



# Practical UI

# Quick and practical UI design guidelines to design intuitive, accessible, and beautiful interfaces.



# Adham Dannaway

Free preview

# Practical UI

Quick and practical UI design guidelines to design intuitive, accessible, and beautiful interfaces.

Written and designed by Adham Dannaway

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[www.practical-ui.com](http://www.practical-ui.com)

# What's in the free preview?

To give you a better idea of what to expect, I've included 3 of 100+ guidelines you'll find in the book. Each guideline comes with visual examples and a clear rationale.

## **Minimise interaction cost**

Fundamentals

## **Group related elements**

Layout and spacing

## **Ensure ideal line length**

Typography



CHAPTER 1

# Fundamentals

Overarching UI design principles that form the foundation of the guidelines

# Minimise interaction cost

Interaction cost is the sum of physical and mental effort required to achieve a task. Looking, scrolling, searching, reading, clicking, waiting, typing, thinking, and remembering all add to interaction cost. The higher the interaction cost, the harder it is for someone to achieve their task.

The great thing about interaction cost is that you can measure it. This means you can try to minimise it to make it easier for people to achieve their goals.

Of course, the more features a product provides, the harder it is to keep interaction costs down. This is one of the reasons why simple apps that focus on doing a specific task efficiently, are often the most successful.

## How to minimise interaction cost

Many of the guidelines in this book help to minimise interaction cost, but here are 3 of the most effective:

### 1. Keep related actions close

According to Fitts's Law, the closer and larger a target, the faster it is to click on that target. Keep actions close to the element they relate to and try to ensure they have a sufficient target area (at least 48pt by 48pt is a safe size). You'll learn about points (pt) in the "Layout and spacing" chapter.

### 2. Reduce distractions

Attention grabbing distractions like animated banners, pop-ups, and unnecessary visuals, can pull people's attention away from the task they're trying to complete.

### 3. Minimise choice

According to Hick's Law, the time it takes to make a decision increases with the number and complexity of choices. Reduce choices to speed up decisions. You can also highlight a smaller set of recommended or popular items to help people make decisions faster.

## An interaction cost example

In the following product page example, let's say you want to add 2 products to your cart. You need to select the quantity via a dropdown, which requires 1 click, 1 scroll, and another click. This can be especially difficult for those with motor impairments. Then you need to move your mouse across to the "Add to cart" button and click it.

The total interaction cost is 3 clicks, 1 scroll, and a short mouse movement.

The screenshot shows a product page for a "White mug" on the "homeshop" website. The page includes a navigation bar with links for Shop, Blog, Contact, and Cart. A large image of the mug is displayed, along with its price (\$12 USD) and a 5.0-star rating from 38 reviews. A detailed product description follows. Below the description is a quantity selector (a dropdown menu showing "1") and an "Add to cart" button. A red circle highlights the quantity selector, and a red arrow points from it to the "Add to cart" button, indicating the interaction path. The total interaction cost is noted as 3 clicks, a scroll, and a short mouse movement.

Total interaction cost is 3 clicks, a scroll, and a short mouse movement.

In the next example, we reduce the interaction cost using a stepper for the quantity instead of a dropdown. A stepper component makes it easier and faster for people to make small numeric changes. It allows people to increase or decrease a number with a single button press or by typing the number in the field.

We move the “Add to cart” button closer to the quantity selector to further reduce interaction cost. Left aligning the button also helps ensure the button won’t be missed by those using screen magnifiers.

We reduced the total interaction cost to 2 clicks and a very small mouse movement. A similar approach can be taken to reduce the interaction cost on any interface.

The screenshot shows a product page for a "White mug" on a website. The top navigation bar includes links for Shop, Blog, Contact, and Cart. On the left, there's a sidebar with a green checkmark icon. The main content area features a large image of a white mug, its price (\$12 USD), a 5.0 rating with 38 reviews, and a detailed description. Below this is a quantity stepper set to 1, with a dashed red circle around the plus button and the text "1 click" next to it. An arrow points from the stepper down to a blue "Add to cart" button, also labeled "1 click".

Total interaction cost is just 2 clicks and a very small mouse movement



CHAPTER 4

# Layout and spacing

Create a consistent spacing system and learn about alignment and layout

# Group related elements

Breaking up information into smaller groups of related elements helps to structure and organise an interface. This makes it faster and easier for people to understand and remember.

Group related elements using the following methods:

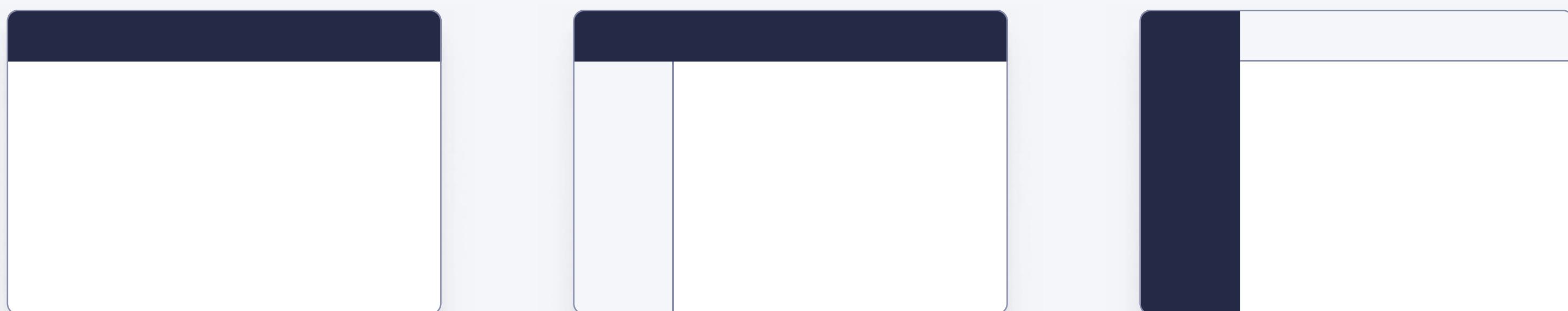
1. Place related elements in the same container
2. Space related elements close together
3. Make related elements look similar
4. Align related elements in a continuous line

You can combine these methods to help display groupings more clearly. Let's look at each of these grouping methods in more detail.

## 1. Place related elements in the same container

According to the principle of common region, items within the same boundary or container are perceived as a group and assumed to be related. You can create containers using borders, shadows, and background colours. Using containers is the strongest visual cue to group interface elements.

Containers are often used to create the main structure of an interface.



Examples of containers being used to define common website structures

Cards and dialog boxes are a common type of container used to group smaller pieces of related content.

The image shows two examples of containers: a 'Card' and a 'Dialog box'.

**Card:** A white rectangular card with rounded corners. It features a large image of Mount Fuji and a traditional Japanese building at the top. Below the image, the text 'Beautiful Japan' is displayed in bold, followed by a description: 'Our curated list of must-see locations that will take your breath away.' At the bottom, there is a small profile picture of a woman and the text 'Tina Wong 16 Feb 2022'.

**Dialog box:** A light blue rounded rectangular box. It contains a circular icon with a checkmark and the text 'Strengthen your brand with a custom domain'. Below this, there is a descriptive paragraph: 'Look professional and help your customers find you online by adding a custom domain.' A blue link 'Benefits of a custom domain ▾' is shown. At the bottom, there is a blue button labeled 'Add domain'.

