

Lab 1: Web Programming - CSci130

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You can use the specification of HTML5 <https://www.w3.org/TR/html5/> to get examples about the different tags.

Keep the different documents that you are creating during the lab sessions as they can be asked later as a part of the “attendance and participation” grade.

Goals: To create documents with HTML5 and to get familiarized with the HTML5 tags.

The goal of this lab session is to create documents with HTML5 and to focus on the semantic of the document by using appropriate tags for the different elements. Through the practice and the use of HTML5 tags you will remember how to use them. Everything can be implemented with a text editor such as notepad++.

Warning: Avoid to just do some copy/pasting from some other websites. It will be counter productive for your performance in the midterms and during the final. I know you can copy/paste/quora/stackoverflow but you need to be proficient in your craft and during job interviews.

Exercise 0. Multimedia (finish the activity given in the previous class)

Create a webpage with examples highlighting:

- The presence of a video (from a file located in a folder of your computer)
- The presence of a video from youtube
- The presence of an audio file
- The presence of an image

Exercise 1. Link between pages and inside pages

Create a set of 5 web pages (one file per page) that are linked to each other, so you can reach each page from all the other pages with a list of items (ul and li tags). In addition, each page contains an article that has 5 sections, and you can reach the **top** and the **bottom** of the page from each section using links. Each page has a header and footer. The footer includes some information about the author (copyright, name, ...) and date of the creation of the page (use the appropriate HTML page)

- Step 1: Represent the organization of the pages on paper with the different links.
- Step 2: Create each webpage by giving them appropriate names.
 - Start with the first page, as all the pages will be very similar
- Step 3: Add some content in the sections (such as large images) to verify that the links are working (if there is not enough content the scrollbars will not appear and you cannot verify that you can jump from one section to another section within the page).

Exercise 2. Reproduce a page

Create a webpage that reproduces the pdf file that is given on blackboard.

(the pdf is in 2 pages but you have to create a single webpage)

Exercise 3. More practice

Create a page containing a table with 1 row and 4 columns. Each cell contains an image of size 50x50. Then you click on the image you get to a page displaying the whole image of size 1000x1000; this page has a link to go to the main page with the table, and links to go to next and previous images.

You can use xnvie to edit and crop images.

Exercise 4. Creating your own HTML5 notes

Create a webpage that uses all the different elements that were seen during the class. You can select a topic of your choice (it must be politically correct and respect the values of the Fresno State). The content of the textual information can be random or it can be meaningful. For instance, you may create a webpage that present the different features of HTML5, using HTML5.

You must use at least:

- 10 different tags related to the sections.
- 5 different tags related to the grouping content.
- 20 different tags related to the text-level semantics.

(<https://www.w3.org/TR/html5/>)

Exercise 5. Starting the project

In relation to the description of the project, organize and set the structure of the required HTML pages using proper HTML5 practices, in particular by using ARIA guidelines by specifying the role of key elements in the webpages.

Think about cases in which you may need DIV or SPAN tags. Justify and discuss these choices.