



New Horizon Visual Theme

The Qualities of Enterprise Design

Gerry Keane,
UX Visual Design Expert

SAP SE

Simone Daiber,
UX Design Manager

SAP SE

Sebastian Rousseau,
UX Visual Design Specialist

SAP SE

Janina Grimm,
UX Visual Design Associate

SAP SE



Overview

01 Qualities of Enterprise Design

02 Visual Design System

03 Feedback & Iterations



Qualities of Enterprise Design



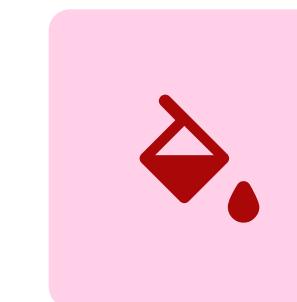
SAP Design

Fundamental / Conf.

UX Consistency Product Standards



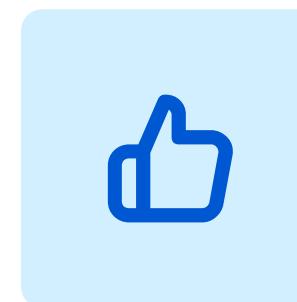
Colors



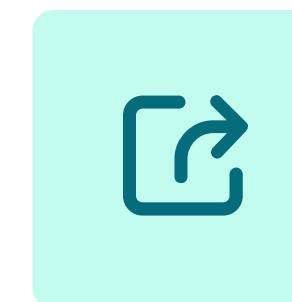
Theming



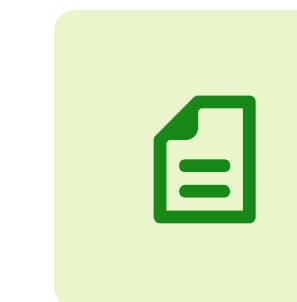
Typography



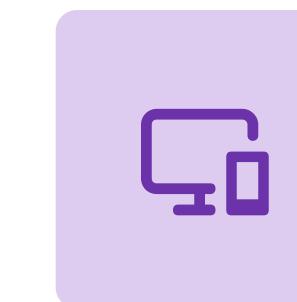
Iconography



Actions



Terminology



Shell

The UX Consistency Product Standard is based on a common set of rules applied to all products and solutions, to achieve alignment on fundamental decisions.

The Fiori Visual Language is the heart of the UX Consistency Product Standard, providing the visual foundations for essential visual and interaction concepts.



Inclusive Design



Designed for Everyone

We want everyone to use our products without compromise. Designing not only for the 80% case, but with and for all.

To fulfill web standards suited for all users, various accessibility guidelines are considered, including the brand-new **WCAG 2.2 working draft**.

Themes for All Needs

SAP Fiori comes with two high contrast themes – black and white – to cater to users with vision impairments.

These themes are also created using theme parameters that enable customers to modify the default color values to cater to any type of color blindness.



Global Design

Language Support

The right to left (RTL) feature renders the UI in a way that supports languages such as Arabic or Hebrew which are read from the right to the left side of the screen.

For those languages, SAP Fiori themes are designed to be displayed an essential mirror of the default left to right (LTR) interface. This includes the visualization of imagery which is direction sensitive, such as direction arrows.



Cultural Sensibility

Metaphors, symbols, or icons can have different local meanings or interpretations. Even symbols that we assume are universal often are not.

When using icons and graphics in business software, we need to be aware that the local meanings of metaphors and symbols can have an influence on business processes and the user experience.



Visual Design System

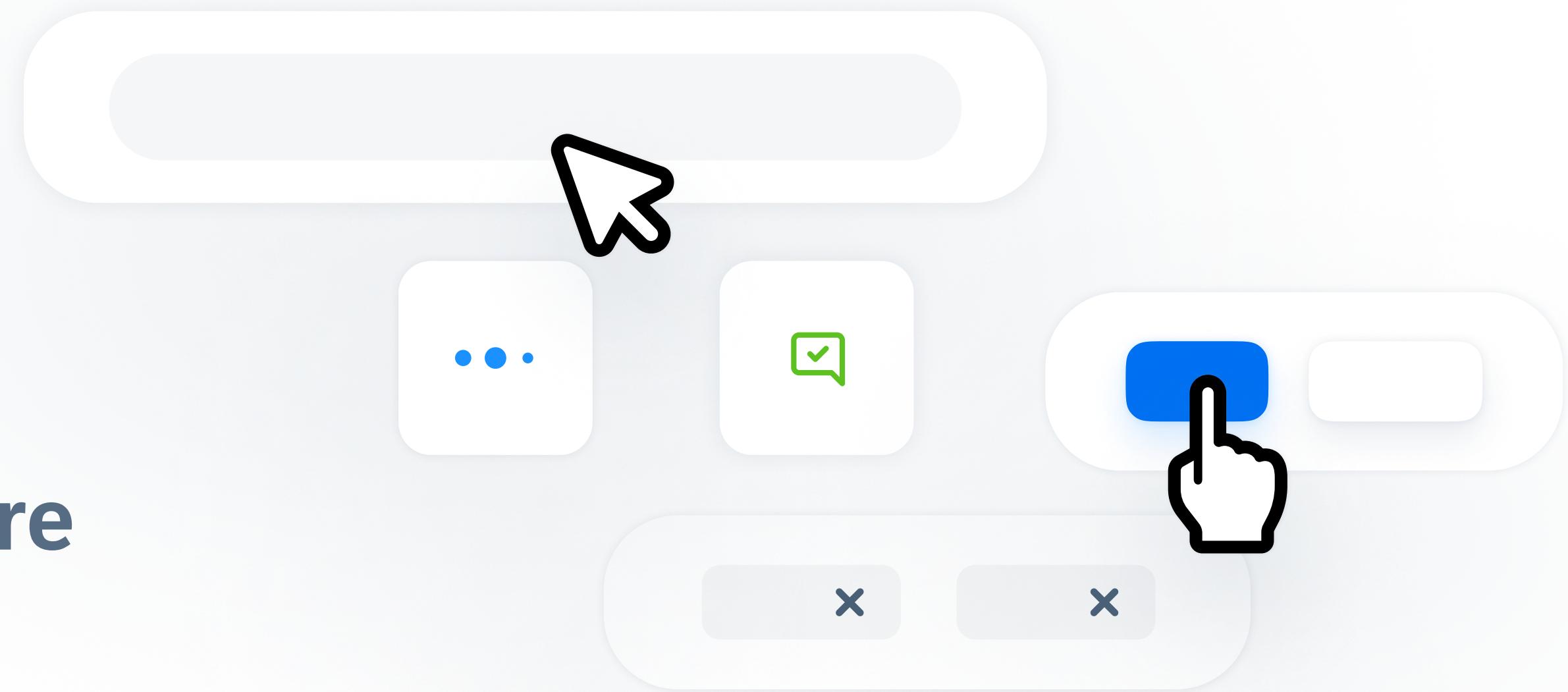


SAP Design

Fundamental components

User Interface

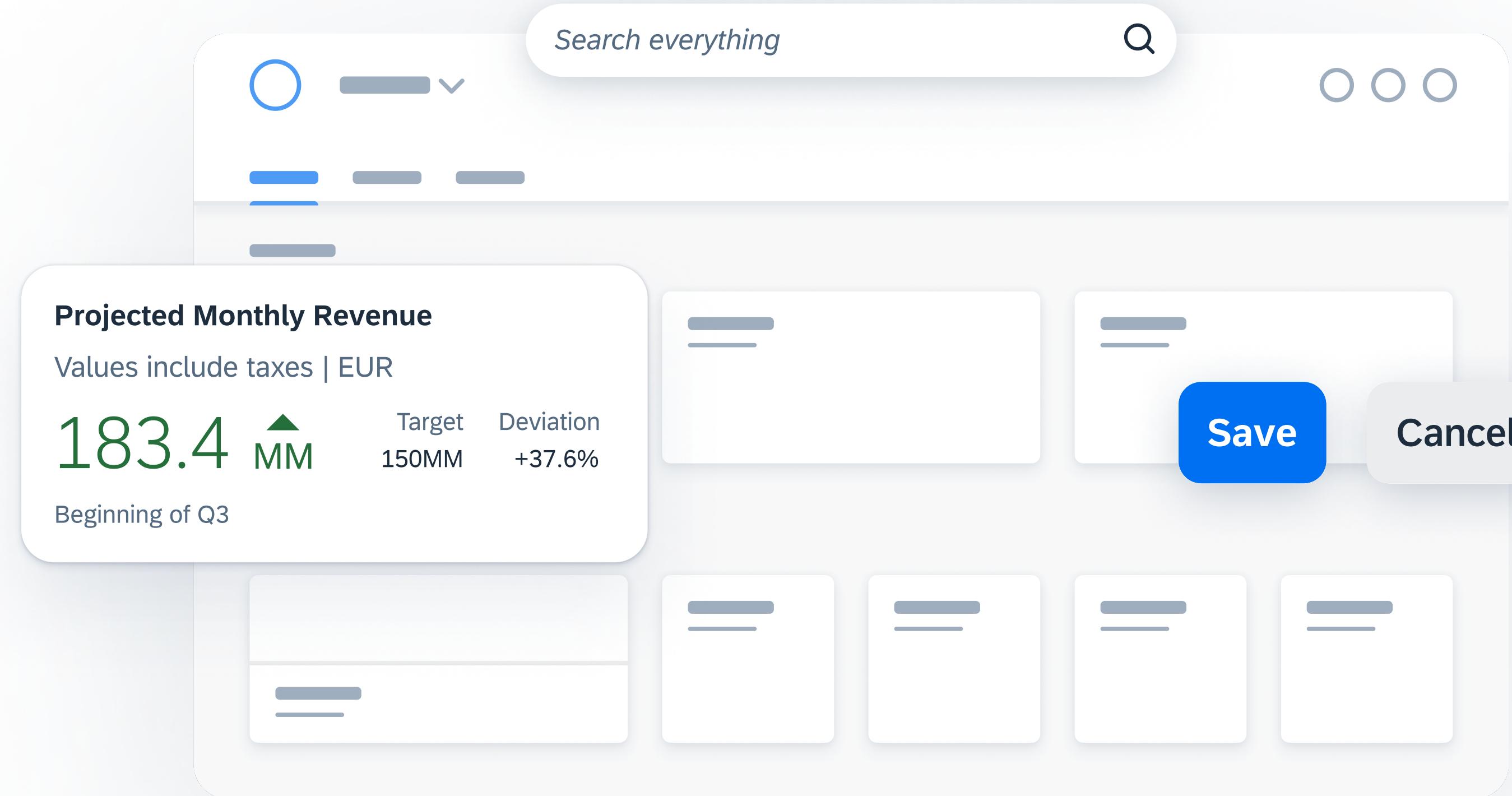
Building Blocks for Our Software



Reducing the Clutter

No Unessential Decorations

Removing borders where possible, and grouping information in visual containers, we achieve hierarchy, without unessential decorations.

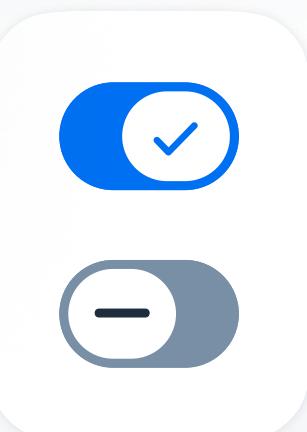
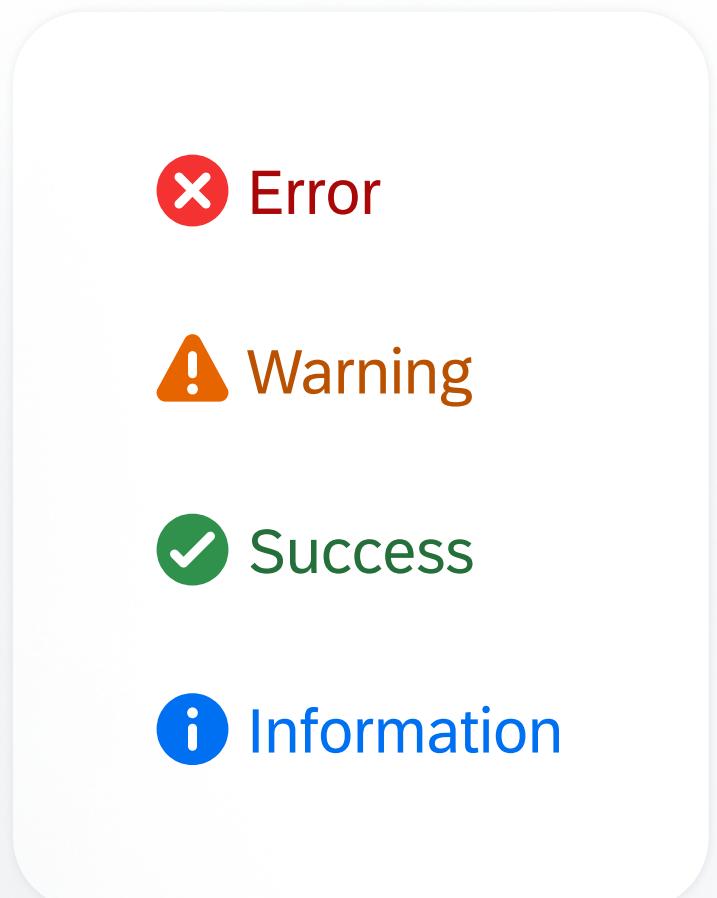
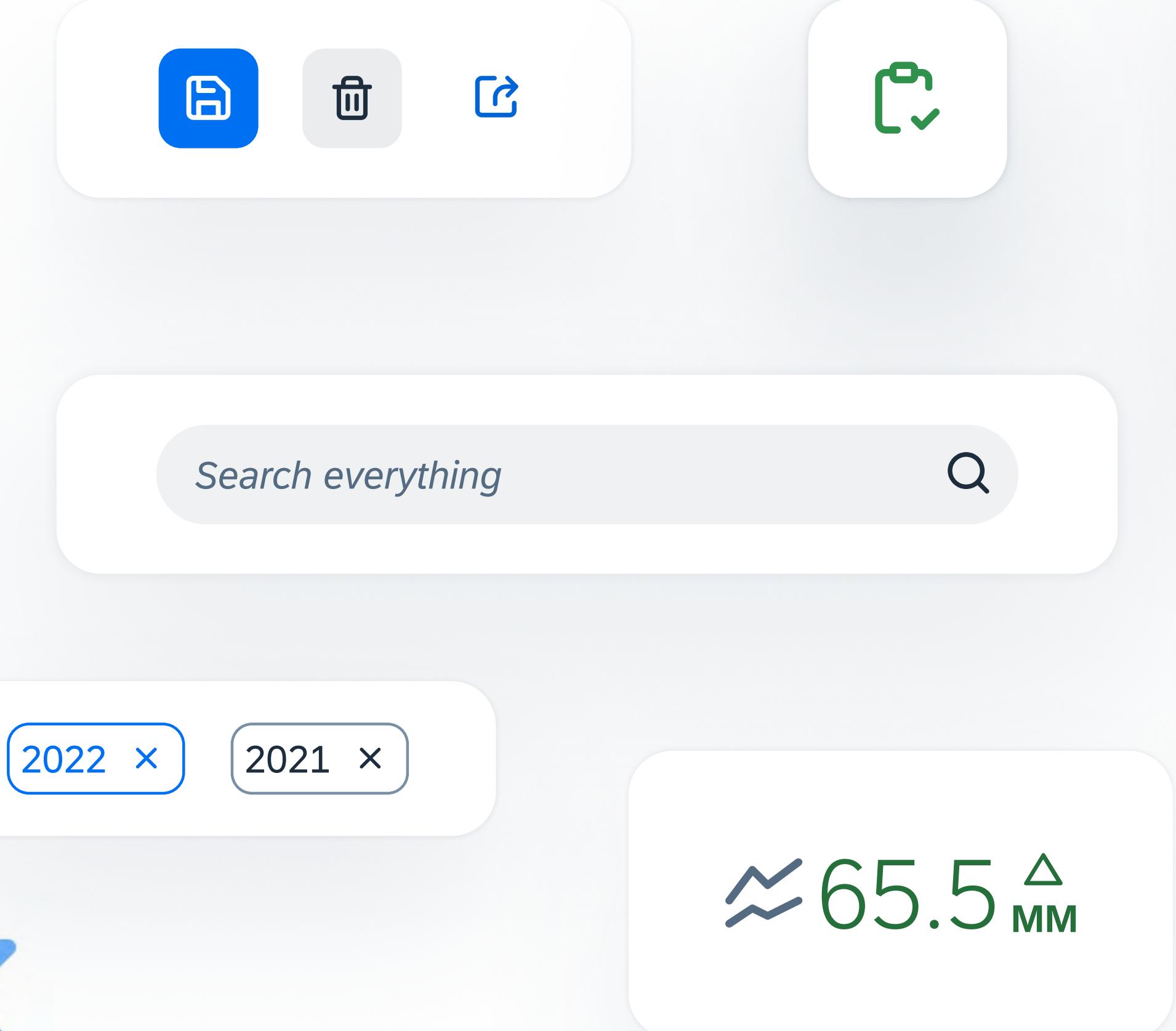


