APLICAÇÕES PARA A INTERNET

Engenharia Informática

HTML 5 / CSS 3 Review

Objectives:

(1) Recall HTML5 and CSS3

(2) Install Homestead (preferred server environment that will be used in this course)

Note the following:

- Before starting the exercise please read the presentations "AINET Review HTML5 CSS3";

- Every page MUST comply to the HTML5 standard and it must be properly validated as such;

2. Go to the official Homestead web page (https://laravel.com/docs/5.7/homestead) and follow the instructions to install the Homestead box. As soon as the box **starts** to install jump to exercise 2.

Some additional notes:

- On Windows machines install Git for Windows before installing the box. Go to https://git-for-windows.github.io, download the binary and follow the installer's instructions;

- If you have a laptop without virtualization extensions you **must** install a 32-bit version by cloning the following repository: https://github.com/rmff/laravel-homestead-32bit;

- If you are using OS X with Parallels (instead of Virtualbox) you can install homestead by cloning the following repository: https://github.com/laravel/settler;

- In case of trouble follow the video instructions placed on Moodle.

2. Create a web page "markup.html" identical to the one presented on Figure 1. Copy the following text before applying the HTML markup.

Page Header
Navigational menu:
Go To Page1 |
Go To Page2 |
Go To Page3 |
Title of Article 1
Content of Article 1
Title of Section 1 of Article 1
Content of Section 1 of Article 1
Title of Section 2 of Article 1
Content of Section 2 of Article 1
Aside header
Content tangentially related to articles in page
Page Footer

Page Header

Navigational menu:

- [Go To Page 1|](#)
- [Go To Page 2|](#)
- [Go To Page 3|](#)

Title of Article 1

Content of Article 1

Title of Section 1 of Article 1

Content of Section 1 of Article 1

Title of Section 2 of Article 1

Content of Section 2 of Article 1

Aside header

Content tangentially related to articles in page

Page Footer

Figure 1: markup.html

Some rules:
- Make sure you use proper semantics such as header, section, article, aside and footer;
- The navigation links are: http://www.w3.org/TR/html5/ (Go To Page 1), http://validator.w3.org/ (Go To Page 2), https://developer.mozilla.org/en-US/docs/Web/HTML (Go To Page 3);
- Use the validator.w3.org validation service to validate the web page.

3. Based on the previous exercise, create the web page "layout.html" that must match the one presented on Figure 2. To solve the exercise, you need to change the following CSS properties: border, border-radius, padding, margin-top, background-color, width, float, box-sizing and clear. Place the CSS rules on a separated file.
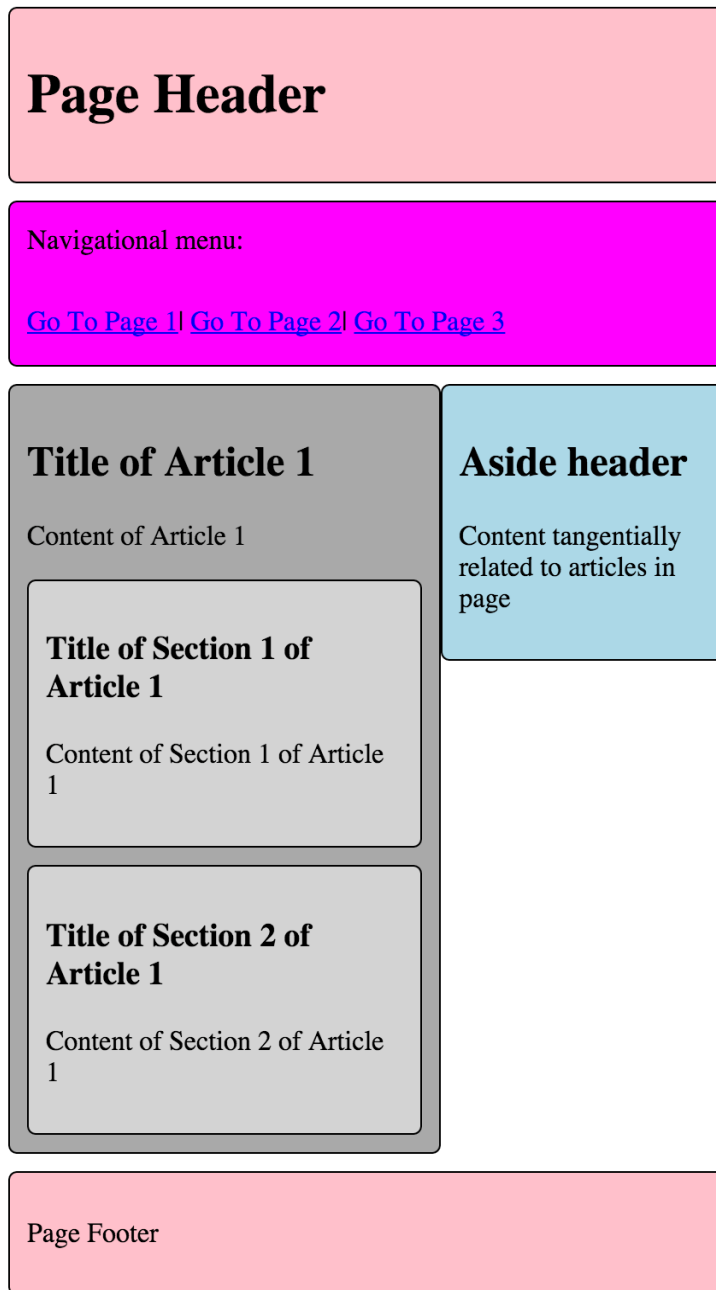
Figure 2: layout.html

