CCPS530 Lab 5 – Technical Report

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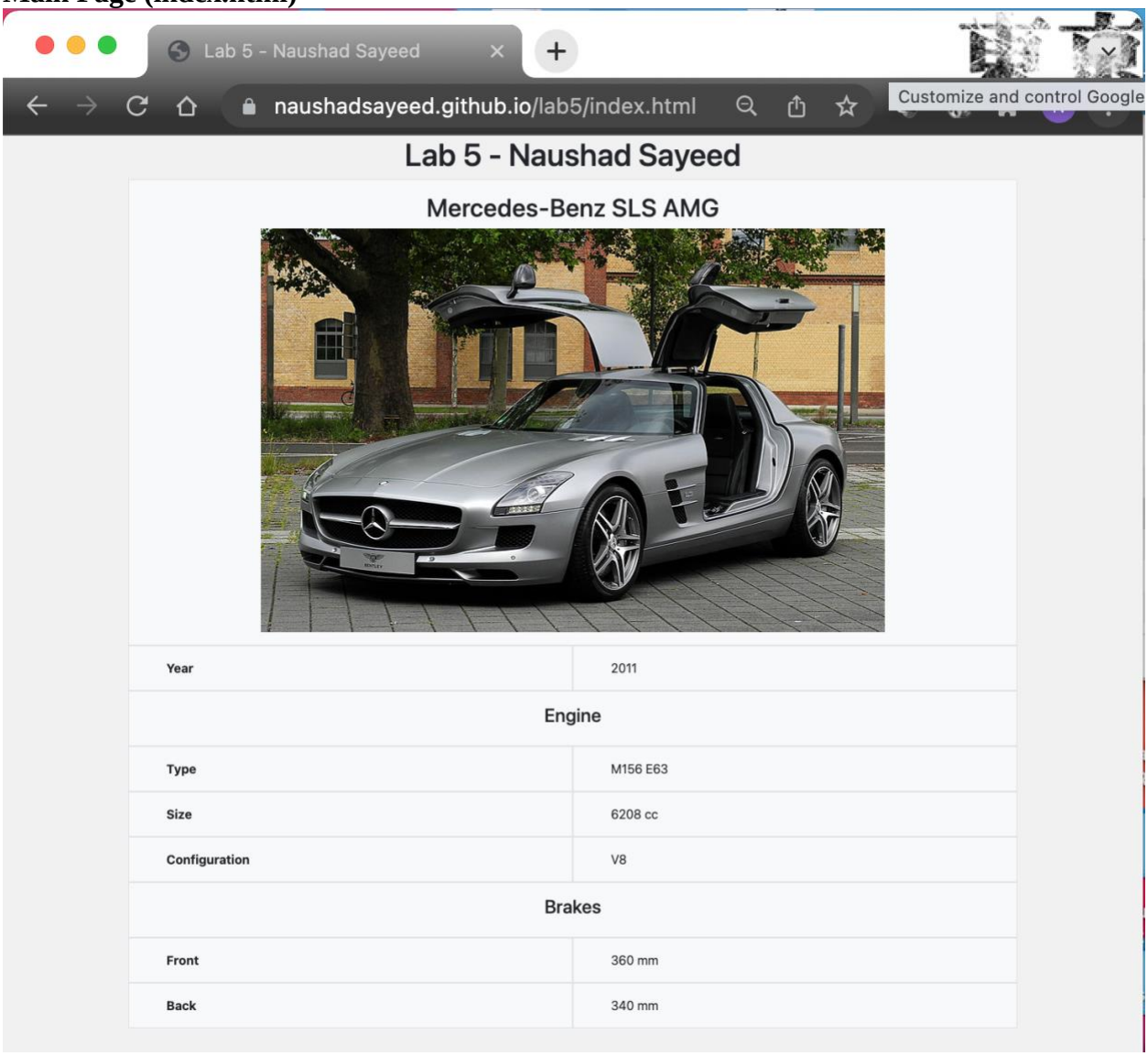
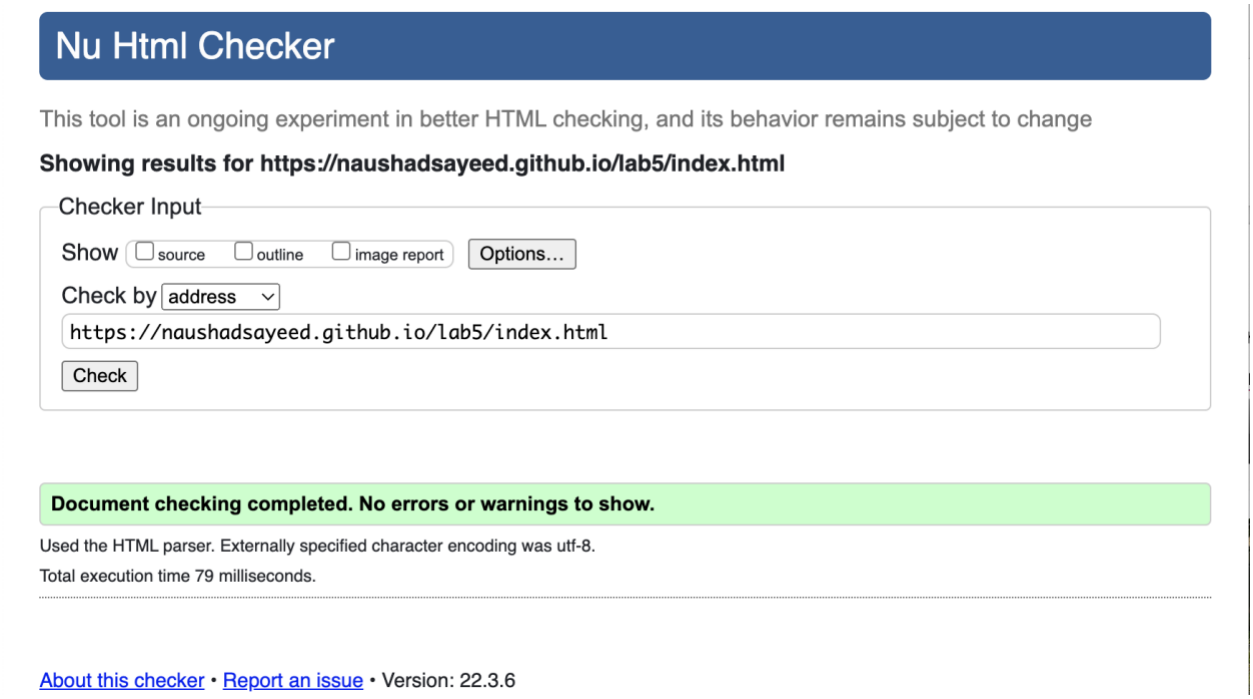
7. You should attach screenshots of your webpages to your report

