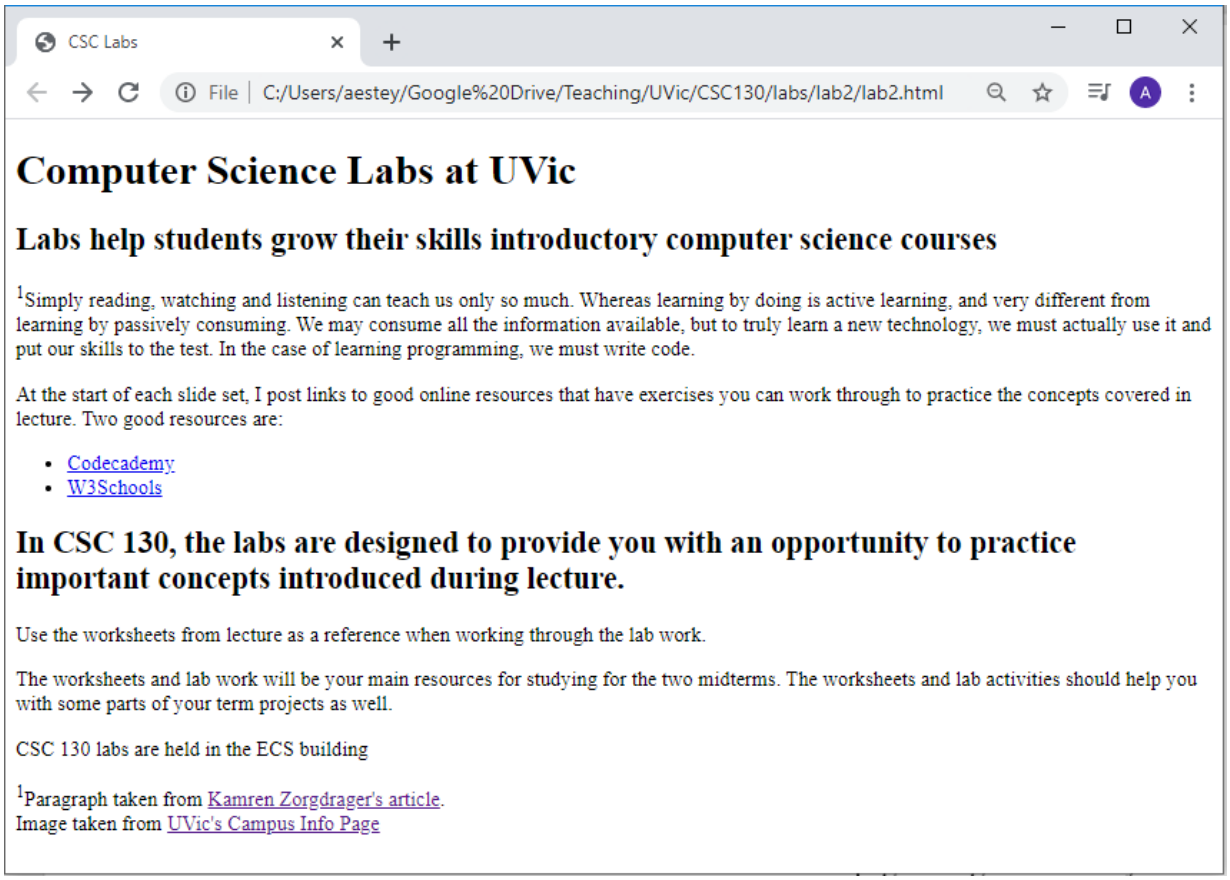
Lab 2

Objectives

- Stylize an HTML page using CSS
- Understand the syntax of CSS
- Write CSS rules for classes and specific HTML elements.