Simplified Aesthetics

Going with a more lightweight look and feel, users are able to focus on what truly matters.



Introducing Our Redesigned Icon Set



Bolder & Rounder Icons

We redesigned our icon font from the ground up.

Building on the recognition already achieved, and evolving the style.

Leveraging Softer Shapes

Making Work Approachable

With SAP Horizon we went all in on creating a friendly environment, that lets users get their work done.





Alain Chevalier
Sales Executive

6 of 12

< April 2021 >

Mon	Tue	Wed	Thu	Fri	Sat	Sun
14	1	2	3	4	5	6
15	8	9	10	11	12	13
16	15	16	17	18	19	20
17	22	23	24	25	26	27
18	29	30	1	2	3	4
						5

 Add New Pin >

 Shared Images

Share Location

Export Map

Bolder Typography, Emphasizing Hierarchy

Information Hierarchy

The 72 font family comes with several weights that allow for clearer visual differences to improve visual groupings of information.

The screenshot shows a user interface with the following elements:

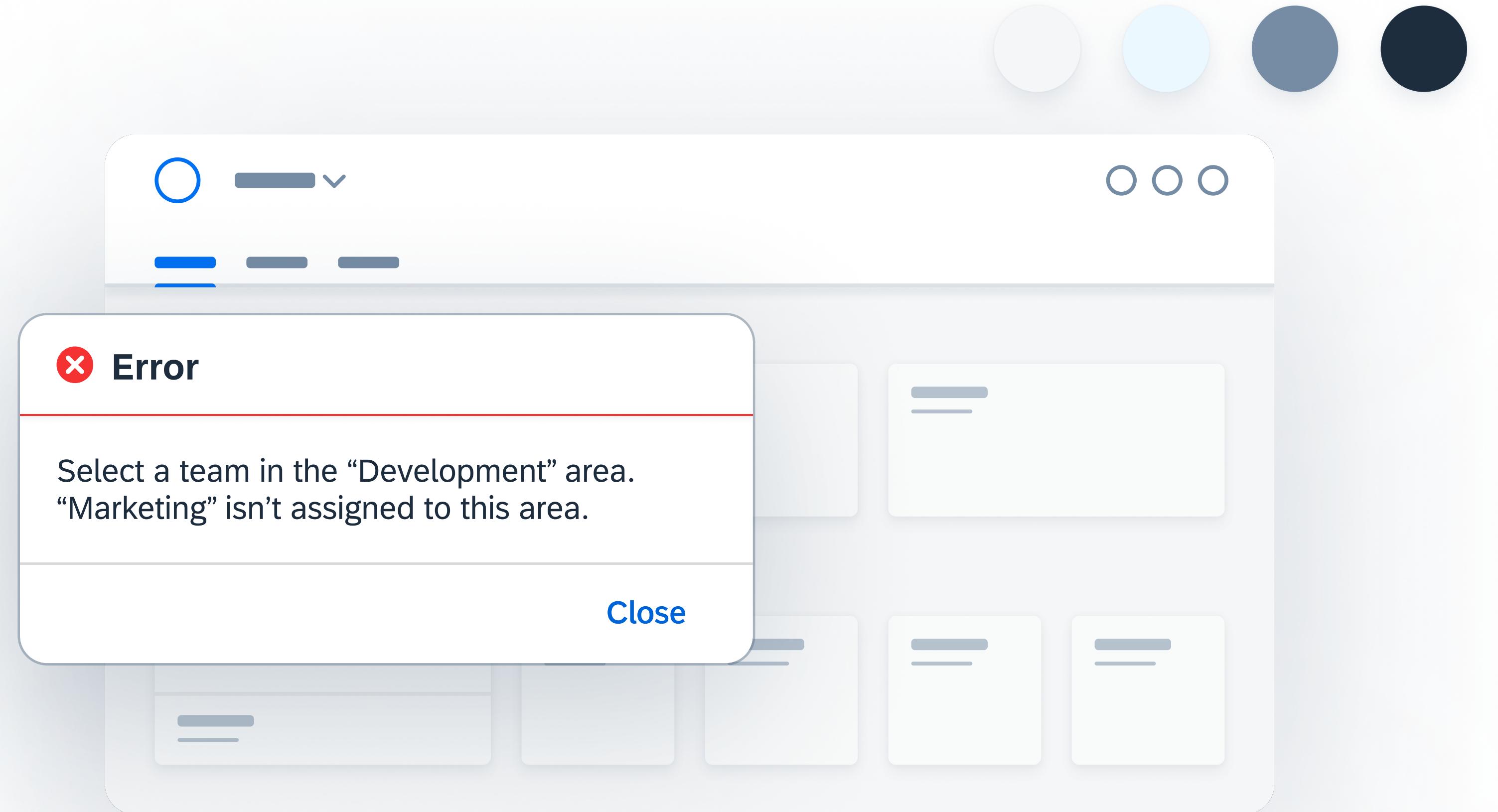
- Header:** "Hello Janice Smith!" in large, bold, dark blue font.
- Navigation Bar:** "My Home" (underlined in blue), "My Inbox", and "Commercial Projects".
- Section:** "To Dos" in bold black font.
- Card 1 (Left):** "Review Purchase Order Accrual" and "450001394-00010-01" in bold black font. A green "Confirm" button is at the bottom right.
- Card 2 (Right):** "Review Purchase Order Accrual" and "9318" in bold black font. A green "SAP" button is at the bottom right.
- Bottom Right:** "SAP Design" in bold black font.



Subtle Base, Vibrant Alerts

Guiding User Attention

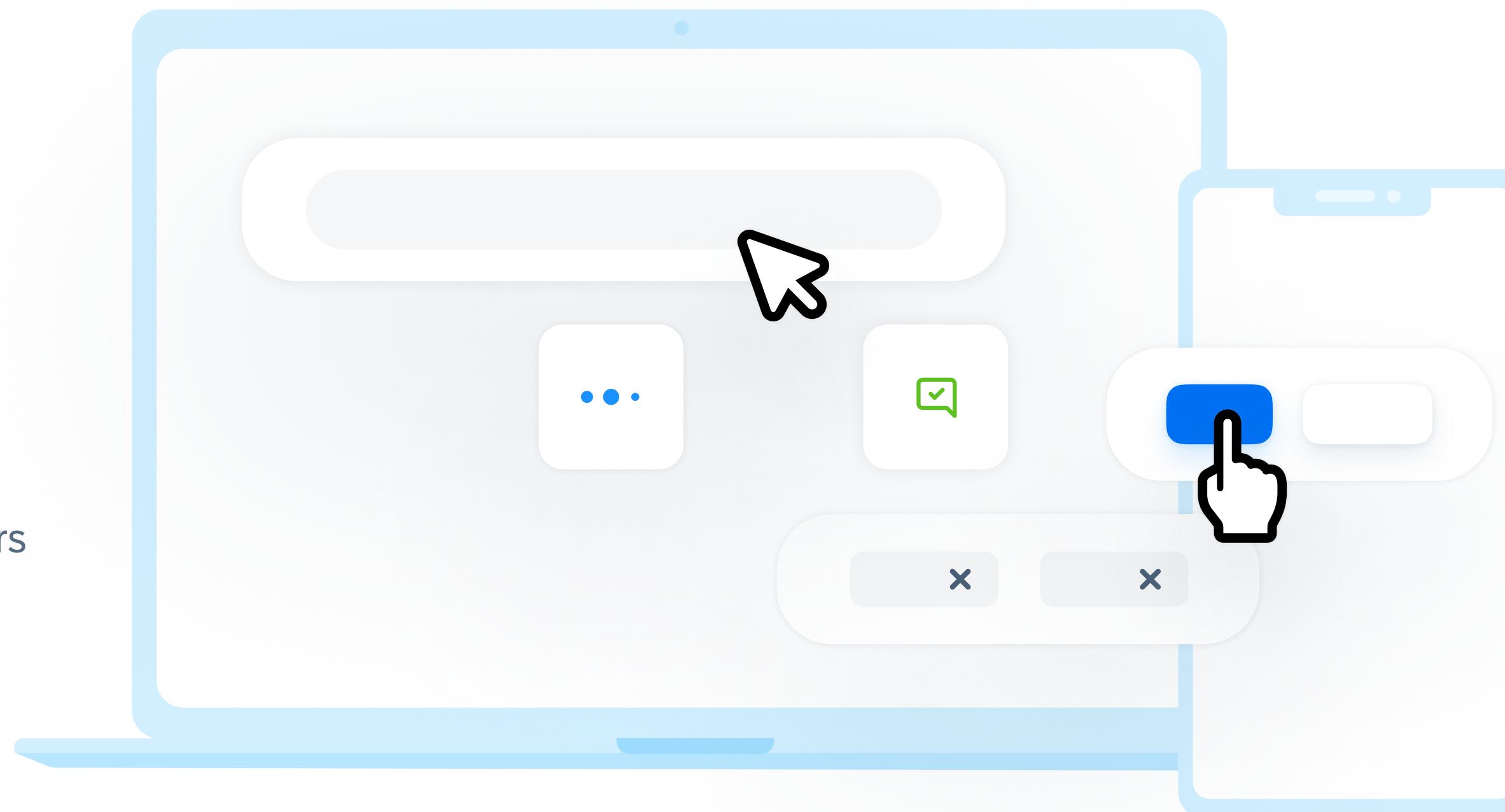
Vibrant semantic colors with bolder iconography and typographic treatments help to bring clearer and more accessible messaging.



Responsive For All Devices

Mouse Optimized

The compact form factor caters best for desktop devices with mouse input, small interactive elements and more data displayed at once.



Touch Optimized

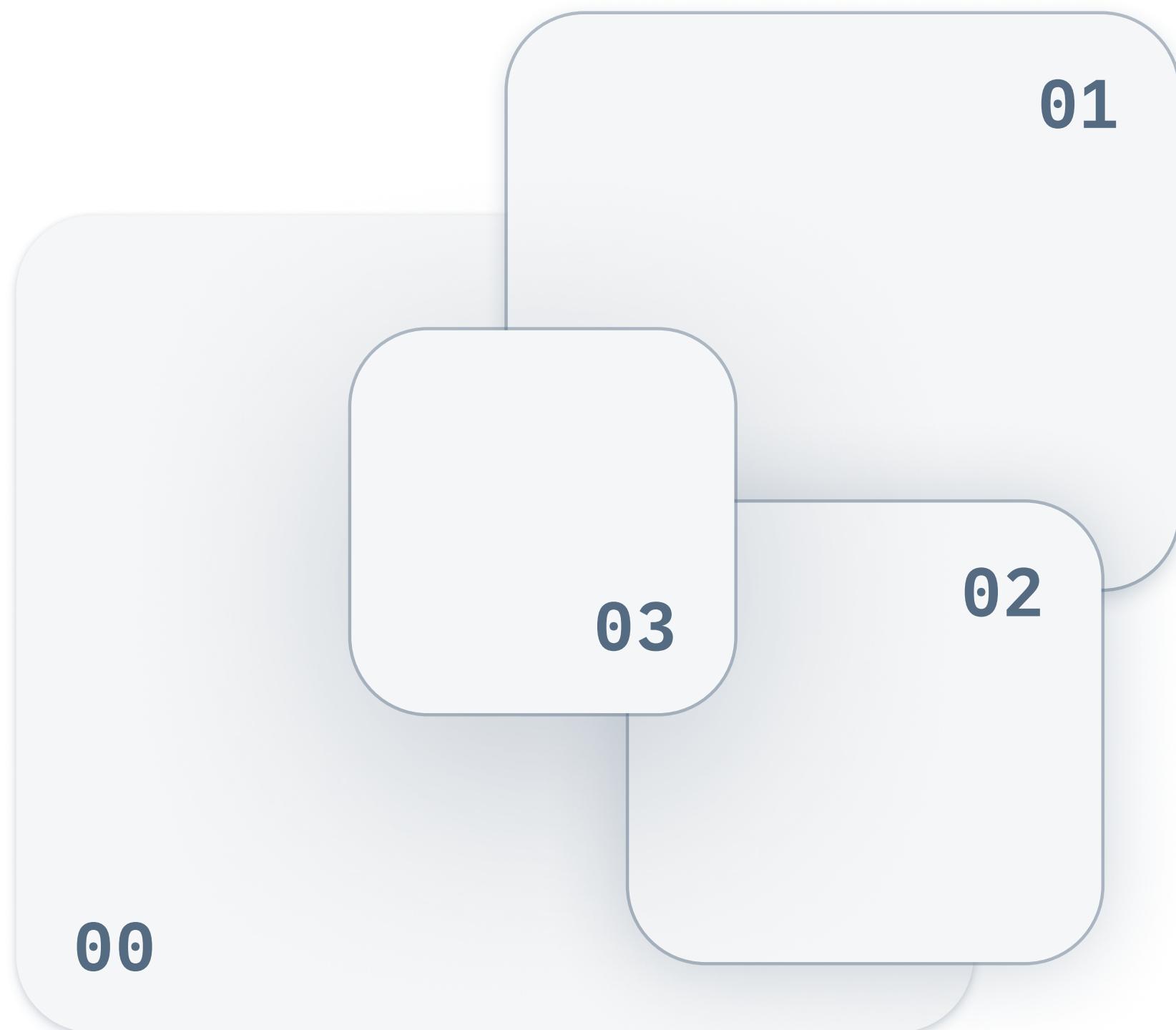
The cozy form factor supports both touch and mouse interactions. UI elements get more space, to make it easier for users to interact with them.