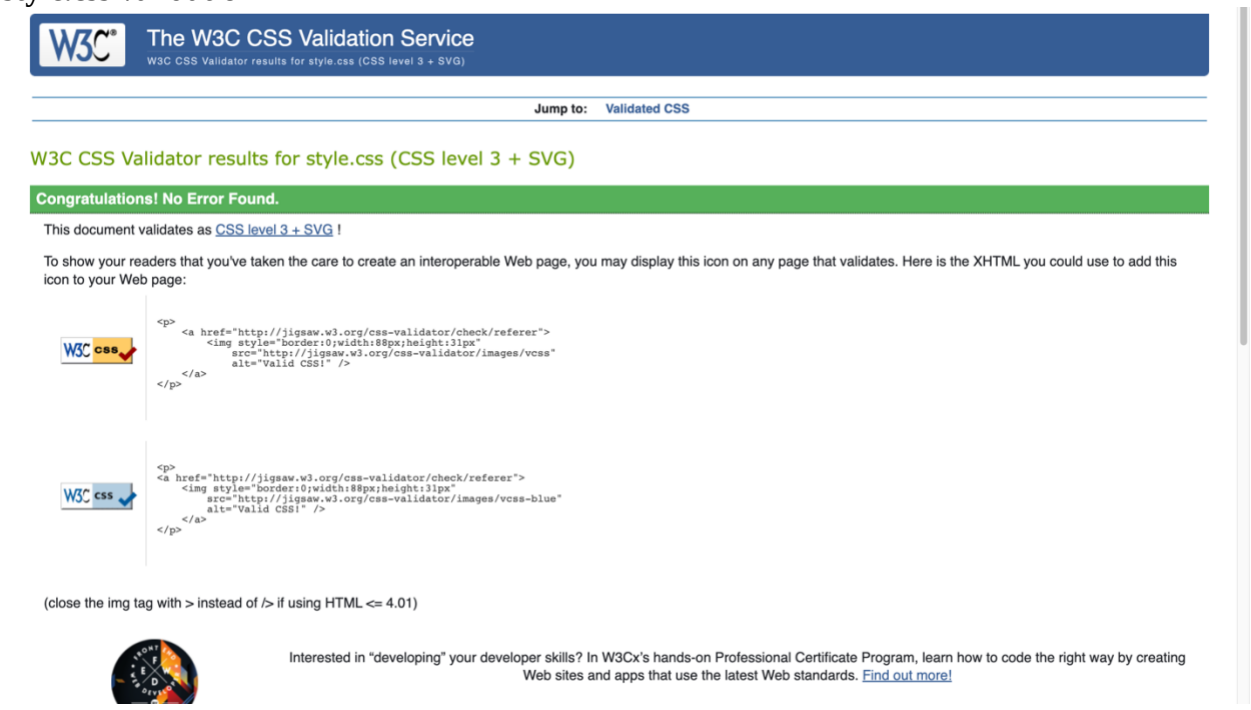
Main Page (index.html)