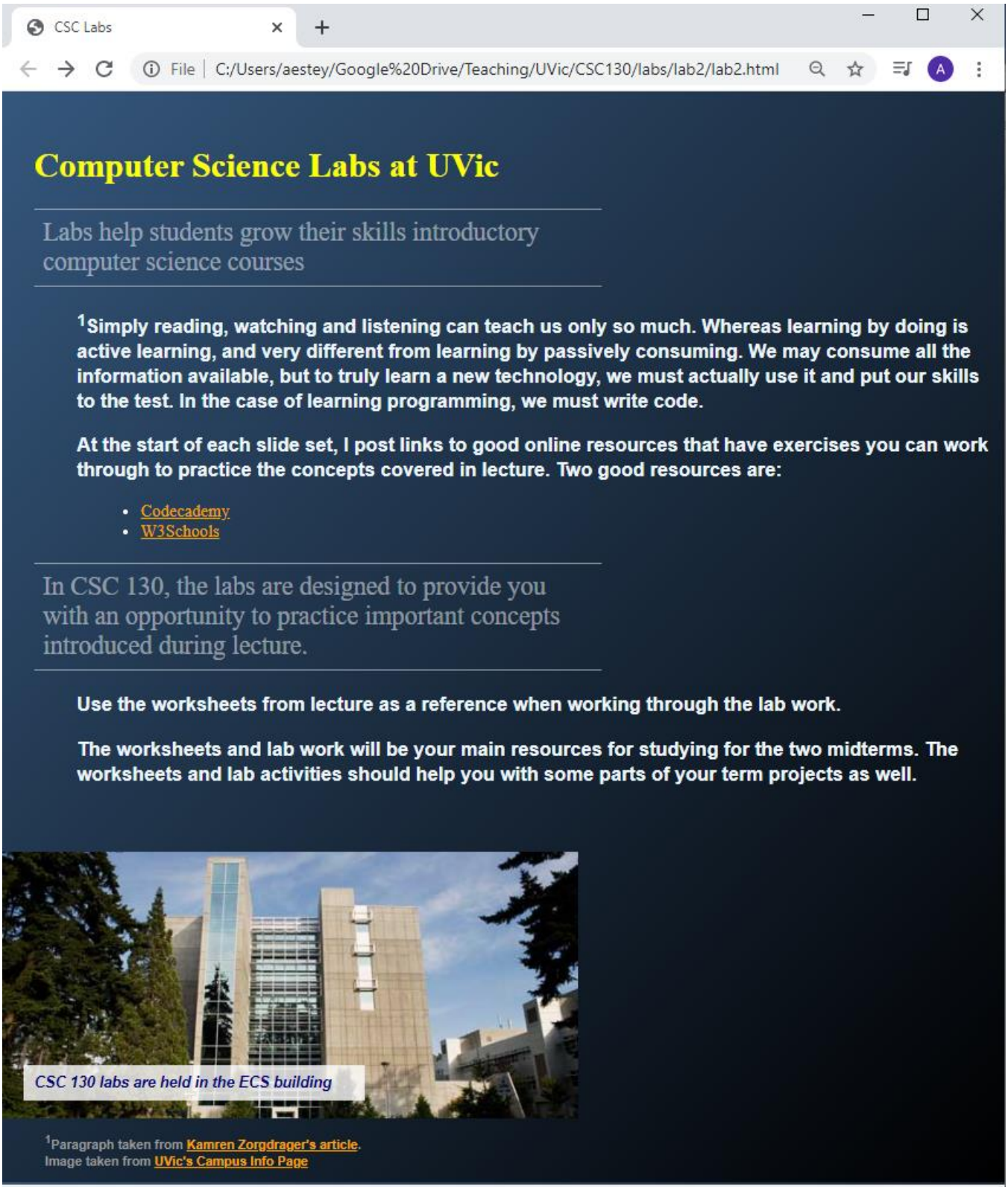
Part I – Download the necessary files

1. If you are working on a lab machine (it is perfectly fine to work on your own laptop for labs if you wish though), and have not set up folders for CSC 130 on your H: drive, I would work through Part 1 of lab 1 quickly.
2. Make a lab 2 folder to save the files for this lab into.
3. Go to the BrightSpace course page, and in the **Assignments > Lab 2** section download lab2.html and save it into your lab 2 folder.
4. You should now be able to open up the lab2.html file in a text editor to edit the HTML, and also open it in a browser to view the web page:



CHECK POINT 1 (check in with the TA now if you have any questions)

Next, we are going to add some style, so that the webpage ends up looking something like the following image. Note: we can do this without changing anything in the BODY of the HTML file.



