Build and Style a Multi-Section Webpage Using CSS Selectors

Estimated Time: 2 hours

Task Description:
You will create a structured HTML webpage for a fictional **Portfolio Website** and style it using **CSS selectors**. You must include **universal selectors, type selectors, class selectors, ID selectors, descendant selectors, child selectors, attribute selectors, pseudo-classes, and pseudo-elements**. This task will help you practice applying selectors to different elements in a complex layout.

Part 1: HTML Structure

Create a structured webpage following these guidelines:

1. **Header Section:**
   - Add a `<header>` tag.
   - Inside the header, include:
     - A main heading (`<h1>`) with the page title: **"Welcome to My Portfolio"**.
     - A navigation menu (`<nav>`):
       - Add an unordered list (`<ul>`) with 3 links (`<a>`) to the sections "About", "Projects", and "Skills".
2. **About Section:**
   - Use a `<section>` with an `id="about"`.
   - Add a heading (`<h2>`) with the title: **"About Me"**.
   - Write a paragraph (`<p>`) describing yourself (fictional content is fine).
   - Add an image (`<img>`) to simulate a profile picture (use a placeholder link: `https://via.placeholder.com/150`).
3. **Projects Section:**
   - Use a `<section>` with an `id="projects"`.
   - Add a heading (`<h2>`) titled **"My Projects"**.
   - Create a list of **3 projects** using `<div>` elements:
     - Each project should have:
       - A project name inside an `<h3>` tag.
       - A description using a `<p>` tag.
     - Add a unique class to each `<div>` for the projects (e.g., `class="project1"`, `class="project2"`, `class="project3"`).

4. **Skills Section:**
   - Use a `<section>` with an `id="skills"`.
   - Add a heading (`<h2>`) with the title: **"My Skills"**.
   - Create an unordered list (`<ul>`) with 5 skills (e.g., "HTML", "CSS", "JavaScript", "Problem Solving", "Communication").
5. **Footer Section:**
   - Use a `<footer>` tag.
   - Add a paragraph with the text: **"© 2024 My Portfolio"**.

Part 2: CSS Styling Instructions

Write all your CSS inside a `<style>` tag in the `<head>` section of the HTML document. Follow these instructions:

1. **Universal Selector:**
   - Remove default margins and padding.
   - Set `box-sizing: border-box`.
2. **Type Selectors:**
   - Style headings:
     - `<h1>`: Center the text and change its color to `darkblue`.
     - `<h2>`: Set font size to `24px` and underline the text.
     - `<h3>`: Set font size to `20px` and color to `darkgreen`.
   - Style paragraphs (`<p>`) with `line-height: 1.5` and `font-size: 16px`.
3. **Class Selectors:**
   - Target the project sections (`.project1`, `.project2`, `.project3`):
     - Apply a unique background color for each project.
     - Add `padding`, `margin`, and a `border`.
4. **ID Selectors:**
   - Style the "About" section (`#about`) with a **light gray background** and centered text.
   - Style the "Skills" section (`#skills`) with a **light yellow background** and bold list items.
5. **Descendant Selector:**
   - Target the list items (`<li>`) inside the navigation menu (`<nav>`):
     - Remove bullets and set text color to `darkred`.
6. **Child Selector:**
   - Style all headings (`<h3>`) that are **direct children** of the "Projects" section.
7. **Attribute Selectors:**

Add a border to the image element using its `src` attribute:
css
Copy code

```css
img[src] {
  border: 2px solid black;
  border-radius: 50%;
}
```

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8. **Pseudo-Classes:**
    - ○ Add a hover effect for navigation links (`<a>`):
        - ■ Change text color to `orange`.
        - ■ Add an underline on hover.
9. **Pseudo-Elements:**

Use `::before` to add a star symbol before each skill in the "Skills" section.
Example:
css
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```css
li::before {
  content: "⭐ ";
}
```

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Acceptance Criteria

Your final webpage must include:

1. A well-structured HTML layout with:
    - ○ Header, About, Projects, Skills, and Footer sections.
    - ○ Correct use of tags: `<header>`, `<nav>`, `<section>`, `<ul>`, `<h1>` to `<h3>`, `<p>`, `<img>`, `<div>`, `<footer>`.
    - ○ Classes and IDs applied appropriately to elements.
2. **CSS Selectors Demonstrated:**
    - ○ Universal Selector
    - ○ Type Selectors
    - ○ Class Selectors
    - ○ ID Selectors
    - ○ Descendant Selectors
    - ○ Child Selectors

- ○ Attribute Selectors
- ○ Pseudo-Classes (`:hover`)
- ○ Pseudo-Elements (`::before`)
3. **Styling Requirements:**
   - ○ Proper use of colors, padding, margins, and borders.
   - ○ Hover effects for links.
   - ○ Unique background colors for each project.
   - ○ Styled image (circular border).
4. **Clean Code:**
   - ○ HTML and CSS should be properly indented and include comments for clarity.

Bonus Task (Optional):

- ● Add the "Testimonials" section below "Projects" that includes at least 2 testimonials using `<blockquote>` tags and style them.

Submission Instructions:

1. Save your file as **portfolio_selectors.html**.
2. Submit the file on Github along with a screenshot of the rendered webpage.