If groupings are unclear, consider using containers to help make them clearer. In the following travel blog example, it's difficult to tell who wrote each article, as the author's details are very close to the article below.

There are also varying amounts of space above the author's details, as the article description text is an inconsistent length. A large gap above the author's details makes it look like the author is related to the article below.

The screenshot shows a travel blog website with a header containing a red 'X' icon, the logo 'travelblog', and navigation links for 'Top destinations', 'Tours', 'About', and 'Contact'. The main section is titled 'Top destinations' and displays 18 articles in a grid format. Each article includes a thumbnail image, the destination name, a brief description, and the author's profile picture and name. The layout is inconsistent, with varying amounts of space between the author details and the descriptions, which can be confusing.

Destination	Description	Author	Date
San Francisco, USA	Discover the jewel of Northern California.	Jon Tony	16 Feb 2022
Fujiyoshida, Japan	Lots to do and beautiful views of Mt. Fuji.	Tina Wong	15 Feb 2022
Beijing, China	Walk the Great Wall, try amazing foods, and much more.	Brooklyn Simmons	14 Feb 2022
Plansee, Austria	This hidden gem will take your breath away.	Tony Robson	6 Jan 2022
Nevada, USA	Take in spectacular sights as you road trip through awe-inspiring mountain ranges.	Aisha Abboud	5 Jan 2022
Positano, Italy	Go on a culinary adventure through the jewel of the Amalfi Coast.	Darlene Robs	19 Dec 2021
(Articles 7-12)	(Articles 7-12)	(Articles 7-12)	(Articles 7-12)

It's difficult to tell who wrote each article due to unclear groupings

Using containers helps to clearly associate the author with their article. This example demonstrates how containers can overpower spacing as a grouping method.

The screenshot shows a travel blog interface with a header containing a green circular icon with a checkmark, the text "travelblog", and navigation links for "Top destinations", "Tours", "About", and "Contact". Below the header, a large section titled "Top destinations" displays 18 articles in a grid format. Each article card includes a thumbnail image, the destination name, a brief description, and author information (profile picture and date). The cards are separated by thin vertical and horizontal lines, creating a grid-like appearance.

Destination	Description	Author	Date
San Francisco, USA	Discover the jewel of Northern California.	Jon Tony	16 Feb 2022
Fujiyoshida, Japan	Lots to do and beautiful views of Mt. Fuji.	Tina Wong	15 Feb 2022
Beijing, China	Walk the Great Wall, try amazing foods, and much more.	Brooklyn Simmons	14 Feb 2022
Plansee, Austria	This hidden gem will take your breath away.	Tony Robson	6 Jan 2022
Nevada, USA	Take in spectacular sights as you road trip through awe-inspiring mountain ranges.	Aisha Abboud	5 Jan 2022
Positano, Italy	Go on a culinary adventure through the jewel of the Amalfi Coast.	Darlene Robs	19 Dec 2021
(Burj Khalifa)	(Burj Khalifa)	(Burj Khalifa)	(Burj Khalifa)

Containers are used to clearly associate the author with their article

Try to avoid using containers for every group on an interface, as it can cause unnecessary clutter. Instead, look for opportunities to use other grouping methods. They're often more subtle and can result in a simpler design, as you'll see next.

## 2. Space related elements close together

According to the principle of proximity, elements near each other are perceived as a group and assumed to be related. Place related elements close together to group them. Separate unrelated elements by placing more space between them. You'll learn how to create and use a predefined spacing system later in this chapter.

Using spacing to create groups, rather than containers, can help declutter and simplify an interface.

The image shows two wireframe prototypes side-by-side, illustrating different approaches to grouping related elements. Both prototypes feature a header section labeled 'TOP DESTINATIONS' and a footer section labeled 'HIDDEN GEMS', each containing three items.

**Grouped using containers (Left):** This prototype uses rounded rectangular containers to group items. The 'TOP DESTINATIONS' section contains three cards: 'San Francisco USA' (Golden Gate Bridge), 'Fujiyoshida Japan' (Mt. Fuji), and 'Beijing China' (Forbidden City). The 'HIDDEN GEMS' section contains three cards: 'Plansee Austria' (mountain lake), 'Salta Argentina' (desert landscape), and 'Yazd Iran' (desert landscape).

**Grouped using spacing (Right):** This prototype uses no containers; instead, it relies on the proximity of elements to group them. The 'TOP DESTINATIONS' section has the same three items as the left prototype. The 'HIDDEN GEMS' section also has the same three items, but they are arranged with more horizontal space between them compared to the left prototype.

Similarly, the next example shows how removing containers can help simplify an interface. Sometimes spacing is enough to clearly group related elements, especially when it's combined with other grouping methods like similarity and continuity.

The screenshot shows a website layout with a white background and rounded corners. At the top left is a logo consisting of a stylized 'A' icon followed by the word 'architect'. At the top right are four buttons: 'Architecture', 'Interiors', 'About', and 'Contact'. Below the header, there's a section titled 'RECENT PROJECT' with a sub-section titled 'Waterview residence'. A paragraph describes the project: 'Inspired by the vast ocean views, our goal was to bring the outside in wherever possible in this full renovation.' To the right of the text is a large, high-quality photograph of a living room with floor-to-ceiling glass doors opening onto a wooden deck and a scenic view of hills and water. Below this main section are three rectangular boxes with rounded corners, each containing a title and a brief description. The first box is for 'Architecture', the second for 'Interiors', and the third for 'About'. Each box also contains a link to more projects or information.

**RECENT PROJECT**

## Waterview residence

Inspired by the vast ocean views, our goal was to bring the outside in wherever possible in this full renovation.

[View projects](#)



**Architecture**  
We believe in the power of architecture to enhance our lives and the cities in which we live, now and in the future.  
[Architectural projects](#)

**Interiors**  
We specialise in designing beautiful, thoughtful, and functional interiors that stand the test of time.  
[Interior design projects](#)

**About**  
Drawing inspiration from the world around us, our practice strives to create elegant and thoughtful designs.  
[About us](#)

Removing the containers simplifies the design without losing the groupings. The spacing is sufficient to clearly separate different groups of content.

This screenshot shows the same website layout as above, but with the container elements removed. The result is a more minimalist and fluid design. The logo, navigation bar, and recent project section are identical. However, the service sections (Architecture, Interiors, About) are now represented by simple text blocks without their own separate boxes. The large image of the living room remains in its original position, maintaining the overall aesthetic and layout.

**RECENT PROJECT**

## Waterview residence

Inspired by the vast ocean views, our goal was to bring the outside in wherever possible in this full renovation.

[View projects](#)



**Architecture**  
We believe in the power of architecture to enhance our lives and the cities in which we live, now and in the future.  
[Architectural projects](#)

**Interiors**  
We specialise in designing beautiful, thoughtful, and functional interiors that stand the test of time.  
[Interior design projects](#)

**About**  
Drawing inspiration from the world around us, our practice strives to create elegant and thoughtful designs.  
[About us](#)

### 3. Make related elements look similar

According to the principle of similarity, when things look similar your mind groups them together. Make related elements look similar by giving them similar visual characteristics, such as size, shape, and colour.

