

# Crafting a Multi-Themed Design System

Kuong Iy Seng

## Sizing & spacing

Sizing and spacing tokens are used to create a consistent layout and to maintain proper alignment and spacing between elements in our interface. They define properties like width, height, margin, padding, and grid/flex layout. Use these tokens to ensure that our interface is well-structured and easy to navigate. For example, use larger spacing tokens for the gap between major sections and smaller ones for the gap between related elements.

### General

xxxxx

PX Value	Rem Value	Variable
0	0	sizing-0
2	0.125rem	sizing-0,5
4	0.25rem	sizing-1
6	0.375rem	sizing-1,5
8	0.5rem	sizing-2
10	0.625rem	sizing-2,5
12	0.75rem	sizing-3
14	0.875rem	sizing-3,5
16	1rem	sizing-4
20	1.25rem	sizing-5
24	1.5rem	sizing-6
28	1.75rem	sizing-7
32	2rem	sizing-8
36	2.25rem	sizing-9
40	2.5rem	sizing-10
44	2.75rem	sizing-11
48	3rem	sizing-12
56	3.5rem	sizing-14
64	4rem	sizing-16
80	5rem	sizing-20
96	6rem	sizing-24
112	7rem	sizing-28
128	8rem	sizing-32
144	9rem	sizing-36
160	10rem	sizing-40
176	11rem	sizing-44
192	12rem	sizing-48
208	13rem	sizing-52
224	14rem	sizing-56
240	15rem	sizing-60
256	16rem	sizing-64
288	18rem	sizing-72
320	20rem	sizing-80
320	20rem	sizing-xs
384	24rem	sizing-96
768	48rem	sizing-192

## Background colors

Use these semantic tokens to define the general background color of different areas within our interface. Distinguish between different sections, create visual hierarchy, or provide contrast for other elements.

Each token is available in Core, OAP and 2DIV and switches automatically by using Figma variables and modes.

### Base

Use base tokens for the majority of our UI components and backgrounds. Base tokens are neutral and subtle, providing a clean and unobtrusive background for elements. Use them to create a sense of depth and layering in the interface.

Type
Strong
Base
Muted
Subtle
Disabled
Base Inverted
White
Dark

### Brand

Brand colors are used to represent our brand identity and are used to draw attention, avoid being overwhelming the user. They might be used for key elements and are used subtly in the background to add a touch of brand identity.

Type
Primary Strong
Primary Base
Primary Subtle
Secondary Strong
Secondary Base
Secondary Subtle
Accent Strong
Accent Base
Accent Subtle

## Typography system

Typography tokens are used to maintain consistency in the text styles across our interface. They define properties like font family, font size, line height, font weight, and letter spacing. Use these tokens to ensure that our typography is consistent, legible, and effectively communicates the information hierarchy.

### Font family

We use **Montserrat** as our typeface.

Type	Variable
Heading	font / family / heading
Body	font / family / body

### Font weight

#### Medium

- Use medium font weight for body text, such as paragraphs and descriptions, to maintain readability.
- Use it for headers or subheadings when you want a less pronounced emphasis compared to bold.
- It's suitable for general content where you want a balance between emphasis and neutrality.

#### Semi-bold

- Semi-bold is ideal for creating contrast and hierarchy in your design without being as heavy as bold.
- Use it for headers, subheadings, or elements that need more emphasis than regular text but less than bold.
- It's great for highlighting important points or creating a visual hierarchy within your text.

#### Bold

- Bold font weight is best for emphasis and drawing attention to specific text elements.
- Use it for headings, titles, call-to-action buttons, or any text that needs to stand out prominently.
- Bold text is also effective for creating contrast and hierarchy in your design, especially when paired with lighter weights for body text.

