## **PaletteFlow**

PaletteFlow is a tool developed by students at OSU-Cascades in collaboration with fare\*well, designed to streamline the client onboarding process for customers building a website. Its primary objective is to provide an intuitive platform that assists clients in establishing a preliminary brand identity, enabling a faster start to site development. PaletteFlow guides users through the selection of an initial color and brand archetype, leveraging this information to generate an accessible color palette and site theme. Users can further customize their theme, and PaletteFlow produces a branding document that can be exported as a PDF.

## **Features**

- · Client Choice section
- · Accompanying Visuals
- · Preliminary Brand Identity Document
- · PDF Deliverable

## Setup Instructions

## **Prerequisites**

- Node.js (v18+)
- · npm or yarn

## **Steps**

#### 1. Clone the repo

- git clone https://github.com/natitack/codespaces-nextjs.git
- o cd codespaces-nextjs.git

#### 2. Install dependencies

- npm install
  - or
- yarn install

#### 3. Run locally

- o npm run dev
  - or

Visit http://localhost:3000

## **VS** Code

- Make sure the Dev Containers extension is installed.
- Open the project folder in VS Code.
- Click "Reopen in Container" when prompted.

## Codespaces

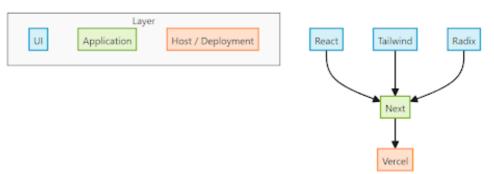
- Start your code space and the deployment should start automatically

## How to Deploy

This project is built on Next.JS 14, and can be easily deployed to Vercel. To deploy PaletteFlow, refer to the <u>Vercel deployment guide (https://vercel.com/docs/getting-started-with-vercel/import)</u>. This resource provides step-by-step instructions for importing your project, configuring settings, and launching your application on Vercel.

## System Architecture

#### System Diagram



## How to Modify

Adding New Relume Components

PaletteFlow supports modular addition of new Relume hero and feature components. Code for these components can be copied directly from the Relume website. To add a new Relume component (such as a hero or feature layout), follow these steps:

#### 1. Create the Component

- o Copy the component code from the Relume website and save it as a .tsx file.
- Place your new component file in the appropriate directory:
  - Hero components: /components/heroelements/
  - Feature components: /components/featureelelemts/

#### 2. Register the Component

- For hero components, edit /components/heroelements/RelumeHeroWrapper.tsx and add your new component to the heroLayouts map.
- For feature components, edit /components/featureelelemts/RelumeFeatureWrapper.tsx and add your new component to the featureLayouts map.

#### 3. Add Preview Images

- Remember to add a PNG preview image of your layout to the associated public directory:
  - Hero:/public/images/previews/hero/
  - Feature: /public/images/previews/feature/
- Name the image file to match your layout key (e.g., header99.png).
- Preview images are required for all new layouts to ensure they appear correctly in the deliverable export.

#### Summary:

- Create your component in the correct folder (copy from Relume if needed).
- Register it in the wrapper (RelumeHeroWrapper or RelumeFeatureWrapper).
- Add a preview image for deliverables (required).

## Adding New Fonts

PaletteFlow allows you to easily add new Google Fonts for users to select. To add a new font option:

#### 1. Import the Font

- Open /hooks/useFontOptions.ts.
- Import your desired font from next/font/google. For example:

```
import { Lato } from "next/font/google";
```

#### 2. Initialize the Font

Create a font instance with the required options:

```
const lato = Lato({ subsets: ["latin"], weight: "400" });
```

#### 3. Add to Font Options

• Add your new font to the fontOptions array:

```
{ value: lato.className, label: "Lato" },
```

#### 4. Use in the Font Picker

 The new font will automatically appear in the font selection dropdown in the UI (e.g., in the FontStep component).

#### Summary:

- Import the font in /hooks/useFontOptions.ts.
- Initialize it and add it to the fontOptions array.
- The font will be available for users to select in the app.

## **Updating the Mood Step**

The Mood Step in PaletteFlow allows users to select a brand personality, which automatically sets related style options such as font, button style, and color mood. To update or add new moods, follow these steps:

#### 1. Open the MoodStep Component

 $\bullet \ \ \ \ \, \textbf{Edit the file}\hbox{:}\ / \texttt{components}/\texttt{steps}/\texttt{MoodStep.tsx}. \\$ 

#### 2. Modify the MOOD\_CONFIG Object

- $\circ$   $\,$  Locate the  ${\tt MOOD\_CONFIG}$  constant at the top of the file.
- o To add a new mood, add a new entry to the object with a unique key. Each mood should include:
  - label: Display name
  - emoji: Emoji icon
  - description: Short description
  - styles: An object with the following properties:
    - font: The label of a font from your font options (e.g., "Nunito")
    - buttonStyle: Button style string (e.g., "medium")
    - heroLayout: Hero layout key (e.g., "header1")
    - featureLayout: Feature layout key (e.g., "layout398")
    - chroma: Chroma value (number, e.g., 0.30)
    - lightness: Lightness value (number, e.g., 0.90)

#### Example:

```
newmood: {
  label: "New Mood",
  emoji: "□",
  description: "Energetic, fresh, unique",
  styles: {
    font: "Nunito",
    buttonStyle: "medium",
    heroLayout: "header1",
    featureLayout: "layout398",
    chroma: 0.50,
    lightness: 0.75
}
```

• To edit an existing mood, update its properties as needed.