In the following example, your mind naturally groups the links in the top navigation because they look similar. The cards also appear to be grouped for the same reason. The fact that they're close together and aligned in a continuous line further emphasises their close relationship.

The screenshot illustrates the principle of similarity in web design. The top navigation bar features three links: 'About', 'Services', and 'Contact', all enclosed within a red dashed rectangular box. Below the navigation is a large banner image of a beachfront with several modern apartment buildings. On the left side of the banner, there's a call-to-action button labeled 'Get started' and a link labeled 'Learn more'. At the bottom of the page, there are three cards, each with a photo and text, also enclosed within a red dashed rectangular box. The cards are labeled 'About', 'Services', and 'Contact', corresponding to the links in the navigation.

Examples of related elements being grouped by similarity

Within a group of related elements, you can highlight certain ones by making them look slightly different. In the following example, the pricing options look similar enough that our eyes group them together.

The middle one stands out, as it looks slightly different. It's larger, has a higher contrast border, a deeper shadow, a filled button, and a "most popular" badge.

**Pricing options**

Join 50,000+ designers growing and optimising their businesses.

Plan	Price	Billing	Features
BASIC PLAN	\$10/month	USD billed annually	<ul style="list-style-type: none"><li>1 user</li><li>10 GB limit</li><li>Email and chat support</li></ul>
STANDARD PLAN	\$20/month	USD billed annually	<ul style="list-style-type: none"><li>Up to 5 users</li><li>25 GB limit</li><li>Email and chat support</li></ul>
PROFESSIONAL PLAN	\$30/month	USD billed annually	<ul style="list-style-type: none"><li>Up to 10 users</li><li>100 GB limit</li><li>Email and chat support</li></ul>

[Buy basic plan](#)

[Buy standard plan](#)

[Buy professional plan](#)

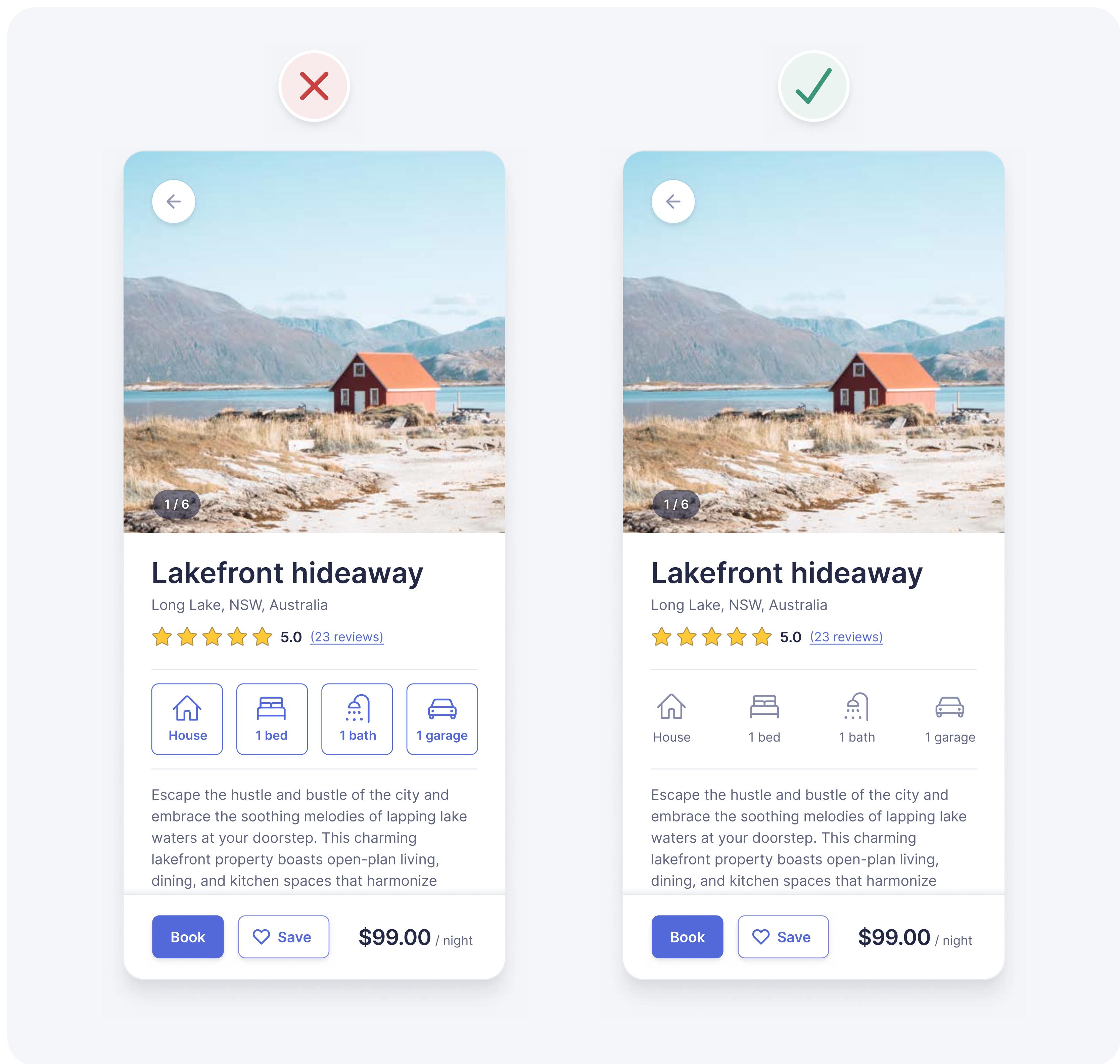
The middle pricing option stands out, as it looks slightly different to the others.

## Ensure similar looking elements function similarly

If elements look similar, people will expect them to work in a similar way. So try to ensure that you use a consistent visual treatment for elements with the same functionality. Conversely, try to ensure elements with different functionality look different.

In the following example, the icons look similar to the secondary “save” button. This makes them seem interactive, even though they’re not.

Removing the blue colour and border helps to differentiate the icons from the secondary button. This makes it clearer that the icons function differently to the secondary button.

