CCPS530 Lab 4 – Technical Report

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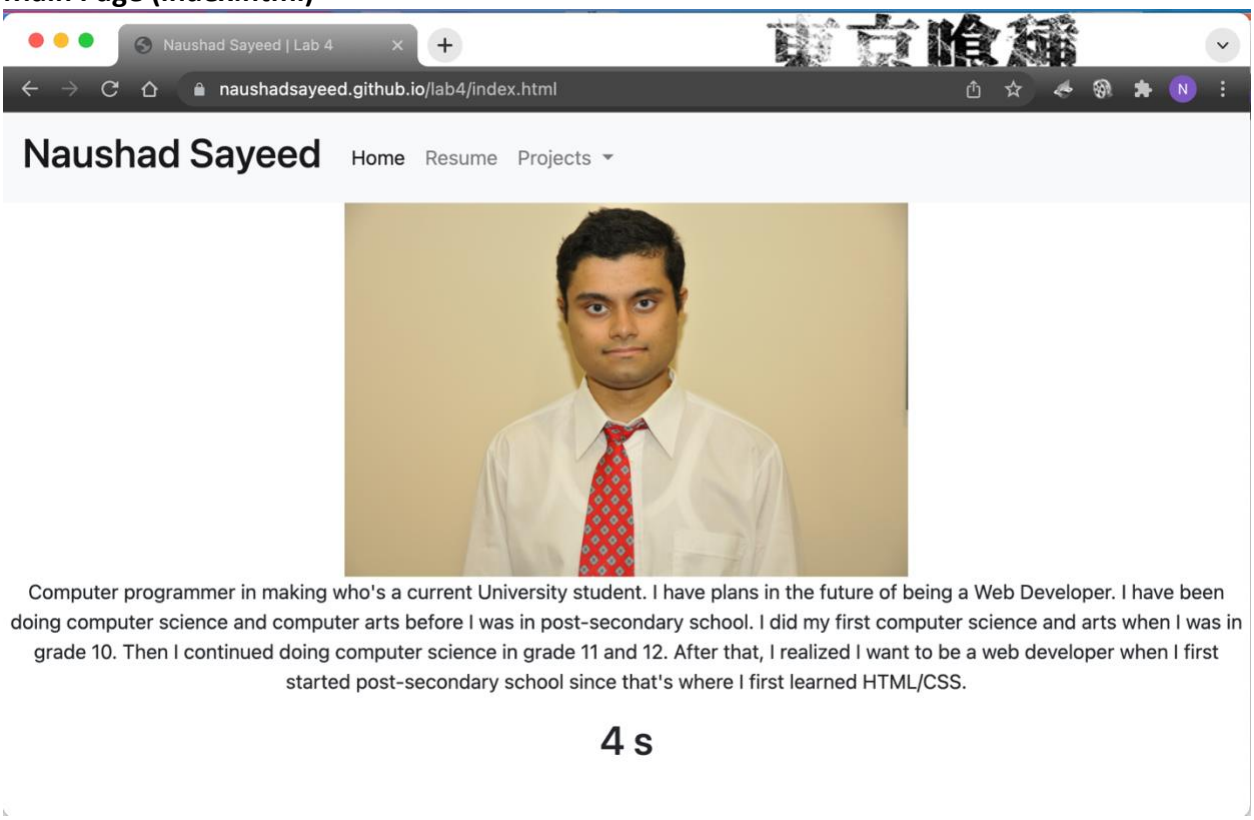
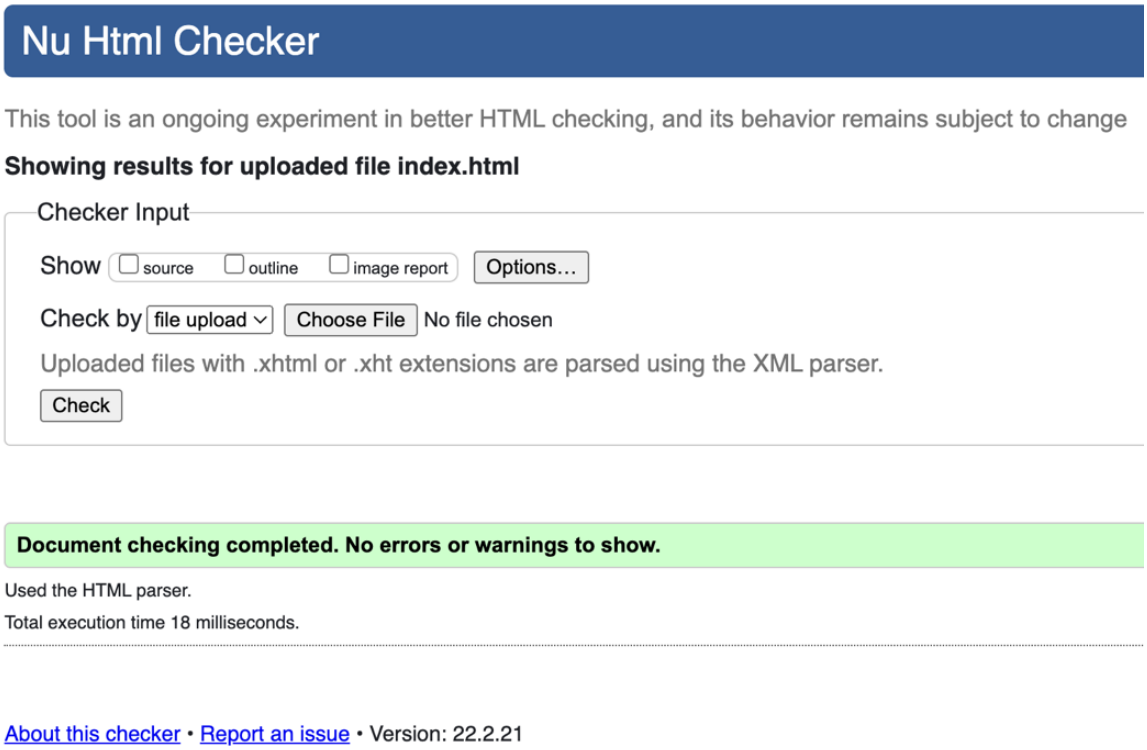
8. Add screenshots of your webpages to the report

