Lab 1B: Hands-On Coding with HTML

Learning objectives

By completing this lab, you should be able to:
- Create HTML documents using the **header**, **nav**, **main** and **footer** HTML5 elements
- Use the anchor element to link pages together
- Create absolute, relative and email hyperlinks
- Save HTML markup as a local file and display it on a web browser
- Test and validate web page documents

Background

Mimo Yoga Studio is a small, recently opened yoga studio based in Norwich. The owner, Melissa Rose would like a website to showcase her yoga studio and provide information for both new and current students. Melissa would like a website consists of a homepage, a classes page that contains information about the types of yoga classes offered, a schedule page and a contact page.

A sitemap for the Mimo Yoga Studio website is shown below in Figure 1. The sitemap describes the structure of the website, which consists of "Home" page with three main content pages: "Classes", "Schedule" and "Contact".
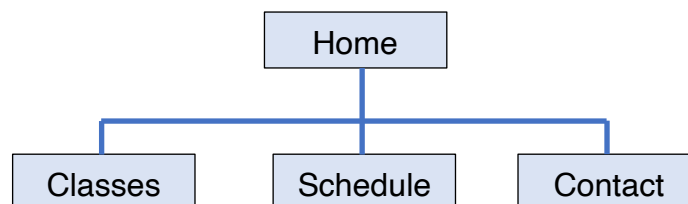

Figure 1. Mimo Yoga Studio sitemap

Figure 2 below shows a rough sketch of the page layout Melissa would like for her website. The layout has sections for header, navigation, main content and a footer for copyright information. Your task is to create Melissa's website using HTML.
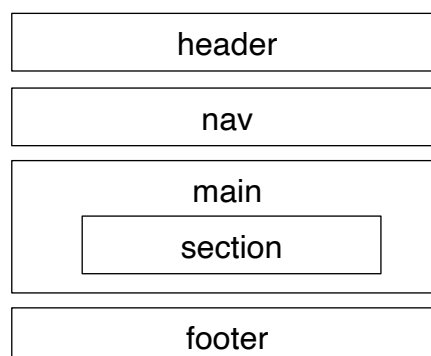

Figure 2. The page layout for each page.

Exercises

1. Open your Visual Studio Code editor (Follow the instructions listed in the "How to open Visual Studio Code Editor in Lab machines" guide)
2. Create a new directory/folder in your Document directory (U: drive) called **7003A**, and inside this folder create a new subfolder called **week1**
3. For this exercise we will create a subfolder called **yoga**. This new **yoga** directory will be the project directory. The folder structure looks like this:

4. On your editor create a new file called `index.html` [**Note:** you can use the template code on Blackboard to begin with]:
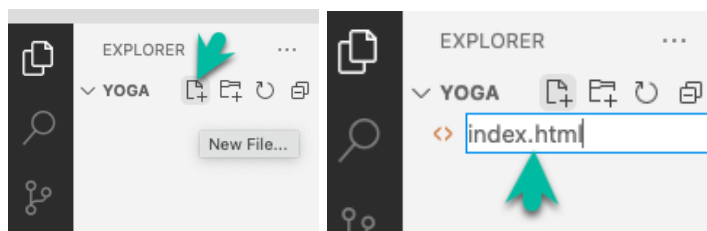
   a. **Webpage title:** Use a descriptive page title. The company name is a good choice for this website.

   b. **Header:** Use the `header` element with the text "Mimo Yoga Studio" and wrap it within an `h1` element.

   c. **Navigation:** Using *an unordered list*, place the following text within a `nav` element as follows:

   > Home   Classes   Schedule   Contact

   Create an anchor tag so that "Home" links to `index.html`, "Classes" links to `classes.html`, "Schedule" links to `schedule.html`, and "Contact" links to `contact.html`.

   d. **Main content:** code the main page content within a `main` element.
      i. Place the following text in a `h2` element:

      > Find Your Inner Light

      ii. Configure the following text (placeholder text https://www.lipsum.com) in a *paragraph element*:

Proin tincidunt sed felis quis pretium. Pellentesque risus nisl, vulputate sed diam non, sollicitudin cursus odio. Suspendisse efficitur lacus tincidunt placerat rutrum. Sed porttitor massa nec dui pulvinar tincidunt.

iii. Configure the following text in a `h3` element:

Benefits

iv. Place the following items in an *unordered* list:
- Improves strength, balance and flexibility
- Helps with stress relief
- Helps improve sleep
- Improves mental health and general wellbeing

If you are not familiar with unordered lists, refer to the unordered list page on MDN: https://developer.mozilla.org/en-US/docs/Web/HTML/Element/ul

e. **Section content**: Create a `section` element. Place the following content inside this element.
   i. Create two `article` elements inside this `section` element.
   ii. For the first `article` element: configure a `h3` heading named "Group Lessons". Wrap the content in a `p` element (use Lorem placeholder text as content)
   iii. For the second `article` element: configure a `h3` element named "One-to-one Lessons". Wrap the content in a `p` element (use Lorem placeholder text as content)
   iv. Now create a `button` element with text "join us". Place this `button` inside a `p` element. (Note: the parent of this `button` element is `section`)

f. **Footer:** Put the following *copyright* information and an *email* link inside a `p` element:

Copyright ©2022 Mimo Yoga Studio

Place your name in *an email* link on a line under the copyright information.

HINT: Search "mailto" on MDN for information about embedded email links.

