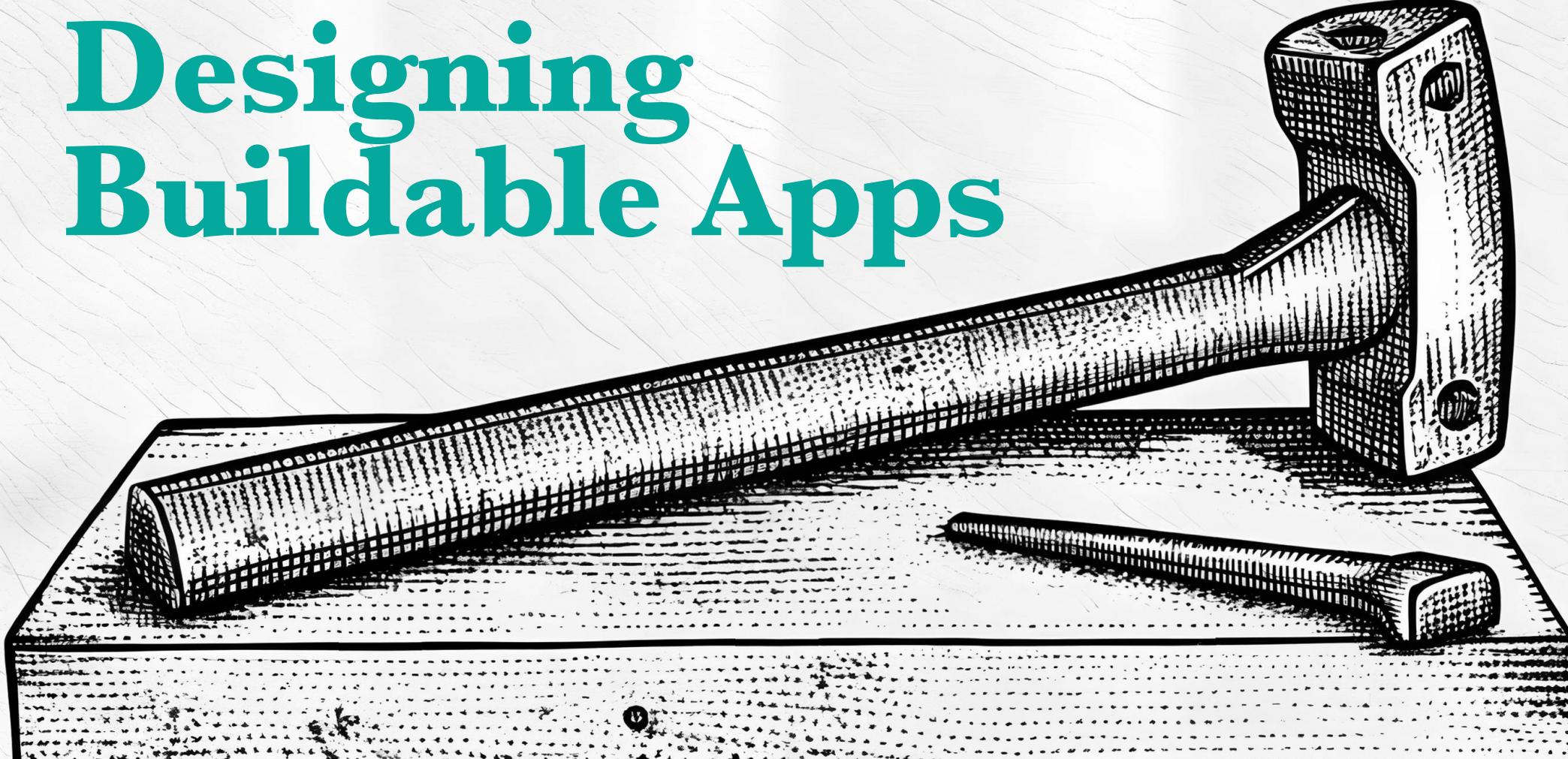


