

Front-End Development Task: Build an Interactive Product Customizer

Objective:

Develop an interactive product customizer for a fictional e-commerce store. Users should be able to select different options to customize a product (e.g., a T-shirt) and see the changes reflected in real-time. The task involves handling dynamic UI changes and requires strong DOM manipulation and event-handling skills.

Requirements:

1. **Product Customization Interface:**
 - Display a product (e.g., a T-shirt) with multiple customizable options:
 - **Color:** Allow users to choose from at least 4 different colors (change the product's color dynamically).
 - **Size:** Provide size options (e.g., S, M, L, XL) as a dropdown or buttons.
 - **Text:** Allow users to enter custom text that appears on the product (T-shirt front).
2. **Dynamic Rendering:**
 - Use JavaScript to dynamically update the product's appearance as the user makes changes.
 - The text input should be live-updated on the product (without refreshing the page).
 - Handle different color combinations by changing the background color of the product based on user selection.
3. **Preview Image & Animations:**
 - Include a product preview area where the user can see the changes happening in real-time.
 - Use basic CSS animations (e.g., a subtle fade-in or transition) to make the changes smooth when updating the preview.
4. **Price Calculation:**
 - Display the base price of the product.
 - Add a small price increase based on the selected options (e.g., color and size).
 - Show the updated total price dynamically as users make their selections.
5. **Form Validation:**
 - Ensure users have selected all necessary options (color, size, and input text) before they can proceed to a mock "Add to Cart" button.
6. **Bonus Challenge:**
 - Implement a "Save Customization" feature using local storage. When the user revisits the page, their previous selections should be pre-loaded into the customizer.

Technology Stack:

- **HTML5, CSS3** (or **SCSS**), **JavaScript** (or **React** if desired)
- Optional: Vanilla JavaScript or a framework/library like **React** for handling the dynamic UI.

Deliverables:

- A fully functional interactive product customizer.
- The design should be clean, intuitive, and responsive, working across various screen sizes.

Deadline:

Completion Date: October 8th, 2024



Sample Design