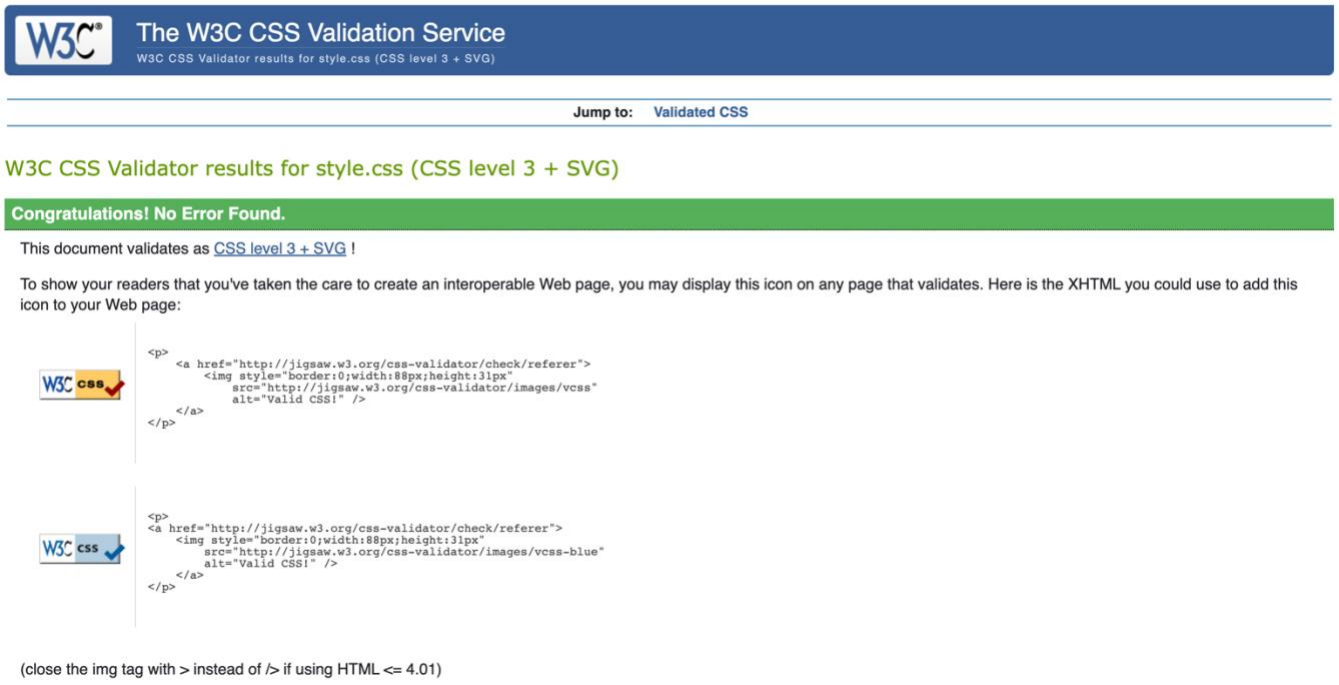
Main Page (index.html)



