



# Interactive Multimedia

## Programming 2. Assignment set

Responsive Web Design and stuff

### 1. RWD:

Responsive web design (RWD) is one of the trendiest technology buzz words in web development. The terms was originally introduced in Ethan Marcotte's A List Apart article in 2010. <http://alistapart.com/article/responsive-web-design> .

1. Read the article carefully
2. Review also all the examples in the article. Review the code and see how the responsiveness develops between different versions.

Answer to following questions:

- What is the purpose of the RWD? Why it is used? How things are done before RWD? What is the difference?
- How css media queries can help you building responsive web sites?
- Why to use em (font) based sizing for example margins?
- Article is already 7 years old, do we have any new technology which can be used to achieve same type of UI responsiveness as described in the article. Buzz words: (CSS Grid, Flexbox)

### 2. RWD Examples:

See few RWD examples. Test how different screen sizes works in desktop browser. Test also sites on mobiles.

- <https://www.bostonglobe.com/> (Ethan Marcotte works here)
- This site lists good examples of sites which uses media queries, test few from here: <http://mediaqueri.es/>

Take screenshots of the sites on different devices and screen sizes.

### 3. RWD in practice

Create a simple responsive web page where nothing is defined as pixels. Use CSS-reset (<http://cssreset.com/what-is-a-css-reset/>), and remember to follow coding conventions. Styles must be stored in separate .css files.

Here are few screenshots you should follow:



## WELCOME TO IMP COURSE

### HOW TO DO RESPONSIVE WEB DESIGN

Published: 2016-05-08

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### BASIC RULES ARE SIMPLE, DON'T USE PIXELS

Published: 2016-05-03

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### EVERYTHING MUST BE SCALABLE

Published: 2016-01-01

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Same page in  
desktop browser  
and in mobile  
browser

No horizontal scroll!

No media queries  
used!



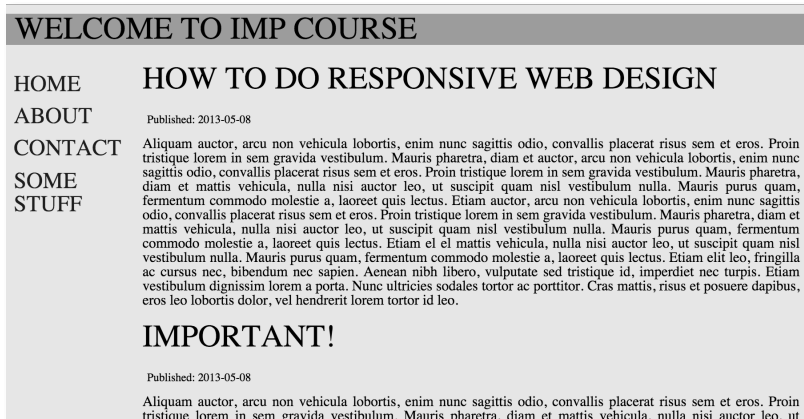
If you have problems on mobile (in scaling), read this article:

[https://developer.mozilla.org/en/docs/Mozilla/Mobile/Viewport\\_meta\\_tag](https://developer.mozilla.org/en/docs/Mozilla/Mobile/Viewport_meta_tag)

After you have done the basic layout, how could you prevent user zooming the site on mobile?

If you wish, you could also use Android SDK emulator to see the rendering in mobile.

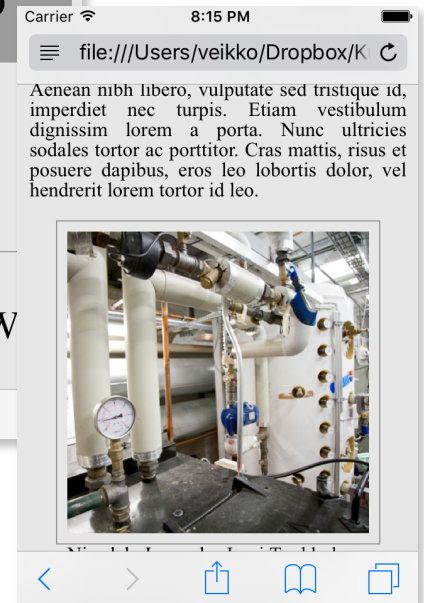
## 4. Adding stuff



- Create a copy of previous task.
- Add a menu to it. Menu should be on the left side of the screen on wide screen, but on the top on mobile portrait screen. See the figures below:



- c. HTML5 specification introduces new semantic elements. One of them is a <figure> element. Can you say why you should use it in addition to standard <img> elements?
- d. Add few figure elements to previous assignment. Images should scale keeping their aspect ratio based on the width of the document. See examples:



## 5. Responsive person list

Create a copy of last week's person list project. Make it responsive!