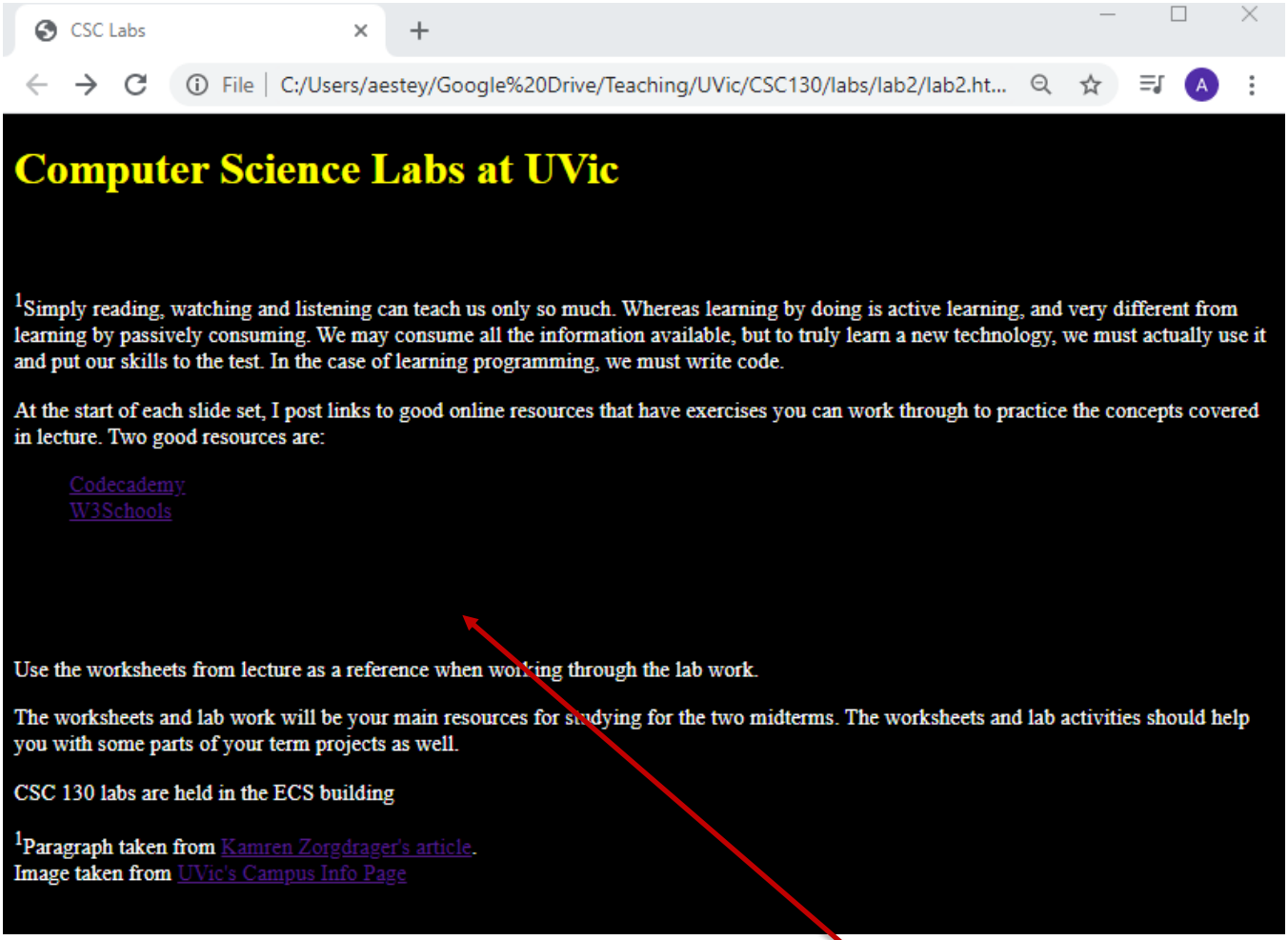
Part II – Adding style

1. In the lab2.html file, add the following line in the HEAD section:

   ```
   <link href="style.css" type="text/css" rel="stylesheet">
   ```

2. Now create a new document (**File > New**) and then save the file as **style.css**. The style.css file must be saved into the same directory as your lab2.html.
3. Start by creating a CSS rule that sets the background color of the body of the html to black. You can do this by setting color to black, or by using the hex code #000000 or by rgba(0,0,0,1)
4. Next, set rules for the h1 and p tags' font color. Making the headings yellow and the paragraphs white.
5. Make sure your lab2.html and style.css files are saved. Refresh your browser or double-click lab2.html to open it up and view it again. It should look similar to:

   (it's okay that the h2's and some other things aren't visible (their font is black)).

