## **Design System Anatomy**

The building blocks of the Brightlayer UI design system are broken down into four levels of increasing complexity: elements, components, pages, and workflows. When communicating with other members of the Brightlayer UI community, you should strive to use this terminology to promote effective collaboration and understanding. This is applicable to designers, developers, product managers, etc.

[Design System Image]

#### **Foundations**

The foundations include the most basic visual elements on the page, such as color, icons, typography, etc. These typically have no behavior or interaction on their own, but instead are used to communicate information to a user, establish a brand, or lay the foundations for the Brightlayer UI components, pages, and workflows.

### **Components**

Components are the basic functional units of the UI. They are usually interactive through clicking, expanding, etc. Components can be as simple (such as buttons, tabs, sliders) or complex (such as navigation drawers). Simpler components are often combined to form complex ones.

Most of the simple components in Brightlayer UI are defined and built by Material Design and the component libraries that implement it. Brightlayer UI focuses on defining and building advanced components that are shared across Brightlayer UI applications.

#### **Pages**

Pages are the largest single unit in the Brightlayer UI design system. These are typically full-screen designs that specify how certain pages can look in an application. Foundation of these pages should stay the same while there may be some room for customizations. Examples of pages include "login (empty fields)" and "create password (invalid)".

#### **Workflows**

Workflows are a sequence of pages combined with rules surrounding how a user goes from one page to another. These usually represent a common path that a user is expected to take to complete various tasks. Workflows that are defined in Brightlayer UI are intended to be nearly identical between applications. Examples of very common workflows include the login experience and user registration / sign up.

## **Design Patterns**

#### [Design System Image]

Design patterns are very common in Brightlayer UI. A design pattern is a common interaction or behavior that can exist at any level in the design system hierarchy described above. For example, we may have a design pattern for showing actions available on a list item or how to interact with individual settings on a settings page.

Because a design pattern centers around interactions, they typically include different states. A button can be normal, hovered, or pressed. Similarly, a login workflow can involve login with 2FA, Captcha, or simply a username and password.

For each state, Brightlayer UI tries to provide:

- Guidelines: How it's used and in what context
- Design Specifications: How it looks
- Interactions: How it goes from one state to another
- Code: How it can be implemented

# **Brightlayer UI and the Atomic Design System**

If you are familiar with other design systems, such as the Atomic Design System, you may recognize some concepts used here. Brightlayer UI's "components" parallel Atomic Design's atoms, molecules, and organisms. The idea of "pages" is the same in both systems, but Brightlayer UI also goes one level further in each direction (i.e., Foundations and Workflows) to define a project's user experience more comprehensively.