index.html validation



style.css validation



The W3C CSS Validation Service

W3C CSS Validator results for style.css (CSS level 3 + SVG)

Jump to: Validated CSS

W3C CSS Validator results for style.css (CSS level 3 + SVG)

Congratulations! No Error Found.

This document validates as CSS level 3 + SVG !

To show your readers that you've taken the care to create an interoperable Web page, you may display this icon on any page that validates. Here is the XHTML you could use to add this icon to your Web page:

```
<p>
    <a href="http://jigsaw.w3.org/css-validator/check/referer">
        <img style="border:0;width:88px;height:31px"
            src="http://jigsaw.w3.org/css-validator/images/vcss"
            alt="Valid CSS!" />
    </a>
</p>
```

```
<p>
<a href="http://jigsaw.w3.org/css-validator/check/referer">
    <img style="border:0;width:88px;height:31px"
        src="http://jigsaw.w3.org/css-validator/images/vcss-blue"
        alt="Valid CSS!" />
    </a>
</p>
```

(close the img tag with > instead of /> if using HTML <= 4.01)

Codes for the Webpages

Code for index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/css/bootstrap.min.css"
integrity="sha384-zCbKRCUGaJDkqS1kPbPd7TveP5iyJE0EjAuZQTgFLD2ylzuqKfdKlfG/eSrtxUkn"
crossorigin="anonymous">
    <link rel="stylesheet" type="text/css" href="style.css"> <!--Links this HTML page with the CSS file-->
    <title>Naushad Sayeed | Lab 4</title>
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
    <script>
    $(document).ready(function(){
        var timeCount=0;
        setInterval(function() {
```

```
      if (timeCount < 20){
         $("#image_with_description").load("img_1_with_description.txt");
      }
      if(timeCount == 20){
         $("#image_with_description").load("img_2_with_description.txt");
      }
      if (timeCount == 40){
         $("#image_with_description").load("img_3_with_description.txt");
      }
      if(timeCount == 60){
         $("#image_with_description").load("img_4_with_description.txt");
      }
      if(timeCount > 80){
         $("#image_with_description").load("img_1_with_description.txt");
         timeCount=0;
      }
      $("#time").text(timeCount+" s");
      timeCount++
      }, 1000);
   });
   </script>
</head>
<body>
 <!-- Navbar starts here -->
 <nav class="navbar navbar-expand-lg navbar-light bg-light">
   <a class="navbar-brand" href="#"><h2>Naushad Sayeed</h2></a>
   <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarNavDropdown" aria-
controls="navbarNavDropdown" aria-expanded="false" aria-label="Toggle navigation">
     <span class="navbar-toggler-icon"></span>
   </button>
   <div class="collapse navbar-collapse" id="navbarNavDropdown">
     <ul class="navbar-nav">
       <li class="nav-item active">
         <a class="nav-link" href="#">Home <span class="sr-only">(current)</span></a>
       </li>
       <li class="nav-item">
         <a class="nav-link" href="#">Resume</a>
```

