Color Palette Generator A black background with a black square

Description automatically generated with medium confidence **Description:**

Create a color palette generator web application that generates harmonious color palettes for UI design. The project can be implemented using HTML, CSS, and JavaScript. This project focuses on UI and visual design, allowing users to explore different color schemes.

**Features:**

* Color Palette Generation: Automatically generate color palettes based on different color rules (complementary, analogous, triadic, etc.).
* Color Picker: Allow users to manually select colors and see their hex values.
* Palette Customization: Enable users to customize and save their favorite palettes.
* Dynamic UI Updates: As users change colors or select different rules, update the UI in real-time to reflect the changes.
* Copy to Clipboard: Provide an option to copy color hex values to the clipboard.

Implementation Steps:

* Set up the basic HTML structure: Create an HTML file with sections for displaying color palettes and controls.
* Style the interface: Design the user interface using CSS, making it visually appealing and user-friendly.
* Implement color generation: Use JavaScript to generate color palettes based on selected rules.
* Implement color picker: Add a color picker input for users to manually select colors.
* Implement palette customization: Allow users to save their favorite color palettes and switch between them.
* Implement dynamic UI updates: Update the UI in real-time as users interact with the controls.
* Implement copy to clipboard: Provide a way for users to easily copy color hex values