in Chrome DevTools. The top toolbar indicates 'Responsive' mode with a width of 1090 and a height of 775. A blue arrow points to the 'Toggle Device Mode' icon (a smartphone) in the top right of the toolbar. The main content area displays the Google Developers homepage with the heading 'Explore Google services for mobile' and three circular icons for Android, iOS, and Web. Below these icons is a link to 'See the full product directory.' and a section for 'Google Developers Launchpad Accelerator'.

On the right side, the 'Elements' panel shows the HTML structure of the page. The `body` element has the class `devsite-home-page`. The `#top_of_page` element is selected, and the 'Styles' panel shows the default styles for the `body, html` selector, including color, font, and margin. A visual box model diagram is also visible, showing the dimensions of the selected element (1090 x 1442).

Toggle Device Mode

body class="devsite-home-page"

devsite-header-no-upper-tabs
devsite-header-no-lower-tabs" id="

"top_of_page">

><div class="devsite-wrapper" style="margin-top: 0px;">

...</div>

><ul class="kd-menulist" style="display: none; position: absolute; top: 1192px; right: 0px; bottom: auto; left: auto; height: 400px; padding: 0px;">...

><script>...</script>

</body>

... #top_of_page

Styles Event Listeners DOM Breakpoints Properties

Filter + .cls

element.style {

}

devsite-blue-grey.css:1

body, html {

✓ color: #212121;

✓ font: 400 16px/24px Roboto, sans-serif;

-moz-osx-font-smoothing: grayscale;

✓ -webkit-font-smoothing: antialiased;

✓ margin: 0;

-moz-text-size-adjust: 100%;

-ms-text-size-adjust: 100%;

⚠ -webkit-text-size-adjust: 100%;

}

margin -

border -

padding -

1090 x 1442

Filter Show all

box-sizing

border-box

color

rgb(33, 33, 33)