Type	Variable
400	font / weight / regular
500	font / weight / medium
600	font / weight / semibold
700	font / weight / bold

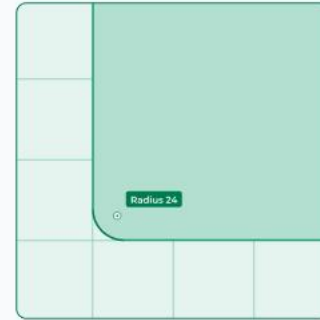
# Agenda

1 Preparation

2 Building the Figma Library

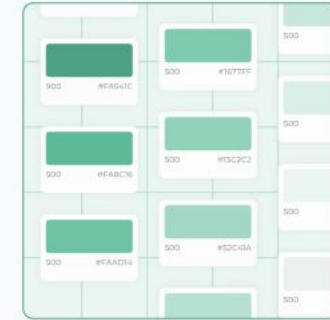
3 Building Components and Variants

4 Documentation and Guidelines



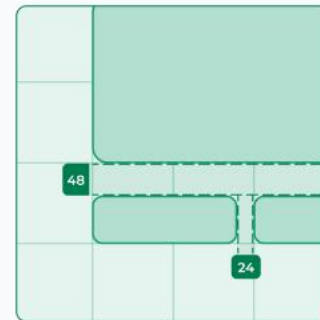
Borders

● Complete



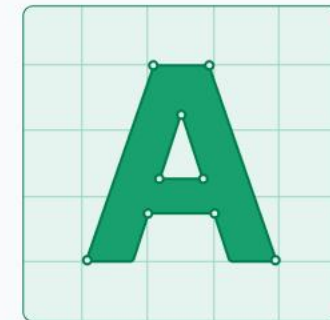
Colors

● Complete



Sizing and Spacing

● Complete



Typography

● Complete

# Preparation

## Context

The goal of this work was to build a system utilising Figma Library tokens to enable the team to work with three distinct colours branding.

- 1 Research and colour strategy
- 2 Typography choices
- 3 Icons and illustrations
- 4 Sizing & Spacing

