

WEB Technologies LAB EXERCISE-HTML [CSS]

1. Create a Personal Introduction Webpage using All Three CSS Styles

Objective: Learn to differentiate between inline, internal, and external CSS and understand their scope and priority.

Task:

Build a simple webpage that includes your name, photograph, and a short paragraph about yourself.

- Use **inline CSS** to style your name (change color, font size).
- Use **internal CSS** (within <style> tag) to style the paragraph and background.
- Create a separate .css file and use external CSS to style the image and layout.

Hint:

Try giving the paragraph a different font using internal CSS and add a border to the image from the external CSS file.

Sample Output

My Name is Sandeep



Hello! I am currently doing research in EEG signal analysis and cognitive neuroscience. I enjoy coding, teaching, and learning new technologies.

Contact me at: sandeep@example.com

2. Design a Color-Themed Landing Page Using CSS Colors

Objective: Practice working with various color models in CSS.

Task:

Design a small homepage layout with a heading, subheading, and a button.

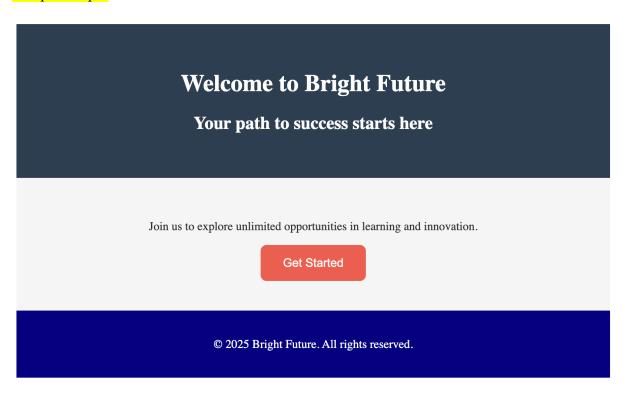
- Use hexadecimal, RGB, and named colors in different sections.
- Assign different background colors to header, body, and footer.
- Make the button visually pop using color contrast.



Hint:

Try using color:, background-color:, and experiment with rgba() to add transparency.

Sample Output



3. Format an Article Page Using Class and ID Selectors

Objective: Use class and ID selectors to organize and reuse styles efficiently.

Task:

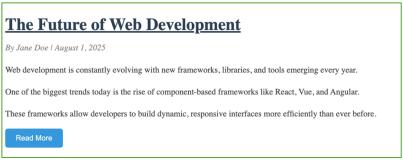
Write a simple blog post with a title, author info, multiple paragraphs, and a "Read more" button.

- Use an **ID selector** to uniquely style the title (e.g., bigger font, underline).
- Use **class selectors** for styling all paragraphs consistently.
- Create a class for the button and apply hover styling.

Hint:

ID starts with #, class starts with . — use them both in your CSS file. IDs are unique; classes can be reused.





4. Visualize the CSS Box Model with Colored Sections

Objective: Understand the impact of margin, padding, border, and content.

Task:

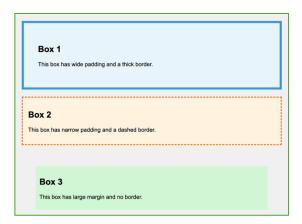
Design a simple layout with 3 different boxes showing margin, padding, and borders clearly. Each box should contain:

- A heading
- Some content
- Visually distinct spacing and border styles

Hint:

Use background colors to clearly differentiate between margin, border, and padding.

Sample Output



5. Design a Stylish Profile Card with Shadow and Rounded Corners

Objective: Build a reusable UI card with modern CSS properties.

Task:

Create a profile card with an image, name, and job title.

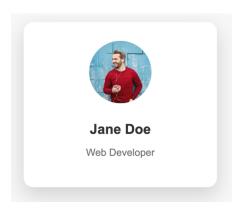


- Add border-radius to make the image circular
- Use box-shadow to give the card depth
- Add a subtle transition effect when hovering over the card

Hint:

Use transition: all 0.3s ease-in-out; and transform: scale(1.05) on hover.

Sample Output



6. Arrange Multiple Elements Using CSS Positioning

Objective: Learn the difference between static, relative, absolute, and fixed positions.

Task:

Create a page with three colored boxes placed at specific positions:

- One should scroll normally (static)
- One should stay fixed at the top right (fixed)
- One should move relative to its container (relative)
- One placed absolutely inside a wrapper (absolute)

Hint:

Use top, left, and right to place positioned elements. Use z-index if elements overlap.





7. Build a Responsive Navigation Bar with Flexbox and Hover Effects

Objective: Create a responsive layout and enhance interactivity using pseudo-classes.

Task:

Create a navigation bar with 4–5 links (e.g., Home, About, Services, Contact).

- Use **Flexbox** to distribute them evenly
- Apply :hover effects (color change, underline, bold)
- Ensure it wraps nicely on smaller screens

Hint:

Use display: flex, justify-content: space-around, and @media queries for responsiveness.

Sample Output

| <u>Home</u> | About | Services | Contact |
|-------------|-------|----------|---------|
| | | | |

8. Create a Blog Post Layout with Multi-Column Content

Objective: Use modern layout techniques like multi-column and overflow handling.

Task:

Design a blog post with:

- Multi-column text (split into 2 or 3 columns)
- A sidebar that remains scrollable
- Long content that demonstrates vertical scrolling with a fixed header

Hint:

Use column-count, overflow, and height with overflow: auto to create scrollable areas.



My Tech Blog

Sidebar

- Recent Posts
- Archives
- Tags
- Contact

Understanding CSS Columns

Lorem ipsum dolor sit amet,
consectetur adipiscing elit. Fusce
varius, sapien sed mattis blandit, est
libero vehicula sapien, non dignissim
mi nisl sit amet leo. Proin at neque nec
lacus iaculis commodo.
Integer efficitur nisl vitae lorem laoreet,
nec imperdiet sapien aliquam.
Curabitur at mi nisi. Curabitur rhoncus
erat ut erat luctus viverra. Sed tempor
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Sed varius lacus justo, a vulputate sapien condimentum id. Nullam porttitor, nisl nec porttitor suscipit, elit dolor mattis risus, ut iaculis erat magna in velit.

Donec nec libero in erat consectetur tincidunt. Duis volutpat mauris ac finibus rhoncus. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia curae.

9. Animate Buttons Using Transitions and Transformations

Objective: Introduce smooth transitions and CSS-based animations.

Task:

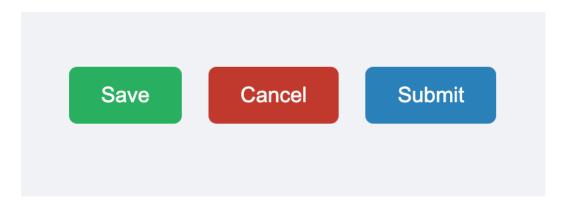
Create a set of buttons (e.g., Save, Cancel, Submit).

- On hover: change background color, scale up slightly
- On click: apply a temporary box-shadow
- Use transitions for smooth effects

Hint:

Use: hover, :active, transform, and transition properties.

Sample Output



10. Design a Web Page Using CSS3 Effects (Gradients, Web Fonts, Opacity)

Objective: Combine multiple modern CSS3 properties in a visually appealing page.

Task:

Create a one-page portfolio layout with:



- Gradient background header
- Web fonts from Google Fonts
- Section with partially transparent images (opacity)
- Buttons with text effects like shadows or letter-spacing

Hint:

Use background: linear-gradient(...), @import for fonts, and text-shadow, letter-spacing.

