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

3

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

Header

Navigation (Horizontal)

Content (2 Columns)

Header

Navigation (Vertical)

Content (1 Column)

5
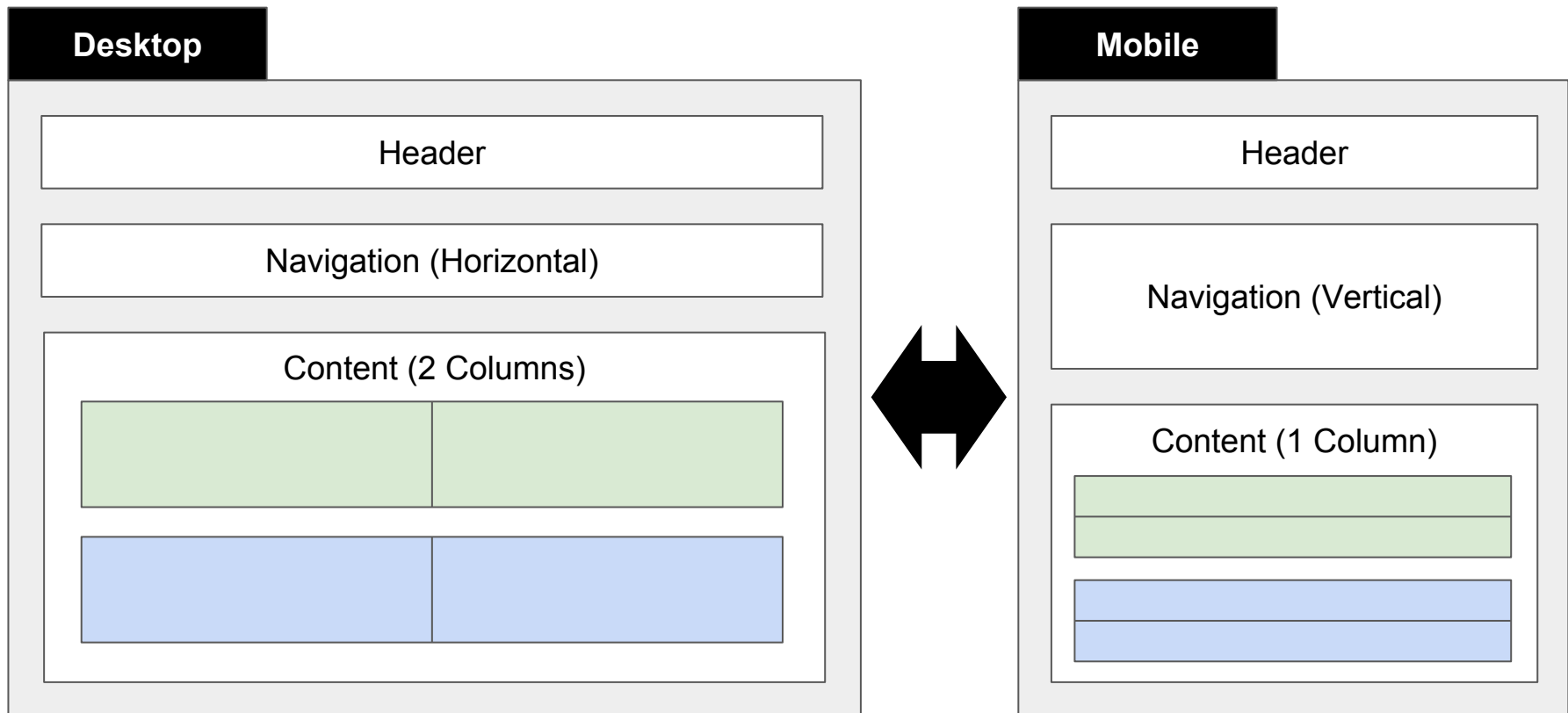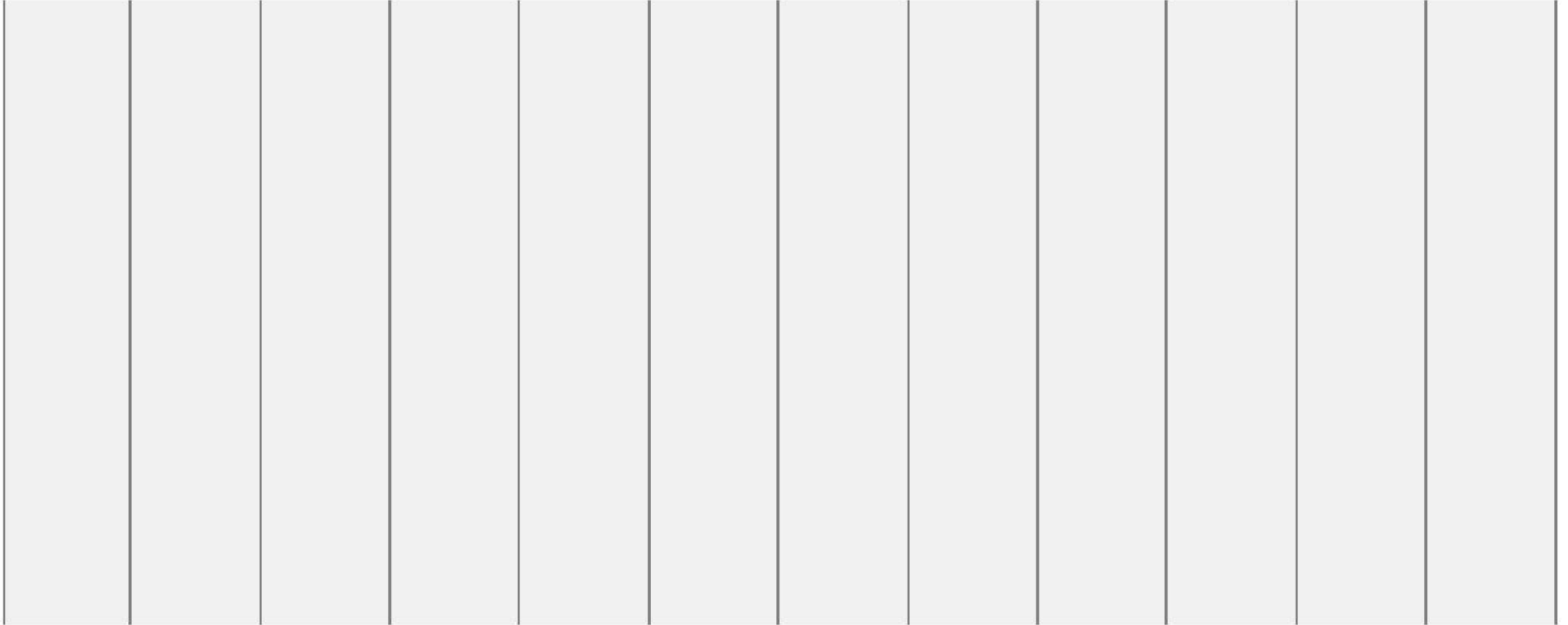
Grid-View