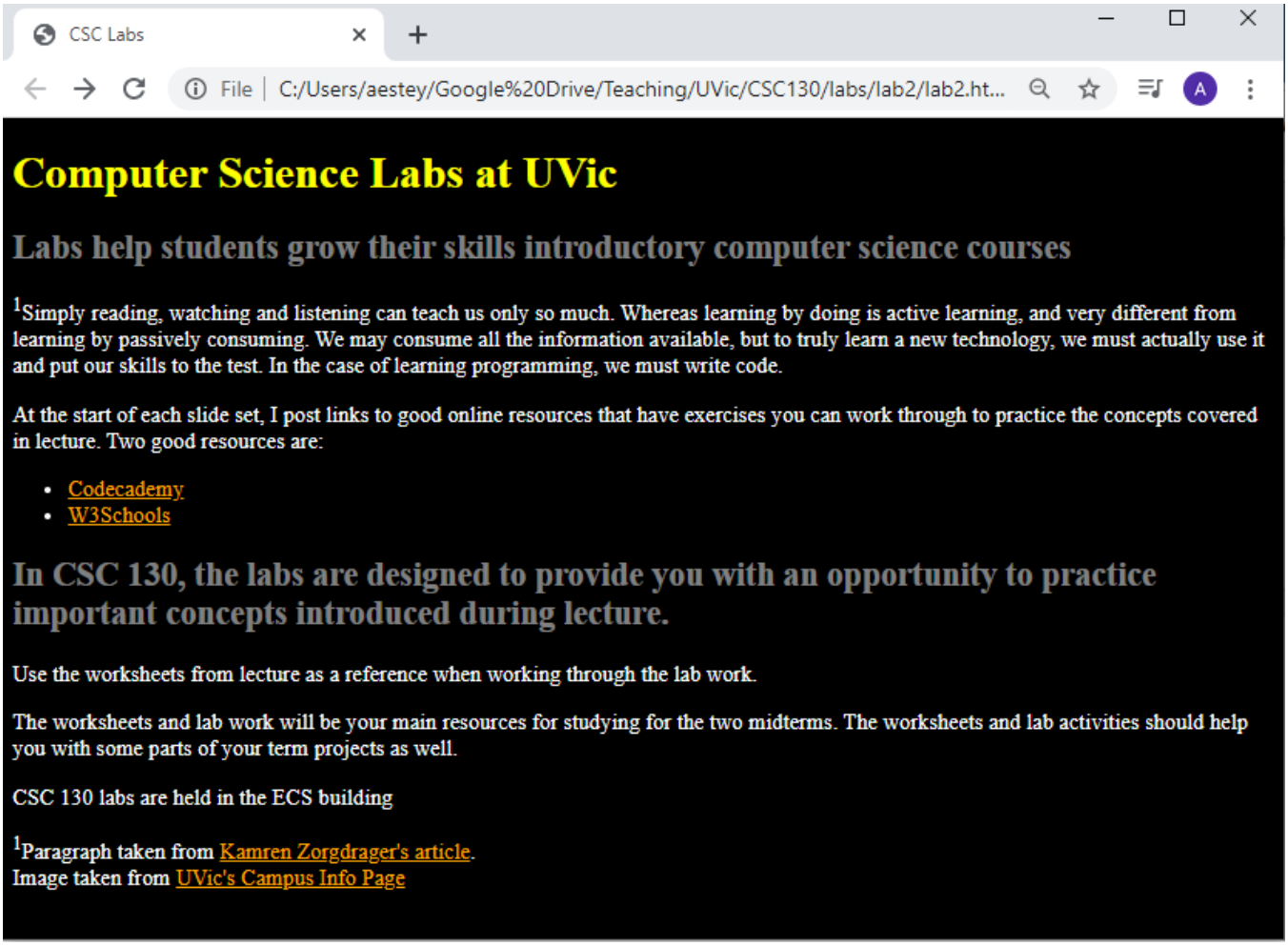


CHECK POINT 2

6. Add more rules for the remaining tags in your css (other headings, links, lists, etc).

(**Hint**: you can always look at the lab2.html to see the different tags used that you can apply style rules to)

The remaining content should now show up:



CHECK POINT 3

Part III – Classes

1. If you look through the lab2.html file, you will notice there are some classes defined. The first line inside the `<body>` tag has `<div class="content">`. This allows us to define a style rule for everything within the div tag.