Universal Shadow Concept

Consistently Smooth Elevation Levels Throughout

Distinct levels of shadows ensure a consistent visual hierarchy, so navigation remains easy no matter the task's complexity.



Colors

Bringing the
Screen to Life!



SAP Design

Colors

DNA Reference Palette



New Vibrant Color Hues

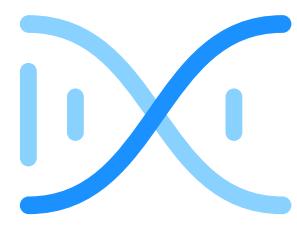
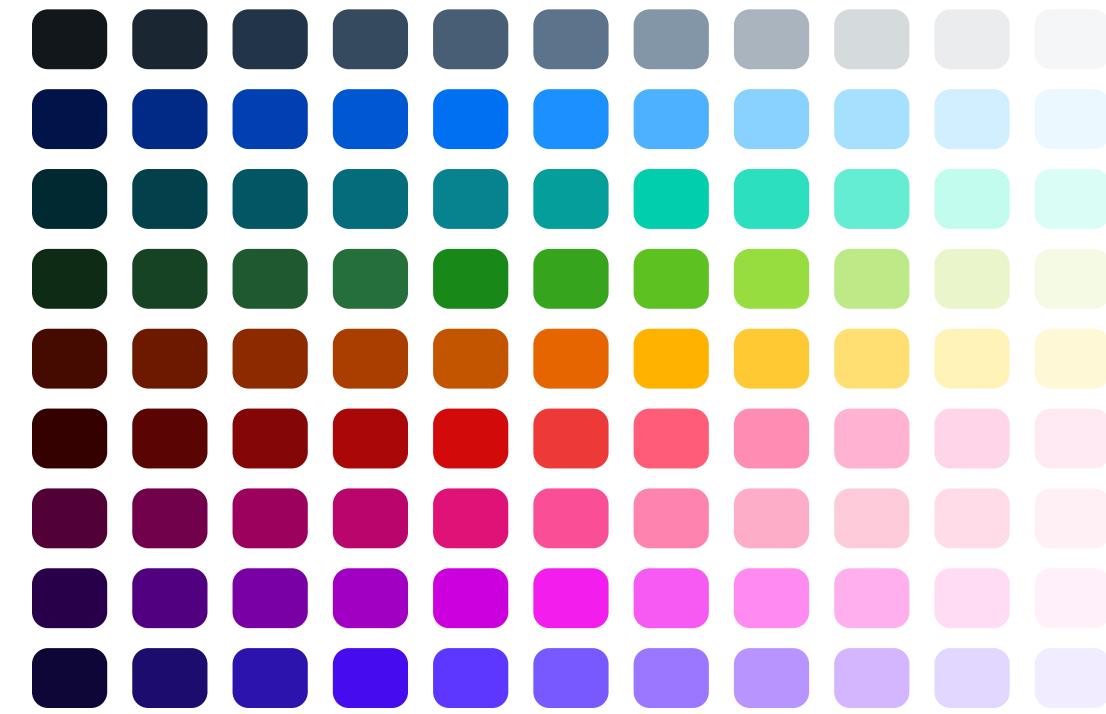
Internally, there are 9 different hues each with 11 different shades available. And also pure white and black is added to complete the whole spectrum.