Grid-View makes it easier to place elements on the page
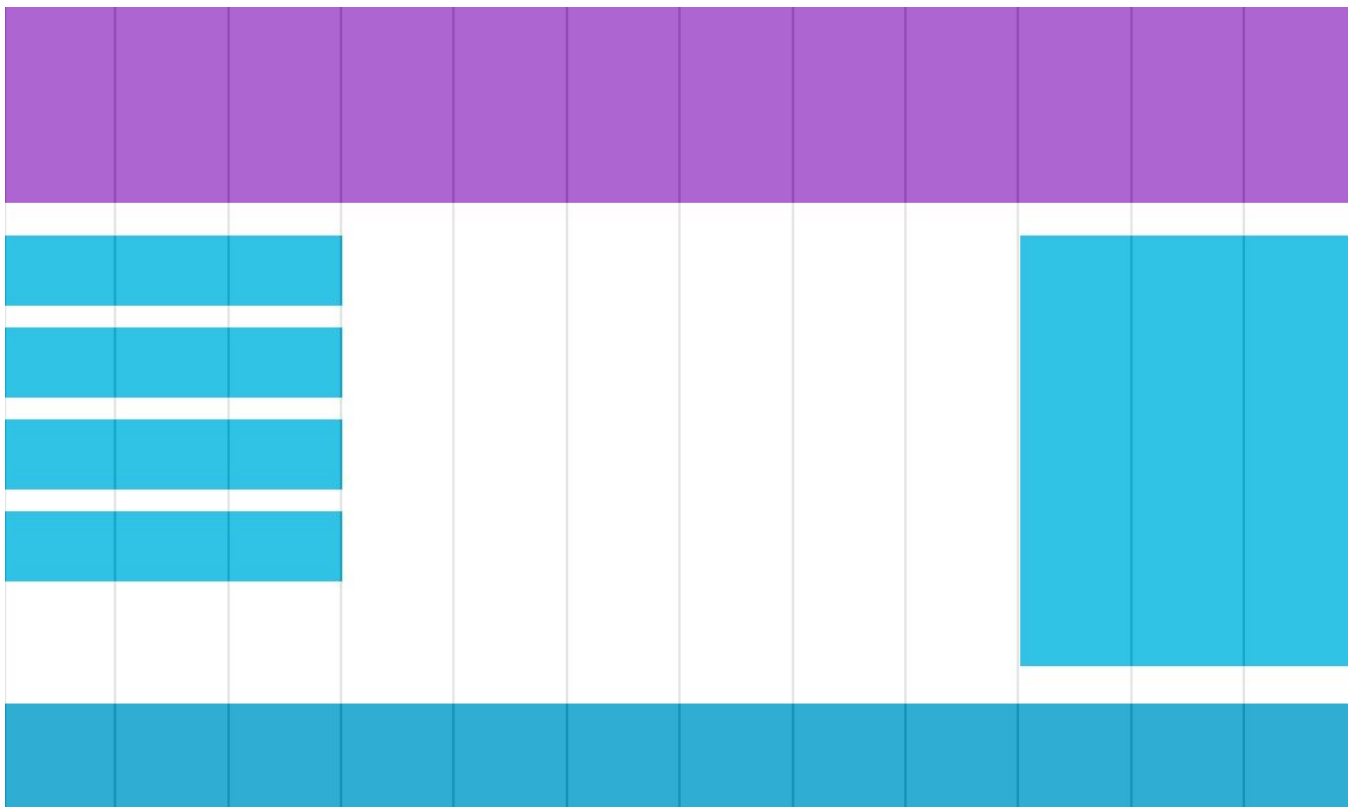
box-sizing property set to border-box

```
* {
    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 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
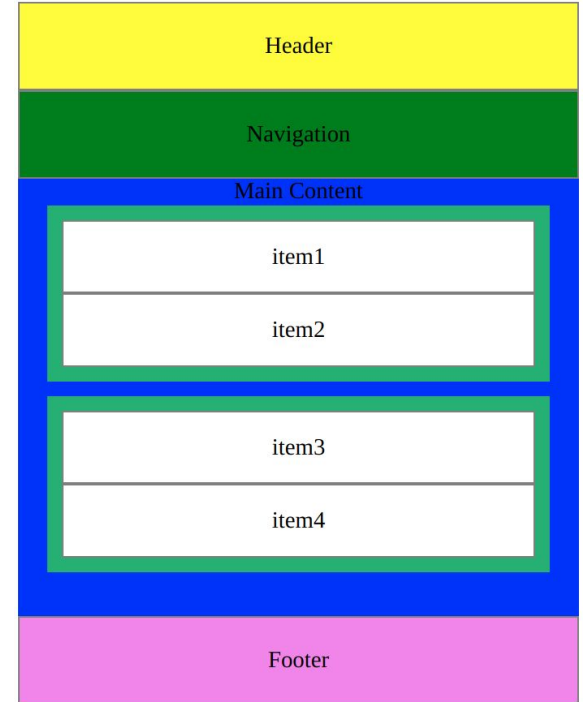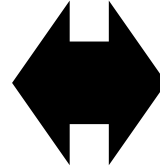