display

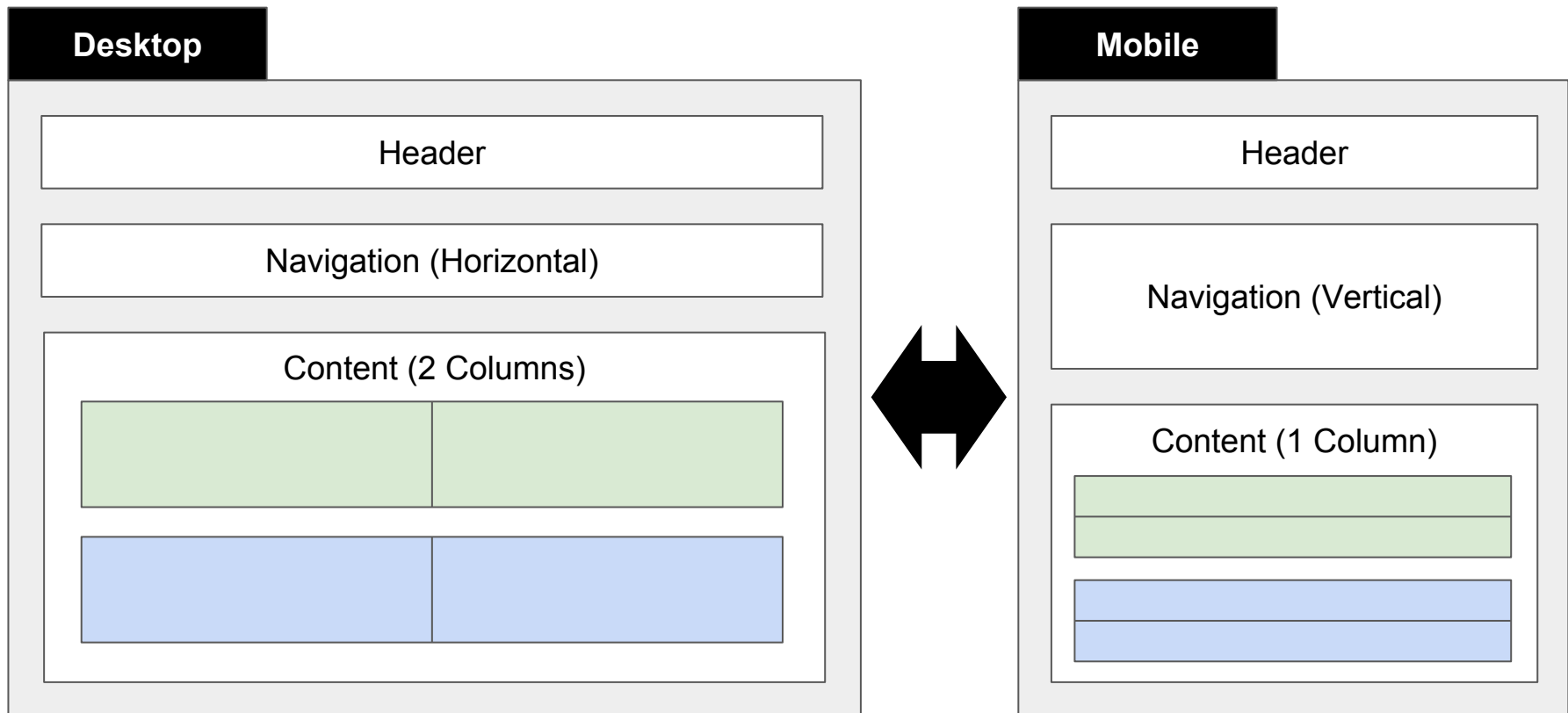
block

Setting The Viewport

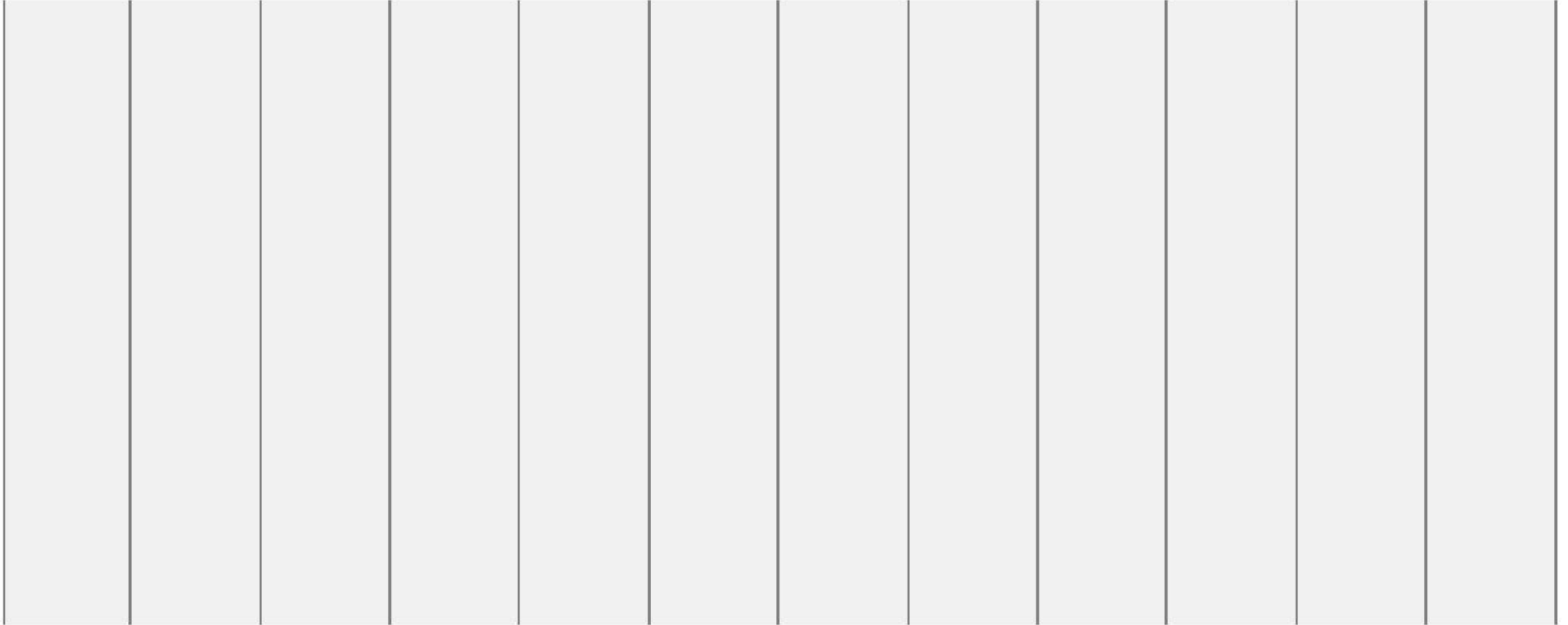
```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

reference : https://www.w3schools.com/css/css_rwd_viewport.asp

