Assignment #3: Web styling CSS
Submission Date: During Week 14 Lab (Monday, December 30, 2024)

1. Instructions

- All students must have a GitHub account.
- Students complete the assignment in order.
- Each student **MUST** prepare the Assignment solution **BEFORE ARRIVING WEEK 14 LAB,** upload your solution to your GitHub, but you **MUST** combine and submit the assignment during the lab time. SUBMISSION PRE-PREPARED SOLUTION IS NOT ACCEPTED.
- Failure to attend week 14 lab and complete the assignment will result in a <u>ZERO</u> in this assignment.

2. Assignment description and requirements

The goal of this assignment is to Style the HTML pages that you created in ASSIGNMENT TWO using CSS. Through this assignment, you will select and style elements with CSS, build page layout, and use Flexbox box.

2.1. General instructions:

1- Don't modify the HTML pages that you created in ASSIGNMENT TWO. Your CSS must work with the HTML as provided.

2- Grading tip: you don't need to go back and fix your ASSIGNMENT 2 code if you didn't get something functioning before. You are welcome to correct any problems, however we will not consider the HTML from ASSIGNMENT 2 while reviewing this assignment.

3- No JavaScript, only CSS and HTML will be used for this assignment.

4- Points will be deducted from projects that are basic, hurried, bare bones, sloppy, and/or careless.

5- All pages on the website must have the same header, footer, and navigation.

6- The navigation bar for all pages on the website must contain working links to all of the pages that have been developed thus far.

7- All pages on your website must be styled with an **external style sheet** (no internal CSS), while inline styles may be used in extremely limited instances.

8- All CSS styles should be commented in a manner that is concise, meaningful, and well-formatted.

9- For all .css files you will create in the assignments you must have the following comment block:

```
/*
    Name:          Your Name
    Course:        CSE211 Web Programming
    Assignment:    Assignment No. ------
    Date:          ----/----/------
    Description:   The purpose of this .css is to style
                   the page(s) in this ..............
*/
```

10- Feel free to use online resources such as Stack Overflow, MDN, W3, and Google for **REFERENCE** but **do not use any copyrighted content** on your webpages.

11- Validate all HTML pages and CSS styles to ensure that your website is code-compliant and error-free.

12- Take screenshots of the validation results for all HTML and CSS pages and save them as images in the images folder.

13- You MUST use the folder structure that you created in ASSIGNMNET 2.

2.2. Specifications AND REQUIREMENST:
There are 3 tasks in this assignment

2.2.1. Task 1:
Create an external style sheet named "global.css" that configures the submitted website in ASSIGNMENT 2 according to the following design resources.

Task 1 Design Resources

1. Webpages `Title`**:**
- The font face is `'Verdana, Arial, or any sans-serif'` and the fallback font is `serif`.
- The font size is `36px`.
- The font weight is `normal` (not bold).
- The font color is `white` or as you specified in color palette in ASSIGNMENT 1.
- The title is vertical, and center aligned to the header image.

2. The `body` **Element:**
- Except where otherwise noted, all elements must have a border of `0pt`.
- Except where otherwise noted, text in the body of the document must be in a `14pt sans-serif` font.
- Except where otherwise noted, text in the bodyof the document must be as follows.
  - The font face is `'Source Sans Pro'`, and the fallback font is `sans-serif`.
  - The line height is `32px`.
  - The font color is as you specified in color palette in ASSIGNMENT 1.

3. The `header` **Element**
  - The contents must be `centered`.
  - The text must be `18pt`.
  - The bottom margin must be `24pt`.
  - The font face is `'Roboto Slab'`, and the fallback font is `serif`.
  - The font size is `36px`.
  - The font weight is `bold`.
  - The title color is `rgb(51, 51, 51)` or as you specified in color palette in ASSIGNMENT 1.

4. In the `header` **of** `section` **Elements**
  - The font face is `'Verdana, Arial, or any sans-serif'` and the fallback font is `serif`.
  - The font size must be `18pt`.
  - The text must be `small caps` (sometimes called a `font variant`).
  - The text must be `black`.
  - There must `not` be a `border`.
  - The text must be `straight/plain/normal`.