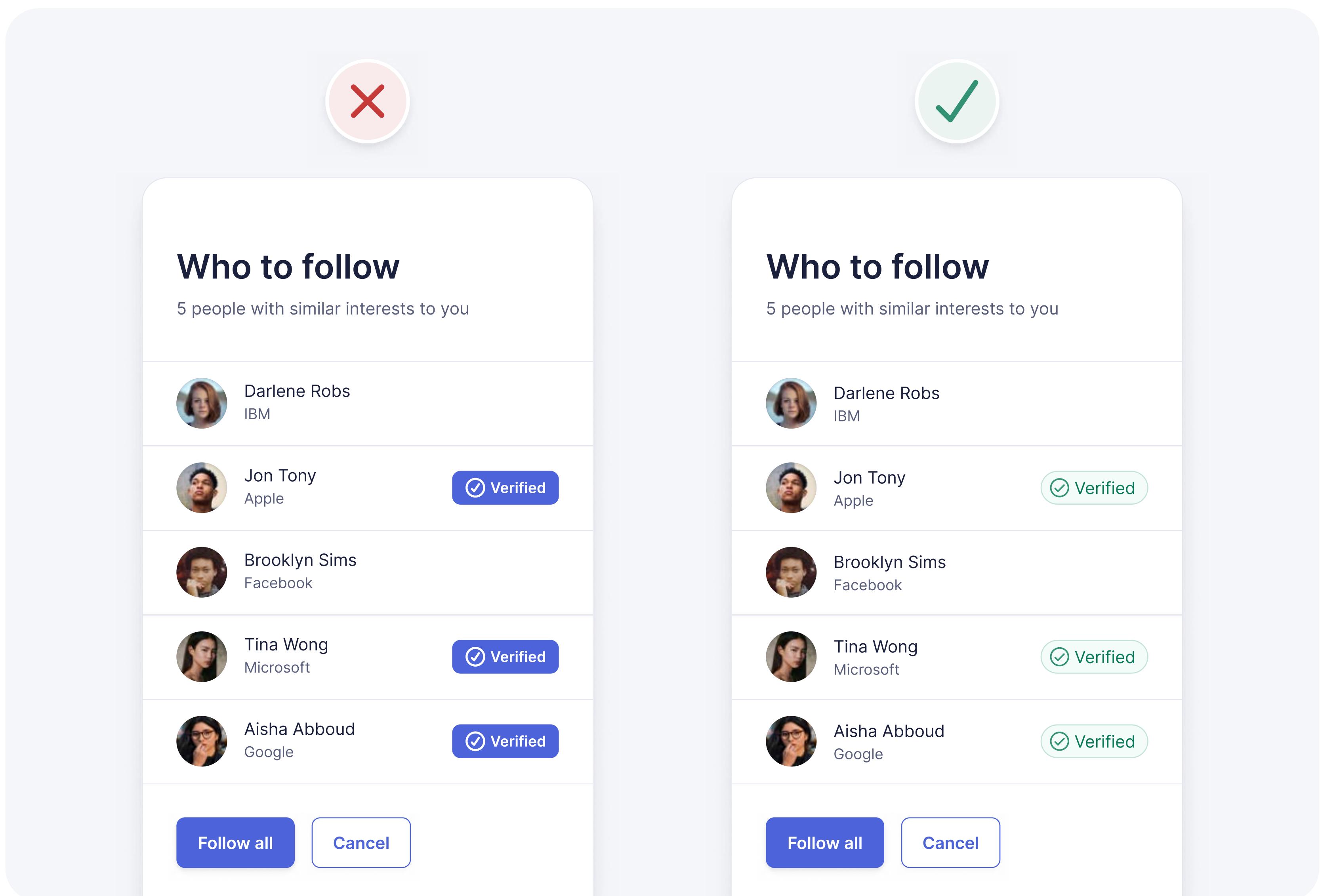


Because the icons look like the secondary button, they seem interactive, even though they're not.

In the next example, the “verified” badges look very similar to the primary “follow all” button. They’re not interactive elements, so they should look different to the primary button to help avoid confusion.

Change the shape, contrast, and colour of the badges in the following ways to help differentiate them from the primary button:

- Since the badges aren’t interactive, avoid using the blue action colour and instead use green to indicate success.
- A more rounded shape is commonly used for badges to help differentiate them from buttons.
- A lighter background colour helps correct the visual hierarchy, so the primary button is the most prominent element.



Because the badges look like the primary button, they seem interactive, even though they’re not.

## 4. Align related elements in a continuous line

According to the principle of continuity, people perceive elements that are arranged in a continuous line to be related. Our eyes naturally tend to follow elements aligned in continuous straight or curved lines. You can use this to your advantage to help guide people's eyes through an interface.

Lists are a common way of using continuity to group related elements in an interface. You can disrupt continuity to indicate the end of a group of related elements or to highlight a particular element.

**Grouped by continuity**

The screenshot shows a mobile application interface titled "Articles". At the top, there is a navigation bar with three categories: "Interiors" (which is underlined), "Architecture", and "Gardens". Below the navigation bar, there is a list of four articles, each consisting of a title, a timestamp, a brief description, and a thumbnail image. The articles are aligned vertically in a single column, demonstrating the principle of continuity where related elements are grouped together.

Article Title	Timestamp	Description	Thumbnail
Contemporary apartment design tips	1 day ago · 6 min read	John Smith	
Beautiful chairs and where to get them for a bargain	1 day ago · 6 min read	Taylor Samson	
Interior decor styling tips	4 days ago · 8 min read	Tamara Hodgekiss	
Lush linens to warm up your bed room			