index.html validation



style.css validation



Codes for the Webpages

Code for index.html

```
<!DOCTYPE html>
<html lang="en-US">
   <head>
      <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>Lab 5 - Naushad Sayeed</title>

      <!--JQuery/Ajax with JSON starts here-->
      <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
      <script>
         $.ajax({
            type: "GET",
            url: "external.json",
            success:function(response)
            {
               $("#name_and_picture").append("<h2>"+response.name+"</h2> <img src='"+response.imageURL+"'>")
               $("#year_column_1").append("<b>Year</b>")
               $("#year_column_2").append(response.year)
               $("#engine").append("<h4>Engine</h4>")
               $("#type_column_1").append("<b>Type</b>")
               $("#type_column_2").append(response.engine.type)
               $("#size_column_1").append("<b>Size</b>")
               $("#size_column_2").append(response.engine.size)
               $("#configuration_column_1").append("<b>Configuration</b>")
               $("#configuration_column_2").append(response.engine.configuration)
               $("#brakes").append("<h4>Brakes</h4>")
               $("#front_column_1").append("<b>Front</b>")
               $("#front_column_2").append(response.brakes.front)
```

```
            $("#back_column_1").append("<b>Back</b>")
            $("#back_column_2").append(response.brakes.back)
        }
    });
</script>
<!--JQuery/Ajax with JSON ends here-->
</head>
<body>
<h1>Lab 5 - Naushad Sayeed</h1>
<!-- Gutters grids starts here-->
<div class="container px-lg-5">
    <div class="row mx-lg-n5">
        <div class="col py-3 px-lg-5 border bg-light" id="name_and_picture"></div>
    </div>
</div>
<div class="container px-lg-5">
    <div class="row mx-lg-n5">
        <div class="col py-3 px-lg-5 border bg-light" id="year_column_1"></div>
        <div class="col py-3 px-lg-5 border bg-light" id="year_column_2"></div>
    </div>
</div>
<div class="container px-lg-5">
    <div class="row mx-lg-n5">
        <div class="col py-3 px-lg-5 border bg-light" id="engine"></div>
    </div>
</div>
<div class="container px-lg-5">
    <div class="row mx-lg-n5">
        <div class="col py-3 px-lg-5 border bg-light" id="type_column_1"></div>
        <div class="col py-3 px-lg-5 border bg-light" id="type_column_2"></div>
    </div>
    <div class="row mx-lg-n5">
        <div class="col py-3 px-lg-5 border bg-light" id="size_column_1"></div>
        <div class="col py-3 px-lg-5 border bg-light" id="size_column_2"></div>
    </div>
    <div class="row mx-lg-n5">
        <div class="col py-3 px-lg-5 border bg-light" id="configuration_column_1"></div>
```

```
            <div class="col py-3 px-lg-5 border bg-light" id="configuration_column_2"></div>
        </div>
    </div>
    <div class="container px-lg-5">
        <div class="row mx-lg-n5">
            <div class="col py-3 px-lg-5 border bg-light" id="brakes"></div>
        </div>
    </div>
    <div class="container px-lg-5">
        <div class="row mx-lg-n5">
            <div class="col py-3 px-lg-5 border bg-light" id="front_column_1"></div>
            <div class="col py-3 px-lg-5 border bg-light" id="front_column_2"></div>
        </div>
        <div class="row mx-lg-n5">
            <div class="col py-3 px-lg-5 border bg-light" id="back_column_1"></div>
            <div class="col py-3 px-lg-5 border bg-light" id="back_column_2"></div>
        </div>
    </div>
    <!-- Gutters grids ends here-->
  </body>
</html>
```

