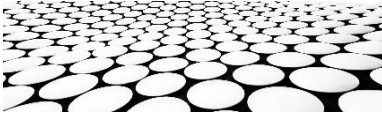


SEG3125 User Interface  
Design and Analysis



## MODULE 4 – TUTORIAL/LAB

### Design of a Health Service Site Using Design Guidelines



#### GOALS

Design principles help us design sites that will make users productive. The purpose of this laboratory is to build a site for a health service business that will respect the design principles presented in the book *Design of Everyday Things* by Dr. Norman. As we saw in the videos, these principles are visibility, feedback, affordance, mapping, constraints, and consistency.

During this lab, you will:

- Learn a JavaScript framework, **Bootstrap**, to make website design easier with a more modern and standardized "look".
- Develop a semi-static site (responding only to the components of Bootstrap) in which you pay particular attention to two principles of design: visibility and consistency.



#### SUBMISSION DEADLINE

- Submission opens: Thursday June 3<sup>rd</sup>, 12pm
- Submission closes: Sunday, June 13<sup>th</sup> 2021, 11:30 pm
- Peer review opens: Monday, June 14<sup>th</sup>, 12pm
- Peer review closes: Thursday, June 17<sup>th</sup>, 11:30pm



#### SUBMISSION METHOD

- Do your submission in peergrade. Lab 4 is listed there.
- Submit either a link or text (containing a link) so that your colleagues and the TA can see the rendering of your online grocery and navigate in it.
- Make sure your new link DOES NOT replace a previous lab.
- **ATTENTION:** Any code or even "small piece of code" that you take from a website such as *stack overflow* or other sites should be acknowledged. It is important to site your sources. In your submission text, you must indicate "Code for X inspired by ..... (html link)".

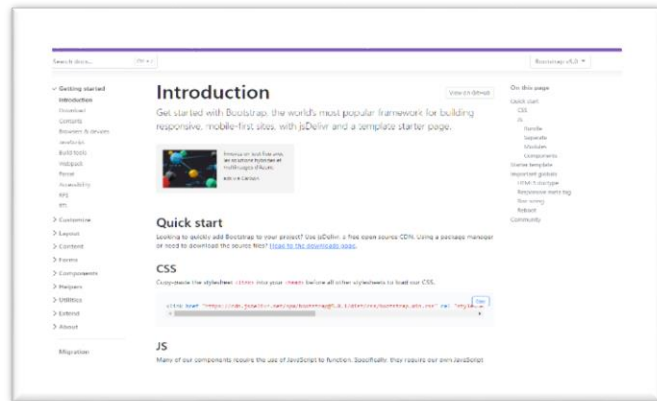


## INSTRUCTIONS / TUTORIALS

We are continuing our exploration of the very popular HTML/CSS/JavaScript technology for website construction. This week we will be using a framework called Bootstrap. Next week we will continue with JQuery, as Bootstrap and JQuery are often used together. But for this week, we're only focusing on Bootstrap.

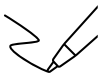
You have seen so far that HTML/CSS is used for the design of your web page and that JavaScript allows actions to be performed (modification of the DOM according to events).

Bootstrap is used to help write HTML, having already pre-encoded several styles in a CSS style sheet that you must import into your HTML file, and also having pre-programmed JavaScript scripts in a script file that you must also import into your HTML file.



Bootstrap has therefore already done part of the job for you ... It offers standardized styles for colors, buttons, certain navigational patterns, etc. All of which results in a prettier website with less effort. Now that you have worked with basic HTML/CSS/JS in the last 3 labs, you will be able to better appreciate what Bootstrap offers.

I suggest you use, once again, the [w3schools.com](https://www.w3schools.com) site, to explore what is possible to do with Bootstrap. We suggest to use [bootstrap 5](https://getbootstrap.com/docs/5.0/) in this laboratory which is the latest release of the framework, however the tutorial is using bootstrap 4 (which is quite similar)



## DESIGN

In this laboratory, you must choose a **health service business** from the following 2 options:

1. Physiotherapy business
2. Veterinary business

What is common to these businesses is that:

- There is a physical place (address) to go to
- You must make an appointment for a service
- Several services are offered (e.g TMJ Pain, Custom Knee Brace, Vestibular Rehab for physiotherapy or Surgery, Preventive Care, Dentistry for the Veterinary clinics).