- The contents must display "inline" (i.e., like words rather than like paragraphs).
- The bottom margin must be 12pt.

5. In section **Elements**
- The text must be `bold`.
- The bottom margin must be 6pt.

6. `h1` **Elements**
Except where otherwise noted
- The text must be 18pt.
- The text must be `italic`.
- The bottom margin must be 6pt.

7. `h2` **Elements**
Except where otherwise noted
- The color must be `black`.
- The text must be 16pt.
- The top margin must be 0pt.
- The bottom margin must be 6pt.

8. `a` **Elements**
Normal Behavior
- The text must be `#0D2636` in hexadecimal.
- The background must be `100,123,138` in decimal.
- The text must `not be underlined` (i.e., there must be `no decoration`) unless you hover over the link.

Hovering Behavior
- The text must be `194,138,154` in decimal.
- The text must be underlined.
- The background must be `#4C0F20` in hexadecimal.

9. `img` **Elements**
- Must "`float`" appropriately.
- Its `margin-left` and `margin-right` is `auto`.
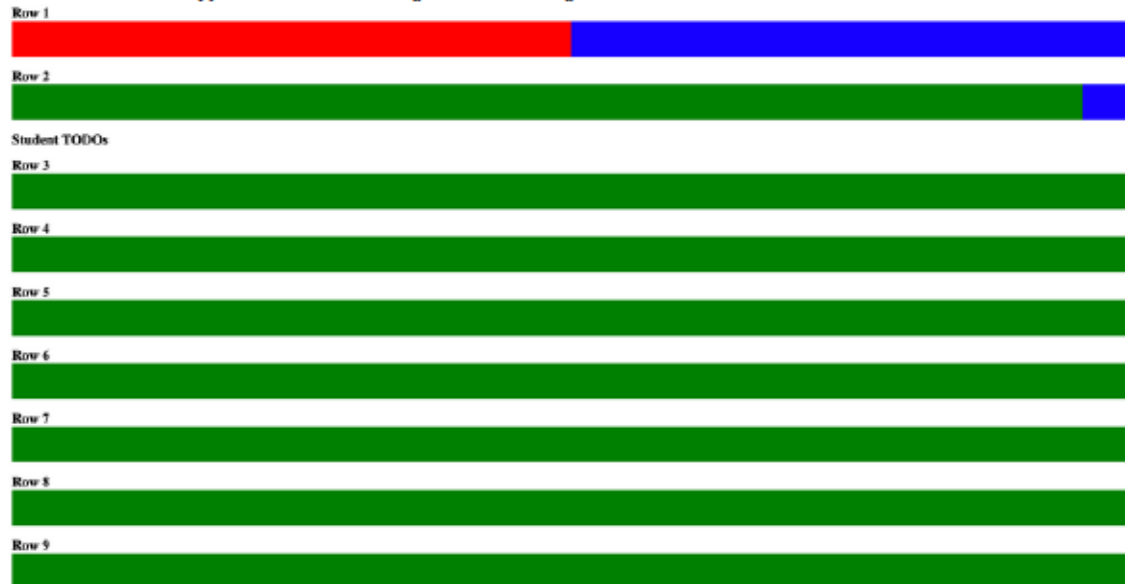- Appropriate `size`.