   There are also some other classes within the html file. Near the bottom of the file (line 43 and 47), there are some different classes defined. Again, these allow us to define different styles for these classes.

   Although on this relatively small webpage, it might not make sense to make classes like this, classes have been set up the following way:
   - content: the class for all of the main web page content
   - caption: the class for image (and maybe also table) captions
   - reference: the class for references

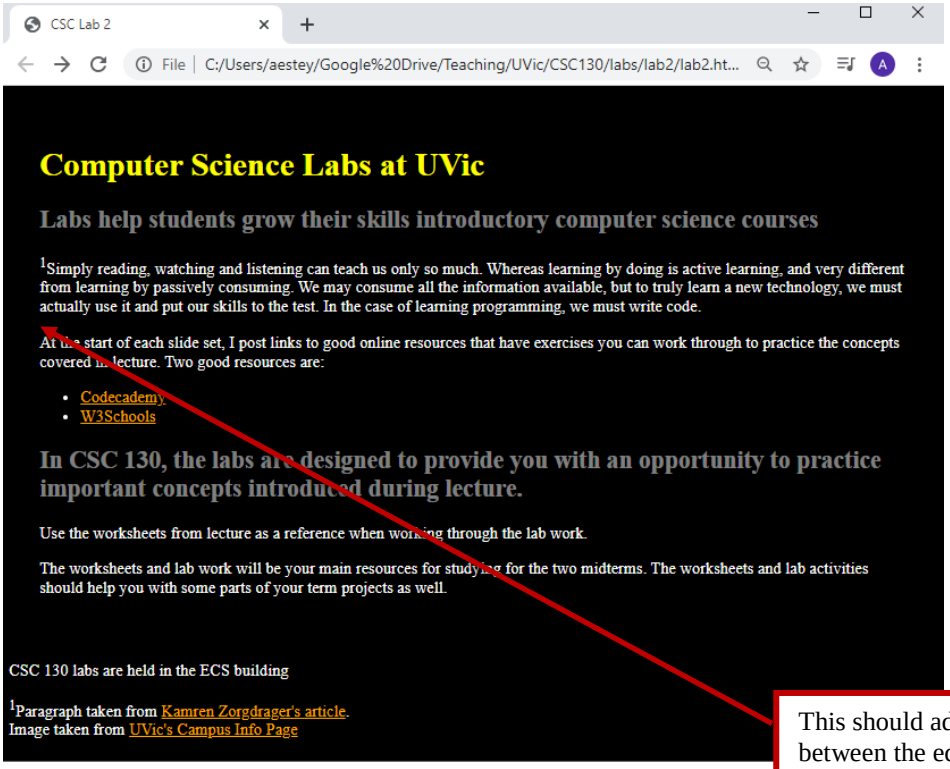
   We might want to style all three of the above classes differently, but also have different parts across our web page, or web pages to be consistent (so all of our captions look the same, and all of our references look the same, etc).

1. Create a css rule for the content class to add padding to that class. To create a rule for a class we use the dot notation.

   For example, to create a style rule for all html tags labeled with class equal to "important", we would write the following:

