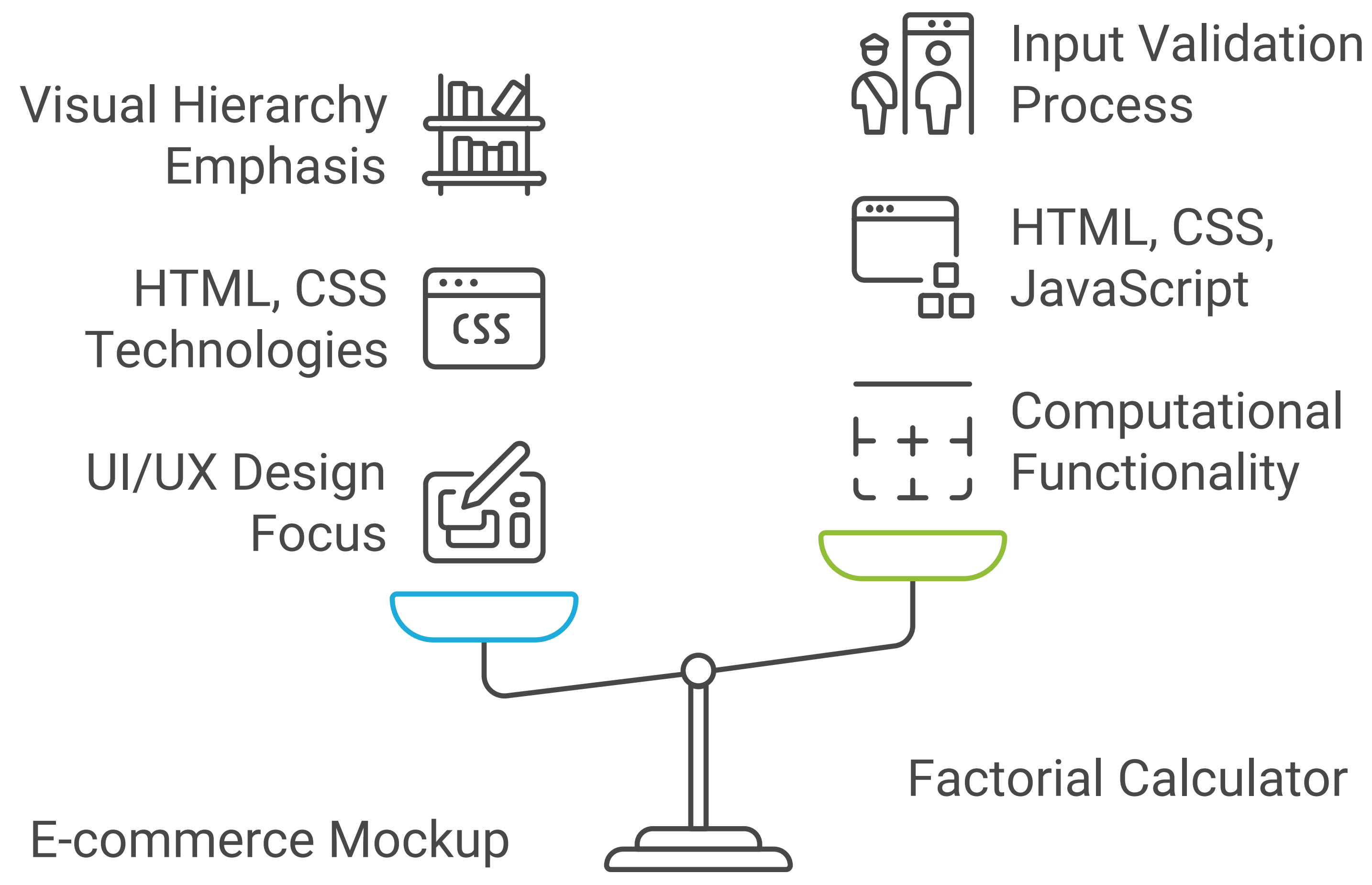
Documentation For The E-Commerce and Factorial Calculator



Balancing Design and Functionality in Web Development

1. Project Overview:
This project creates two front-end components: an e-commerce product page mockup and a factorial calculator web application.

2. E-commerce Product Page Mockup:

- **Purpose:** Visual representation of a product page, emphasizing layout and product information display. UI/UX focus.
- **UI Elements:**
    - Product Image
    - Product Title
    - Product Description
    - Price
    - "Add to Cart" Button
- **Styling & Responsiveness:**
    - Visually appealing design
    - Responsive layout (desktop, tablet, mobile)
    - Clear visual hierarchy
- **Technologies:** HTML, CSS
- **Considerations:** Image quality, readability, prominent call to action.

3. Factorial Calculator Web Application:

- **Purpose:** Calculate factorial of a number using iterative/recursive methods. Includes input validation.
- **UI Elements:**
    - Input Field (number)
    - Calculate Buttons (Iterative, Recursive)
    - Result Display (factorial value, method used)
- **Functionality:**
    - Input Validation (positive integer)
    - Iterative Factorial Calculation
    - Recursive Factorial Calculation
    - Result Display
- **Technologies:** HTML, CSS, JavaScript
- **Input Validation:** Type check (number), Positive Integer Check (>= 0).
- **Testing:**
    - Valid Inputs (positive integers, 0)
    - Invalid Inputs (non-numeric, negative, floating-point)
    - Cross-Browser Compatibility
    - Edge Cases (large numbers)
- **Deployment:** Any web server supporting HTML, CSS, and JavaScript.

4. General Considerations:

- **Accessibility:** Adhere to accessibility guidelines (WCAG).
- **Performance:** Optimize JavaScript for larger factorial calculations.
- **Overall:** Aim for clean, user-friendly interfaces for both components. Focus on clear presentation and intuitive interaction. Prioritize a positive user experience. Ensure thorough testing across different scenarios. This project is focused on front-end development and presentation. The calculator is for demonstration and learning purposes, not for production-level scientific calculations. Remember to comment the code for better maintainability and understanding. The design of both components should be simple and easy to understand.
- Consider using a CSS framework for faster development
- Use modern JavaScript syntax to be more compatible
- Use responsive meta tag to scale correctly in all devices
- All HTML elements must be valid.
- Provide descriptive error messages