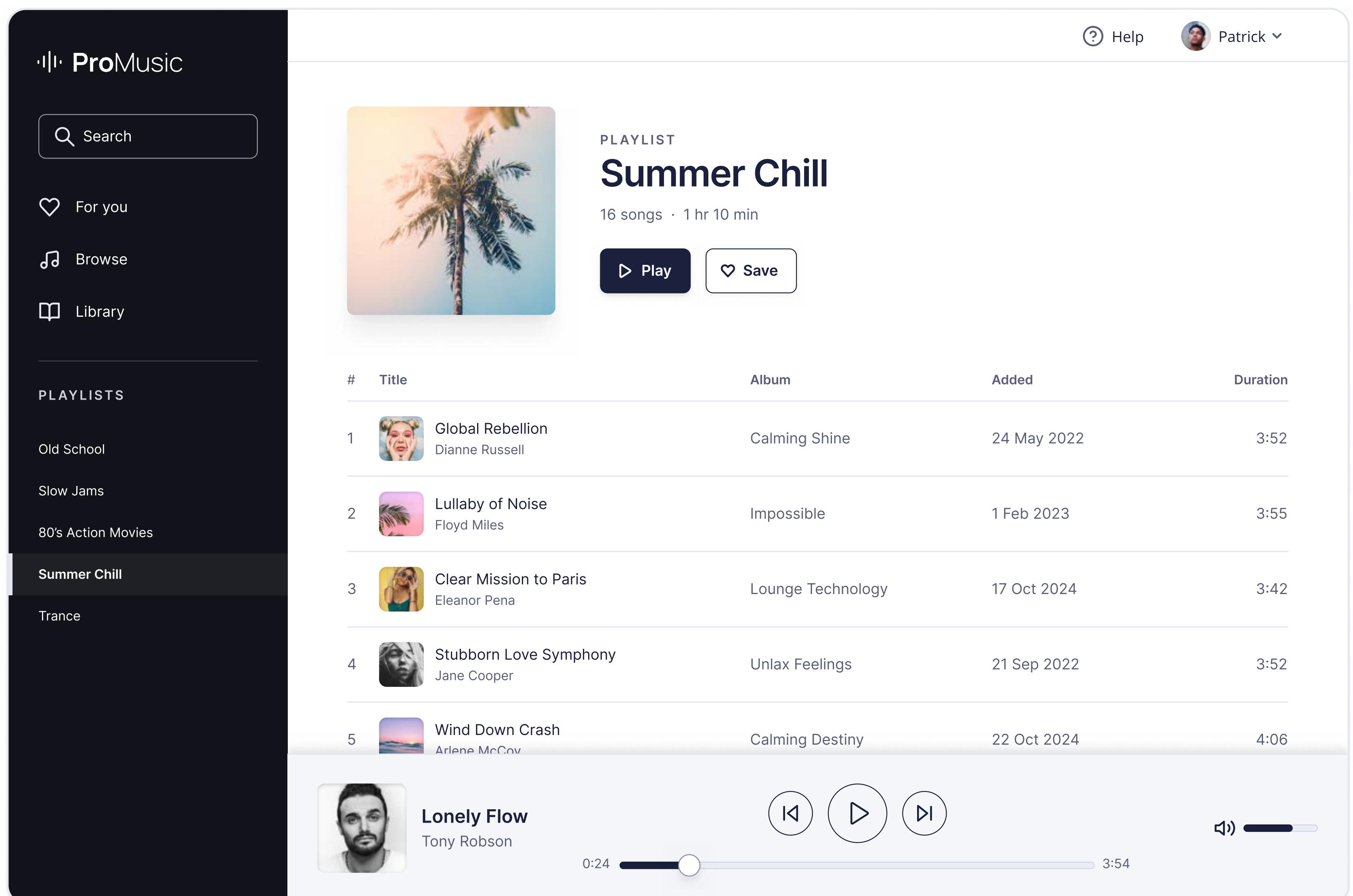
**Continuity broken**

The screenshot shows a mobile application interface titled "Articles". At the top, there is a navigation bar with three categories: "Interiors" (which is underlined), "Architecture", and "Gardens". Below the navigation bar, there is a list of four articles, each consisting of a title, a timestamp, a brief description, and a thumbnail image. The articles are arranged in two separate columns, demonstrating how breaking the continuity of a list can indicate the end of a group of related elements or highlight a particular element.

Article Title	Timestamp	Description	Thumbnail
Contemporary apartment design tips	1 day ago · 6 min read	John Smith	
Beautiful chairs and where to get them for a bargain	1 day ago · 6 min read	Taylor Samson	
Love interior design?		Receive beautiful interiors in your inbox weekly	
Interior decor styling tips	4 days ago · 8 min read	Tamara Hodgekiss	
Lush linens to warm up your bed room			

## Grouping methods example

Let's look at how different grouping methods are used and combined in the following music player example.



Containers are used to create the main structure of the interface:

- A dark grey background is used to contain the left side navigation.
- A light grey background and shadow are used to contain the music player controls along the bottom.
- A grey border is used to contain the account menu along the top.

All of these colours come from the monochromatic colour palette created previously in the "Colour" chapter.

You might think of using a container to group the songs in the table, but it's not always necessary.

The screenshot shows a mobile application interface for a music service. On the left is a dark sidebar with the app's logo 'ProMusic' at the top, followed by a search bar containing a magnifying glass icon and the word 'Search'. Below the search bar are three navigation items: 'For you' (with a heart icon), 'Browse' (with a person icon), and 'Library' (with a book icon). Under the 'PLAYLISTS' heading, there is a list of playlists: 'Old School', 'Slow Jams', '80's Action Movies', 'Summer Chill' (which is highlighted with a darker background), and 'Trance'. The main content area on the right features a large image of two palm trees against a sunset sky. Above the image, the text 'PLAYLIST' is displayed in a small font, followed by the title 'Summer Chill' in a large, bold, dark font. Below the title, it says '16 songs · 1 hr 10 min'. There are two buttons: a dark blue 'Play' button with a white triangle icon and a white 'Save' button with a heart icon. Below these buttons is a table with five rows of song information. The table has columns for '#', 'Title', 'Album', 'Added', and 'Duration'. The songs listed are:

#	Title	Album	Added	Duration
1	Global Rebellion Dianne Russell	Calming	24 May 2022	3:52
2	Lullaby of Noise Floyd Miles	Impossible	1 Feb 2023	3:55
3	Clear Mission to Paris Eleanor Pena	Lounge Technology	17 Oct 2024	3:42
4	Stubborn Love Symphony Jane Cooper	Unlax Feelings	21 Sep 2022	3:52
5	Wind Down Crash Arlene McCoy	Calming Destiny	22 Oct 2024	4:06

At the bottom of the screen, there is a player bar for the currently playing song, 'Lonely Flow' by Tony Robson. The player bar includes a portrait of the artist, the song title, the artist's name, and playback controls (back, forward, repeat, shuffle) along with a progress bar showing 0:24 of a 3:54 track.

Container is used to group songs in the table

Look for opportunities to use grouping methods other than containers. This can help simplify an interface design. The songs in the table are grouped in multiple ways:

- They have a container
- They're in close proximity
- They look similar
- They're aligned in a continuous line

#	Title	Album	Added	Duration
1	 Global Rebellion Dianne Russell	Calming	24 May 2022	3:52
2	 Lullaby of Noise Floyd Miles	Impossible	1 Feb 2023	3:55
3	 Clear Mission to Paris Eleanor Pena	Lounge Technology	17 Oct 2024	3:42
4	 Stubborn Love Symphony Jane Cooper	Unlax Feelings	21 Sep 2022	3:52
5	 Wind Down Crash Arlene McCoy	Calming Destiny	22 Oct 2024	4:06
6	 Lonely Flow Tony Robson	Summer Vibes	2 Dec 2024	3:48

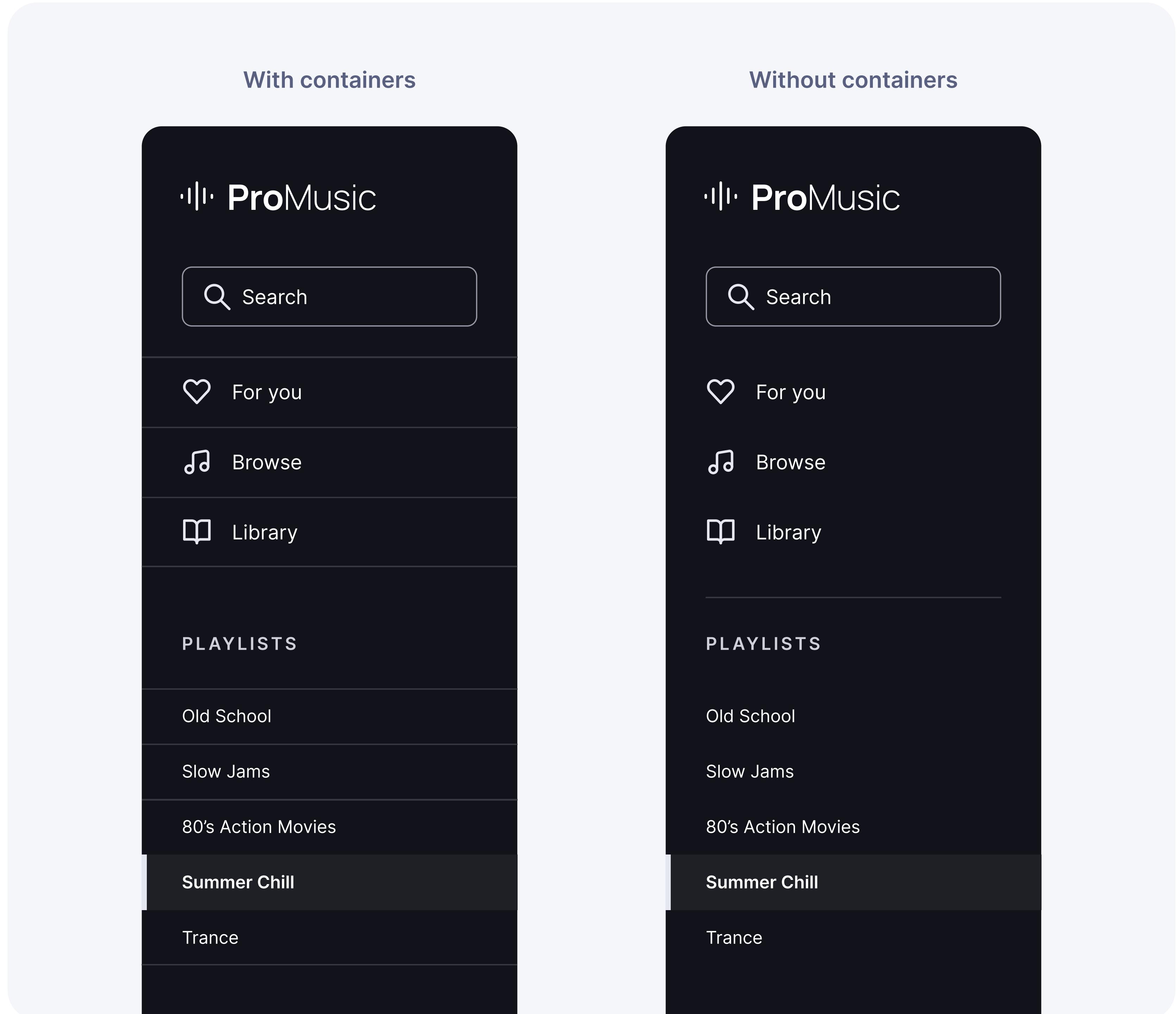
Container is used to group songs in the table