I strongly suggest that you make paper sketches of your site first. As mentioned in the video on colors, you have to think monochrome first, even if later you include colors. Thus, the paper sketch is the best way to quickly suggest several ideas in monochrome.

Once you start programming, be sure to pay close attention to your choice of colors and fonts so that they reflect the image you want to project for your site. One of our themes this week was visual communication. Ensure good visual communication complementary to a good verbal communication.

If you don't know where to start, get inspiration from existing sites by looking at what you like and what you don't like in terms of layout, colors, fonts, text alignment. Ask yourself if these sites offer good visibility. Ask yourself if the site has good aesthetic consistency and how it is created (through a color them perhaps).

The sites below are just a few examples (Not necessarily good ones! You'll see.)

<https://www.physiocarephysiotherapy.com/>

<https://www.optsc.com/hunt-club-physiotherapy-massage-therapy>

<https://maplecarephysiotherapy.com/>

<https://aylmerveterinaryclinic.com/>

<http://www.billingsbridgemanimalhospital.ca/>

<https://www.carlinganimalhospital.com/>



#### STARTING POINT

Ryan Matte (your TA) provides a [code file](#) containing multiple Bootstrap components (in a mixed-up order). You can see the rendering [here](#). I suggest you browse through this code in which Ryan has written several comments and put links to appropriate sections of the tutorial offered by w3schools.

This is only a starting point... your site should reflect your design choices.



#### CODING

You have to make a single page, because we will think about a "mobile first" design which aims at presenting the information in a vertical way in which a user scrolls down for more information. Your site must not contain lateral navigation (no tab). This is definitely not a general design rule, this is only a constraint for this laboratory to force you towards a vertical design, better suited to mobile phones.

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We will continue this site next week using JQuery to add payment information validations, etc., but this week, your focus is ONLY on the design of your page, on the principles of design and on the use of Bootstrap for the implementation on your page.

I will use the word *health clinic* to refer to the veterinary or physiotherapy clinic. Your web page (one page) must comply with the two design principles listed below.

**Visibility:** *Where am I? What can I do from here?*

The following items must be present and easily visible. You have to think about how to organize the information, and how to present it.

- Health clinic Information:
  - on which site the user is (logo, image, or company badge)
  - location (health service address)
  - the services offered and their prices (the user wouldn't want bad surprises once at the clinic – include at least 5 services)
  - who are the experts? (the user wants to be confident and to know a little more about the experts working at the health clinic – describe at least 3 experts)
- Health clinic possible user actions
  - Selection of a service
  - Selection of a date and time
  - Enter their contact information

**Consistency:** *The elements that I see are consistent within the page, and consistent with the standards that I know.*

- Aesthetic consistency:
  - Decide on which elements in your page will create a consistent look.
  - Decide on the meaning of each font and color, in your page, to improve consistency.
  - Also, remember that "*Fonts have moods*". Bootstrap uses the Helvetica Neue font, but maybe it doesn't suit your business. Is it a fun easy-going health service provider or one that is more traditional and wants to offer a very classical look?
- Functional consistency
  - External
    - using standard Bootstrap components gives you this consistency of known functionality (lists, buttons)
    - use of standard navigation patterns
  - Internal
    - Bootstrap already suggests color choices to express different types of messages (success, warning, danger, etc.). You can adapt these color choices to “fit” the style of site you want to show.

**Next week, we will focus on 2 other principles: feedback and constraints.**

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## EVALUATION

- This laboratory is worth 3.5%.
- Peer evaluation will be based on your website following the requirements given above. In peergrade, you can preview the questions included in the peer evaluation.
- Any delay beyond the deadline will have a penalty of 10% per day.
- ATTENTION: Any modification to your website AFTER the submission deadline will result on a reduction of 50% of your grade.



## QUESTIONS

- You can ask your questions in the Module 4 discussion forum on Brightspace.
- You can also send your questions directly to the TA you are assigned to. If your last name starts with a letter between A and J - please send mail to Abdorrahim ([abahr010@uottawa.ca](mailto:abahr010@uottawa.ca)), otherwise send an email to Xinyi ([xhe068@uottawa.ca](mailto:xhe068@uottawa.ca)).