```
      </li>
      <li class="nav-item dropdown">
        <a class="nav-link dropdown-toggle" href="#" id="navbarDropdownMenuLink" role="button" data-
toggle="dropdown" aria-expanded="false">
          Projects
        </a>
        <div class="dropdown-menu" aria-labelledby="navbarDropdownMenuLink">
          <a class="dropdown-item" href="#">Project 1</a>
          <a class="dropdown-item" href="#">Project 2</a>
          <a class="dropdown-item" href="#">Project 3</a>
        </div>
      </li>
    </ul>
  </div>
 </nav>
 <!-- Navbar ends here -->

 <!--div tag for images with description starts here!-->
 <div id="image_with_description"></div>
 <!--div tag for images ends here!-->

 <h2 id="time">loading...</h2><!--This is for viewing the time (in seconds). The "loading..." is there to show that the
time is loading and starting from 0.-->

</body>
</html>
```

Code for style.css

```
/*The CSS here is just for putting the images and the paragraph (<p>) texts in the center*/
img {
    display: block;
    margin-left: auto;
    margin-right: auto;
}
p, h2{
    text-align: center;
```

```
}
```

9a. What HTML5 tags you used and why you chose them?

I first started off with the tags that all HTML files contain:

- <!DOCTYPE html> for the very first line
- <html lang="en-US"></html> something the document begins and ends with. The lang="en-US" is required so it can validate in the W3 HTML validator.
- <head></head> is for the title, meta and the CSS <style> tags.
- <meta charset='utf-8'> is the attribute and web developers use utf-8
- <body></body> is for the visible part of the HTML document

Tags I used after finished putting the tags above.