SAP Design

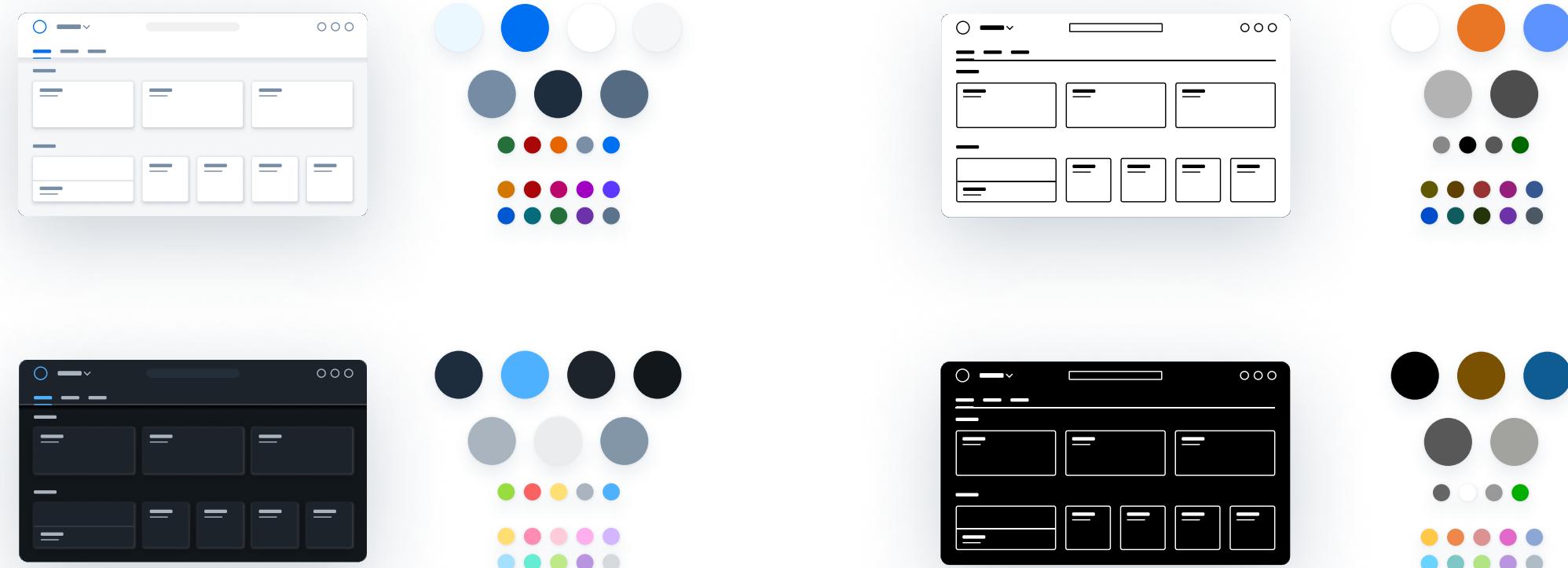
Colors

From DNA to User Interface



DNA Look and Feel

Technology Agnostic Reference Colors
Independent of Use Cases



User Interface Use Case Orientation

Semantic Meanings
Usage Specific

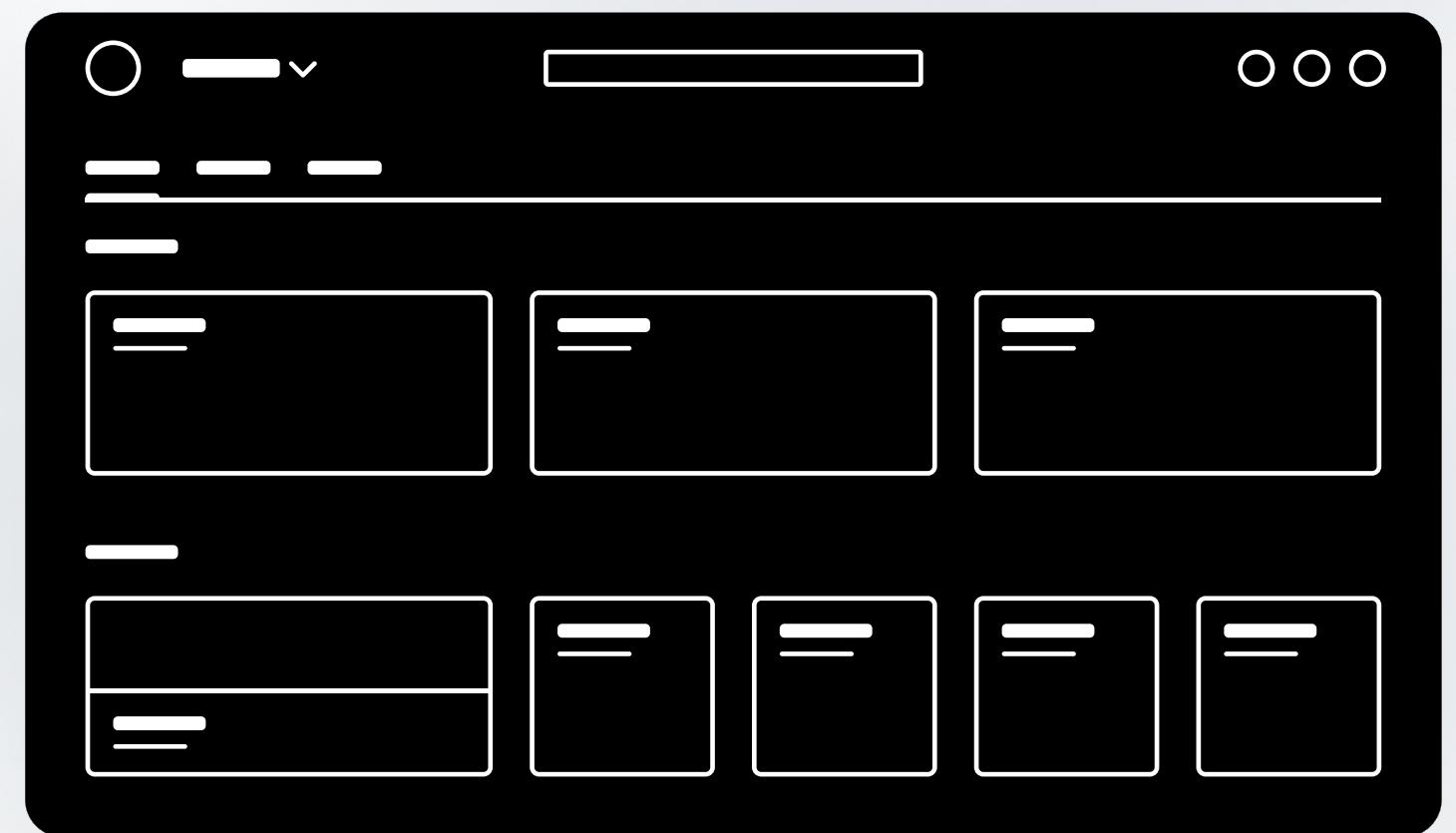
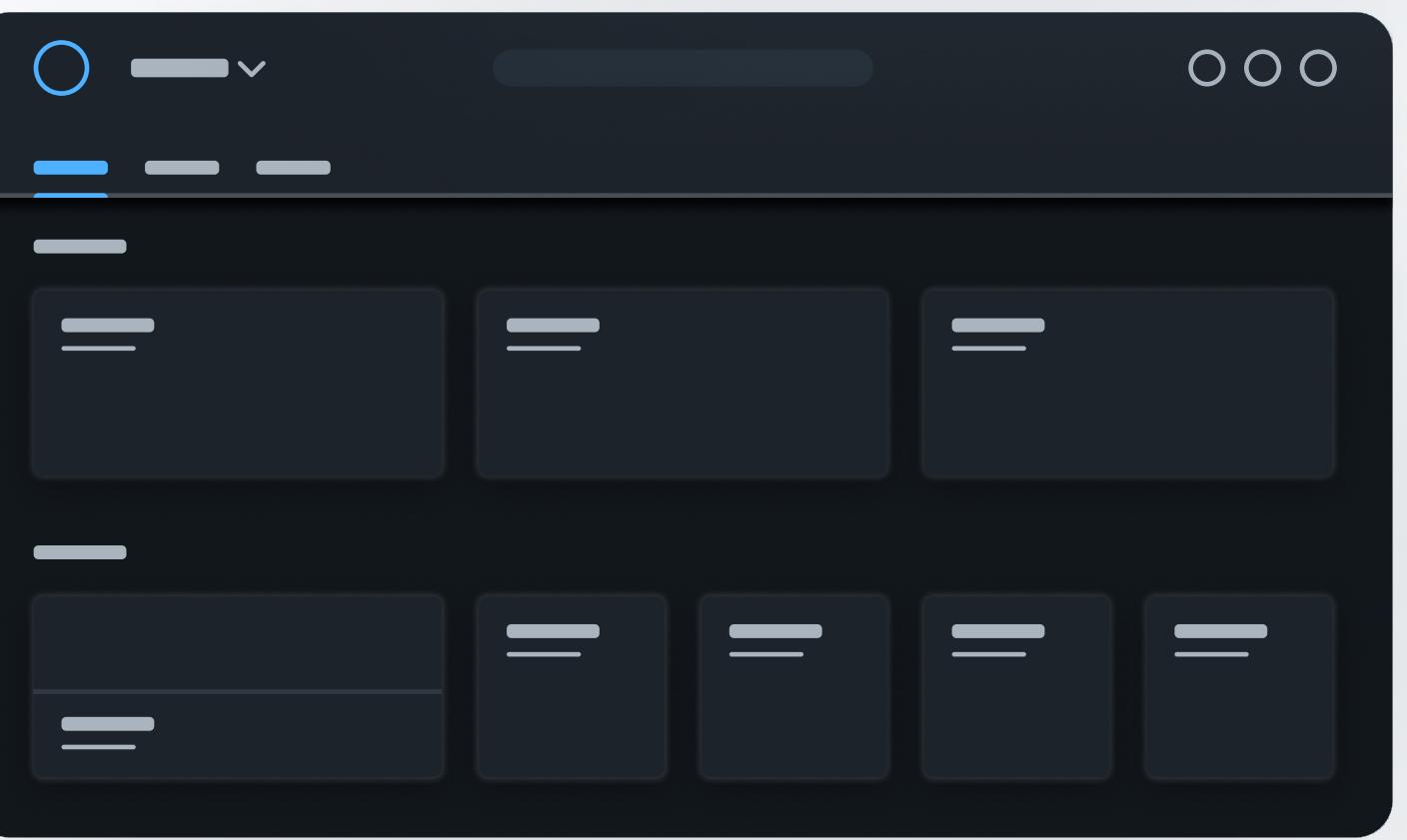
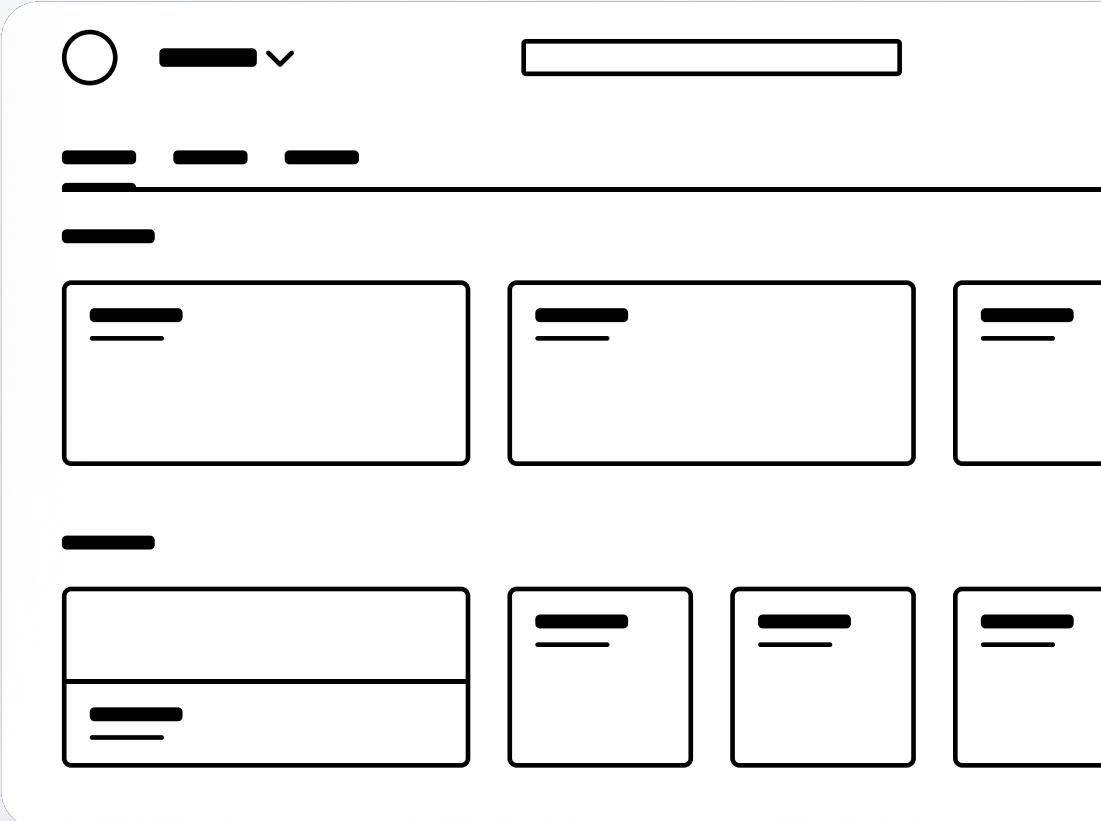
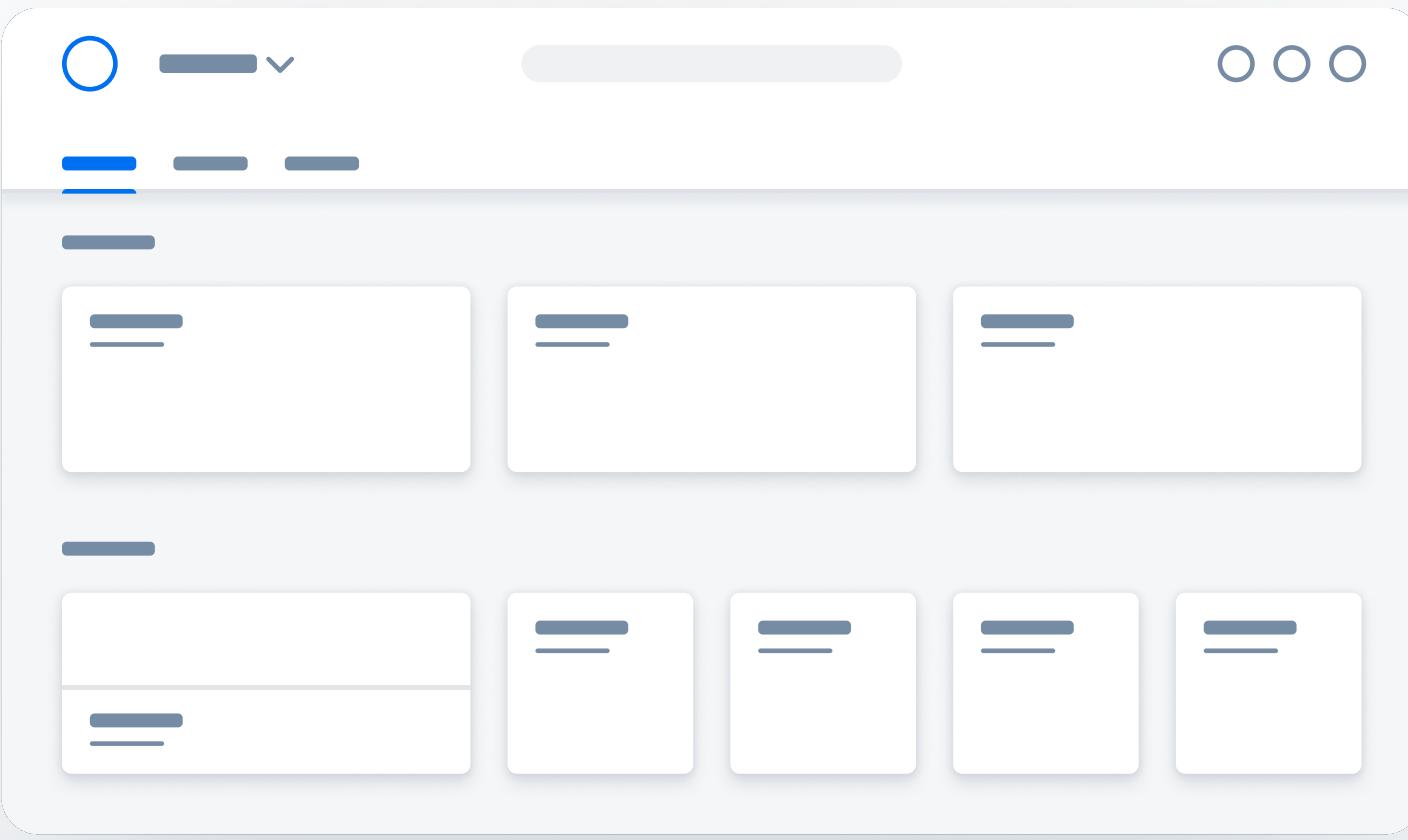
Theme Specific
Light, Dark & High Contrast

Accessible Contrasts
WCAG 2.2 Requirements

SAP Design

Theming

Flexibility in Design



SAP Design

Theme Tokens 1:1 with CSS Variables

01 DNA Palette

The DNA reference palette is the technology independant base source of color. **Reference colors use general color names that may change from theme to theme** and are not suitable to be used in UI context. **These colors should not be used in the CSS of UI controls.**



Blue 7



White



02 Theme Tokens

Reference colors are mapped by designers to **Theme tokens** (theme variables), which are **styles documented in design specifications**. Theme tokens use names that remain stable from theme to theme and are **1:1 with the CSS variables provided for all SAP UI technologies**.



Button Background



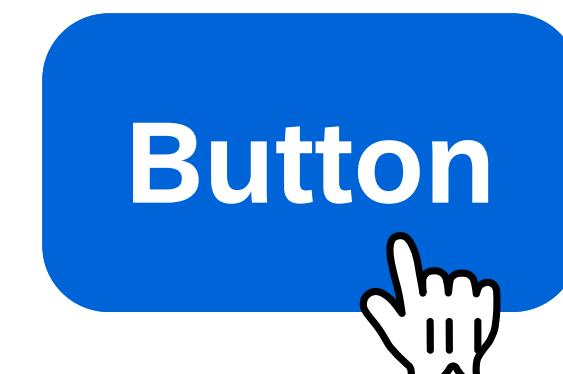
Button Hover



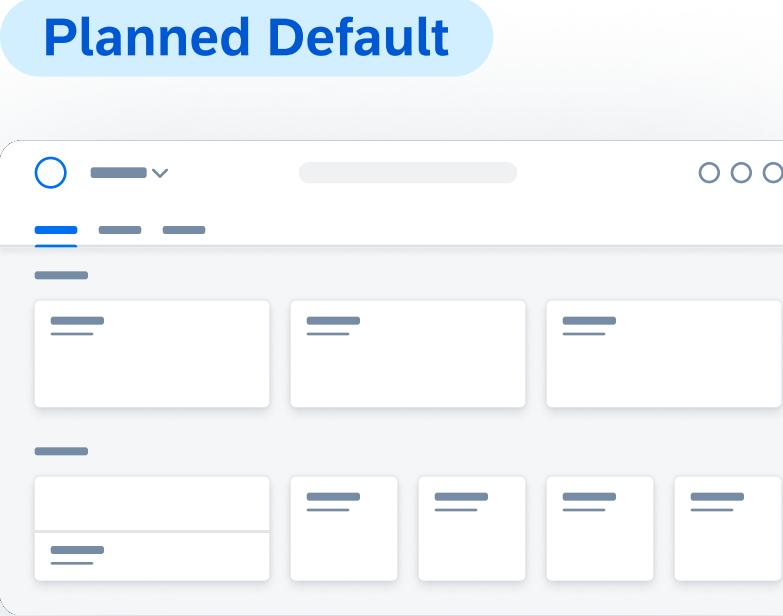
Button Text

03 User Interface

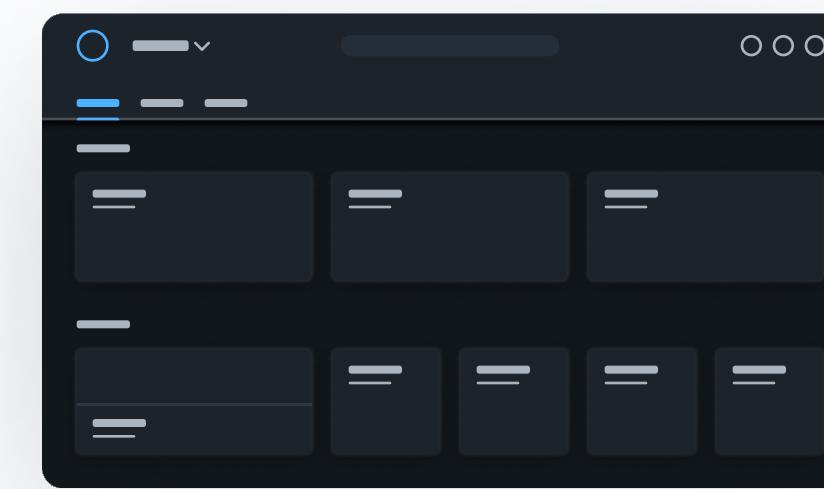
Semantically named control CSS variables, (design tokens), are **already established**, used **in all the main SAP technology frameworks** and available even as an open source **SAP theming base github repository**.



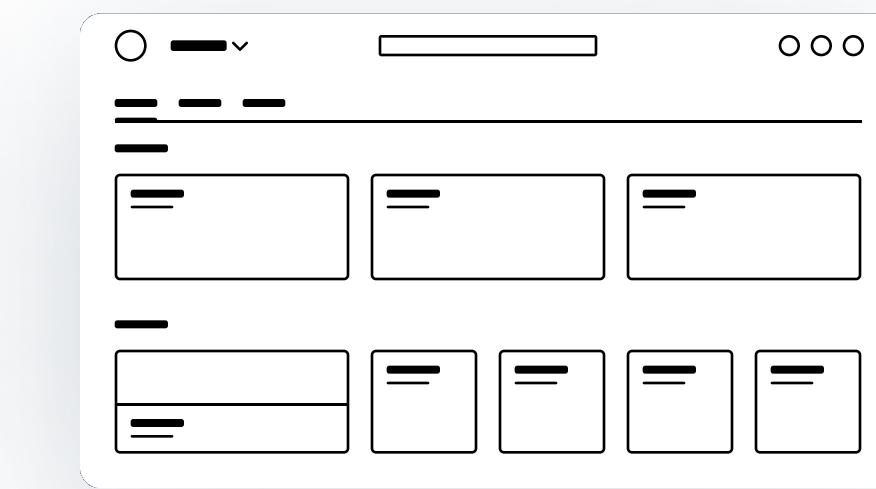
Our Themes



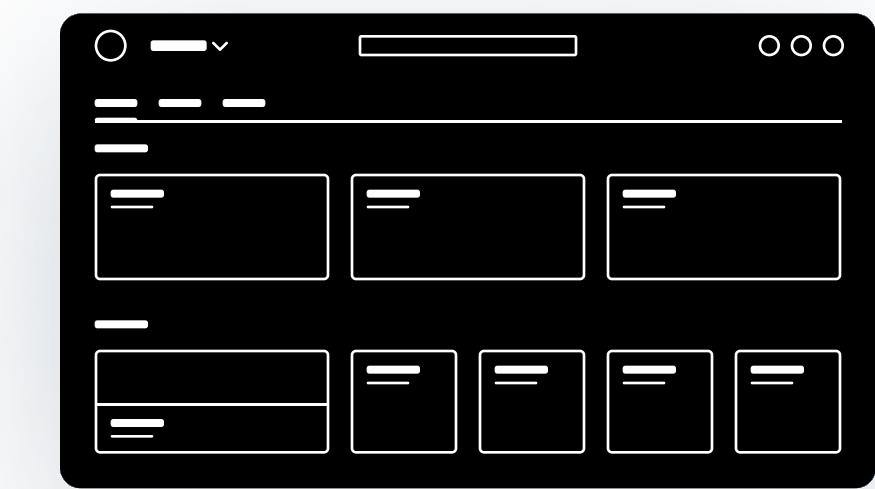
SAP Morning Horizon



SAP Evening Horizon



SAP High Contrast White
(Horizon)



SAP High Contrast Black
(Horizon)

SAP Fiori comes with an array of themes out of the box, which all cater to accessibility standards, fulfilling at least AA.