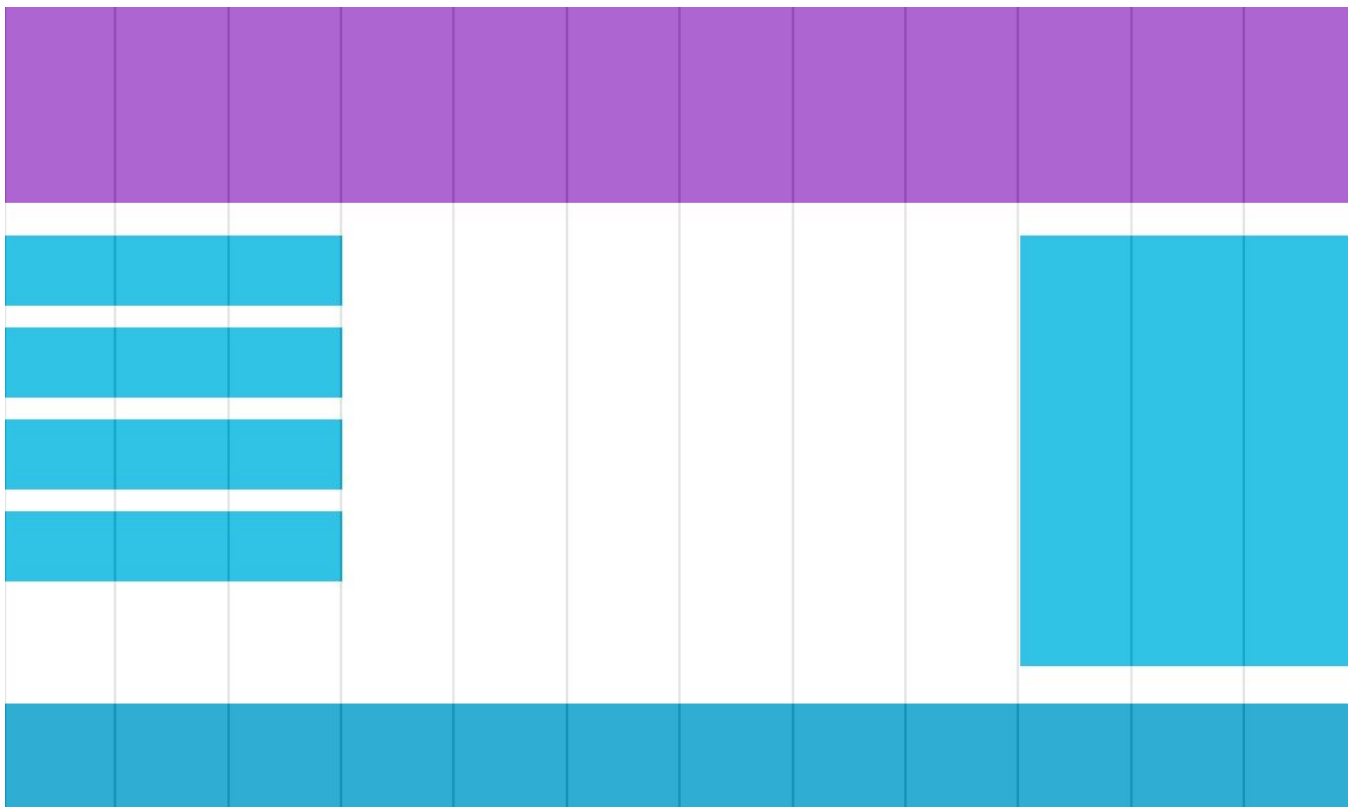
Let's Design the Layout



Grid-View



Grid-View makes it easier to place elements on the page



box-sizing property set to border-box