Since the songs are grouped using multiple methods, you can remove the outer container, and the songs still appear to be grouped.

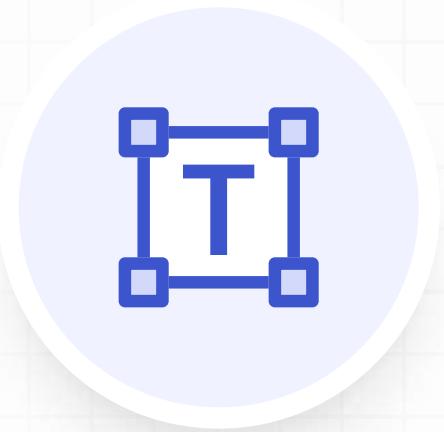
#	Title	Album	Added	Duration
1	 Global Rebellion Dianne Russell	Calming Shine	24 May 2022	3:52
2	 Lullaby of Noise Floyd Miles	Impossible	1 Feb 2023	3:55
3	 Clear Mission to Paris Eleanor Pena	Lounge Technology	17 Oct 2024	3:42
4	 Stubborn Love Symphony Jane Cooper	Unlax Feelings	21 Sep 2022	3:52
5	 Wind Down Crash Arlene McCoy	Calming Destiny	22 Oct 2024	4:06
6	 Lonely Flow Tony Robson	Summer Vibes	2 Dec 2024	3:48

Container is removed from the table for simplicity

Similarly, you can simplify the side navigation by removing unnecessary containers.



Containers, proximity, similarity, and continuity are simple but powerful methods for grouping interface elements. Use them individually or combine them for clarity.



CHAPTER 5

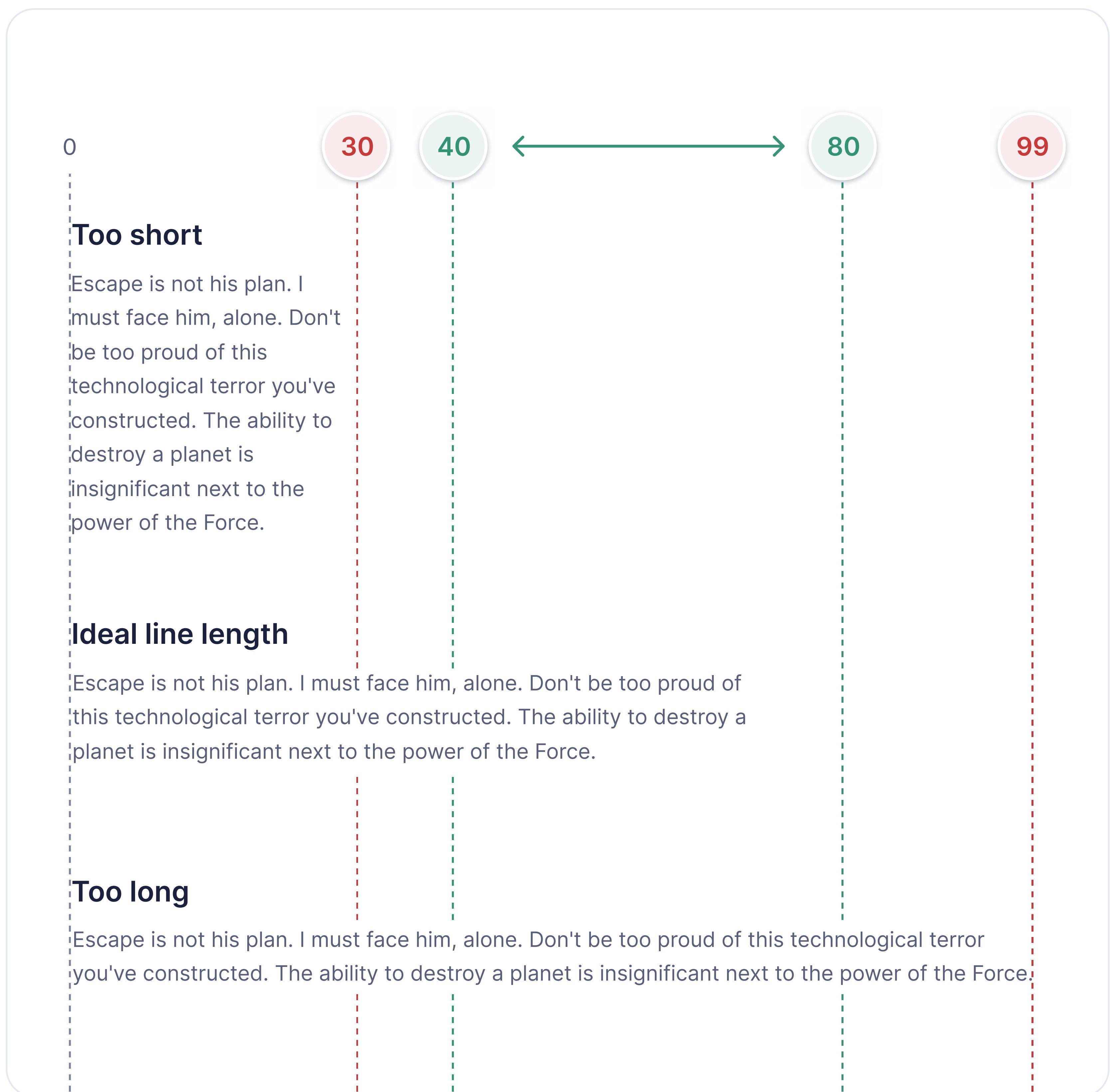
# Typography

Learn a system of logical guidelines to make text beautiful and easy to read

# Ensure ideal line length

Ensure text is **40 - 80 characters per line** (including spaces) to improve readability. If lines are too long, it makes it harder for people to gauge where the line starts and ends.