SAP Morning Horizon is planned to be the default SAP theme.

For each theme evolution, we offer AAA compliant high contrast themes.

Our other themes are: SAP Quartz Light, SAP Quartz Dark, SAP Belize, and SAP Belize Plus



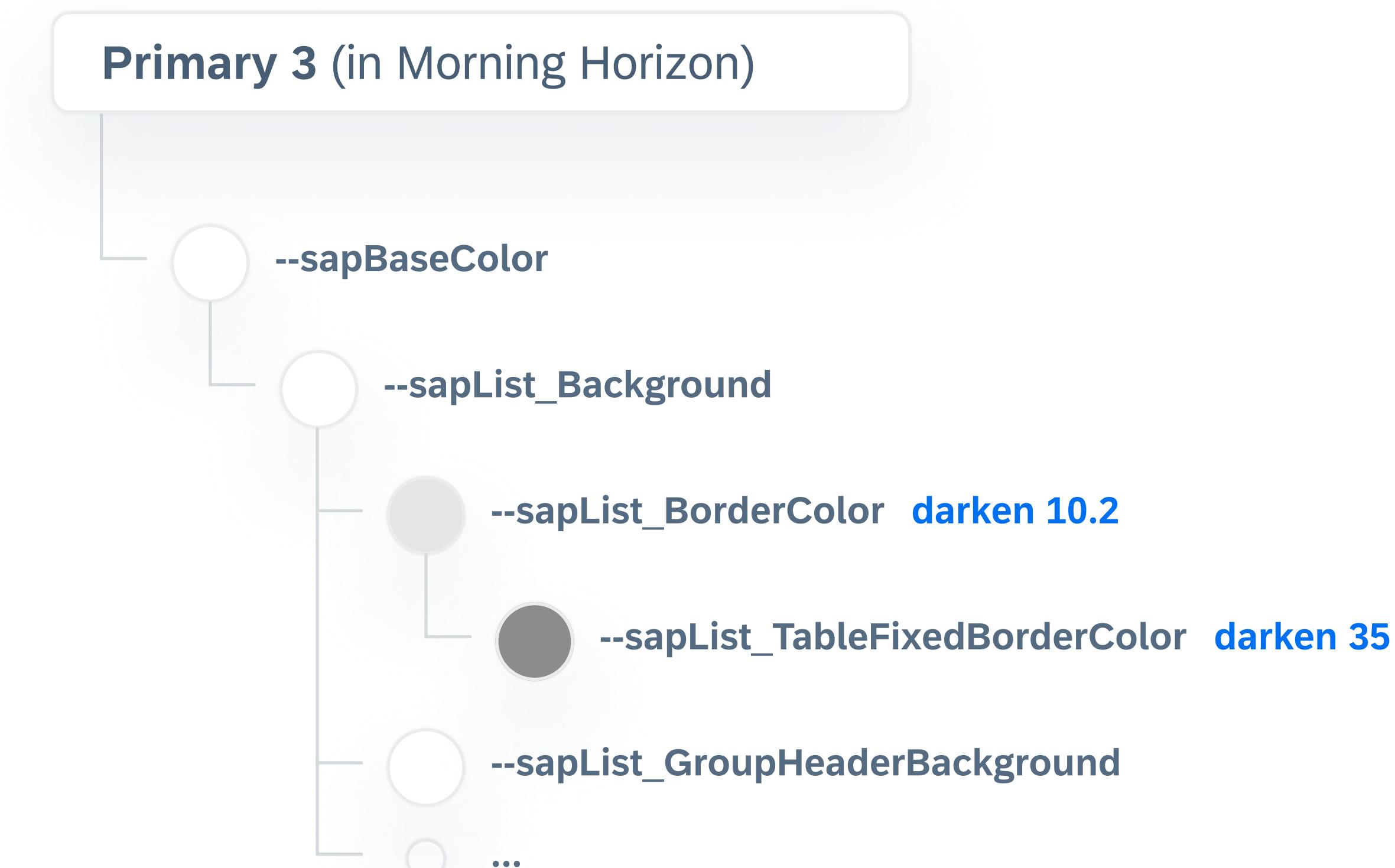
Smart Cascading

Calculating Mapping Instead of Hardcoding

Interdependencies are a must for theming.

Through linking together parameter variables that are related to each other, we achieve a visual system that inherits values.

This way, changing only a few key colors can give you a whole new look in no time, while keeping the possibility of changing the most nitty gritty details.

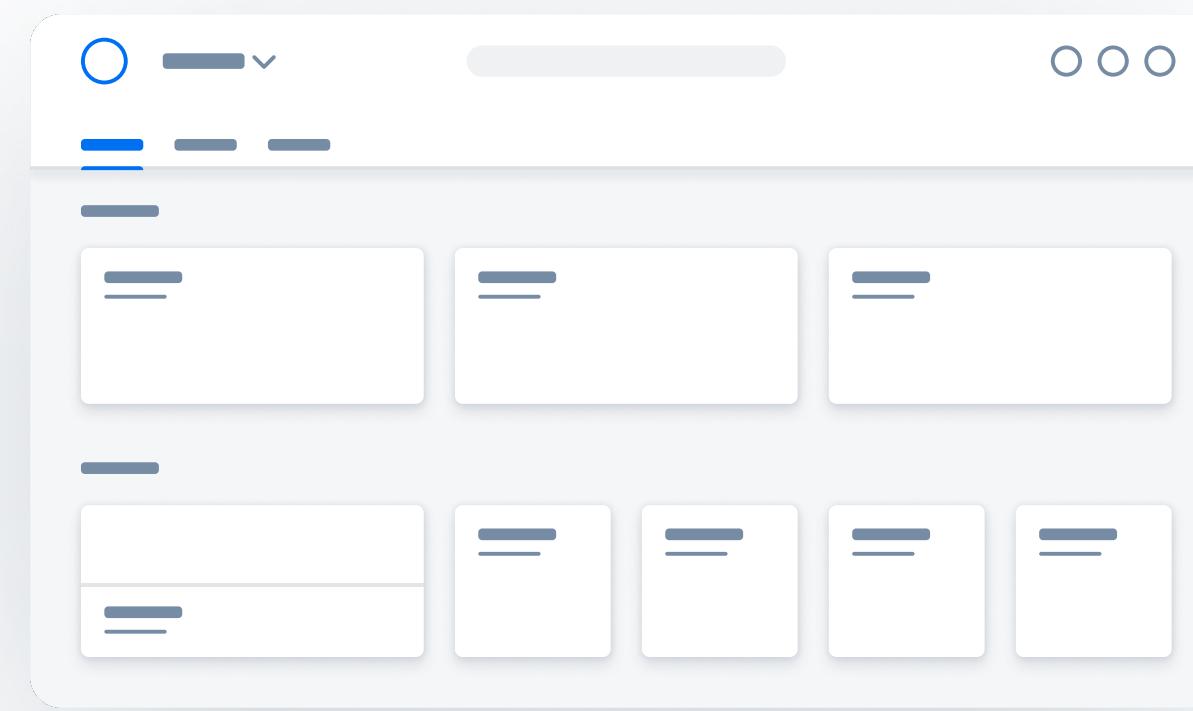


Quick Theming

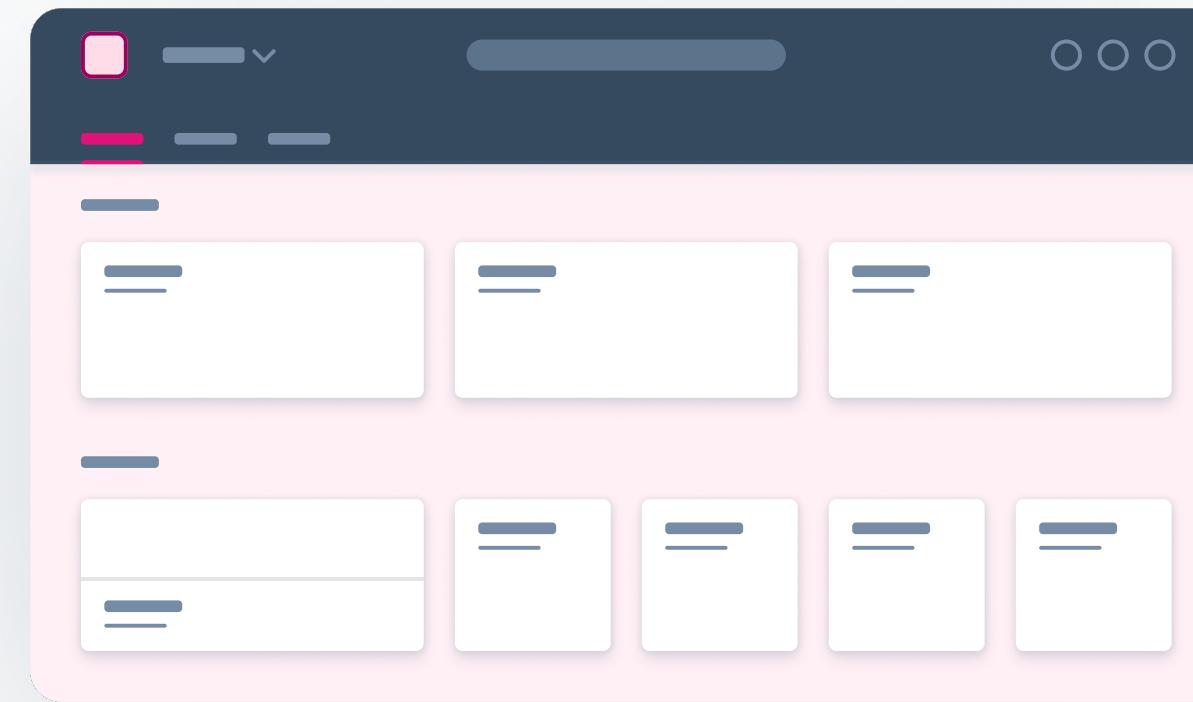
The UI Theme Designer

The theming concept enables customers to apply their own brand identity to the user interface. Theming can work across all SAP UI technologies.

Via Quick Theming, customers can simply replace the logo or change the main branding colors of the UI by replacing the default brand and base colors of the theme.



- sapCompany Logo
- sapBrandColor
- sapShellColor
- sapBackgroundColor



- sapCompany Logo
- sapBrandColor
- sapShellColor
- sapBackgroundColor



Theming

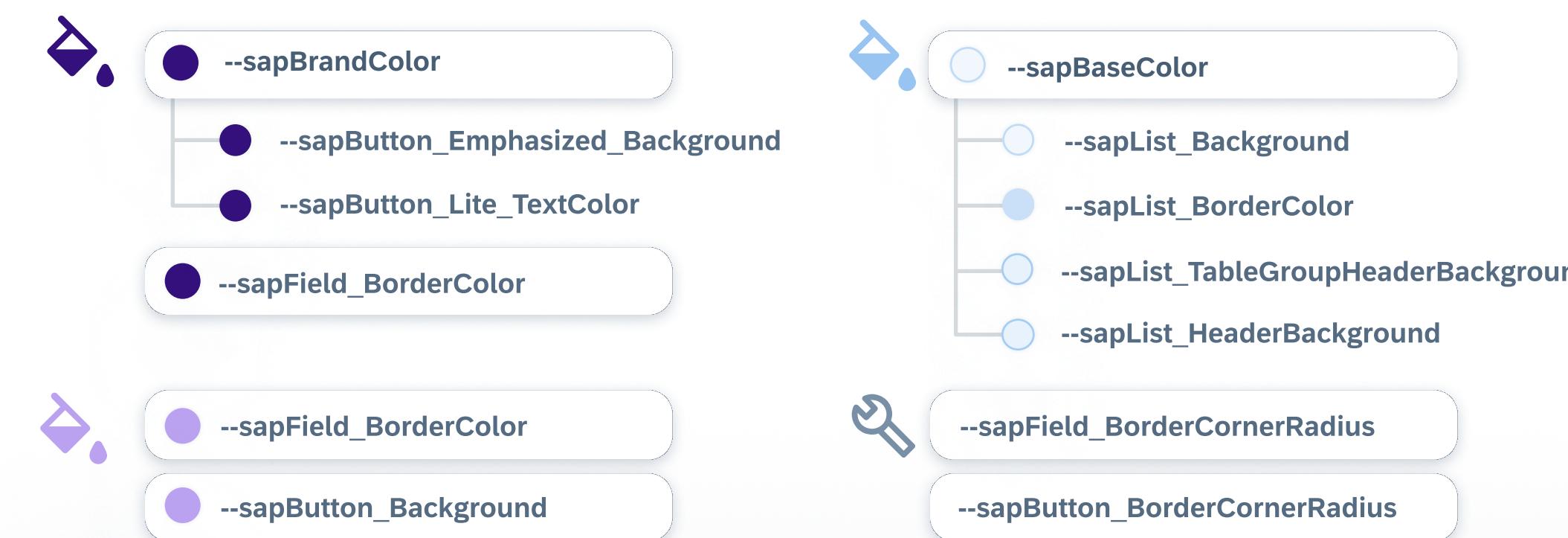
Detailed Theming

Customizing Control Groups or Specific Details

For customers that require more precise adaptations to their theme, the UI Theme Designer offers detailed theming.