```
* {  
  box-sizing: border-box;  
}
```

This property makes sure that the padding and border are included in the total width and height of the elements

Responsive grid-view with 12 columns

`.col-1 {width: 8.33%;}`

`.col-2 {width: 16.66%;}`

`.col-3 {width: 25%;}`

`.col-4 {width: 33.33%;}`

`.col-5 {width: 41.66%;}`

`.col-6 {width: 50%;}`

`.col-7 {width: 58.33%;}`

`.col-8 {width: 66.66%;}`

`.col-9 {width: 75%;}`

`.col-10 {width: 83.33%;}`

`.col-11 {width: 91.66%;}`

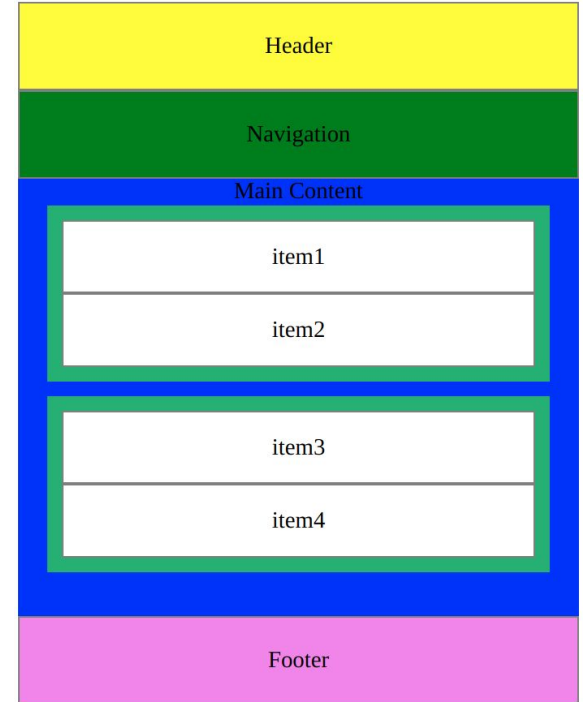
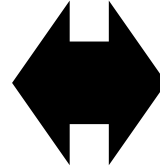
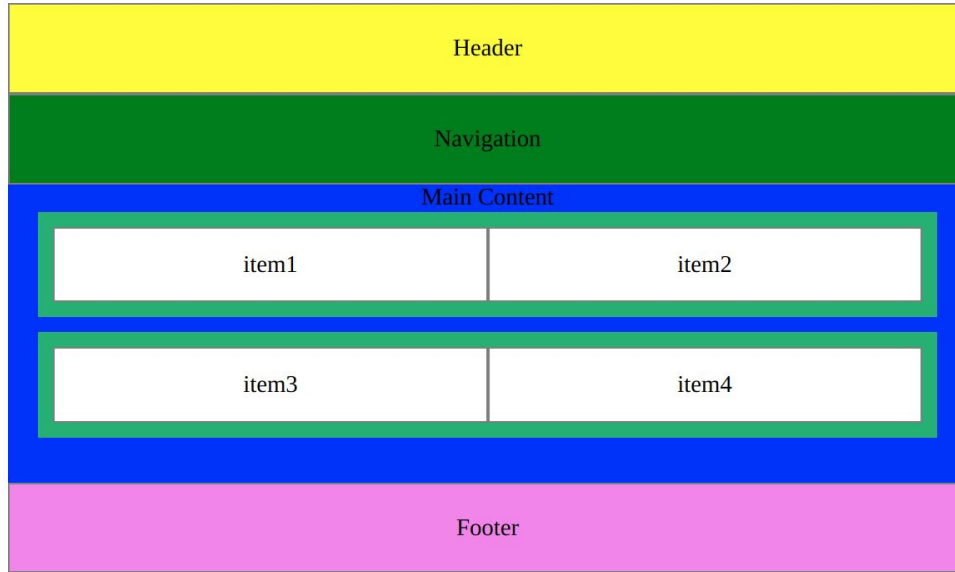
`.col-12 {width: 100%;}`

$100\% / 12 \text{ columns} = 8.33\%$

All these columns should be floating to the left