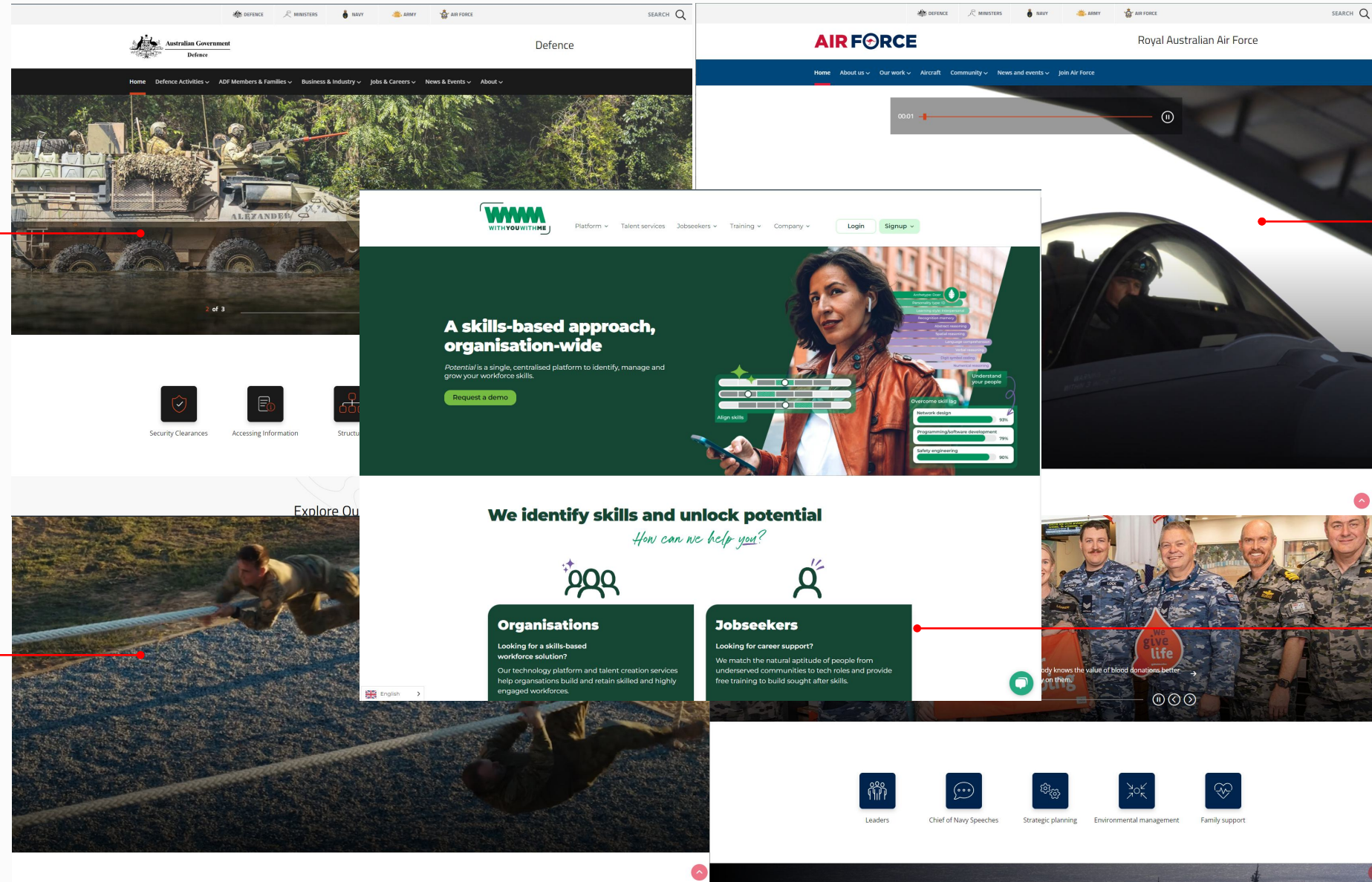
# Research Themes

Primary  
#1A4B85

Secondary  
#DEECFA

Primary  
#1A4B85

Secondary  
#DEECFA



Primary  
#1A4B85

Secondary  
#DEECFA

Primary  
#1A4B85

Secondary  
#DEECFA

# Foundations

FOUNDATIONS ✨

- Borders
- Colors**
- Responsive Layout 🟡
- Sizing & Spacing
- Typography
- Visual Effects

## State

Type	Variable	Color
Danger Strong	background / danger / strong	
Danger Base	background / danger / base	
Danger Subtle	background / danger / subtle	
Warning Strong	background / warning / strong	
Warning Base	background / warning / base	
Warning Subtle	background / warning / subtle	
Success Strong	background / success / strong	
Success Base	background / success / base	
Success Subtle	background / success / subtle	
Info Strong	background / info / strong	
Info Base	background / info / base	
Info Subtle	background / info / subtle	

## Action

Type	Variable	Color
Neutral Normal	background / action / neutral / normal	
Neutral Hover	background / action / neutral / hover	
Neutral Focus	background / action / neutral / focus	
Link Normal	background / action / link / normal	
Link Hover	background / action / link / hover	
Link Focus	background / action / link / focus	
Primary Normal	background / action / primary / normal	
Primary Hover	background / action / primary / hover	
Primary Focus	background / action / primary / focus	
Secondary Normal	background / action / secondary / normal	
Secondary Hover	background / action / secondary / hover	
Secondary Focus	background / action / secondary / focus	
Danger Normal	background / action / danger / normal	
Danger Hover	background / action / danger / hover	

Type	Variable	Color
Primary Strong	background / primary / strong	
Primary Base	background / primary / base	
Primary Strong	background / primary / strong	
Primary Base	background / primary / base	
Primary Strong	background / primary / strong	
Primary Base	background / primary / base	
Primary Strong	background / primary / strong	
Primary Base	background / primary / base	
Primary Strong	background / primary / strong	
Primary Base	background / primary / base	
Primary Strong	background / primary / strong	
Primary Base	background / primary / base	
Primary Strong	background / primary / strong	
Primary Base	background / primary / base	
Primary Strong	background / primary / strong	
Primary Base	background / primary / base	

Type	Variable	Color
Primary Strong	background / primary / strong	
Primary Base	background / primary / base	
Primary Subtle	background / primary / subtle	
Secondary Strong	background / secondary / strong	
Secondary Base	background / secondary / base	
Secondary Subtle	background / secondary / subtle	
Accent Strong	background / accent / strong	
Accent Base	background / accent / base	
Accent Subtle	background / accent / subtle	

## Brand Colours

# Typography

FOUNDATIONS ✨

Borders

Colors

Responsive Layout ●

Sizing & Spacing

Typography

Visual Effects

## Font size

Type	Variable
<b>xs</b>	font / size / xs
<b>sm</b>	font / size / sm
<b>md</b>	font / size / md
<b>lg</b>	font / size / lg
<b>xl</b>	font / size / xl
<b>2xl</b>	font / size / 2xl
<b>3xl</b>	font / size / 3xl
<b>4xl</b>	font / size / 4xl