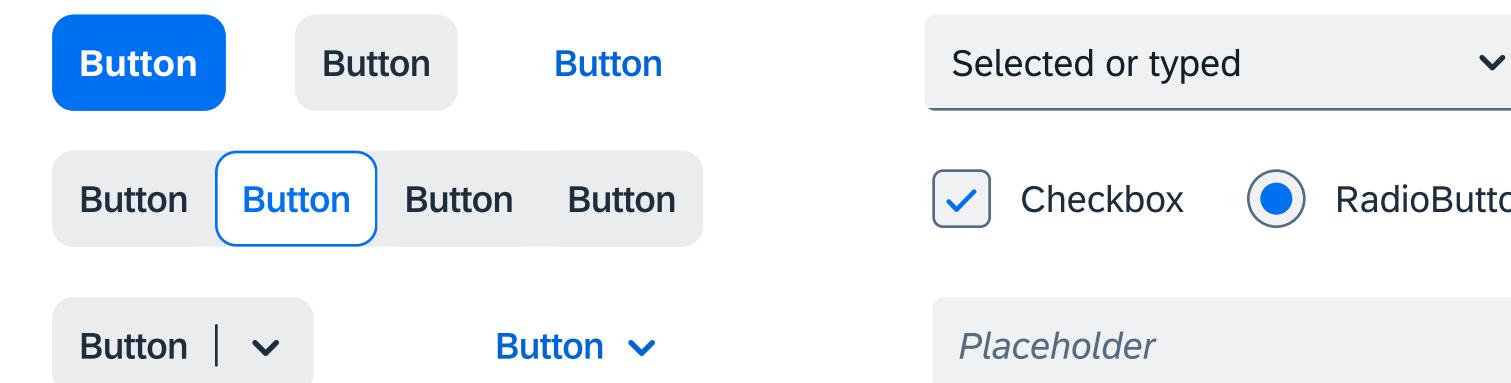
Controls are grouped by their logic. For example input controls (input field, radio button, checkbox, ...), lists (list, table, ...), and so on.

This makes it easy to either change entire control groups, or only edit very specific parameters, without having to hardcode.



Control Group Examples

Example of SAP Horizon theme Control Groups



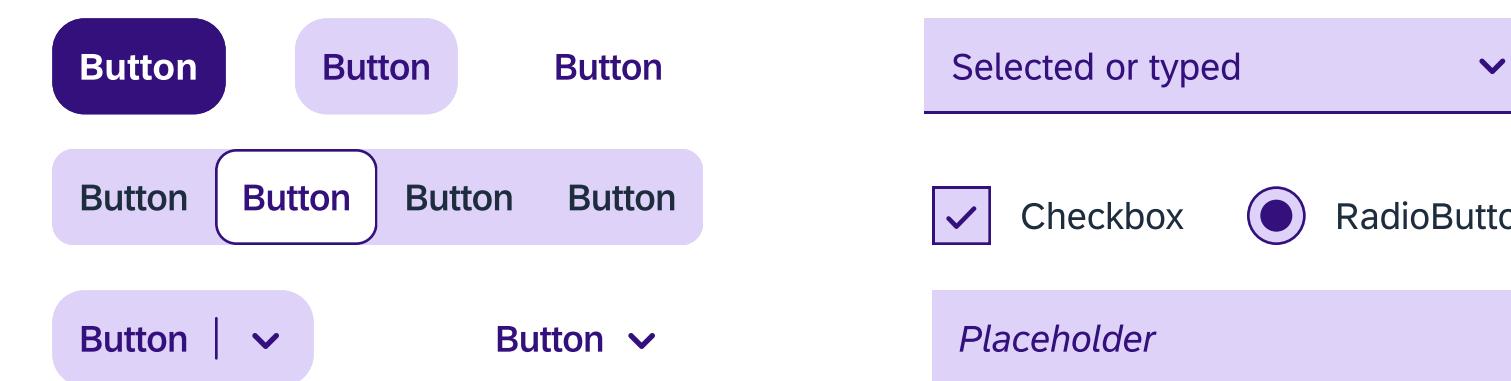
Note: This is only an example. Additional control groups exist and control groups will contain more UI controls.

Column Header

Group Header

List or Table Item

Example of Custom Theme Based on Horizon



Column Header

Group Header

List or Table Item



Typography

The Bespoke Typeface for SAP



Typography

Legibility Enhancements

A wide apex results in
larger counters



Acessibility

Open counters & large apertures
improve character differentiation
and recognition

Decreased character ambiguity
differentiates a character's details.

Open terminals create more negative
space, and reduce fill-in at small sizes



Typography

Scale & Usage

Improved Hierarchy

Our typography system enables clear visual hierarchy and ensures visual direction and focal points to improve the reading experience within the UI.

Headlines generally use 72 Bold font weight by default and 72 Black for the main title, but this is flexible depending on the control component or product application context.

These recommendations are offered by default, and product lines have the flexibility to define their own type scale.



Size	Usage
Header 1	Optional Title Size
Header 2	Main Title
Header 3	Optional Title Size
Header 4	Black Title Snapped/ Scrolled, Bold Section Title
Header 5	App Title, Subsection, Title of List, Table, Form etc.
Header 6	Group Title in List, Table, Form etc.
Large Text	Stand-out text controls, such as the author name in a feed, or the file name for a collection of uploaded files.
Medium Text	Default text size used in controls, such as buttons, inputs, tables, etc.
Small Text	Small Text, Exceptional use cases within controls, such as time stamps or a unit of measurement. Not recommended to use small text size as the main UI text size within controls.

Line Height

Auto	All bread & butter controls such as buttons, inputs, lists, tables, etc.	1.5	For long continuous text such as text areas, feed list items, etc.
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Even More Font Weights



Introducing New Font Weights!

With Horizon we are adding Semibold, as well as Semibold Duplex, to give even more flexibility.

While Semibold offers the perfect inbetween weight, Semibold Duplex enables you to leverage that aesthetic, while retaining the exact width as Regular would. This way it won't affect your implementation!

NEW

Light

Regular

Semibold

Semibold Duplex

Bold

Black

Italic

Italic Bold

Condensed

Condensed Bold

Mono

Mono Bold

Typography

Semibold Duplex

regular

semibold
duplex

semibold

Sales Order

Sales Order

Sales Order



Typography

72 Language Support

Afaan Oromoo	Czech	Haitian Creole	Luba	Romani	Tahitian
Afar	Danish	Hiligaynon	Luganda	Romanian	Tatar (Latin)
Afrikaans	Dawan (Uab Meto)	Hungarian	Luxembourgish	Russian	Tausug
Albanian	Dholuo	Icelandic	Macedonian	Ruthenian (Rusyn)	Tok Pisin
Alsatian	Dutch	Ilokano	Makhuwa	Samoan	Tsonga
Aromanian	English	Indonesian	Malagasy	Sango	Tswana
Asturian	Erzya	Irish	Malay	Sardinian	Tumbuka
Aymara	Esperanto	Italian	Maltese	Serbian (Cyr)	Turkish
Balkar	Estonian	Jamaican	Maori	Serbian (Latin)	Turkmen (Latin)
Basque	Faroese	Kadazan-Dusun	Mapuche	Shona	Tzotzil
Belarusian (Cyr)	Fijian	Kapampangan	Mauritian Creole	Sicilian	Ukrainian UpperCase
Belarusian (Latin)	Filipino (Tagalog)	Kaqchikel	Moksha	Silesian	Uyghur (Latin)
Bemba	Finnish	Karachay	Nahuatl	Slovak	Venetian
Bikol	French	Karakalpak (Latin)	Ndebele	Slovenian	Vietnamese
Bosnian	Frisian	Karamojong	Norwegian (Bokmal+Nynorsk)	Somali	Walloon
Breton	Friulian	Karelian	Otomi	Sorbian	Waray-Waray
Bulgarian	Gaelic (Scottish)	Kazakh (Latin)	Ovambo	Sotho	Welsh
Cape Verdean	Galician	Kinyarwanda	Pangasinan	Spanish	Wolof
Creole	Ganda	Kirundi	Papiamento	Sranan	Xhosa
Catalan	Garo	Kumyk	Piedmontese	Swahili	Yucatec Maya
Cebuano	German	Kurdish (Latin)	Polish	Swazi	Zazaki
Chavacano	Greek	Ladin	Portuguese	Swedish	Zulu
Chichewa	Greek monotonic	Latin	Q'eqchi'	Sami	
Cornish	Greenlandic	Latvian	Quechua	Lule	
Corsican	Guadeloupean Creole	Ligurian	Rhaeto-Romance	Sami Northern	
Croatian (Latin)	Guarani	Lithuanian LowerCase		Sami Southern	

Following our mission of improving as many people's lives as possible also means being able to speak as many languages as possible.

Additionally, support for all languages required for SAP applications is achieved by using font stacks, which allow for fallbacks to system fonts.



Iconography

The New Icon Font Style



SAP Design

Iconography

Redesigned SAP Icon Library

Overhauling the Entire 680+ Icon Library

In the new IconFont 5.0 the SAP icon font was redesigned to be bolder and aligned with the new visual look.

To achieve this, a new grid was designed alongside 680+ icons.

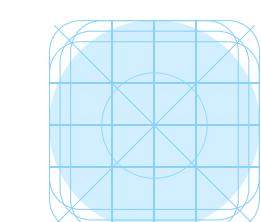
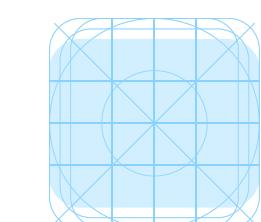
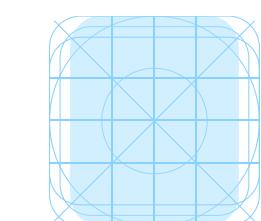
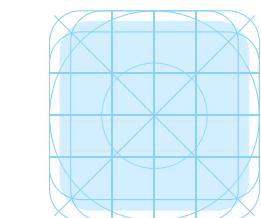
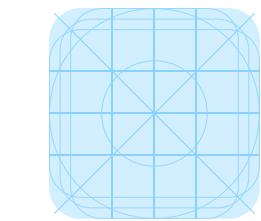
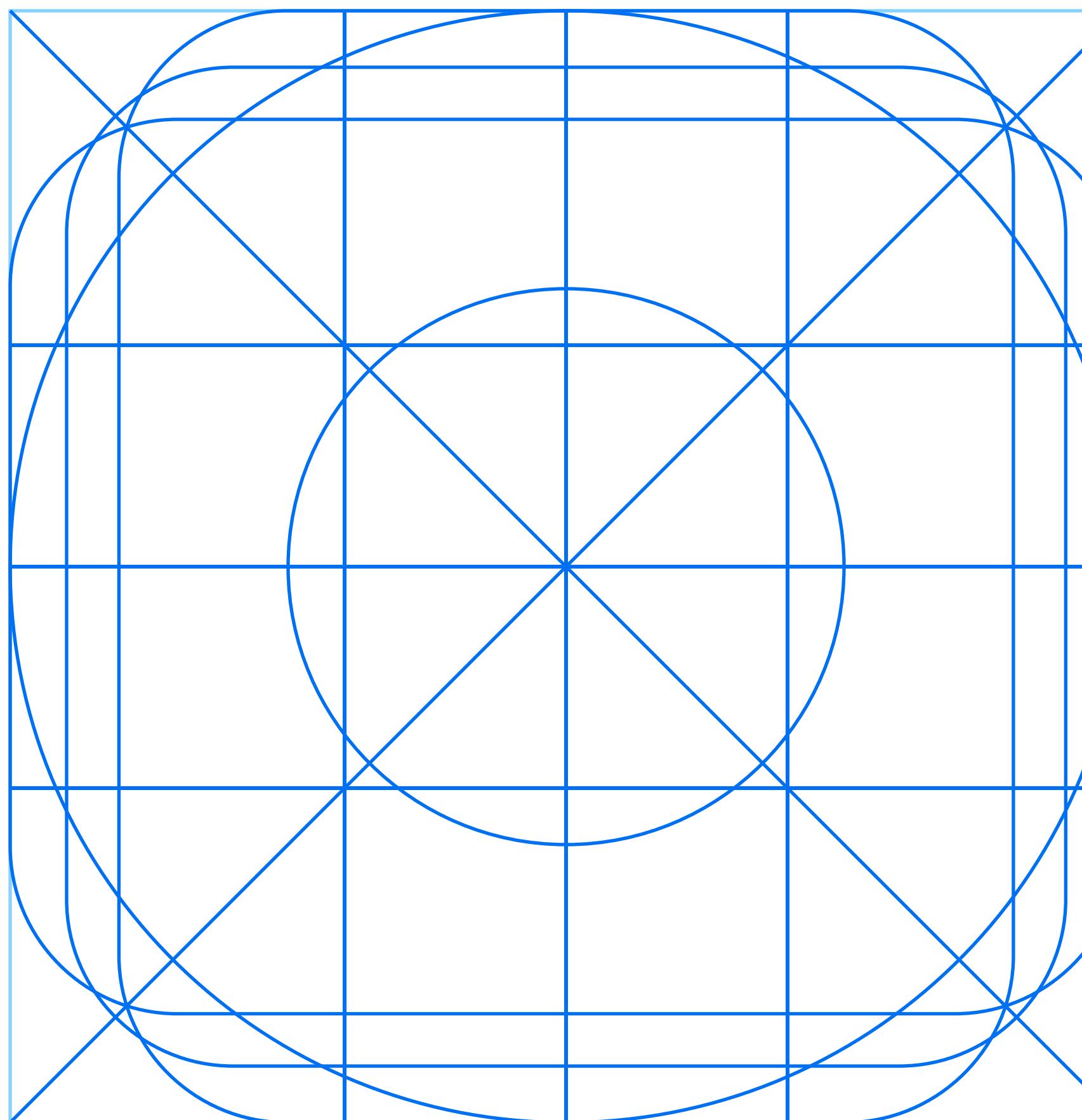


Iconography

Grid System

A Softer Grid System

As the new style relies on softer corners and bolder strokes, the Grid System was adapted – size and shape – to create the new icon look.