- <h2></h2> is used for the heading smaller than h1 so I used h2 for the subheadings. For printing out my name and the time (in seconds).
- <link …> is used for linking the external CSS including the CSS used for bootstrap.
- <script> is used for the JQuery and JavaScript code which includes the AJAX stuff like load()
- <nav …> for the bootstrap navbar
- <button ..> something inside the "nav" tags for the bootstrap navbar.
- <a ..> is used for the href path, for the bootstrap navbar.
- <span ..> used in bootstrap for the styling purposes.
- with <ul> tags are used in bootstrap to keep the navbar in a styled unordered list.
- tag with id is mainly used to place the loaded image with description from AJAX JQuery.

Tags I used inside the text (.txt) files.

- <img src=""> I used this so once I load it with AJAX jQuery, it can embed the image to HTML.
- <p> is so I can put the description of the picture in paragraph format.

CSS File (style.css) explanation:

- The stuff for "img" is used to place all images in the center since it's for the <img ..> tags.
- The stuff for "p" and "h2" where the texts in those tags are aligned to the center.

JQuery/JavaScript with Ajax explanation:

- .ready() is the first thing to put for AJAX JQuery where all the code is inside.
- The "var" is for making a variable (timeCount for this part)
- setInterval() is used to set a time based on milliseconds, so 1000 millisseconds = 1 second.
- .text() is used to put a value between a certain html tag with id, I used it to put the time.

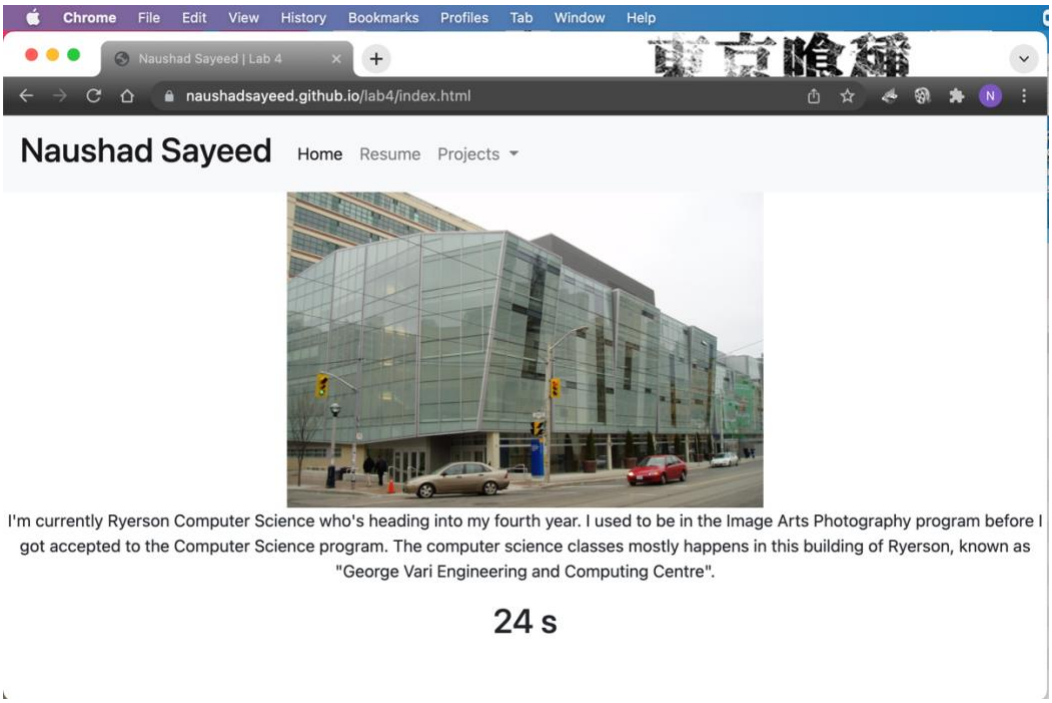
- if() statements are used to check the time so it can switch between the images.
- .load() is the most important part since it's Ajax, it is used to load the HTML code from a text file. I used this to load the image with description.