Code for style.css

```
/*The CSS here is just for putting the images and the texts in the center, and a background color for the body.*/
body
{
  background: #F1F1F1;
}
h1, h2, h4{
  text-align: center;
}
img {
  display: block;
  margin-left: auto;
  margin-right: auto;
}
```

Code for external.json

```
{
   "name":"Mercedes-Benz SLS AMG",
   "year":2011,

   "imageURL": "https://upload.wikimedia.org/wikipedia/commons/thumb/2/2e/Mercedes-
Benz_SLS_AMG_%28C_197%29_%E2%80%93_Frontansicht_ge%C3%B6ffnet%2C_10._August_2011%2C_D%C3
%BCsseldorf.jpg/800px-Mercedes-
Benz_SLS_AMG_%28C_197%29_%E2%80%93_Frontansicht_ge%C3%B6ffnet%2C_10._August_2011%2C_D%C3
%BCsseldorf.jpg",

   "engine": {

   "type":"M156 E63",

   "size":"6208 cc",

   "configuration": "V8"

   },

   "brakes" : {

   "front":"360 mm",

   "back":"340 mm"

   }
}
```

8a. 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.

- <h1></h1> is used for the heading which I used to make my full name more visible.
- <h2></h2> is used for the heading smaller than h1 so I used h2 for the subheadings.
- <h4></h4> is used for a more smaller heading.
- <b> is used to make a text bold.
- <link …> is used for linking the external CSS including the CSS used for bootstrap.
- tag is mainly used for the bootstrap grids and the ones with id are to place the contents in the grid.
- <script> is used for the JQuery and JavaScript code which includes the AJAX stuff like append() which is used to put the JSON contents on the HTML page.

JSON File (external.json) file:
I just included everything given on the instructions which are the name and other information of the Mercedes-Benz.

CSS File (style.css) explanation:

- body{} – to add the background of the body with the code between the tag.
- h1, h2, h4{} – so the texts with those tags can be placed in the center with the code between the tag.
- img {} – so all the images can be placed in the center with the code between the tag.

8b. Did you use element CSS classes and/or global CSS classes?

I didn't use any element CSS for this lab. I only used Global CSS.
Global CSS Classes I used:

