Week 1: Introduction to HTML and CSS

Day 1: Introduction to HTML

- **Topics Covered**: Basic structure of an HTML document, <html>, <head>, <body>, <h1>, <p>, <a>, <img>.

- **What I Learned**: Today I learned the basic structure of an HTML page and how to create headings, paragraphs, links, and images. I also learned about different types of attributes like src, href, and alt for images and links.

- **Challenges**: Initially, I had trouble understanding the difference between block-level and inline elements, but I researched and practiced and now it's clearer.

Day 2: Advanced HTML Elements

- **Topics Covered**: Forms, inputs, buttons, and lists.

- **What I Learned**: I created a simple contact form with different types of inputs like text, radio buttons, checkboxes, and a submit button. I also worked with ordered and unordered lists.

- **Challenges**: Styling forms in HTML was challenging because the layout was not aligned. It took me a while to understand how to structure them properly.

Day 3: Introduction to CSS

- **Topics Covered**: CSS syntax, selectors, color properties, background properties.

- **What I Learned**: I learned how to style basic HTML elements using CSS. The concept of classes and IDs to target specific elements was new to me. I also explored colors, backgrounds, borders, and padding.

- **Challenges**: Understanding the difference between margin and padding was a bit tricky. But after practicing, I now know when to use each one.

Day 4: Box Model and Flexbox

- **Topics Covered**: The Box Model (margin, border, padding, content), Flexbox.

- **What I Learned**: I understood how elements are spaced and sized using the Box Model. Flexbox made it easier to create responsive layouts without worrying about float properties.

- **Challenges**: Flexbox layouts seemed confusing at first, especially when aligning items horizontally and vertically, but I practiced with examples and now feel more confident.

Day 5: CSS Positioning

- **Topics Covered**: position: relative, absolute, fixed, and sticky.

- **What I Learned**: Today, I worked on positioning elements on the page. I learned how relative and absolute positioning work, as well as how fixed can keep elements in place when scrolling.

- **Challenges**: I kept making mistakes with absolute positioning because it positions the element relative to its nearest positioned ancestor. I had to practice and experiment a lot with it.

Day 6: CSS Transitions and Animations

- **Topics Covered**: CSS transitions, keyframes, and animation properties.

- **What I Learned**: I explored adding transitions to elements to create smooth animations when properties change. I also learned how to use keyframes to create more complex animations.

- **Challenges**: The timing functions (ease, linear, etc.) in CSS animations were a bit tricky to grasp at first, but I now understand how they control the speed of animations.

Day 7: Review and Practice

- **What I Learned**: I spent the day reviewing everything from this week and practicing creating simple web pages.

- **Challenges**: Organizing HTML and CSS files correctly and making sure everything was properly structured was challenging, but I got better with practice.