If lines are too short, your eyes get stressed from having to travel back too often. A comfortable line length is especially important for long body text.



Uncomfortably long line lengths are very common, like in the following landing page example.

**Your property investment journey starts here**

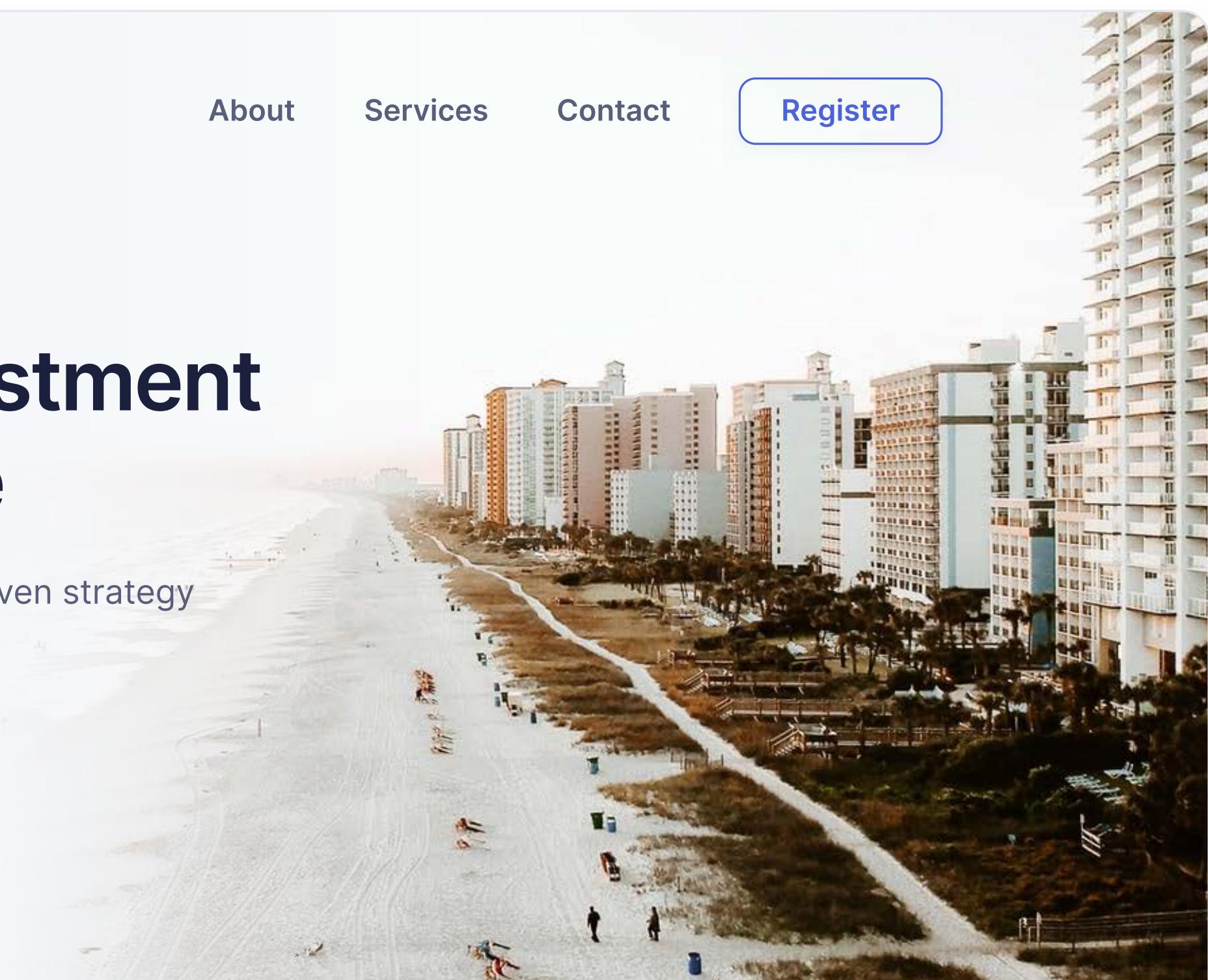
Achieve financial independence using our proven strategy to build your property portfolio

[Get started](#) [Learn more](#)

About Services Contact [Get started](#)

Example of an uncomfortably long line length

You don't need to use the full width of the page for your text, as it hinders readability. Instead, keep your line length between the recommended character range and align your block of text to the left or centre of the page.



The image shows a wide-angle aerial shot of a coastal urban area. A long stretch of sandy beach runs parallel to a dense line of modern, multi-story residential or hotel buildings. The buildings vary in height and color, creating a vibrant skyline. In the foreground, the sandy beach is dotted with a few small figures of people, umbrellas, and beach chairs, suggesting a quiet day at the shore. The water of the ocean is visible on the left side of the frame.

**homeinvest**

About Services Contact Register

**Your property investment journey starts here**

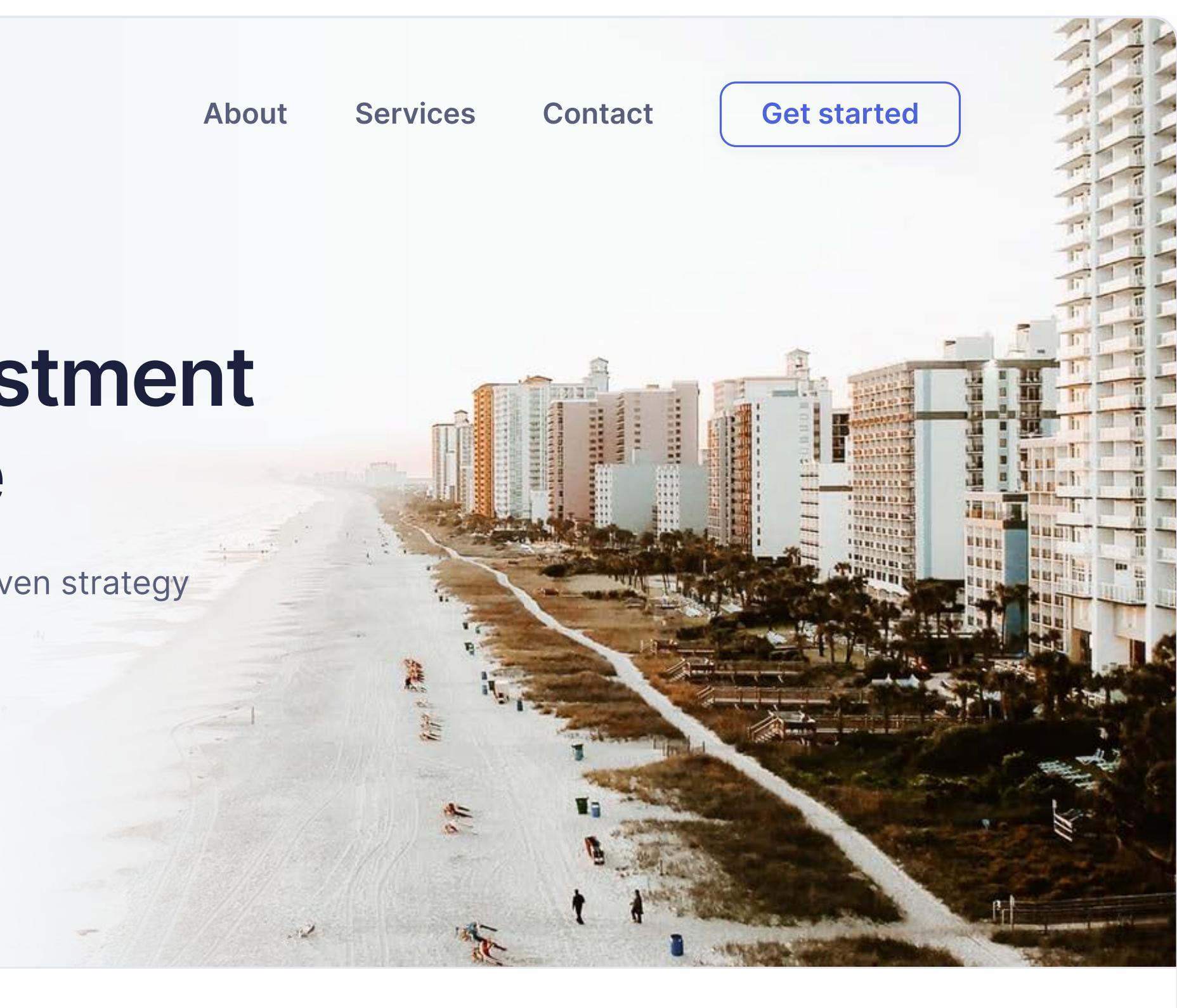
Achieve financial independence using our proven strategy to build your property portfolio