## Line height

Type	Variable	Mo
<b>xs</b>	line-height / xs	14
<b>sm</b>	line-height / sm	16
<b>md</b>	line-height / md	18
<b>lg</b>	line-height / lg	20
<b>xl</b>	line-height / xl	24
<b>2xl</b>	line-height / 2xl	32
<b>3xl</b>	line-height / 3xl	40
<b>4xl</b>	line-height / 4xl	48
<b>5xl</b>	line-height / 5xl	56

18

20

24

32



## **Building the Figma Library**

# Thinking ahead



The screenshot shows a design system tool interface with a sidebar on the left and a main content area. The sidebar has a search bar with 'primitives' and a list of categories: 'All variables' (234), 'colors', 'core' (1), 'neutral', 'deep green', 'mint green', 'fierce green', 'disruptive green', 'passionate purple', 'oap' (2), '2div' (3), 'archetype', 'functional', and 'defence' (4). The main content area displays three color palettes: 'colors / core / neutral', 'colors / oap / green', and 'colors / defence / vermillion'. A 'typography' panel is open, showing 'All variables' (24) and a table of font settings.

Name	desktop	mobile
font / family		
T heading	Montserrat	Montserrat
T body	Montserrat	Montserrat
font / weight		
# regular	400	400



# Putting it all together

Name	core <b>1</b>	oap <b>2</b>	2div <b>3</b>	defence <b>4</b>
background / primary				
white	<input type="checkbox"/> colors/core/neutral/0	<input type="checkbox"/> colors/oap/neutral/0	<input type="checkbox"/> colors/2div/neutral/0	<input type="checkbox"/> ...lors/defence/neutral/0
dark	<input checked="" type="checkbox"/> .../core/deep green/800	<input checked="" type="checkbox"/> colors/oap/green/800	<input checked="" type="checkbox"/> ...rs/2div/deep blue/800	<input checked="" type="checkbox"/> ...defence/neutral/10700
background / primary				
background	<input checked="" type="checkbox"/> .../core/deep green/900	<input checked="" type="checkbox"/> colors/oap/green/900	<input checked="" type="checkbox"/> ...rs/2div/deep blue/900	<input checked="" type="checkbox"/> .../defence/neutral/2700
strong	<input checked="" type="checkbox"/> .../core/deep green/900	<input checked="" type="checkbox"/> colors/oap/green/900	<input checked="" type="checkbox"/> ...rs/2div/deep blue/900	<input checked="" type="checkbox"/> ...defence/neutral/10700
base	<input checked="" type="checkbox"/> .../core/deep green/800	<input checked="" type="checkbox"/> colors/oap/green/800	<input checked="" type="checkbox"/> ...rs/2div/deep blue/700	<input checked="" type="checkbox"/> .../defence/neutral/9500
dark-subtle	<input checked="" type="checkbox"/> .../core/deep green/400	<input checked="" type="checkbox"/> colors/oap/green/200	<input checked="" type="checkbox"/> ...rs/2div/deep blue/200	<input checked="" type="checkbox"/> ...ors/defence/blue/1200
subtle	<input type="checkbox"/> ...rs/core/deep green/50	<input type="checkbox"/> colors/oap/green/50	<input type="checkbox"/> ...lors/2div/deep blue/50	<input type="checkbox"/> .../defence/neutral/2300
background / secondary				
strong	<input checked="" type="checkbox"/> ...s/core/mint green/900	<input checked="" type="checkbox"/> colors/oap/green/200	<input checked="" type="checkbox"/> ...rs/2div/deep blue/200	<input checked="" type="checkbox"/> .../defence/neutral/2700
base	<input checked="" type="checkbox"/> ...s/core/mint green/500	<input checked="" type="checkbox"/> colors/oap/green/50	<input checked="" type="checkbox"/> ...rs/2div/deep blue/100	<input checked="" type="checkbox"/> .../defence/neutral/2500
subtle	<input type="checkbox"/> ...rs/core/mint green/50	<input type="checkbox"/> colors/oap/green/25	<input type="checkbox"/> ...lors/2div/deep blue/50	<input type="checkbox"/> .../defence/neutral/1000