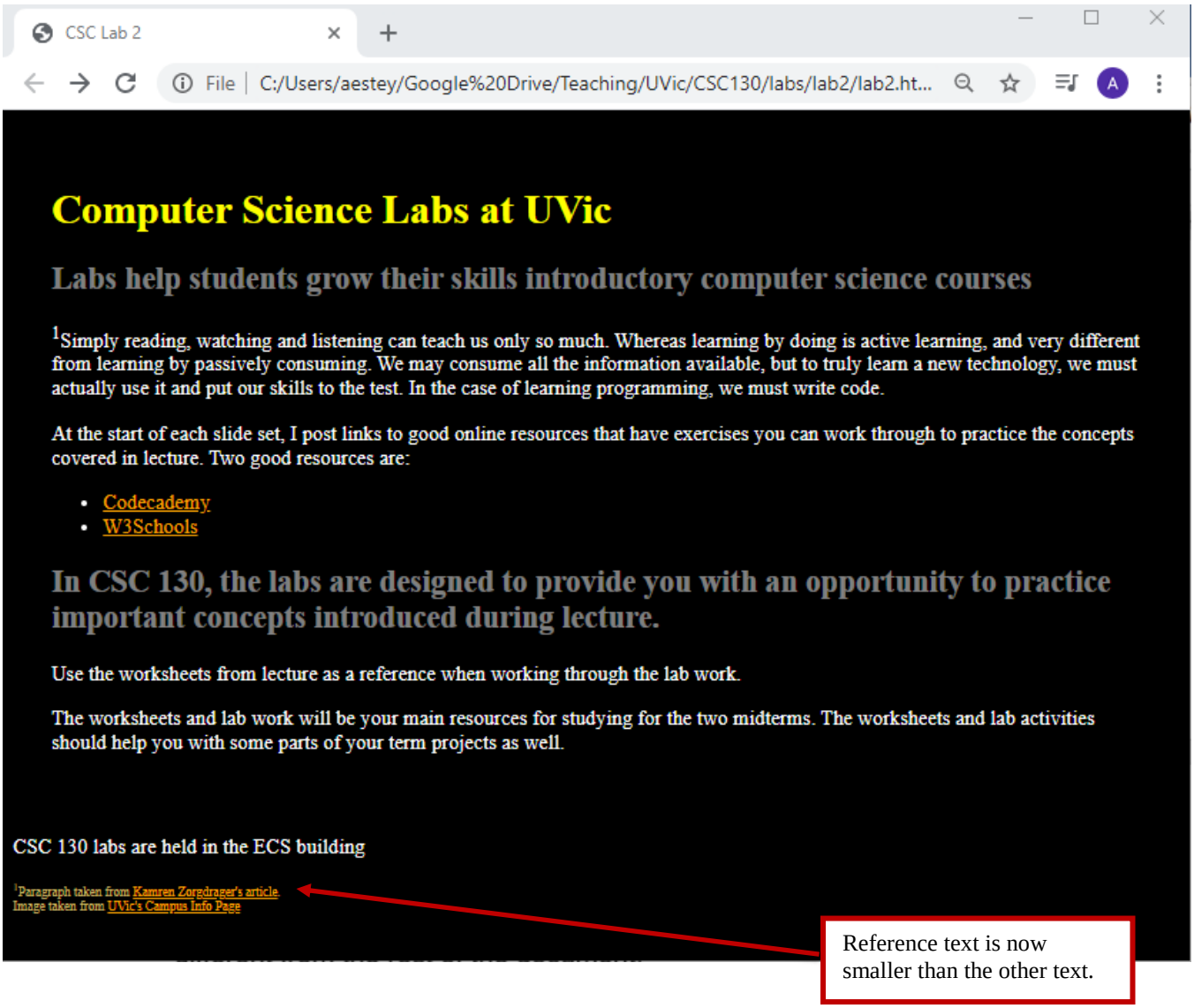
```
.important {
      color: red;
      font-weight: bold;
      font-size: 50px;
      text-transform: uppercase;
}
```

   This would make everything "important" in upper-case, large, bold, red font.



This should add some space between the edge of the webpage and the content.

2. Create a rule for the reference class so that that the font size and color are different from the rest of the document.
3. Don't worry about the caption class for now, we will get to that later.