```
[class*="col-"] {  
    float: left;  
  
    padding: 15px;  
  
    border: 1px solid red;  
  
}
```

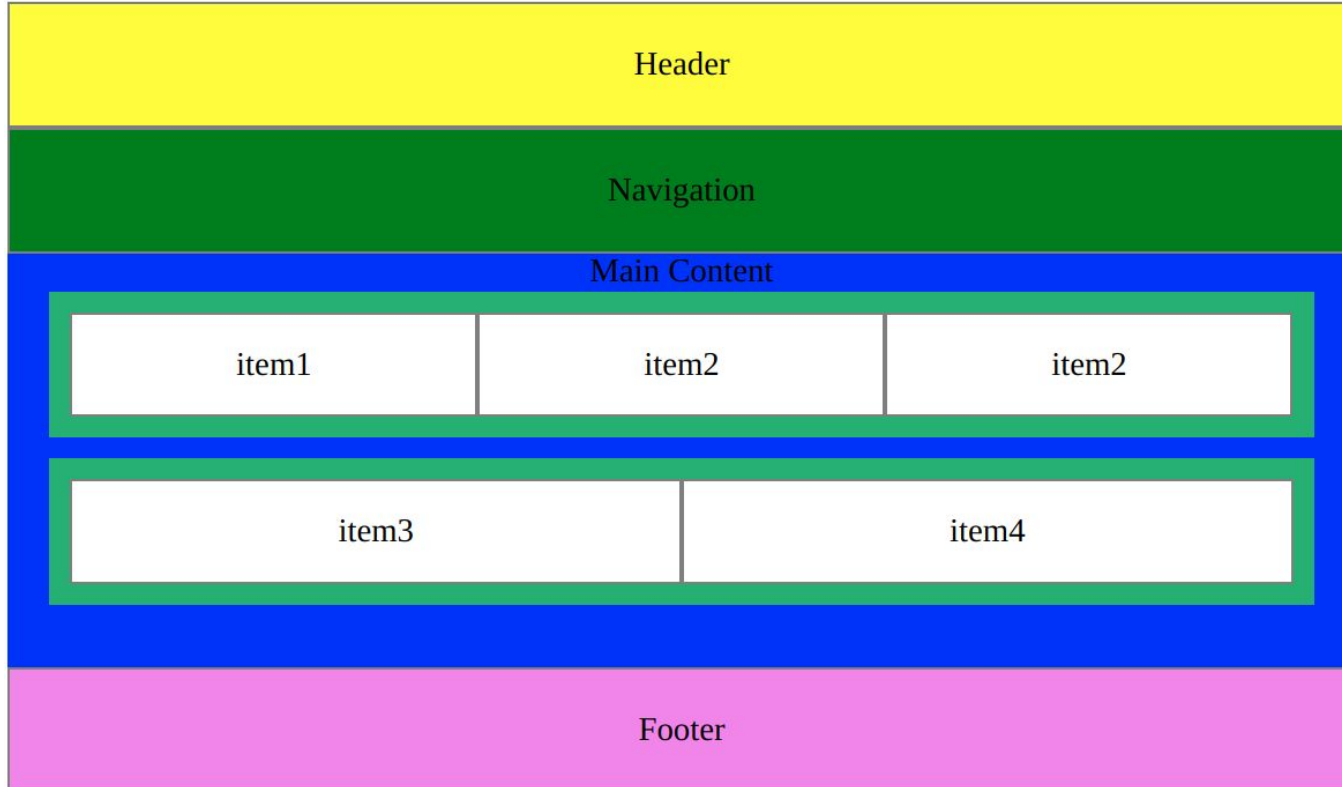
Try - Hint : CSS3 Media Queries



Hint : CSS3 Media Queries