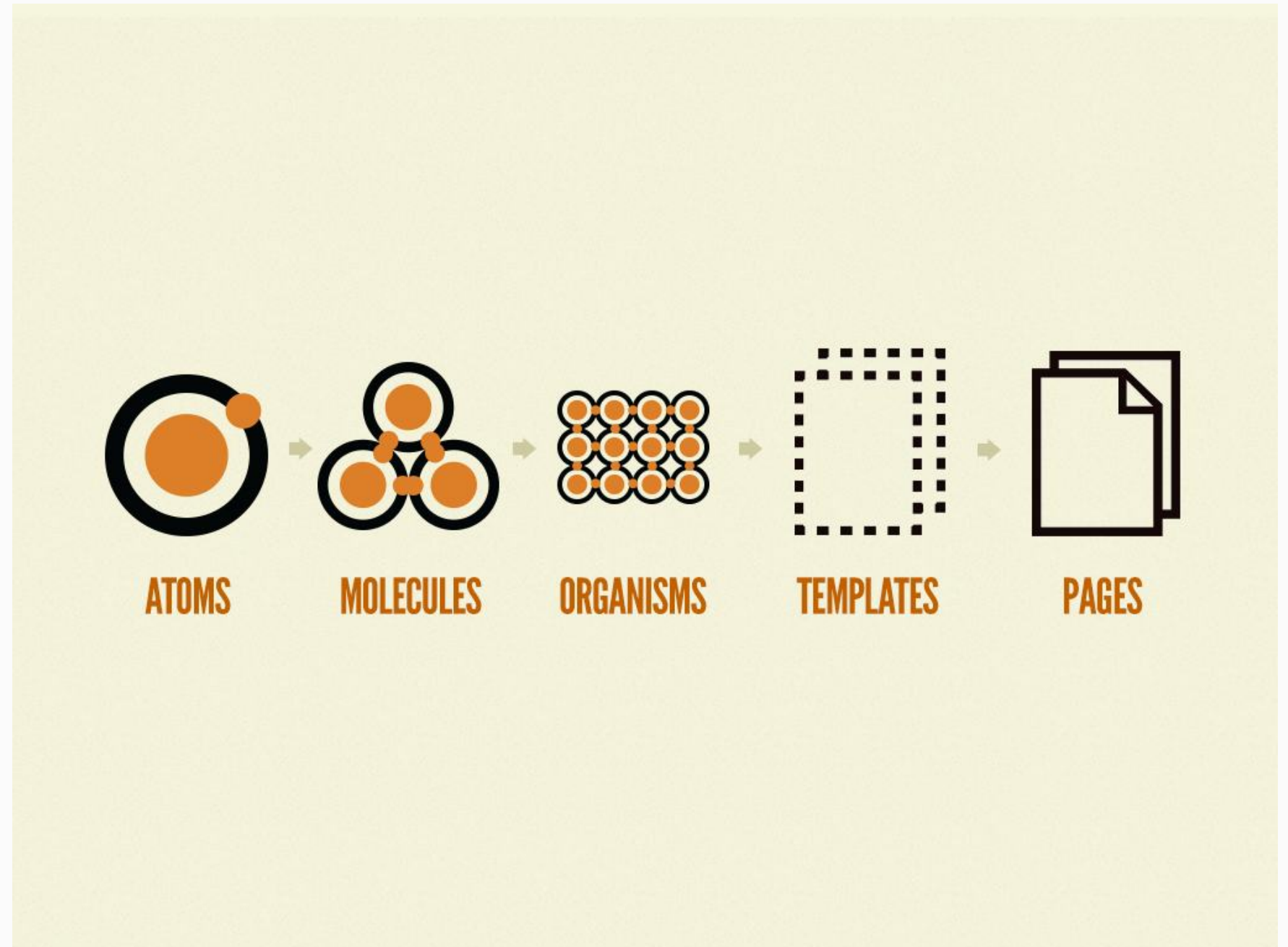


## **Building Components and Variants**

# Atomic Design Methodology

The goal was to create a flexible design system that could be easily modified and expanded upon while keep the design process efficient and organised.

Atomic Design was the perfect methodology to achieve this, as it breaks down complex elements into smaller and reusable parts.