CHECK POINT 4

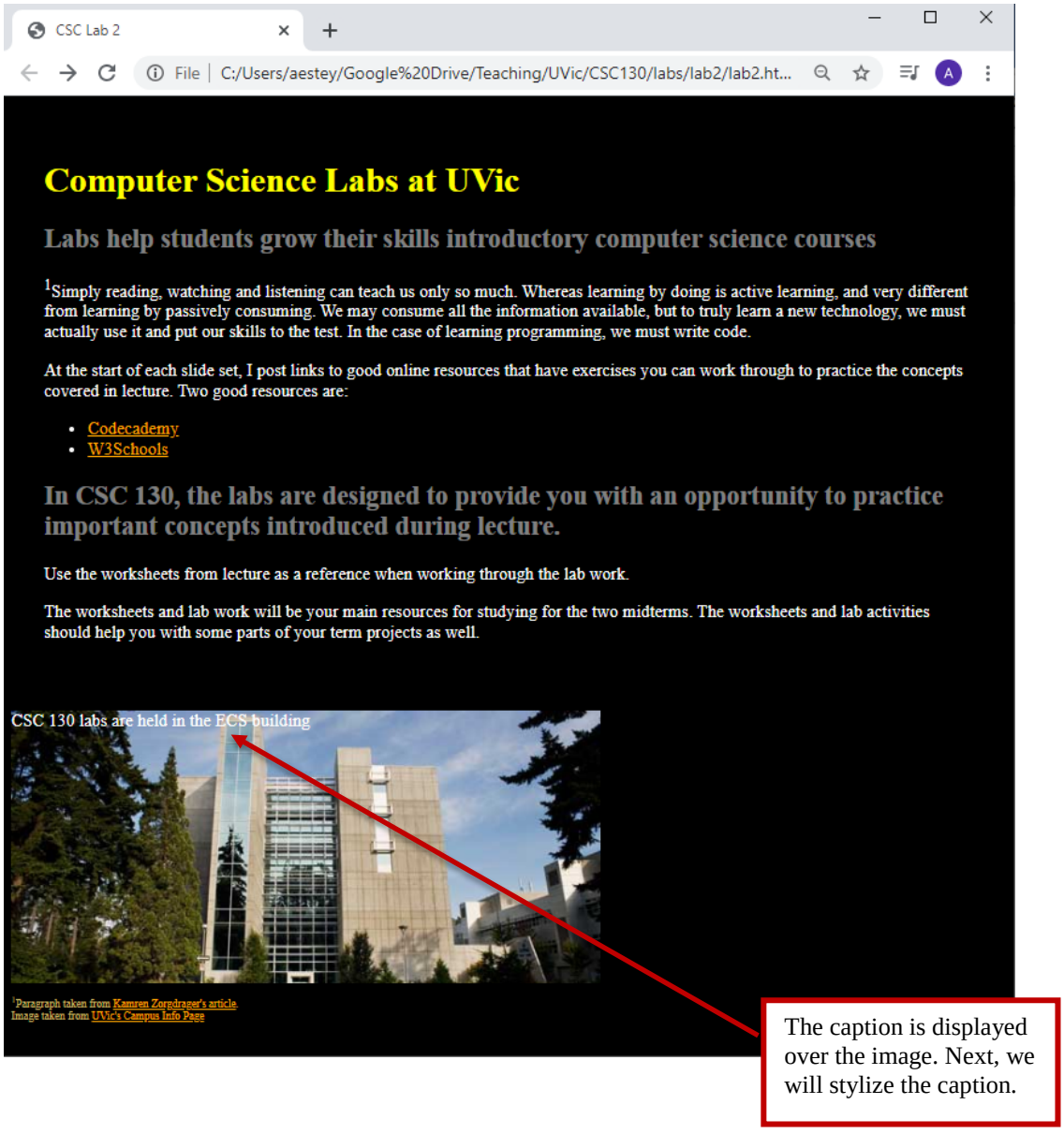
Part IV – IDs

1. On line 42, there is `<div id="ecs-image">`. IDs are typically more specific than classes. On line 42, I want that particular section of the document to display an image of ECS. Within that section of the page, I also want a caption displayed.

   Add the following lines to your style.css file:

```
#ecs-image {
   background-image: url("https://www.uvic.ca/assets2012/images/photos/main/campus-info-maps-maps/main-blg-ecs.jpg");
   background-repeat: no-repeat;
   height: 250px;
}
```

   There should now be an image in that section of the web page, with a caption:



2. Now we want to add some CSS rules for our caption class. There are a number of things to think about, including the positioning, font characteristics, and background color.

   For positioning, there is a position property we can use for example:

```
.caption {
     position: relative;
     top: 200px;
}
```

   The rule above would set the caption to positioned relative to the **top** of the section, and in particular 200px from the top. We could also position it a certain number of pixels from the **left** as well.

   In my example, I added italics, altered the font-size, set a background-color, and also said the caption itself should have a width of 300px:

CHECK POINT 5 – LAB COMPLETE (with some additional content below if you are interested in adding a few special effects).

Part V – Additional effects

1. I added a few more effects to my page, including a background that shifts in color from dark blue to black. This is called a gradient effect. More information can be found here: https://www.w3schools.com/css/css3_gradients.asp

   In my css file, I have the following:

   ```
   body {
     background: linear-gradient(to bottom right, #35577D, #000000);
   }
   ```

2. I also added borders to my h2 tags. This was done with `border-top` and `border-bottom` properties.

   In my css file, I have the following:

   ```
   h2 {
     border-bottom: 1px solid;
     border-top: 1px solid;
     padding: 8px;
     color: rgba(255, 255, 255, 0.5);
     font-weight: 100;
     width: 60%;
   }
   ```

Try making these changes and seeing what your web page looks like afterwards!