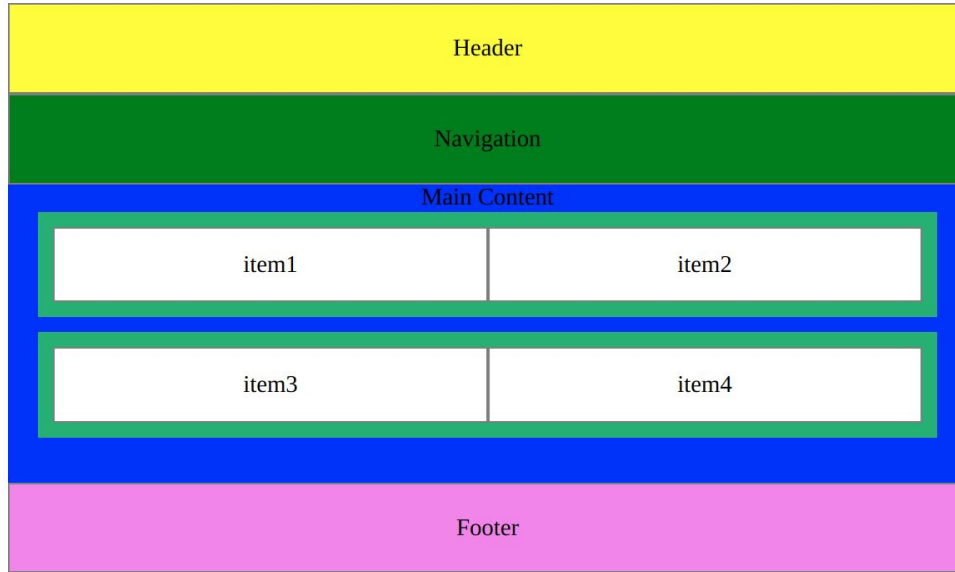
Hint : CSS3 Media Queries

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

}

Try - 3 Columns or 4 Columns Row

Header
Navigation

Main Content

item1	item2	item2

item3	item4

Footer
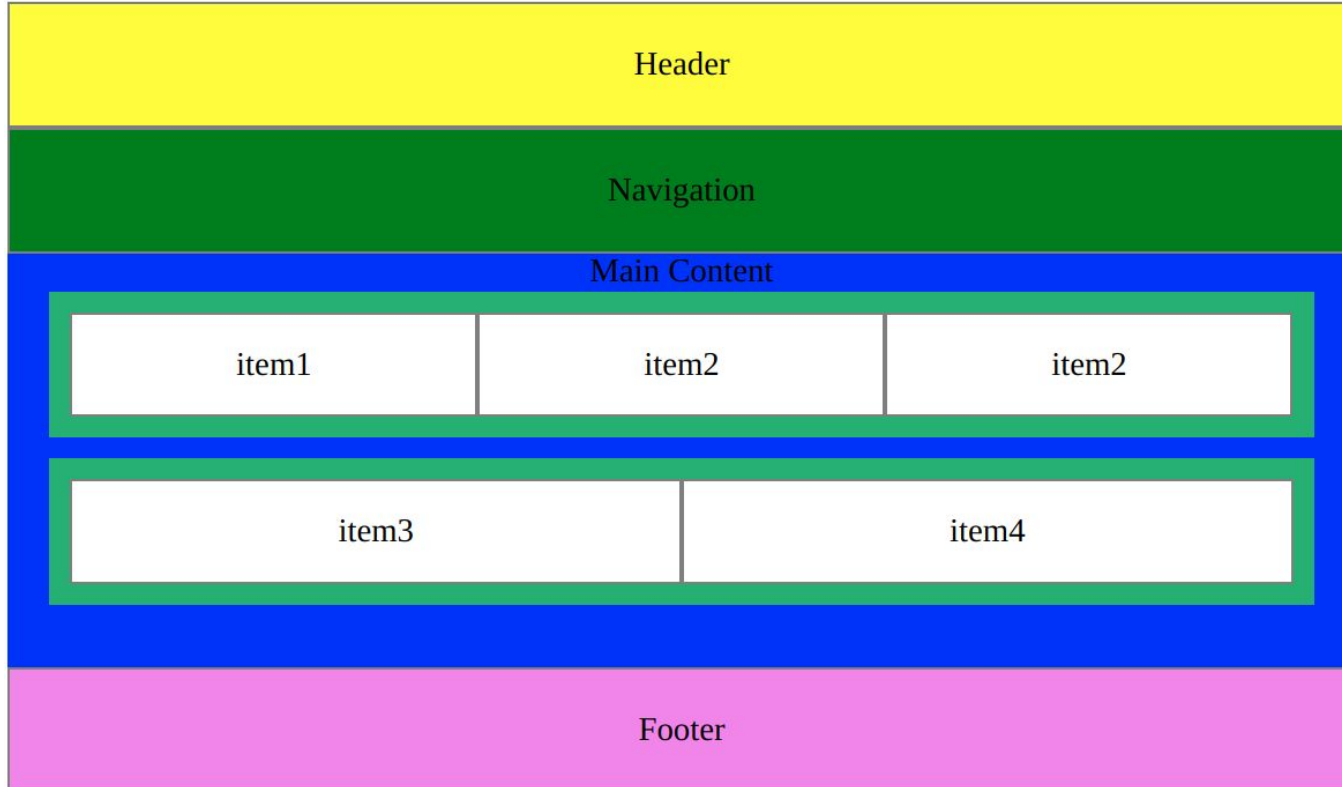
Navigation Bar

