Personalized Room Color Scheme Generator

Objective : The primary objective of the web application is to:

- Generate a complementary color palette based on a user-selected base color.
- Provide room-specific decor suggestions that match the generated color palette.

Flow :

Client (Browser) → User opens the web page by requesting the URL.

Server → Sends HTML, CSS, and JavaScript to the client.

Browser → Renders the HTML and applies CSS styles.

JavaScript → Initializes and waits for user interaction.

User Interaction → User selects a room type and a base color.

JavaScript → Sends an API request to Colormind.io to generate a color palette.

API Server (Colormind.io) → Returns a generated color palette based on the input color.

JavaScript → Processes the data, updates the UI with the generated color palette and matching decor suggestions.

User Sees Updated Information → The page updates to display the generated color palette, matching suggestions, and changes the background image to match the selected room type.

Usage :

Select Room: User selects the type of room they want to decorate from a dropdown list (e.g., Kitchen, Master Bedroom, Balcony, etc.).

Select Primary Color: User picks a base color using a color picker input, which will serve as the primary color for generating the palette.

Generate Palette: User clicks the "Generate Palette" button, which triggers the generation of a color palette and matching decor suggestions.

View Results: The generated color palette is displayed on the left side of the screen. Matching decor suggestions are displayed on the right side in a table format, with each suggestion colored according to the palette.

Requirements:

Browser: The code is designed to run in a modern web browser with JavaScript support. Ensure compatibility with browsers like Chrome, Firefox, Safari, or Edge.

APIs Used: The application utilizes the Colormind API to generate color palettes.

<u>Summary</u>

- **Purpose:** The web application is designed to help users generate and visualize a complementary color palette for room decoration, along with specific decor suggestions based on the selected room type.
- **APIs Used:** Colormind.io API is used for generating color palettes based on user input.