SAP Design

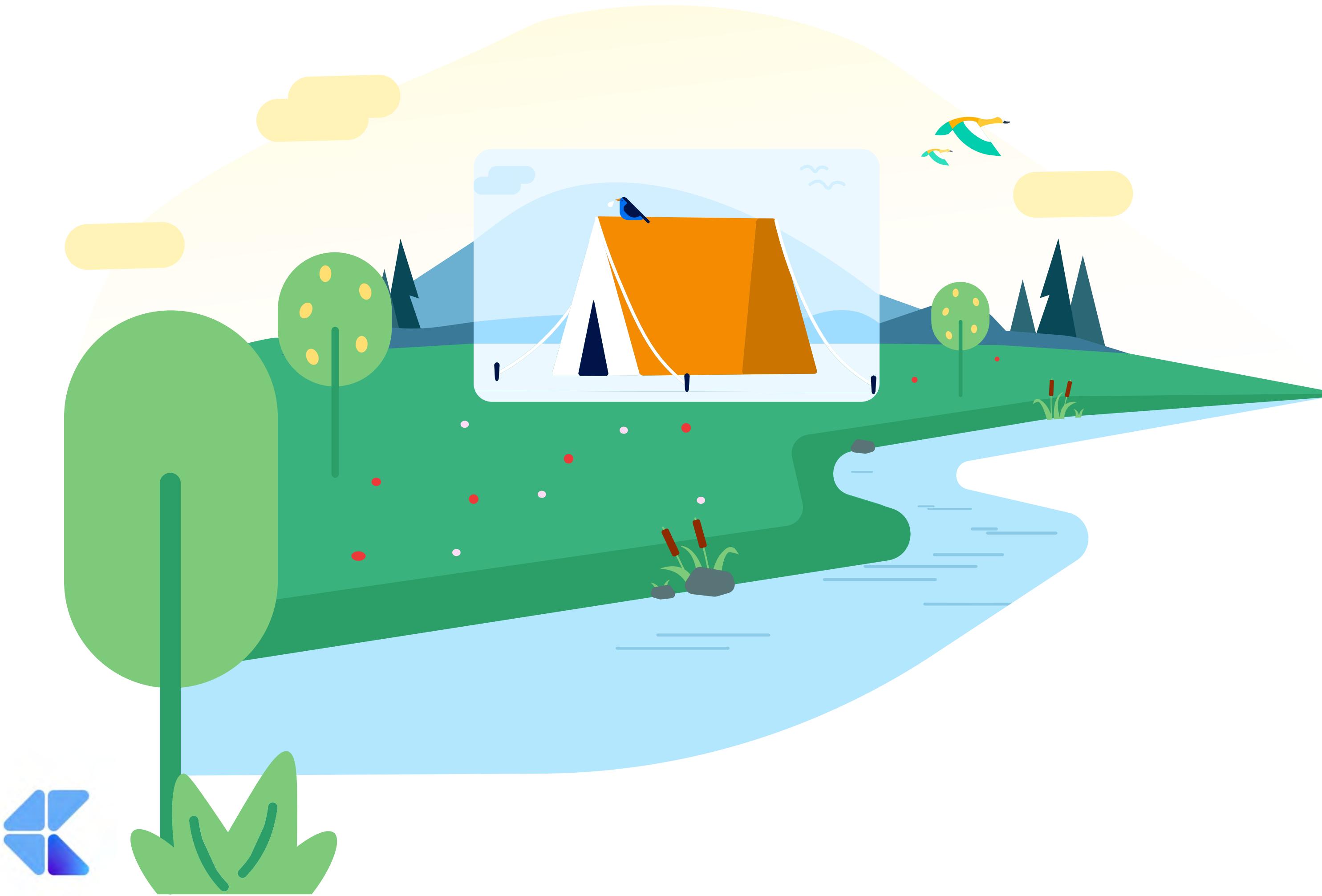
Illustrations

New Illustration Style



Illustrations

Storytelling Through Imagery



Capturing the Moment

Illustrative style illustrations aim to show a snapshot of a larger scene. As the size decreases, so does the lens through which the user views the scene.

Too busy for your taste? Try the Simple Style! A simple style illustration is limited to foreground elements and accents to bring the message across.

Illustrations

Standing Out



Vibrant Foregrounds

Foreground elements must always contain at least one primary foreground color, ensuring them to immediately catch the users eye.



Monochrome Backgrounds

In order to make the foreground really stand out, background elements are much more subtle and create calming environments.



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Illustrations

Illustration Overview



4 Different Sizes
From XS to L

158 Implemented
Illustrations

28 Use Cases
Existing and New



SAP Design

Feedback & Iterations



SAP Design

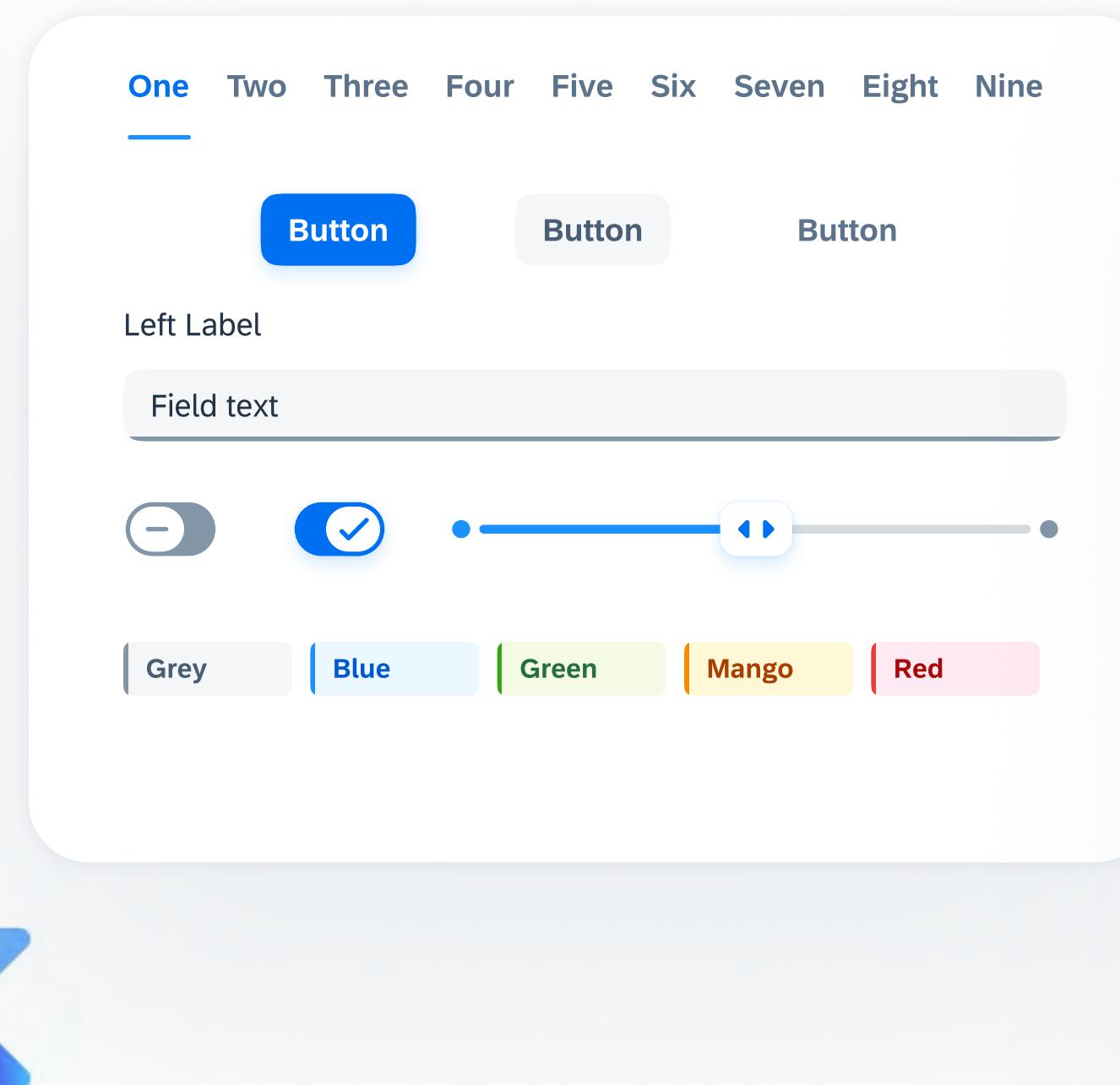
Fundamental concepts

Feedback & Iterations

Control Design Iterations

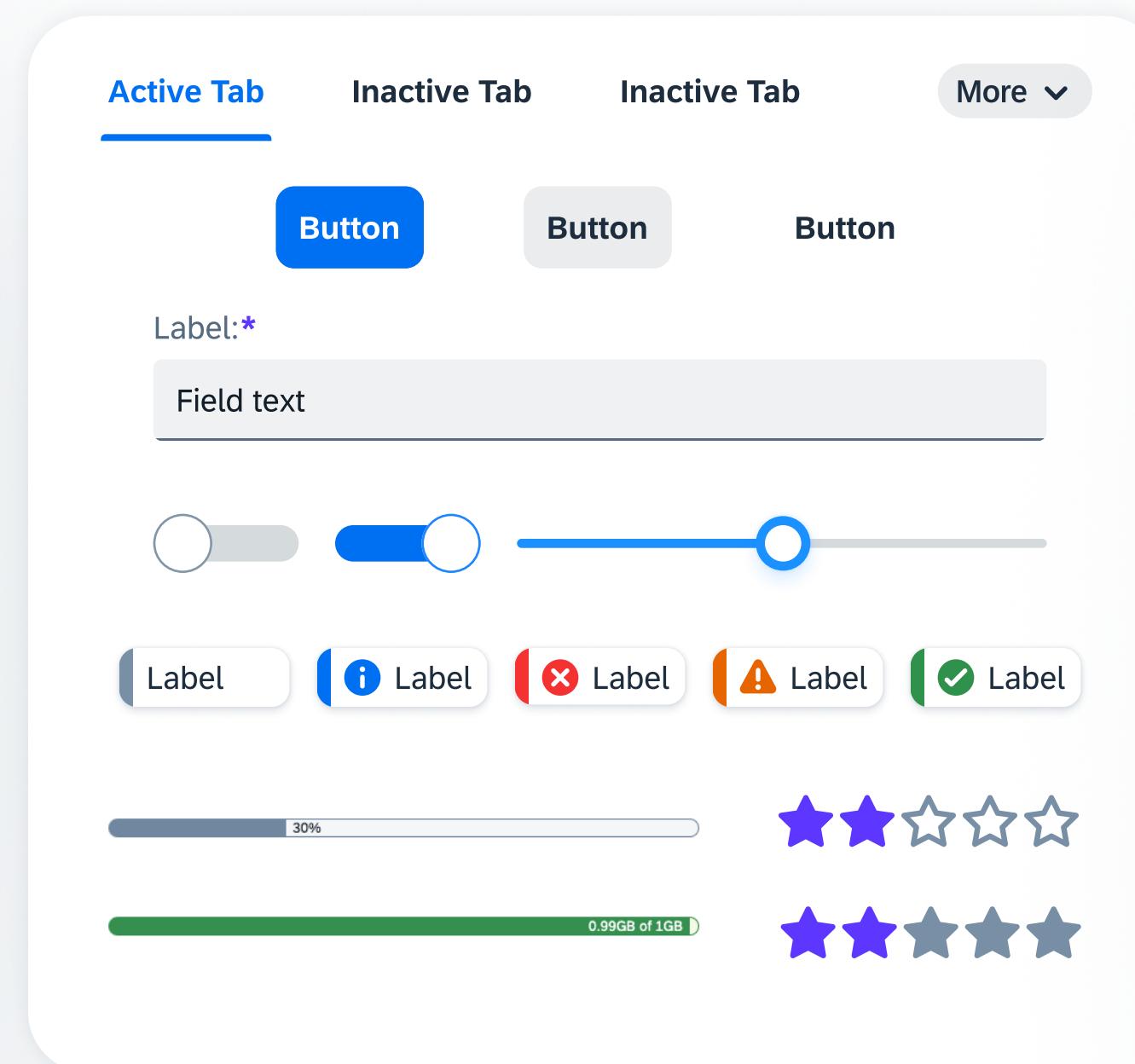
Alpha / Draft Design

First draft mockups and design explorations done in collaboration with SAP product design teams.



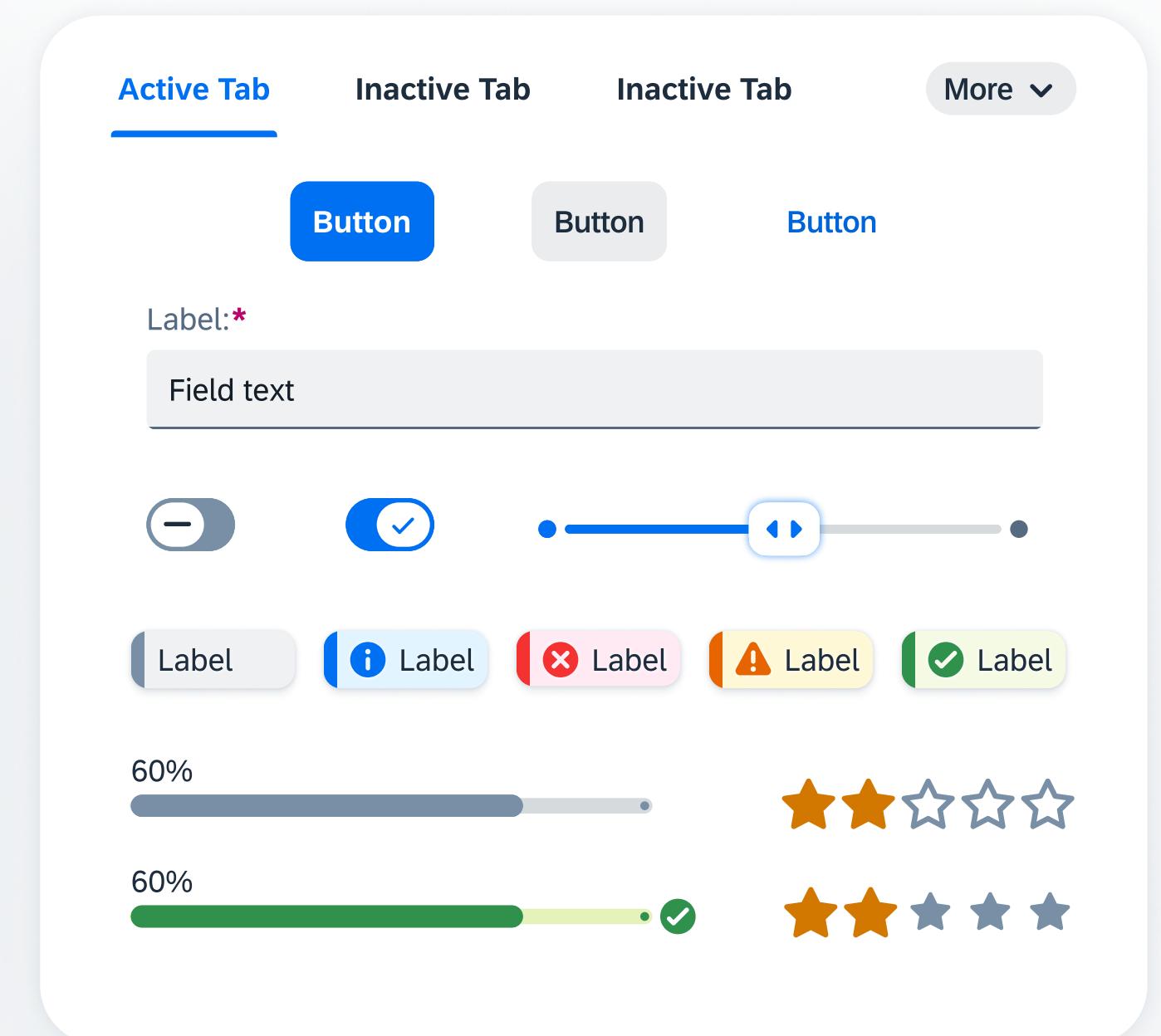
TechEd 2021

First draft versions of controls created under time pressure using Horizon theme colors based on Fiori 3 control implementation.