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

Add style to <ul> tag

ul.nav {

        list-style-type: none;

        margin: 0;

        padding: 0;

        background-color: #333;

}

Add style to <li> 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;

}
```
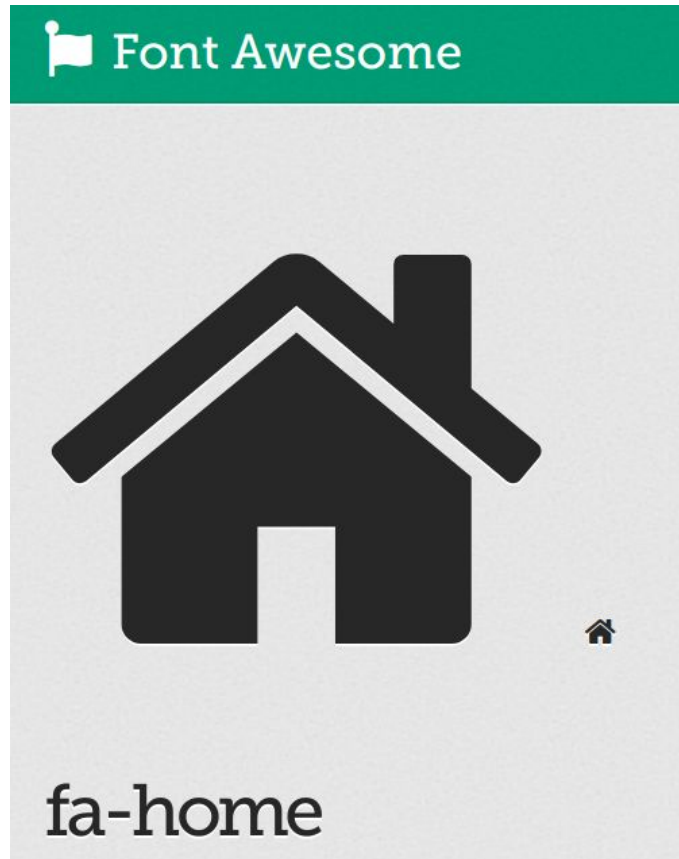
Add Home Icon