9b. Compare and contrast JQuery vs plain JavaScript usage when it comes to using AJAX and navigating through DOM of your HTML page.

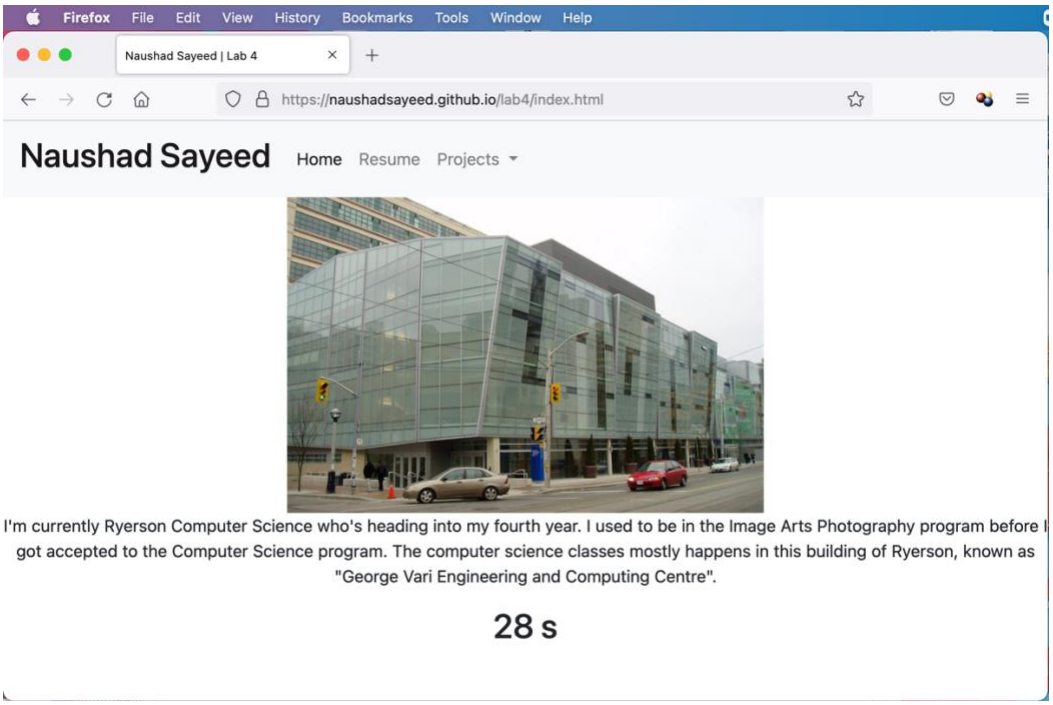
So I find botj JQuery and JavaScript really useful to use. As someone who had a past experience with JavaScript, I find JQuery equally easy to use. I like how Jquery requires less on a line in most cases. In JavaScript, I used the innerHTML method while in jQuery, I used the .text() method which are both for placing contents between tags with id.

9c. Which web browsers did you used to view your page and are there rendering differences between browsers? You may add screenshots to your report.

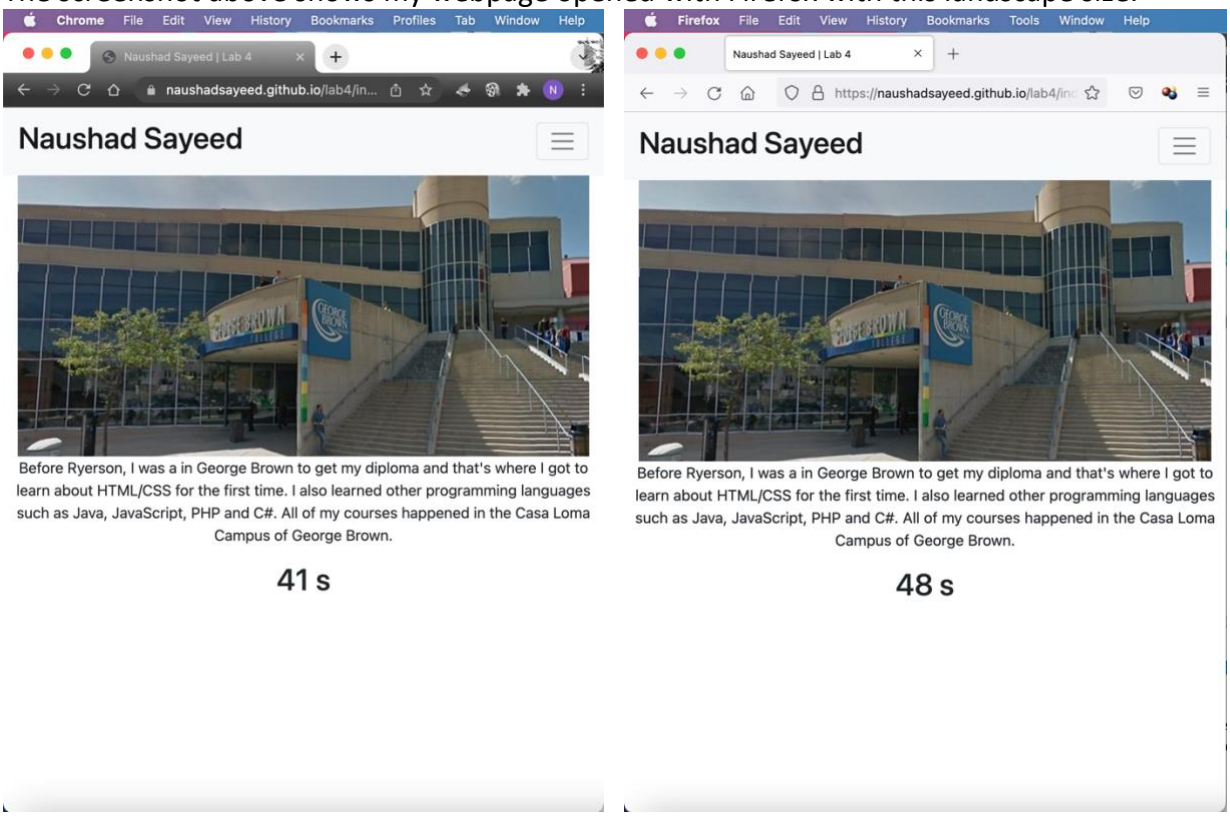
I used Chrome and Firefox, and here are the screenshots of my webpage.



The screenshot above shows my webpage opened with Chrome with this landscape size.



The screenshot above shows my webpage opened with Firefox with this landscape size.



The screenshots above show my webpages with a portrait size opened with both Chrome (on the left) and Firefox (on the right).

All the screenshots with Chrome and Firefox look the exact same. So, there is no rendering differences between browsers.

How long did you spend on this lab? Length of time includes readings and research and code experimentation. State time involved in readings and research as well as code experimentation sessions.

It took me a total of 12 hours to do this lab:

- 2 hours of reading through lectures
- 2 hours of research through different codes
- 8 hours of code experimentations and once I was successful with the code experimentations, I added them in my lab and I completed everything