

COMP 484L - Web Engineering I Lab

Spring 2018

Lab 2 and 3: HTML and CSS

Group assignment for two

- Due: 10 days after upload
- Late submission penalty: 10% per day up to 3 days. Submission is not accepted afterwards.
- The value of this lab assignment is equivalent to 2 assignments.

Requirements:

- Submission type must be a zip file called **484-lab1-<lastname1-lastname2>.zip** including html and css files and other resources such as images with proper directory structure.
- Allowed software to use for the assignment is a basic text editor, such as Notepad.
- Honor indentation and write clean code.
- Add comments for clarity.

Some tips:

- You will create 3 HTML files along with 4 CSS files in this assignment. Each html page will have its own CSS file for page specific styles and there will be also one CSS file for all html pages, where you will add the common styling rules.
- Follow best practices.
- Define your CSS styling rules as an external style sheet as far as possible and avoid repeating the styling rules in individual elements as inline style or in the html document "head". It is acceptable to have inline or embedded styling if necessary.
- Wherever required to style a group of elements, wrap block elements in div elements and then apply the styling to the div. For inline elements use span instead.

All pages:

- All pages will share the same header and footer so remember to add them to all pages.

Header: contained in <header>

- At the top of the page, add a header section with lightgrey background color and a logo of your own portrait (**team member #1**) on the top left of the header section. (use css float property)
- A <p> element which will appear on the right side of the image with a few lines of text with the following format. (Assume team members are Alice Jones and Bob and Alice's portrait is the logo)

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Jones&Smith Inc.
Alice Jones, CEO
alice@JonesnSmith.com

Welcome to our website!

- Add a welcome message contained in a `<h2>` element in header, which will appear under the floating image (research “clear” css property).
- Download a transparent @ logo and layer it over the header logo (portrait) using CSS. The two images don’t need to have the exact same size, @ can be of the equal size to the logo or smaller.
- On the top right corner of the header, create a form including a label "search" and a text or search input where the user can enter a search string and a submit button called "search". When the user clicks on the "search" button, the form content should be sent to <http://www.google.com/search> , and the method of the form should be "GET". The user should see the results of the search in google. (browse the internet for some examples)
- Next to the search box add 2 options for the user to select from:
 - "Search the web"
 - "Search within the website"

One of those options at a time should be selectable (how?), but they don't have to have any impact on the search functionality at this point.

Nav: nested in header and contained in `<nav>`

We are going to have 3 html pages. We need a navigation to move back and forth through those pages. The navigation section should have a heading called "Links" and an unordered list of links to page 1, page 2, and page 3 with titles:

- Sign up
- Privacy Agreement
- About us

When the user clicks on each link from any page they should be taken to the proper destination page. Using CSS rules create a drop-down menu with header "menu" and 3 items, each for one html page. When hovering over the menu header, the menu must expand and when moving away it should collapse. While expanded, the menu item with the cursor over it must have a different background color.

- With menu expanding/collapsing, the rest of the page content should not move down and move back up.

Footer: contained in <footer>

- Create a footer section at the bottom of your page, with a lightgrey background color and the same logo you added to the header at the left.
- Add a logo of your own portrait (**team member #2**) on the top left of the footer section. (use css float property)
- A <p> element which will appear on the right side of the image with a few lines of text with the following format. (Assume team members are Alice Jones and Bob and Alice's portrait is the logo)



Jones&Smith Inc.
John Smith, CEO
John@JonesnSmith.com

[Copyright info here](#)

- Add a sentence about the copyright of the page including the copyright symbol, using html character entity references to have something like: "©...., INC. ALL Rights Reserved". Make that copyright statement a link to a second html page, described at the end of this section as "Page 2".
- At the right side of the footer add an <address> element with "Contact us at: <youremail@yourwebsite.com>" text and some random address and phone number using a <tel> element. The email should be a link. When the user clicks on the link, their email client should be opened with your email address prepopulated as the destination.

Page 1

- Title of the page: "Sign up"

Article: contained in <article>

- After the header section of your page, create a main section and add the following components in it.
- A heading with one or two lines such as "Sign up today to receive updates"
- A form (post method, content to be sent to http://www.deitel.com) with the following components:
- First name, last name, email, password, re-enter password, birth date (day, month, year) inputs, each using the most appropriate input type.
 - First name should have the auto-focus.
 - First name, last name, email should have a placeholder value showing to the user as a guide.
- Birth date should show January 1 1998 as the default value.