When writing the stylesheet follow these guidelines:

- vertical distance between boxes: 10px
- padding inside each box: 10px
- border radius for each box: 5px
- colors used: pink, magenta, darkgray, lightgray, lightblue
- two-column split: 60/40

Note: validate both the HTML and CSS files.

4. After finishing the installation of the Homestead box, follow these instructions:

   (a) On your computer, create a folder where you will place all your course materials (e.g. C:\AInet)

   (b) Locate and open the file "Homestead.yaml". Replace the content of this file with the content of the file available on Moodle

   (c) Edit the "folders" section and replace "map" folders with the folders to use on your computer. Example:
       - map: C:\AInet\adminer
         to: /home/vagrant/adminer
       - map: C:\AInet
         to: /home/vagrant/ainet

   (d) Create a ssh key
       o Open Git Bash.
       o Paste the text below, substituting your email address:
              ssh-keygen -t rsa -b 4096 -C "your_email@example.com"
       o This creates a new ssh key, using the provided email as a label.
       o When you're prompted to "Enter a file in which to save the key," press Enter. This accepts the default file location.
       o At the prompt, type a secure passphrase (or a empty passphrase).

   (e) Inside the AInet folder on your computer (e.g. C:\AInet), create the following folders:
       .\adminer
       .\working
       .\teoria
       .\pratica\ficha1
       .\pratica\ficha2
       .\pratica\ficha3
       .\pratica\ficha4
       .\pratica\ficha5

   (d) Locate and edit your "hosts" file and add the following lines at the end:
       192.168.10.10 adminer.test
       192.168.10.10 ainet.working.test ainet.teoria.test
       192.168.10.10 ainet.teoria.09.complete.test
       192.168.10.10 ainet.teoria.10.ourframework.test ainet.teoria.10.laravel.test
       192.168.10.10 ainet.pratica.1.test ainet.pratica.2.test ainet.pratica.3.test
       192.168.10.10 ainet.pratica.4.test ainet.pratica.5.test ainet.pratica.6.test
       192.168.10.10 ainet.laravel.working1.test ainet.laravel.working2.test

   Windows tip: create a shortcut with the following target:
       "notepad c:\windows\system32\drivers\etc\hosts"

   Add make sure that the shortcut is only executed as an administrator.

Mac/linux tip: execute the following command:
"sudo nano /etc/hosts"

(e) Run "vagrant up"

(f) Place the "markup.html" and "layout.html" files inside the folder c:\AInet\pratica\ficha1

(g) Open your browser (e.g. Chrome or Firefox recommended), and type:
http:// ainet.pratica.1.test

(h) You should see your "markup.html" file being served by Homestead. Now, replace "markup.html" with "layout.html" and check if the page is rendered correctly;

(i) Now that your Homestead box is working, inside the folder c:\AInet\pratica\ficha1 create a web page called "test.php". Edit the file and write:
<?php
phpinfo();

(j) Open your browser and type:
http:// ainet.pratica.1.test/test.php

(k) The browser should render a page similar to the following one:

Alternative environment

If the Vagrant Homestead environment does not work on your computer, you can use any other tools that allows you to run PHP 7 and Laravel. We recommend to use "**Laragon**" (https://laragon.org/).