10. The `footer` **Element**
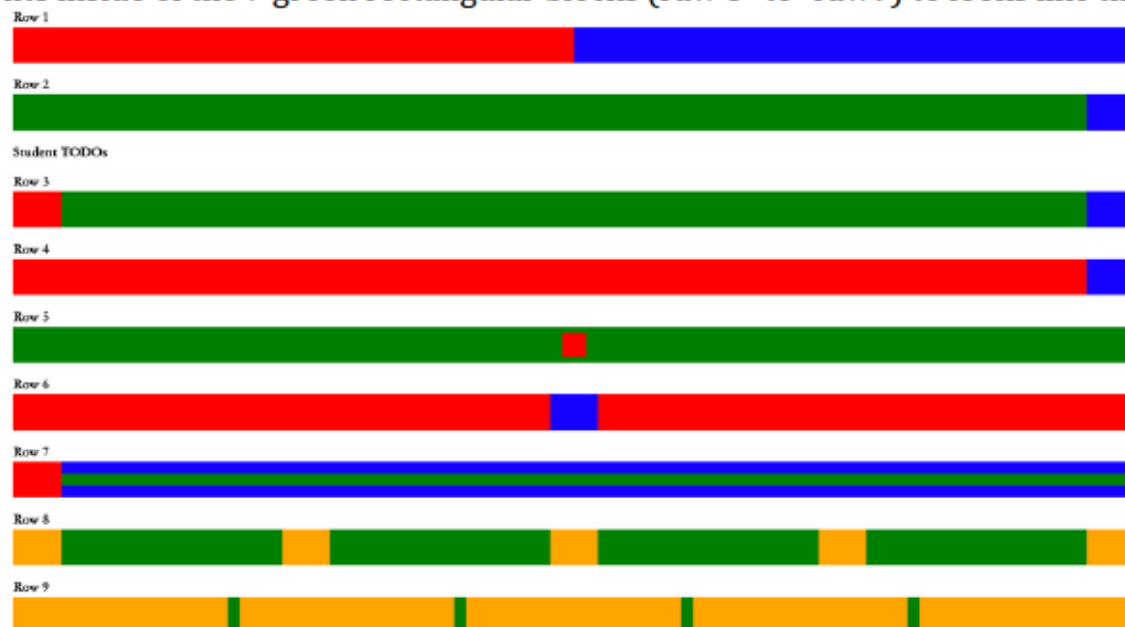- The contents must be `flush left`.
- The text must be 10pt.

2.2.2. Task 2:

This task is to test how to align HTML elements using **flexboxes** as they are widely used in modern web development.

Assume you have given a webpage that contains 9 rectangles that look like the following. The width of these rectangles is the full width of the viewport. The styling and makeup of the first two rectangles are already built for you.

Your task is to develop a responsive webpage and apply stylings using **Flexbox** and **div** elements inside of the 7 green rectangular blocks (raw 3 -to- raw9) to looks like this:

None of the divs you create inside of the provided wrapper divs should have `background-color: green;`.

Try to style the **boxes** as closely to the solution image as possible. Your evaluation will depend on what structure, CSS styles you used, and the dynamic behavior of the page.

For reference,
- The color of the boxes are

```
background-color: red,blue,orange
background-color: FF0000, #0000FF, #FFA500
```

- Some width/height values we used are 20px, 40px, 80px

Description and some hints for a possible approach:

1- For the third row, the red and blue end rectangles should remain the same width, and the green space should shrink. Use an appropriate value for justify-content.

2- For the fourth row, the blue end rectangle should remain the same width, and the red rectangle should shrink. Possible approach: have a fixed width on the blue div. Use flex-grow.

3- For the fifth row, the red square should remain the same size, but always remain in the center of the green rectangle. Hint: think about how to keep a div fixed size and how to align something in the absolute center of the parent element.

4- For the sixth row, the blue rectangle should remain the same size, while the red rectangles should shrink. The blue rectangle should remain in the center of the row.

5- For the seventh row, the red rectangle should remain the same width. Hint: Nest `divs` and use `background-color: transparent`

6- For the eighth row, the orange rectangles should remain the same size while the green space between them shrinks.

7- For the ninth row, the green space between the orange rectangles should remain the same width while the orange rectangles narrow.

2.2.3. Task 3:

This task is to transform a plain HTML template into a fully styled, responsive portfolio webpage using CSS. This project will test your understanding of modern CSS techniques and responsive design principles.

Task Description

You are provided with a complete HTML structure that includes detailed comments about styling requirements. Your task is to create the CSS necessary to transform the provided template into a professional webpage that works across all devices.

