



# 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 <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?

### 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?

## 4. Running your stuff inside web server (locally)

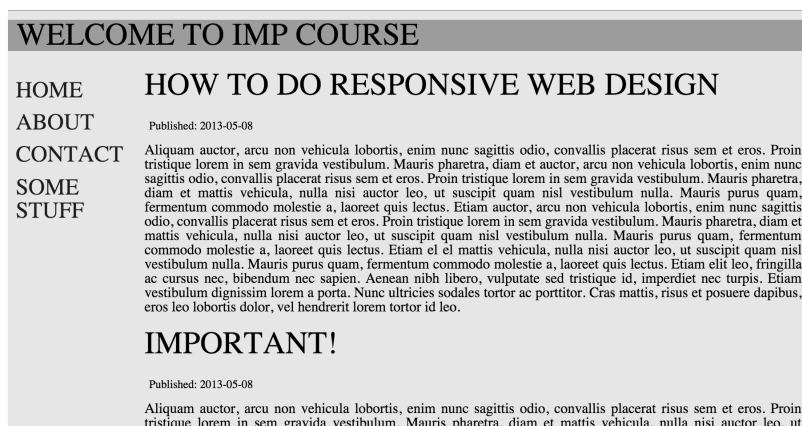
Install express to your Node.js environment. It is simple web server. Follow instructions from here:

<http://expressjs.com/en/starter/installing.html> and from here:

<http://expressjs.com/en/guide/routing.html>

## 5. 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:



## 6. Responsive person list

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