# Example of how organisms are built

Atoms → Molecules → Organisms

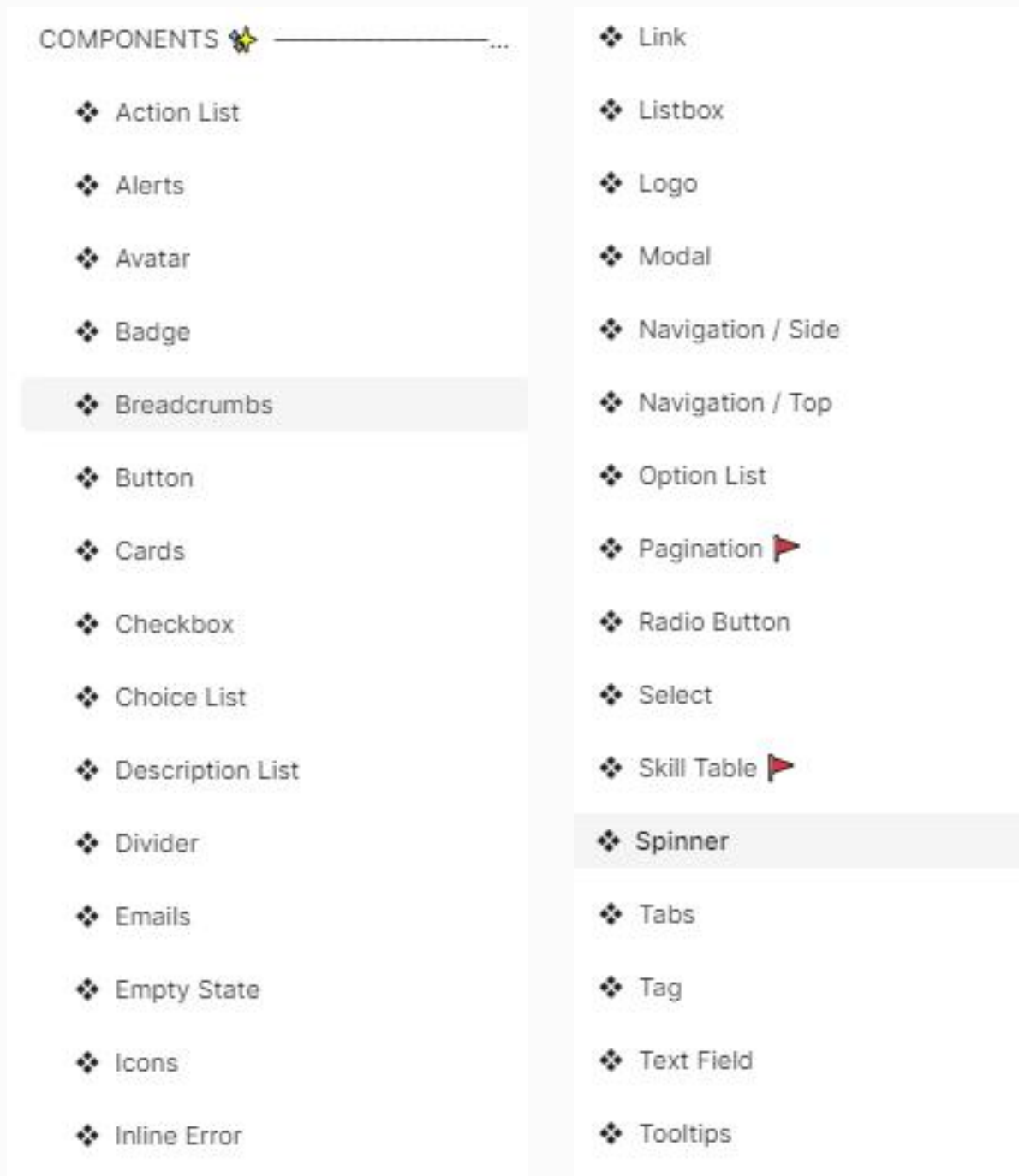
Form label	Form label	Form label
Placeholder	Placeholder	Placeholder
Placeholder (Off)	Placeholder (Off)	Placeholder (Off)
Error Message	Error Message	Error Message
<input type="text"/>		

	Default (I-R)	Active (I-R)	Focus (I-R)	Error (I-R)	Disabled (I-R)
<b>Small</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Medium</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Large</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Default (N-I)	Active (N-I)	Focus (N-I)	Error (N-I)	Disabled (N-I)
<b>Small</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Medium</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Large</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Default (I-R)	Active (I-R)	Focus (I-R)	Error (I-R)	Disabled (I-R)
<b>Small</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Medium</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Large</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