1- Download the template webpage "CSE211_Assignmnet-3_html_template.html" [https://piazza.com/gu.edu.eg/fall2024/cse212/resources] and save it in your website public folder.

2- Download the images called image1, image2, image3, skills_1, skills_2, skills_3 "images" [https://piazza.com/gu.edu.eg/fall2024/cse212/resources] and save them in the images folder in your website. Use these images in the project cards in "My Projects" section and in the skill cards in "Skills" section.

3- Create a new CSS file in the public folder called "Ass3_task3.css". You will write all of the CSS for this assignment in this file.

4- Styling Implementation

    4.1 Implement all styles as specified in the HTML comments.

    4.2 Use CSS variables for color scheme and reusable values.

4.3 Implement all hover effects and transitions

4.4 Ensure proper spacing and alignment

5- Responsive Design

    5.1 Website must be fully responsive

    5.2 Implement mobile-first approach

    5.3 Create appropriate breakpoints for different screen sizes

    5.4 Ensure navigation is usable on mobile devices

6- Layout Requirements

    6.1 Fixed header that stays at top of page

    6.2 Full-height hero section

    6.3 Responsive grid for projects section

    6.4 Properly aligned and spaced content

    6.5 Consistent margins and padding

7- Visual Elements

    7.1 Implement specified color scheme

    7.2 Add all required transitions and animations

    7.3 Ensure proper contrast for readability

    7.4 Maintain consistent spacing throughout

8- Design Resources

    8.1 Image Requirements

        8.1.1 Hero Section Background

- Use: `Hero.png`
- Dimensions: `1920x1080px`
- Dark overlay required (`rgba(0,0,0,0.7)`)

        8.1.2 Projects Images

- image1.png: Website mockup (`800x600px`)
- image2.png: Mobile app design (`800x600px`)
- image2.png: E-commerce site (`800x600px`)

        8.1.3 Skill Section Icons

        Use provided emojis or Font Awesome icons

- HTML5: `skills_1.png`
- CSS3: `skills_2.png`
- Responsive: `skills_3.png`

    8.2 Layout Specifications

        8.2.1 Navigation

- Height: `70px`
- Logo size: `1.5rem`
- Nav links padding: `0.5rem 1rem`
- Dropdown animation: `0.3s ease`

        8.2.2 Hero Section

- Full viewport height (`100vh`)
- Content vertically and horizontally centered
- Button padding: `1rem 2rem`

8.2.3 Projects Grid
- Desktop: `3 columns`
- Tablet: `2 columns`
- Mobile: `1 column`
- Gap: `2rem`
- Card padding: `1.5rem`

8.2.4 Contact Form
- Input height: `45px`
- Textarea height: `150px`
- Button width: `100%` on mobile, `auto` on desktop

8.3 Color Codes CSS

```
:root {
    primary: #2c3e50;
    secondary: #3498db;
    accent: #e74c3c;
    text: #333333;
    light-bg: #f4f4f4;
}
```

8.4 Spacing System
- Section padding: `5rem 1rem`
- Component gap: `2rem`
- Content margin: `1.5rem`
- Card padding: `1.5rem`

8.5 Typography
- Headings: `'Segoe UI'`
- Body: `Tahoma, Geneva, sans-serif`

Size scale:
```
h1: 3.5rem   h2: 2.5rem   h3: 1.8rem   p: 1rem
```

8.6 Breakpoints CSS
```
Mobile: 0-768px
Tablet: 768px-1024px
Desktop: 1024px+
```

8.7 Animation Requirements
- Nav hover: `0.3s ease`
- Project cards: `transform translateY(-5px)`
- Button hover: `scale(1.05)`
- Form inputs: `focus border transition`

2.3. General guidelines
- Do not use JavaScript. There's no need to use JavaScript in this assignment.
- Follow the best practices that were described in lectures and in the labs.
- Try not to have too many redundant styles, if there are ways to use inheritance or special selectors to concisely define style rules.
- Use descriptive names, consistent spacing, and otherwise follow good code hygiene.