To use the Font Awesome icons, add the folllowing 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>;

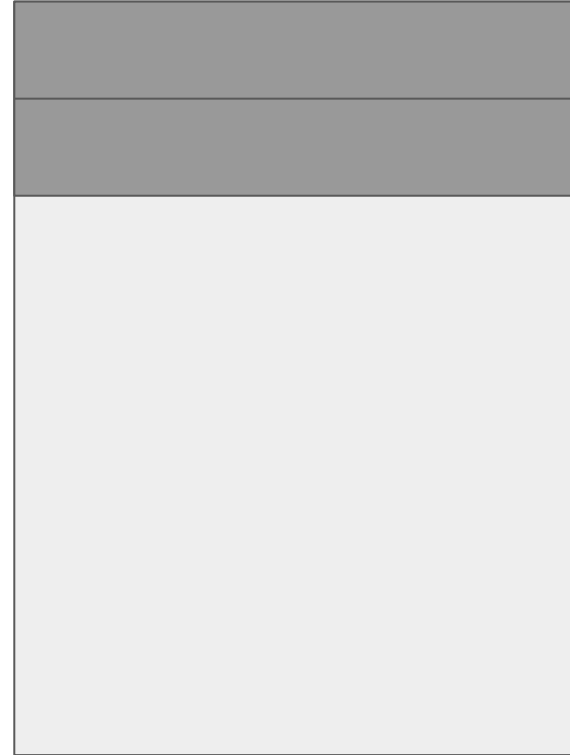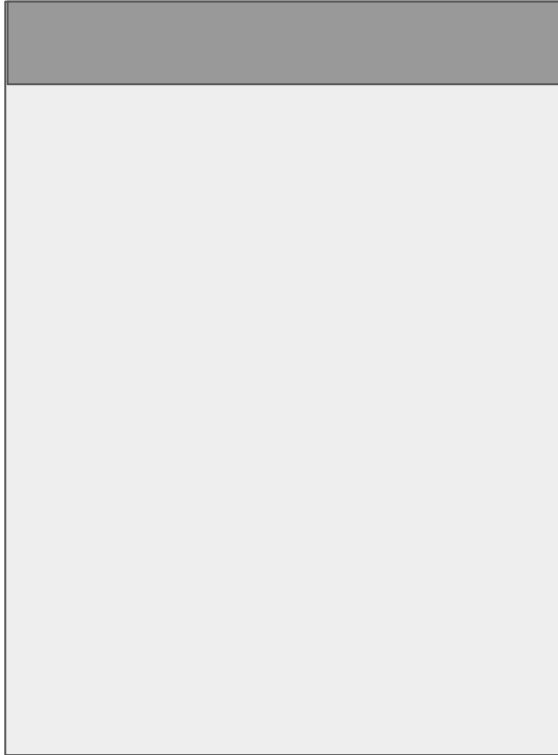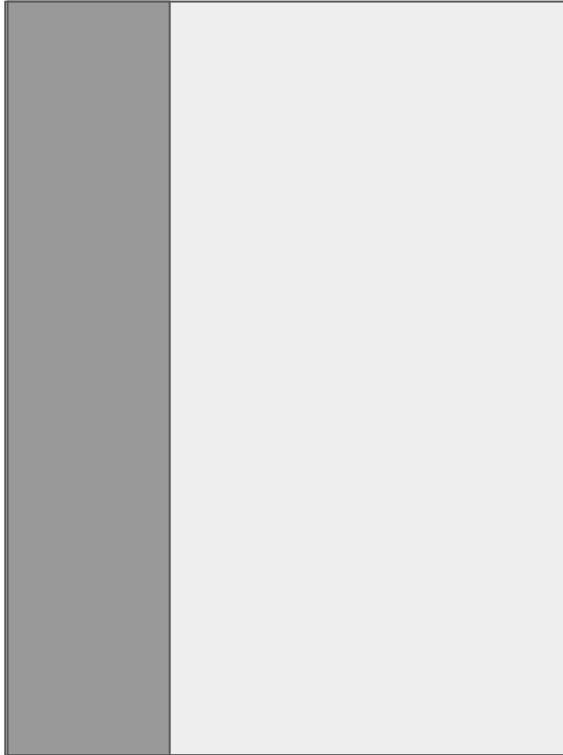   background-color: <color>;

}

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