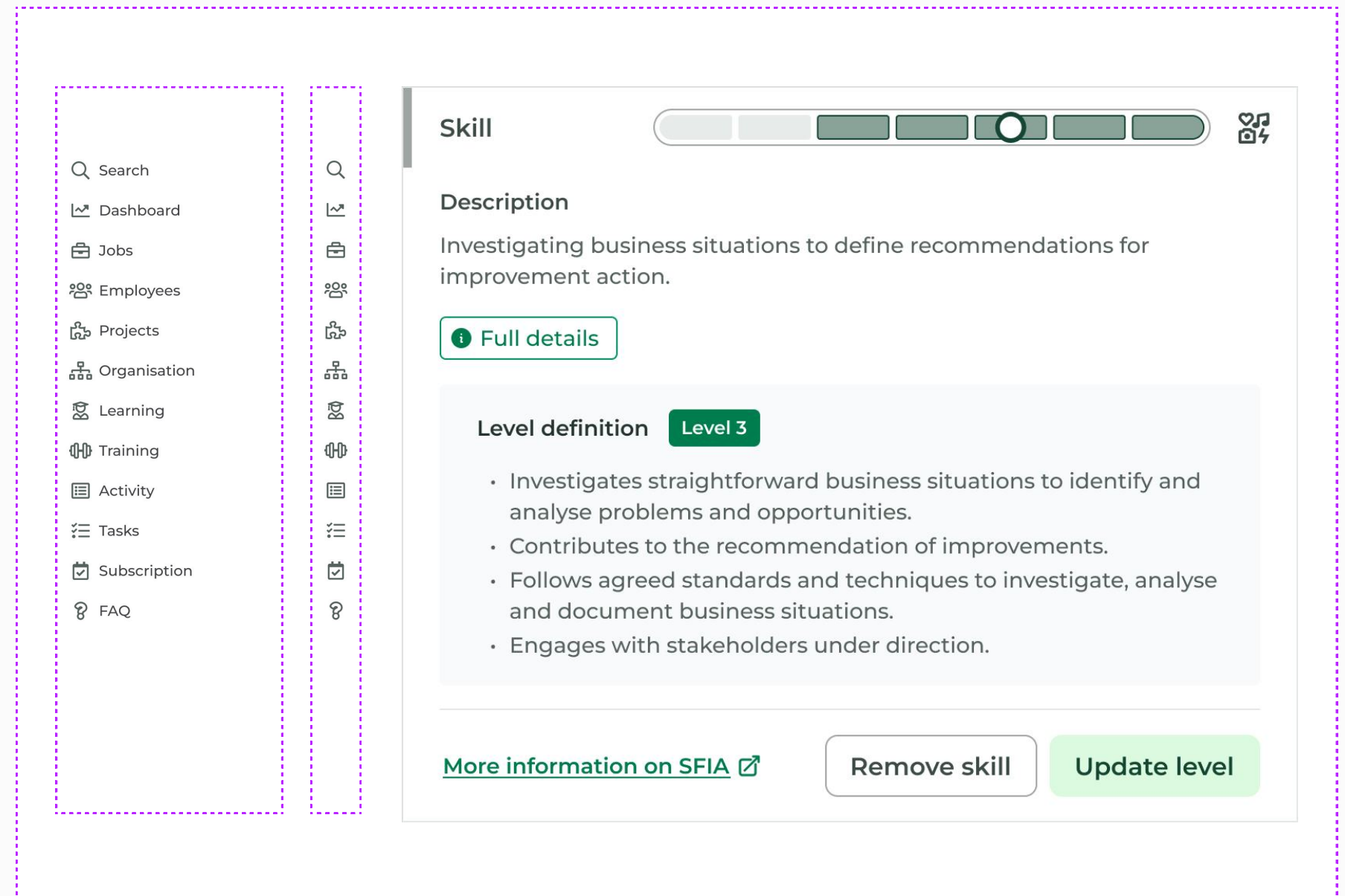
	Default (I-R)	Active (I-R)	Focus (I-R)	Error (I-R)	Disabled (I-R)
<b>Small</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Medium</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Large</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Default (N-I)	Active (N-I)	Focus (N-I)	Error (N-I)	Disabled (N-I)
<b>Small</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Medium</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Large</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Default (I-L)	Active (I-L)	Focus (I-L)	Error (I-L)	Disabled (I-L)
<b>Small</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Medium</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Large</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

# Components list & Example

## Components list



## Components example



# Next steps...

- 1 Continue documentation and guidelines
- 2 Testing
- 3 Open discussion