3. **Method and significance of the assessment**
   - This coursework accounts for **10%** of the whole course mark and is done **INDIVIDUALLY**.
   - This assessment will demonstrate progression of the student's academic ability and is used to measure students' achievement intended learning outcomes (ILOs) [3.a.1, 3.a.2, 3.a.3, 3.b.1, 3.c.1, 3.c.3 and 3.d.1].
   - The marks will be awarded pro-rata, depending on the offered details, evidence of academic and technical talents, professionalism, and organization.
   - A **40%** reduction will be applied for each individual element if evidence of thoroughness is not adequate.
   - If the student appears to be performing it right but makes a mistake, they will receive a maximum of 70% for any of the separate elements.

4. **Marking schema:**
   - 30% of the mark for the evidence of the presented knowledge, understanding, completeness, and the contribution of the student.
   - 60% of the mark for providing the exact requirements stated in Section 2.
   - 10% of the mark for uploading the project on GitHub and validation.

5. **Feedback given to students in response to assessed work.**
   - Specific oral feedback on the assessed components.
   - Feedback for the HTML will be placed on the coursework assessment sheet returned with the coursework mark.
   - During contact hours, students will receive oral generic comments on every part of their assignment..
   - If students need more input, they are encouraged to speak with the teaching staff.

6. **Deliverables**
   - The whole website must be submitted on GitHub during week 12 lab.
     - Put your name, and ID at the head section of each webpage.
   - Late submission, if there is a solid reason, is permissible during the next day subject to the arrangement with the teaching staff, however you will lose 50% of the coursework mark.
   - more than 48 hours delay is not accepted, and you will get **ZERO** in this assignment.

----------- END -----------

7. Rubrics

Project Topic Approval Rubric

	Outstanding 1 point	Developing ½ point	Needs Improvement 0 points
Website Name and Purpose	Clearly stated	Unclear	Missing
Intended Audience	Clearly described in terms of age, gender, interests, and socio-economic criteria.	Unclear or missing criteria	Missing or does not relate to the website purpose
Content	The type of text, graphics, and media needed for the website are clearly described.	Unclear or missing criteria	Missing or does not relate to the website purpose
Related or Similar websites	Listed two URLs of related/similar websites	Listed one URL of a related/similar website	Less than two URLs listed or the websites are not related/similar
Mechanics	Well organized, complete sentences, correct grammar and spelling.	Complete sentences, disorganized, less than three grammar/spelling errors.	Incomplete sentences, three or more grammar/spelling errors.

Planning Analysis Rubric

	Outstanding 2	Developing 1	Needs Improvement 0
Website Name / Goal	Clearly stated	Unclear	Missing
Page Titles	Lists the title of each page (between seven and eleven titles)	Lists more than four but less than seven titles	Lists less than five titles are listed.
Form	The use of a form in an appropriate manner is clearly described.	Unclear or inappropriate form use	Missing
Obtain Content	Lists at least four sources of content (facts, text, graphics, media)	Lists at least two sources of content	Lists less than two sources of content
Mechanics	Well organized, complete sentences, correct grammar and spelling.	Complete sentences, disorganized, less than three grammar/spelling errors	Incomplete sentences, three or more grammar/spelling errors

Site Map Rubric

	Outstanding 4-6 points	Developing 2-3	Needs Improvement 0-2
Site Organization	The site is organized in an appropriate and usable manner.	Only one area of the site organization needs to be modified to result in a usable product.	Two or more areas of the site organization need to be modified.
Web Pages	Lists each web page (between 7 and 10 pages)	Lists more than four but less than seven pages	Lists less than five pages
Mechanics	--	Clearly labeled, readable	Unclear or not readable

Wireframe Rubric

	Satisfactory 2-4 points	Needs Improvement 0-2 points
Logo Area	Present	Missing
Navigation Area	Present	Missing
Content Area	Present	Missing
Footer Area	Present	Missing
Mechanics	Organized, easy to read and understand.	Some improvement is needed in the organization and/or the document is not easy to read or understand.