General Availability

Iterations of the target design applied to framework UI control libraries based on the consolidated feedback received.



SAP Design

Feedback & Iterations

Editable & Read-Only

Initial Design

Non-editable fields did not have an underline and were too similar to editable fields.

The lock or the crossed out pencil icons were also not fully understood.

Editable

Editable Field

Read-Only

Non-Editable Text Field

Non-Editable Text Field

Non-Editable Text Field

"There should be a clearer distinction between editable and read-only controls."

Design Iteration

Removal of the grey background.

Clearer visual difference on first look.

Introduction of dashed lines for non-editable fields to meet ACC requirements.

Editable

Editable Field

Read-Only

Non-Editable Text Field

Non-Editable Text Field

Non-Editable Text Field

SAP Design

Feedback & Iterations

Text Button Affordance

Initial Design

Simplified actions

All buttons using bolder text

“There should be a clearer distinction between text buttons and UI text.”

Text Buttons and UI Text

The screenshot shows a table of sales orders. At the top right of the table, there is a grey rounded rectangle containing the text "Create", "Copy", "Paste", and other icons. The "Create" button is highlighted with a light blue background and white text.

Sales Orders (7)			
		Create	Copy
<input type="checkbox"/>	Product	Customer Contact	Price >
<input type="checkbox"/>	Astro Laptop 1516	Charlotte Hojby	499.00 EUR >

At the bottom of the table, there are two buttons: "Ok" and "Cancel".



Design Iteration

Clearer visual difference of all clickable text buttons.

Introduction of 72 Semibold to provide font weight distinction.

Maintaining existing hierarchical action placement for global actions.

Text Buttons and UI Text

The screenshot shows the same table of sales orders as the initial design. However, the "Create" button is now a standard blue rectangular button with white text, visually distinct from the other UI text.

Sales Orders (7)			
		Create	Copy
<input type="checkbox"/>	Product	Customer Contact	Price >
<input type="checkbox"/>	Astro Laptop 1516	Charlotte Hojby	499.00 EUR >

At the bottom of the table, there are two buttons: "Ok" and "Cancel".

SAP Design

Feedback & Iterations

Main Page Titles

Initial Design

All titles were originally enlarged with 72 Black.
Intended as an additional brand recognition enhancement.

A screenshot of a product page for a 'Special Running Shoe'. The title 'Special Running Shoe' is prominently displayed at the top in a large, bold, black font. Below it is a smaller sub-headline 'PO-48865'. To the left is a green thumbnail image of the shoe. To the right are sections for 'Price' (579 EUR), 'Availability' (In Stock), and 'Product Description' (Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean commodo ligula eget dolor. Aenean massa.). At the bottom are tabs for 'Specification' (which is active), 'Material', and 'Production Options'.

“Titles are too massive and take up too much space.”

Design Iteration

Smaller main page titles on smaller screens and when scrolled. Adaptive / responsive arrangements ensure maximum utilization of screen space.

A screenshot of the same product page after design iteration. The main title 'Special Running Shoe' is now smaller and positioned above the sub-headline 'PO-48865'. The layout remains similar to the initial design, with the green thumbnail, price, availability, and product description sections. The tabs at the bottom ('Specification', 'Material', 'Production Options') are also present.

SAP Design



Enhanced Visual Focus

Initial Design

To cater for the latest WCAG 2.2 accessibility standards, the focus was enhanced to have more visual affordance.



Horizon
2px solid



High Contrast
2px dotted

**"The focus line gets cut off!
Focus should only appear when
a keyboard key is pressed."**

A collection of user interface components from the initial design iteration. It includes a 'Button' section showing three buttons with different focus styles, a 'Lists & Tables' section showing a table with a row highlighted by a thick blue border, and a 'Sales Orders (7)' card with a blue border around its title and a table row.



Design Iteration

The focus visual uses consistent color and style but also has been individually specified for each control.



Links & Interactive Text Controls

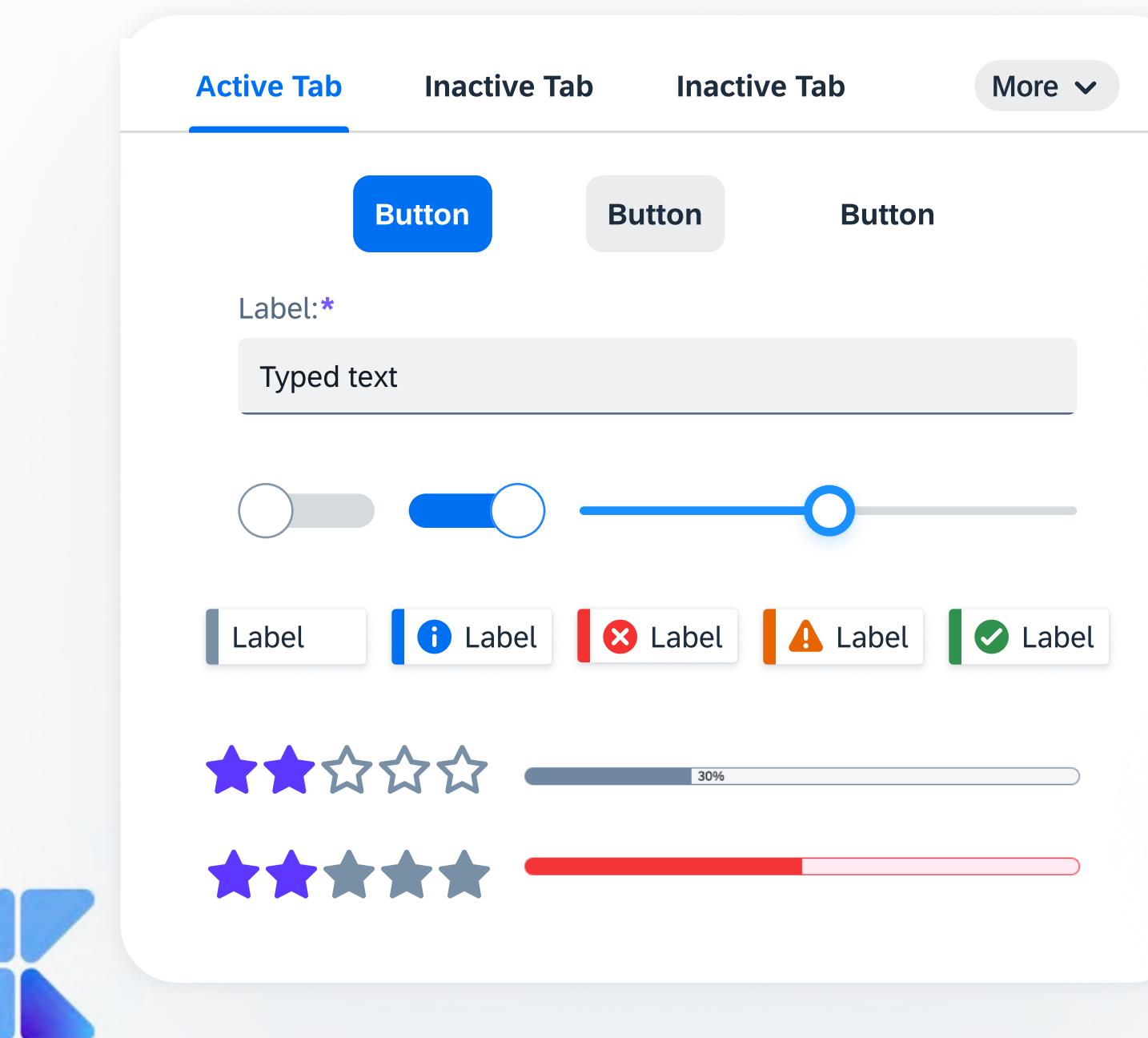
Link Text Link Text ⚠ Warning ⚠ Warning

SAP Design

General Control Feedback

TechEd 2021

First draft versions of controls using Horizon theme colors based on Fiori 3 control concepts and implementation.



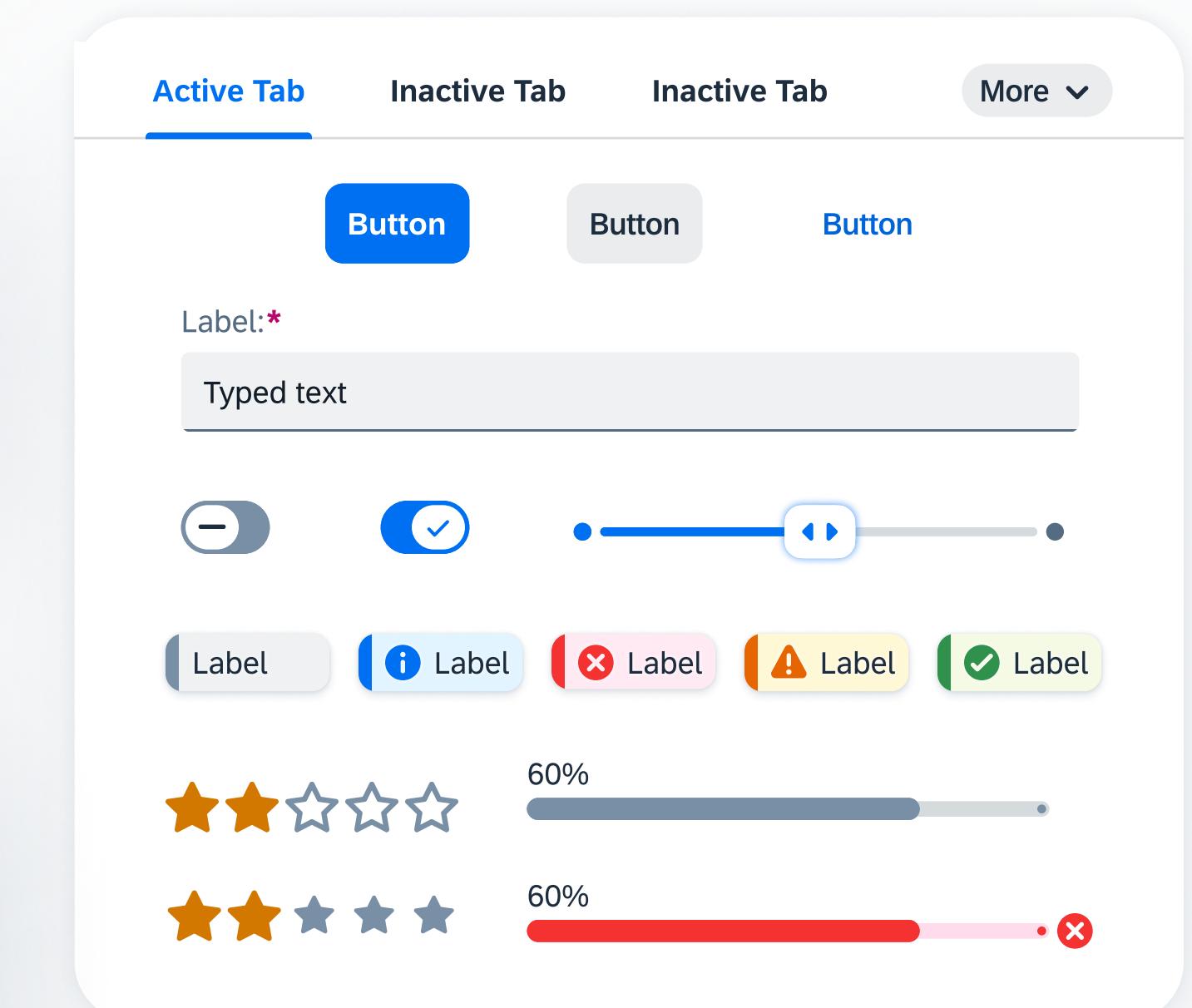
"The mandatory field star does not stand out as it did in former themes."

"Some controls like switches, sliders and progress indicators look outdated"

"State differences should be more obvious, ACC needs to be improved to latest standards"

General Availability

Iterations of the target design applied to framework UI control libraries based on the consolidated LOB & ACC feedback received.



SAP Design

Feedback & Iterations

Adjusting interactive shadow

Initial Design

Added shadows on hover state bring a modern enhancement to visual interactions but require spacial, layouting or style adjustments.

“The shadows get cut off when control is hovered!”

Header bars, Toolbars

Men / Shoes / Running Shoes

Special Running Shoe Oversized multimaterial sneakers wit...

Form

Label: Typed text

Label: Typed text

Label: Typed text

Label: Typed text

Design Iteration

Small tweaks on the spacing and adjustments to the Horizon styling / spacing specification can solve the shadow issue on hover interaction and maintain a smooth experience.

Header bars, Toolbars

Men / Shoes / Running Shoes

Special Running Shoe Oversized multimaterial sneakers wit...

Form

Label: Typed text

Label: Typed text

Label: Typed text

Label: Typed text

SAP Design

Resources

-  [Fundamentals](#)
-  [OpenUI5](#)
-  [UI5 Web Components](#)
-  [Theming Base Content](#)
-  [SAP Horizon Theming](#)
-  [SAP Horizon Theme Colors](#)