```
@media screen and (max-width: 600px) {  
  
}
```

Try - 3 Columns or 4 Columns Row



Navigation Bar

- Mainly Used :
 - HTML - , , <a>
 - CSS : float, display, box model(padding, margin, border), psedo_class



HTML

CSS

JAVASCRIPT

SQL

PHP

BOOTSTRAP

JQUERY

ANGULAR

MORE ▼

Add style to tag

```
ul.nav {  
  
    list-style-type: none;  
  
    margin: 0;  
  
    padding: 0;  
  
    background-color: #333;  
  
}
```

Add style to and <a> tags

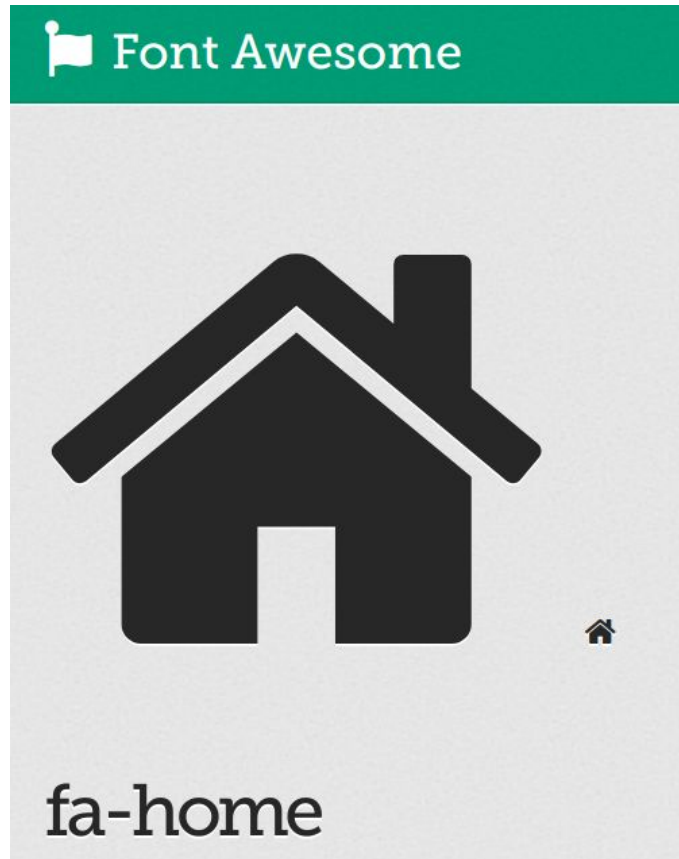
```
ul.nav li {  
  
    display: inline;  
  
    float: left;  
  
}
```

```
ul.nav li a {  
  
    display: block;  
  
    text-align: center;  
  
    padding: 14px 16px;  
  
    color: gray;  
  
    text-decoration: none;  
  
}
```


Add Home Icon

To use the Font Awesome icons, add the following line inside the <head> section of your HTML page

- `<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">`
- refer <http://fontawesome.io/icons/>



Change the link color on hover and right align link