- A drop down created by "datalist", where the user can select their major among the following options:
 - Civil Engineering
 - Computer Engineering
 - Computer Information Technology
 - Computer Science
 - Electrical Engineering
 - Engineering Management
 - Manufacturing Systems Engineering
 - Mechanical Engineering
- A color selector input with label "Your favorite color: "
- A number input type with label "Number of years in college", where the user can select 1, 2, 3 or 4 from a drop down.
- Tel input with label "Phone number: " where the user can input a phone number. Enable html validation on this input field. The acceptable phone number must be in the format of: ###-###-####
- URL input with label "Link to your homepage: " where the user can input a URL. Disable Html validation on this input field.
- A set of options called "Years of experience" and options:
 - 0-5, 5-10, 10-15, 15-20, 20+
 - only one of the options should be selectable at a time.
- A Range input with label "Skill level in <...>". The available range should be 0-10.
- A set of options that the user can select any number of them at a time, called "Contact Preference". Options:
 - I would like to receive emails about new products and offers
 - I would like to receive emails about my account and membership
 - I would like to receive mail
- The form should have autocomplete enabled for firstname and lastname but disabled for email, tel, URL.
- Submit and reset buttons. Submit button should say "Sign up". Reset button caption should be "Reset".

Some CSS:

- Add a background image for the page, vertically tiled.
- The form should be centered in the window and should cover 50% of the window width with a solid white background image. The form must have a 3D silver frame (groove) and the distance between the frame and the content of the form needs to be 30px.
- The form elements must be center aligned inside the form borders.
- Using non-inline css, using an inline wrapper element (what element?) and a class selector for that wrapper, define font family and color for "favorite color" words in " Your favorite color:" the font of that section of the label to be "Comic Sans" and "red".

- Title of the page: "Privacy Agreement"
- Page 2 must have the same Header, Footer and Nav sections of the first page.

Section: contained in <section>

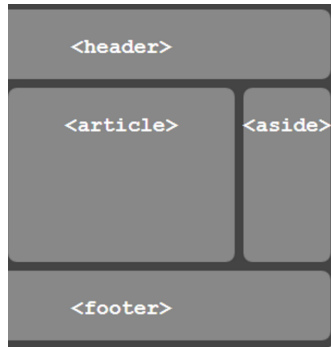
- A paragraph called "Department specific policy with a table. The table must have a header (department, links). The first column should include the name of a department item, and the second one a link to a URL describing that element (you can link to random Wikipedia pages). At least one of the links must be a clickable random image. The table must have a footer.

An Article inside the section: use <article>

- In the Article section of the page, include a few long paragraphs of random text as the privacy policy.

Some CSS:

- Given the text content is already inside "article" element, set a class attribute for the "article" element equal to "privacyArt".
- Using media queries and css "class" selector for "article" element set the following styles:
- When the screen width is greater than or equal to 1025px, show the main text content in 4 columns, and column gaps 25px, background color skyblue
- When the screen width is less than 1025px, but greater than 480, show the text content in 3 columns, and column gaps 30px, background color skyblue
- When the screen width is less than or equal to 480px, show the text content in 2 columns and column gaps 20px, background color **silver**,
- In all cases the rule between the columns should not be visible
- The texts in columns must have "justified" alignment.
- If the screen width is between 700 and 900, the font color should be purple and the text in the columns should be left aligned.
- For the Article section, use background-attachment and background-image CSS rules to add a small image (larger than logos) as follows:
- The image should appear on the left-bottom corner of the "article" section, above the footer. The image must be visible at the same position when scrolling up and down.
- Add a side bar section to the document using "aside" and add "Contact us" (address, phone, email, ...) to the side bar. It should cover %20 of the width of the window. The sidebar needs to have a different background color compared to the article section. The sidebar should have the **same height as the article and should not finish abruptly** at the point where the text of aside element finishes, but it should have the same height as the article section without setting the height explicitly to a number.
- Hint: try wrapping the "article" and "aside" elements inside a new "div" container and then experiment with the following styling rules for the aside element: **position, top, bottom, width, right**
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Page 3:

- Title of the page: "About us"
- Page 3 must have the same Header, Footer and Nav sections of the first page.

Article:

- In the Article section of the page, add
 1. Two p elements with large enough content.
 2. First section should be a "Details" section, with a "summary" section of one short sentence about your company or website. Also include a few paragraphs of random "About us" text in the "details" section. The paragraphs should only appear when the user clicks on the little arrow on the left of the summary (html details and summary elements). Add the map image inside the detail section.
 3. Add a section with heading "Contact us", which will have a random address, phone number, and email address and an image (html address element).

Some CSS

- Using universal selector *, make all elements **in this page only**, highlighted when hovered over. **Exclude** major elements like body and html from this behavior. Hint: assign a class to all desired elements or assign a class to all undesired elements and use css `:not(.classname)` selector.
- For long P element #1 and #2, set a margin of twice the normal size (2em) in all 4 directions. Set a padding of 2em for p element #1 only.
- Long P element #1: should take 30% of the screen width and have a height of 150px. The text must stay within the bounds of the enclosing box, and not bleed into other content. A scroll bar should be added to let the user see the rest of the text.
- Long P element #2: should take 30% of the screen width and have a height of 150px. The text must stay within the bounds of the enclosing box, and not bleed into other content. The text not fitting into the box must be hidden.