5. Save your homepage in the **yoga** directory and name it as `index.html`. Now open this file in a web browser and compare it to Figure 3 below.
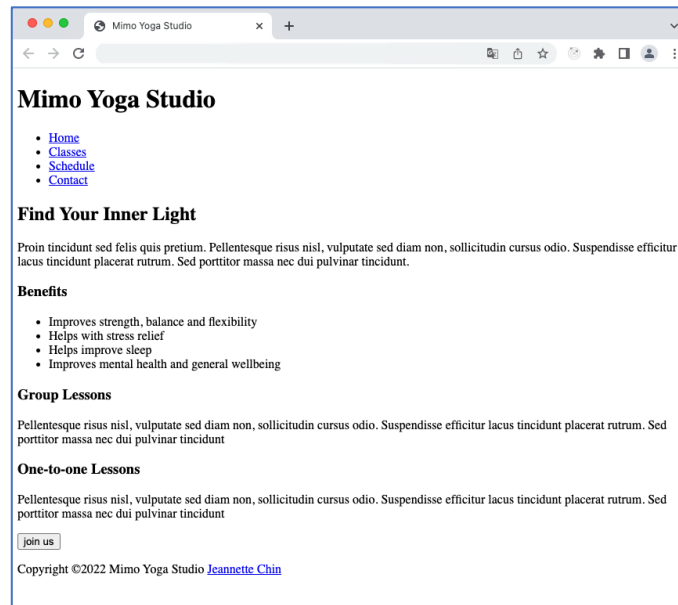
Figure 3. The `index.html` page of Mimo Yoga Studio

Your page should look similar to as the sample shown in Figure 3. Your goal at this point should be to practice and get comfortable with using HTML.

6. Create a page called `classes.html`. A technique to improve productivity is to create new pages based on existing pages, so that you can benefit from your previous work. Your new Classes page will use the `index.html` page as a starting point.

   Open the `index.html` page in a text editor. Select *File > Save As*, and save the file with a new name "`classes.html`" in the yoga folder. Now you are ready to edit the page.

   a. **Webpage title:** *Modify* the page title and change the text to:

      Mimo Yoga Studio :: Classes

   b. **Main content:** *Delete* all the content inside the `main` element.
      i. Create a `section` element and place this inside the `main` element.
      ii. Inside this `section` element, create four `article` elements. (Note: the parent of these `article` elements is `section` element)
      iii. For the first `article` element:
         1. Configure a `h3` heading with the text: Gentle Hatha Yoga.
         2. Configure a `p` element and paste below text as the content:

            estibulum et aliquet arcu. Cras congue cursus massa, ac tristique turpis rhoncus vel.

      iv. For the second `article` element:

1. Configure a `h3` heading with the text: Vinyasa Yoga
2. Configure a `p` element and paste below text as the content:

   estibulum et aliquet arcu. Cras congue cursus massa, ac tristique turpis rhoncus vel.

v. For the third article element:
1. Configure a `h3` heading with the text: Restorative Yoga
2. Configure a `p` element and paste below text as the content:

   estibulum et aliquet arcu. Cras congue cursus massa, ac tristique turpis rhoncus vel.

vi. For the fourth article element:
1. Configure a `h3` heading with the text: Iyengar Yoga.
2. Configure a `p` element and paste below text as the content:

   estibulum et aliquet arcu. Cras congue cursus massa, ac tristique turpis rhoncus vel.

vii. Create a `button` element with text "Find out more" and place this `button` element inside a `p` element. Note: the parent of this `button` element is `p` element whose parent is `section` element.

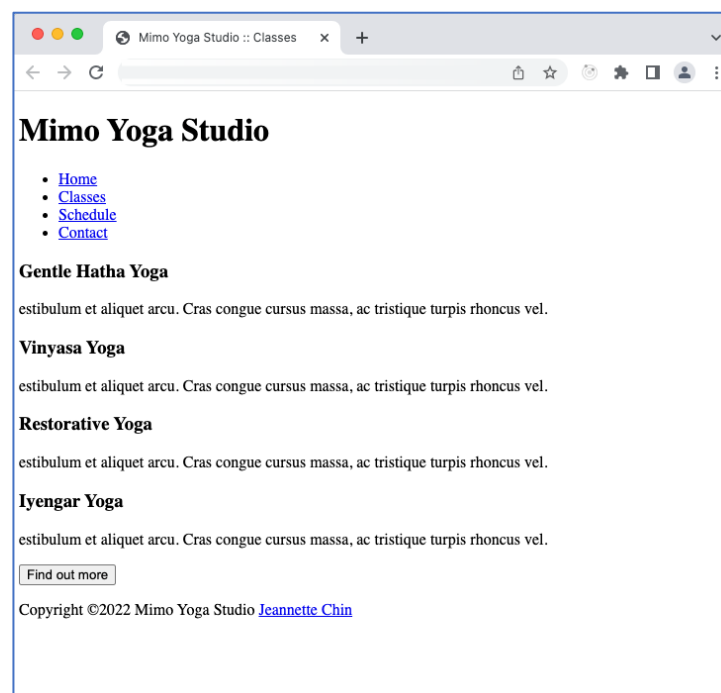Save your page and test it using Chrome. Your page should look similar to Figure 4.

Figure 4. classes.html

c. Now test Home and Classes hyperlinks. If these two links do not work, then verify that you have saved the pages with the correct names in the correct folder and verify your spelling of the page names in the anchor elements. Test again after you make the changes. Note: The Schedule and Contact links will not work at this point. This is because we have not created the pages yet.

7. Validate your webpages using W3C's free mark-up validation service at: https://validator.w3.org. Make sure your web document is free from errors. Correct any errors that are found and resubmit to the validator.