#### 3. Ensure Font Mapping

• The font property in each mood's styles should match the label of a font in your /hooks/useFontOptions.ts file.

#### 4. Save and Test

Save your changes. The new or updated mood will appear in the Mood Step UI, and selecting it will
update the brand's style settings accordingly.

#### Summary:

- Edit MOOD CONFIG in /components/steps/MoodStep.tsx to add or update moods.
- Use font labels that exist in your font options.
- Save and test the Mood Step in the app.

# Adding and Referencing New Fields in Choices Context

PaletteFlow uses a global Choices Context (/context/ChoicesContext.tsx) to store user selections such as color, font, mood, and more. If you want to add a new field (for example, backgroundPattern or logoShape) to the context and use it throughout the app, follow these steps:

#### 1. Add the Field to the ChoicesState Interface

Open /context/ChoicesContext.tsx and update the ChoicesState interface to include your new field:

```
interface ChoicesState {
   // ...existing fields...
  backgroundPattern: string; // <-- Add your new field here
}</pre>
```

#### 2. Add the Field to the Initial State

In the getInitialChoices function, add a default value for your new field:

```
return {
  // ...existing fields...
  backgroundPattern: "dots", // <-- Default value for new field
};</pre>
```

## 3. Reference or Update the Field in Components

To read the value in a component:

```
import { useChoices } from "@/context/ChoicesContext";

const { choices } = useChoices();

console.log(choices.backgroundPattern); // Access the value
```

#### To update the value:

```
const { updateChoice } = useChoices();
updateChoice("backgroundPattern", "stripes");
```

#### 4. Add to setAllChoices

If you use setAllChoices, ensure your new field is included in any objects passed to it.

#### Summary:

- Add your field to ChoicesState and the initial state.
- · Migrate old data if needed.
- Use choices.<field> to read, and updateChoice("<field>", value) to update.
- · Update any UI or logic to use the new field.

This ensures your new field is globally available and persists across sessions.

## Adding a New Step to the Brand Builder

To add a new step (such as a new design choice or configuration) to the Brand Builder flow in PaletteFlow, follow these steps:

#### 1. Create Your Step Component

- Create a new file for your step in /components/steps/, e.g. NewStep.tsx.
- Export a React component that accepts value and onChange props.
- · Example:

#### 2. Add the Field to Choices Context

- Add a new field to the ChoicesState interface in /context/ChoicesContext.tsx.
- Add a default value for your field in the getInitialChoices function.
- Example:

```
// filepath: /context/ChoicesContext.tsx
interface ChoicesState {
    // ...existing fields...
    newField: string; // <-- Add your new field
}

// In getInitialChoices:
return {
    // ...existing fields...
    newField: "", // <-- Default value
};</pre>
```

#### 3. Register the Step in the Brand Builder

- Open /pages/brand-builder.tsx.
- Add your new step to the STEPS array, specifying a unique id, your component, and a title.
- Example:

```
// filepath: /pages/brand-builder.tsx
import { NewStep } from "../components/steps/NewStep";

const STEPS = [
   // ...existing steps...
   { id: "newField", component: NewStep, title: "New Step Title" },
];
```

#### 4. (Optional) Update the Live Preview

 If your new step affects the live preview, update the LivePreview component to use the new field from choices

#### 5. (Optional) Update Deliverables

If your new field should appear in exported documents or deliverables, update the relevant export logic to include
it.

# Known Issues, Future Improvements

- · Moodstep options need more meaningful differentiation
- Additional Relume feature and hero components should be added
- Color selection does not handle colors with low color saturation and lightness values well because the mood step
  overrides those values. One way to resolve this issue is to have a low saturation option in the mood step
- The client is very interested in having an inspiration step component, incorporating a ranking process of existing websites to inform archtype selection
- Font Selection component does not show what a font would look like until after it is selected.
- · Deliverable component needs aesthetic refinement
- · Application is not mobile friendly

## Troubleshooting

Here are some common issues you might encounter while running or modifying PaletteFlow, along with suggested fixes:

## App Doesn't Start or Shows Errors on Launch

Symptom: npm run dev or yarn dev fails with errors.

Fixes:

Make sure you're using Node.js version 18 or later.

Run rm -rf node modules && npm install to clear and reinstall dependencies.

Check that your .env file (if applicable) is correctly configured.

## New Component or Step Doesn't Show Up

Symptom: Custom hero/feature layout or a new builder step doesn't appear in the UI.

Fixes:

Confirm you've correctly imported and registered the component in the appropriate wrapper (RelumeHeroWrapper.tsx, RelumeFeatureWrapper.tsx, or the STEPS array).

Ensure your component file is located in the correct folder (/heroelements/, /featureelelemts/, or /steps/).

Check for typos in layout keys or missing preview image files.

## Font Doesn't Appear in Dropdown

Symptom: Added a Google Font but it's not selectable in the UI.

Fixes:

Ensure the font is imported and instantiated in /hooks/useFontOptions.ts.

Make sure the label in the font config matches the label used in any mood configurations.

## **Exported PDF Missing Previews or Styles**

Symptom: Branding PDF shows empty blocks or missing images.

Fixes:

Verify that preview images are added to the correct directory (/public/images/previews/hero/ or /feature/) and that file names match layout keys.

Ensure all required fields in Choices Context are set before export.

## **UI Looks Broken on Smaller Screens**

Symptom: Layout issues or components overlap on mobile.

Fix: PaletteFlow is not currently optimized for mobile. Responsive design improvements are tracked in the Known Issues section.