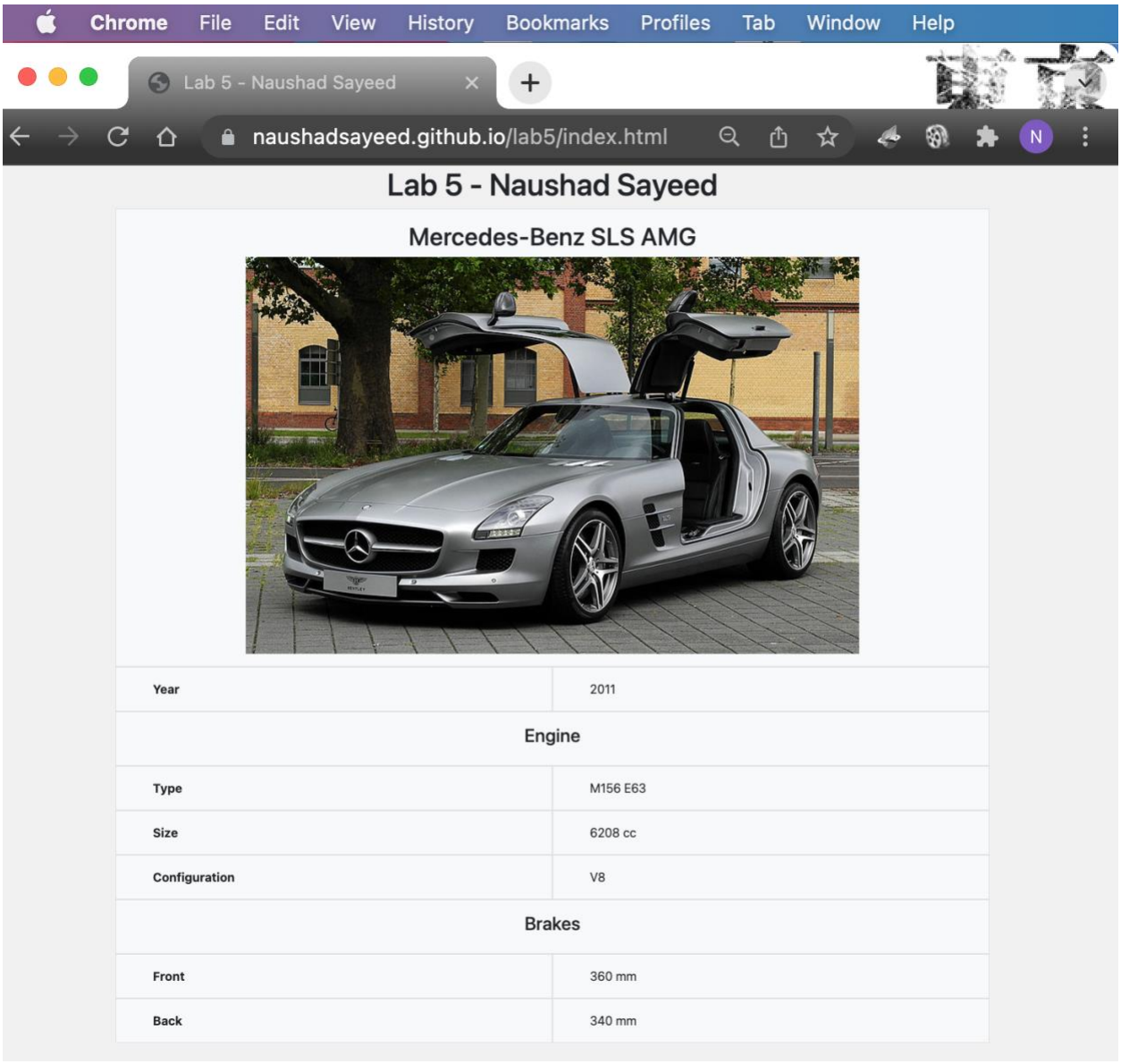
- body {} – I used this class to determine the style for everything in the body tags. I only used this for the background color.
- h1, h2, h4 {} – I used this class to determine the style for all these heading tags. I only used this to place these headings in the center.
- img {} – I used this class to determine the style for all images. I only used this to place all images to the center.

8c. How did you consume and parse JSON?