[Get started](#) [Learn more](#)



**Why use our services**

Choosing the right partner for your property investment journey is crucial, and here's why our services stand out. We bring a wealth of expertise, providing you with tailored strategies that align with your financial goals.



The image shows a wide-angle aerial shot of a coastal urban area. A long stretch of sandy beach runs parallel to a dense line of modern, multi-story residential or hotel buildings. The buildings vary in height and color, creating a vibrant skyline. In the foreground, the sandy beach is dotted with a few small figures of people, umbrellas, and beach chairs, suggesting a quiet day at the shore. The water of the ocean is visible on the left side of the frame.

**homeinvest**

About Services Contact Get started

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[Get started](#) [Learn more](#)



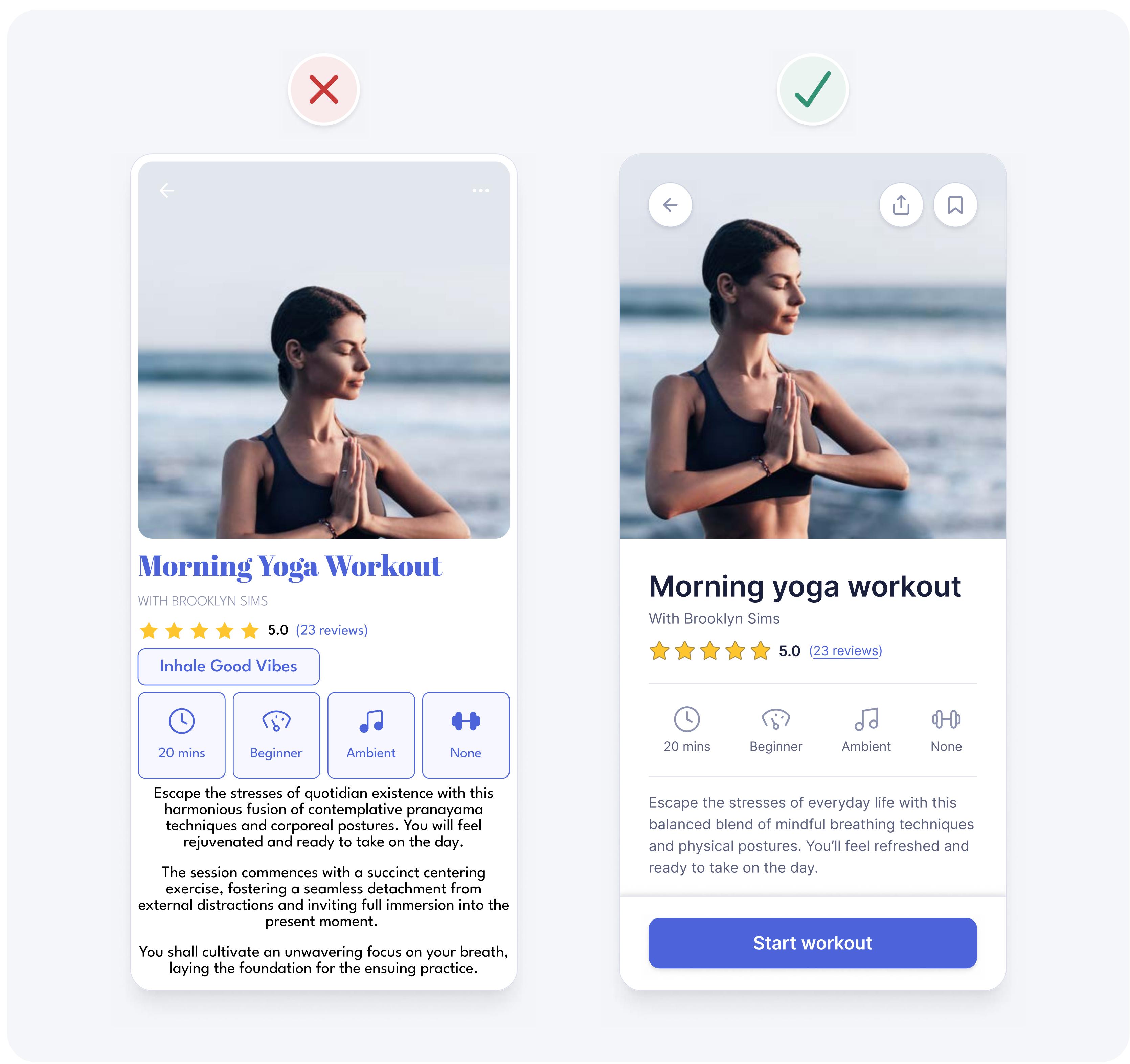
**Why use our services**

Choosing the right partner for your property investment journey is crucial, and here's why our services stand out. We bring a wealth of expertise, providing you with tailored strategies that align with your financial goals.

# A tutorial to apply what you've learned

The best way to learn is by doing. At the end of each chapter, you'll practice your new skills by doing a quick tutorial. You'll apply what you've learned by improving the following example. It's an interface for a workout in a fictional fitness app and it's full of common design problems.

By the end of the book, you'll have fixed the problems and created an intuitive, accessible, and beautiful design. All simply by applying some of the guidelines from the book.



Before and after of the fitness app example you'll be working on

# Want more?

Great work, you've just improved your UI design skills with 3 quick guidelines. Imagine what you'll learn from over 100 more in the complete book.

# Save 20%

LIMITED TIME ONLY

# Buy the book

