

CS 641, Haik Sahakian

Mobile Web Development

Readings and Assignments
Week 1

Assignments

Assignments: Background

- ❖ The prerequisites for CS 641 are to be comfortable in a programming language, and to have made a web page.
- ❖ If you're new to HTML or CSS, watch all three 12-minute videos and browse the tutorials listed in the "Getting Started with HTML and CSS" section of the "Intro to HTML and CSS" class slides in Blackboard.
- ❖ If you're new to programming, complete the Code Monster tutorial. More information is in the next section of this document.

Assignments: Initial Web Page

- ❖ Make a simple web page, about anything you'd like. Use CSS to style it and JavaScript to add a little interactivity. At a minimum, the page should use the IMG, DIV, and BUTTON tags, and the color, background-color, and transition styles.
- ❖ As an example of interactivity, you could change the look of the page when the user clicks on a button.
- ❖ In the page, use at least one HTML tag and one CSS style that you think no-one else in the class will have used.
- ❖ Feel free to start with the page you made in class.

Assignments: Web Server

- ❖ Please set up a web server at webpage.pace.edu. Instructions are at the end of this document.
- ❖ Place your web page on your webpage.pace.edu web site. Use an FTP client to copy your files there. There are many good FTP clients; I use CrossFTP on Mac, and download instructions for FileZilla are at webpage.pace.edu as well.
- ❖ View your web page on your mobile phone.
- ❖ Create a thread in the Blackboard Discussion Board for this course, and in your thread please post a link to your web page. For 10 points of extra credit, make the link a working link that can be clicked.

Assignments: Install Software

Using the instructions in the next section of this document:

- ❖ Install SASS, which is a pre-processor for CSS that we'll use next week.
- ❖ Choose and install a text editor and an image editor, if you don't already have them installed.

Assignments: Image Editing

Using your image editor, see if you can:

1. Save transparent images in PNG format
2. Cut out part of one image and paste it into another
3. Change the color of an object in an image to a new given color

Programs to Install

CSS Preprocessor

SASS is a tool to help with CSS that we'll be using next week. It can be run from the command line, or from inside code editors. Please install SASS *before* next week's class.

- ❖ SASS installation instructions are at <http://sass-lang.com/install>. Many of you will install Ruby as part of this step.
- ❖ If you already have already installed SASS or SCSS on your system, or in a code editor, you can skip this step.

Image Editor

- ❖ Choose and install an image editing program to use in the course. PhotoShop is excellent but expensive. Gimp is harder to use, but is free. Adobe's PhotoShop Elements is about \$30 second-hand. There are also many good OS-specific image editors available around \$30.

Text Editor

- ❖ If you're looking for a good text editor for all web development including Ionic, I recommend WebStorm. A full license for all JetBrains products is free for students.
- ❖ You can download it at <https://www.jetbrains.com/webstorm/>.

Resources

Hosting Web Sites at Pace

There's web site space hosted by IT services at Pace for each student with information at <http://webpage.pace.edu/>.

It's a good place to put static HTML files for assignments. You can just send me the URL to your site on this server. It will look something like <http://webpage.pace.edu/dtrump/cs641/assignment1/mypage.html>.

Just FYI, if installing the FileZilla client as they suggest to transfer files to the server, choose "Advanced Mode" during setup and then click "Skip" to prevent Yahoo becoming your default search engine and Real Player from being installed.

Learning Programming

If you're just starting out with learning programming, I recommend looking at Crunchzilla's Code Monster site. Its visuals are aimed at school-age kids, but don't mind them — it's the fastest way to learn programming I've seen.

Another advantage to Code Monster is that it happens to teach programming by using JavaScript and the browser's Canvas object to draw graphics. So you get a good introduction to web graphics programming as well.

<http://www.crunchzilla.com/code-monster>

Language Reference

For questions about HTML, CSS, and JavaScript syntax, I recommend Mozilla's Developer Network site at developer.mozilla.org. Microsoft's MSDN and the W3Schools site are excellent sites too.

For HTML: <https://developer.mozilla.org/en-US/docs/Web/HTML/Element>

For CSS: <https://developer.mozilla.org/en-US/docs/Web/CSS/Reference>

Code from Class

I put the code from class up at <http://webpage.pace.edu/hsahakian/examples/intro-html/intro.html>.