```
ul.nav li a:hover {  
    color : <color>;  
    background-color: <color>;  
}
```

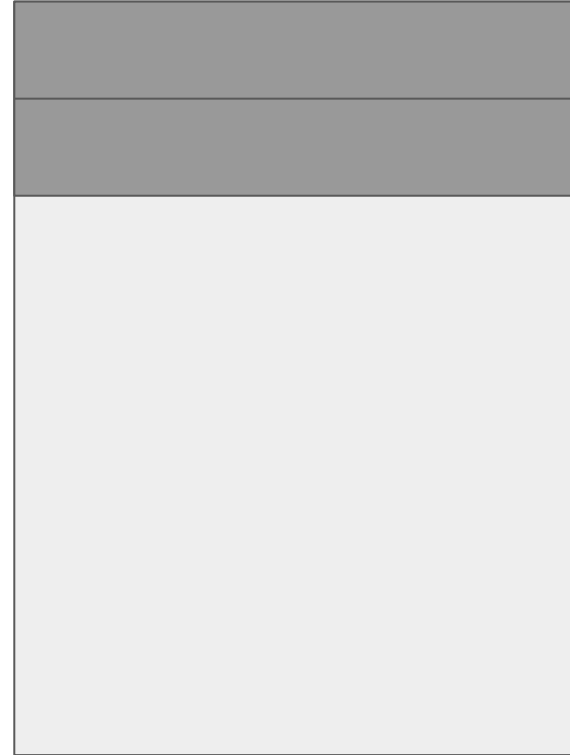
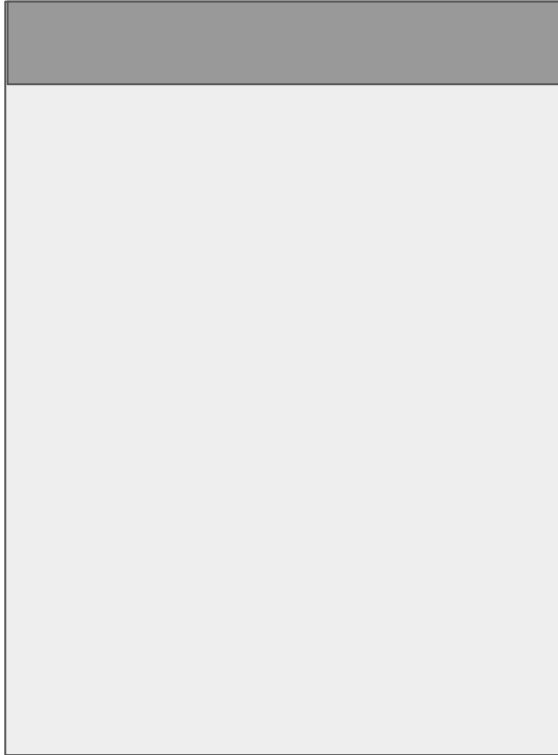
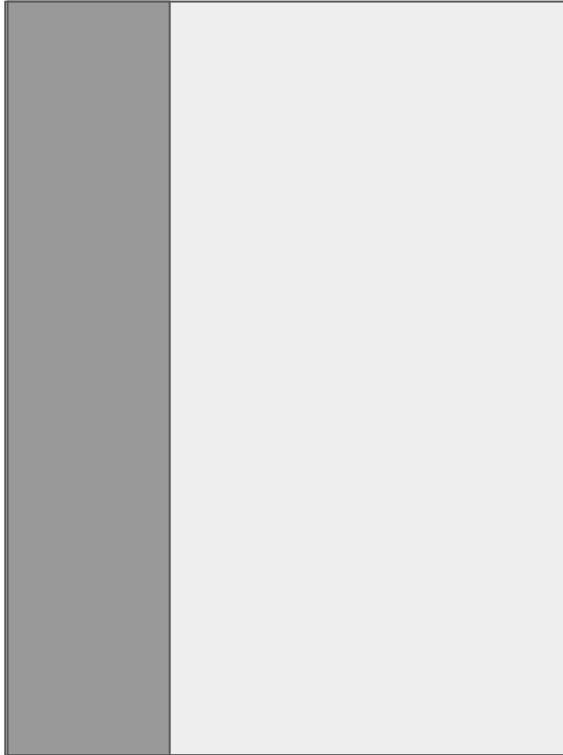


```
ul.nav li.right {float: right;}
```

Create Fixed Navigation Bars

```
ul.nav {  
    position: fixed;  
    top: 0;  
    width: 100%;  
}  
  
.content {  
    margin-top: 50px;  
}
```

Try - Responsive Navigation Bar



Homework

- Make it as similar to this example as possible without bootstrap or other libraries,
 - Portfolio-2-column-example - based on bootstrap
 - You may refer it : https://www.w3schools.com/css/css3_pagination.asp
 - You don't need to use same pictures.
 - Deadline and submission page will be announced on the lecture website

Next Step - Bootstrap

Bootstrap

Build responsive, mobile-first projects on the web with the world's most popular front-end component library.

Bootstrap is an open source toolkit for developing with HTML, CSS, and JS. Quickly prototype your ideas or build your entire app with our Sass variables and mixins, responsive grid system, extensive prebuilt components, and powerful plugins built on jQuery.

[Get started](#)[Download](#)

Currently v4.0.0-beta

