

NET3010 Lab 6: Dynamic Website Design (CSS Layout)

Note you will need to complete this lab by uploading all required files onto BrightSpace. You are responsible for the content of these lab instructions on your weekly quizzes and exams.

Read the entire lab instruction before starting.

This lab is to be completed on BrightSpace any lab worksheets handed in will be discarded. Carefully follow the procedures outlined in this lab worksheet. **If at any time you are unsure or are having problems, consult your lab instructor.**

Required Equipment: XAMPP, HTML editor, Word Processor.

Part I: DOM Element Targeting

In this lab we will be focusing on introducing some front-end dynamic content to our company web projects (the one you last worked on in lab4). For this project you will need to identify and build pages that we can make dynamic. One will be a form, which we will get to in Part II, but in Part I you will need to identify one or two sections of your website where you will have part of the page change after loading (dynamic). The content can be text or images and an image gallery or carousel would be great choice.



When you have identified a section of your web site to add some dynamic content make sure you add a note in your style guide. For example, if you have a section of cycling images, in the style guide note where the images are drawn from, the dimensions and any formatting that will be applied to the images, interface elements, as well as the timing if you use a timer like in our in-class example.

Acceptable options (choose **2** or more):

- A pool of text blocks that are chosen randomly and inserted into the page when loading.
- An image gallery where the images grow when hovered over.
- Articles that show headlines but expand into the full articles when they have mouse-over focus.
- An image that cycles through a set of sources.

- An animated element of the page, such as a clock in the banner.
- A custom CSS card element that adds information to your web page and can be manipulated in some way.



When you have decided on your dynamic features keep in mind that you are limited to plain JavaScript, CSS, and HTML. There are a lot of tools out there that will do these things, but the learning moment here is in how you implement these things from scratch. This will make it easier to understand if the overhead of a large framework or library is worth it for a simple website dynamism. Whatever approach you use, you need to manipulate HTML elements and/or CSS properties using the DOM.

Part II: Form Validation



In this part of the lab we are going to create a registration page for users. We will do a purchase form a bit later in the course once we start looking at back-end development. In your registration form you will collect and validate the following data (at a minimum):

- User's real name (mandatory)
- User's email (mandatory, well formed)
- User's mailing address (only mandatory if you have a shipped product)
- Who referred the user (implement as a radio button and include things like social media, advertising, word-of-mouth, internet search). This feature must include an 'other' option which, if selected, causes a text input to appear and at that point be mandatory. Deselecting 'other' (by selecting something else) will cause the text input to no longer be mandatory and to be removed from the screen.

You can collect other data but make sure that you form all the input elements correctly and provide only inline web form validation feedback and all mandatory fields must not use the HTML mandatory attribute.



Be sure to include a note in your style guide about the format in which the form data is collected.



When your style guide updated and your dynamic pages are complete, please zip up all the files (**lab6.zip**) created and modified in this lab including a copy of any images that you have used in your growing website. Please

preserved the folder structure in your .zip file.

- updated **style guide** document
- **all .html, .css, and other script files** for your website
- **all images** used in your website

Upload the zip file to BrightSpace.

Marking Rubric (/20)

1	Zip file that includes style guide, all HTML, CSS, JS, and image files used.
2	Dynamic content notes added to style guide.
6	Acceptable dynamic content added to web page (must include JS or advanced CSS (animation)). (Only uses HTML, CSS, and JS)
1	Form uses proper HTML 5 to markup the form (not validate the form).
6	Form uses only custom JS validation to add feedback into the DOM.
1	Form has a formatted email field.
1	Form has referral radio button properly formed.
1	Style guide includes note on expected format of returned data (name/value pairs).
1	Student's name is in all submitted code files.