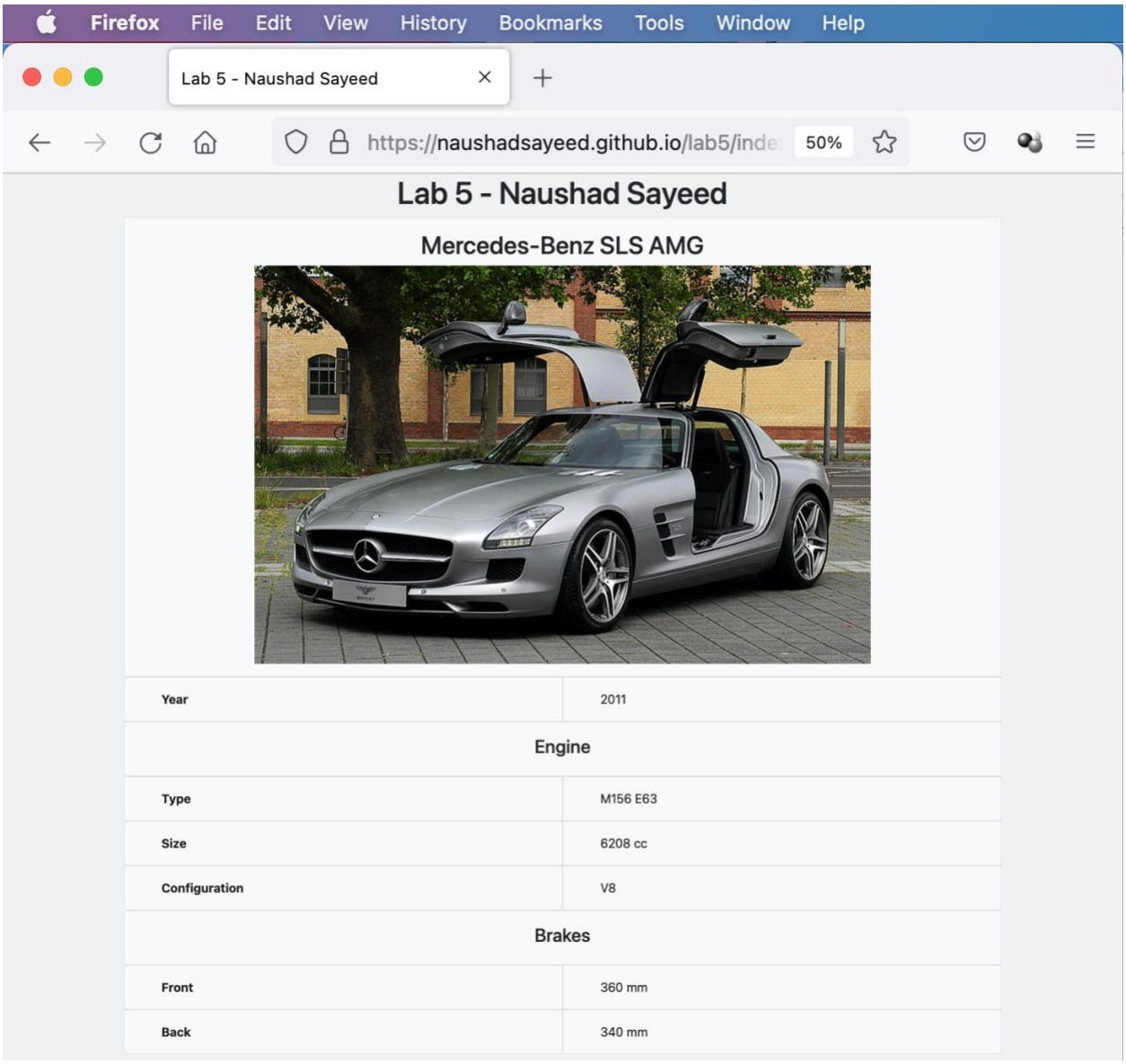
So I copied and pasted the JSON code posted on D2L into an external file which I named "external.json" and I fixed the code by adding the quotation marks and making sure the comma is after the right quotation mark. After I fixed the JSON code, I used the $.ajax ({}) thing with the type and url to connect the HTML page with the external JSON file. After that, I used append() to retrieve and embed the JSON contents into the HTML page and I used gave the div tags an id in order to place the JSON contents in the bootstrap grid.

8d. 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 the Zoom being 50%.



The screenshot above shows my webpage opened with Firefox with the zoom being 50%.

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

8e. 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 4 hours to do this lab:

- 1 hour to take proper notes of the video tutorial
- 3 hours of code experimentations including fixing the error, and once I was successful with the code experimentations, I added them in my lab, and I completed everything