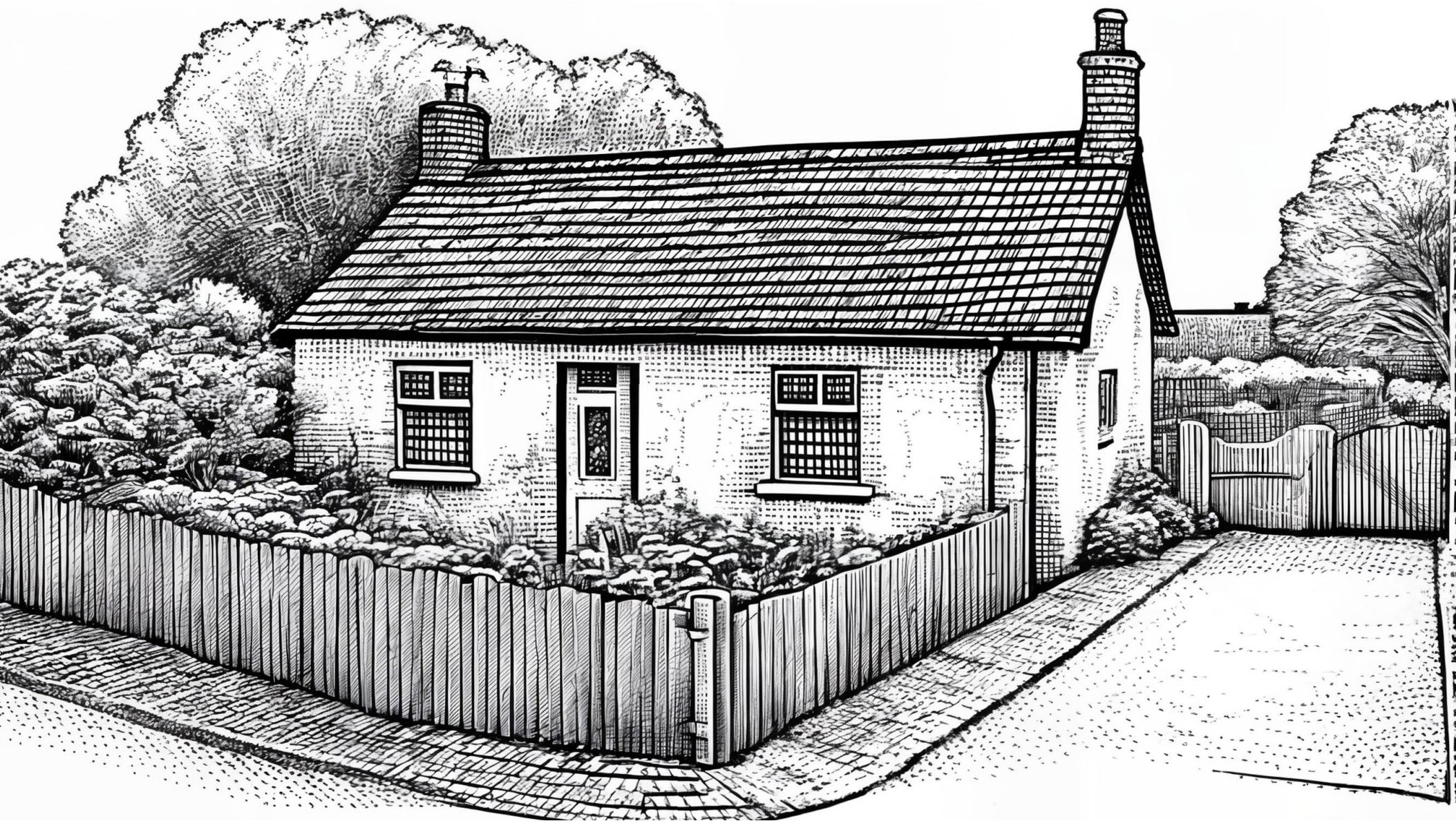


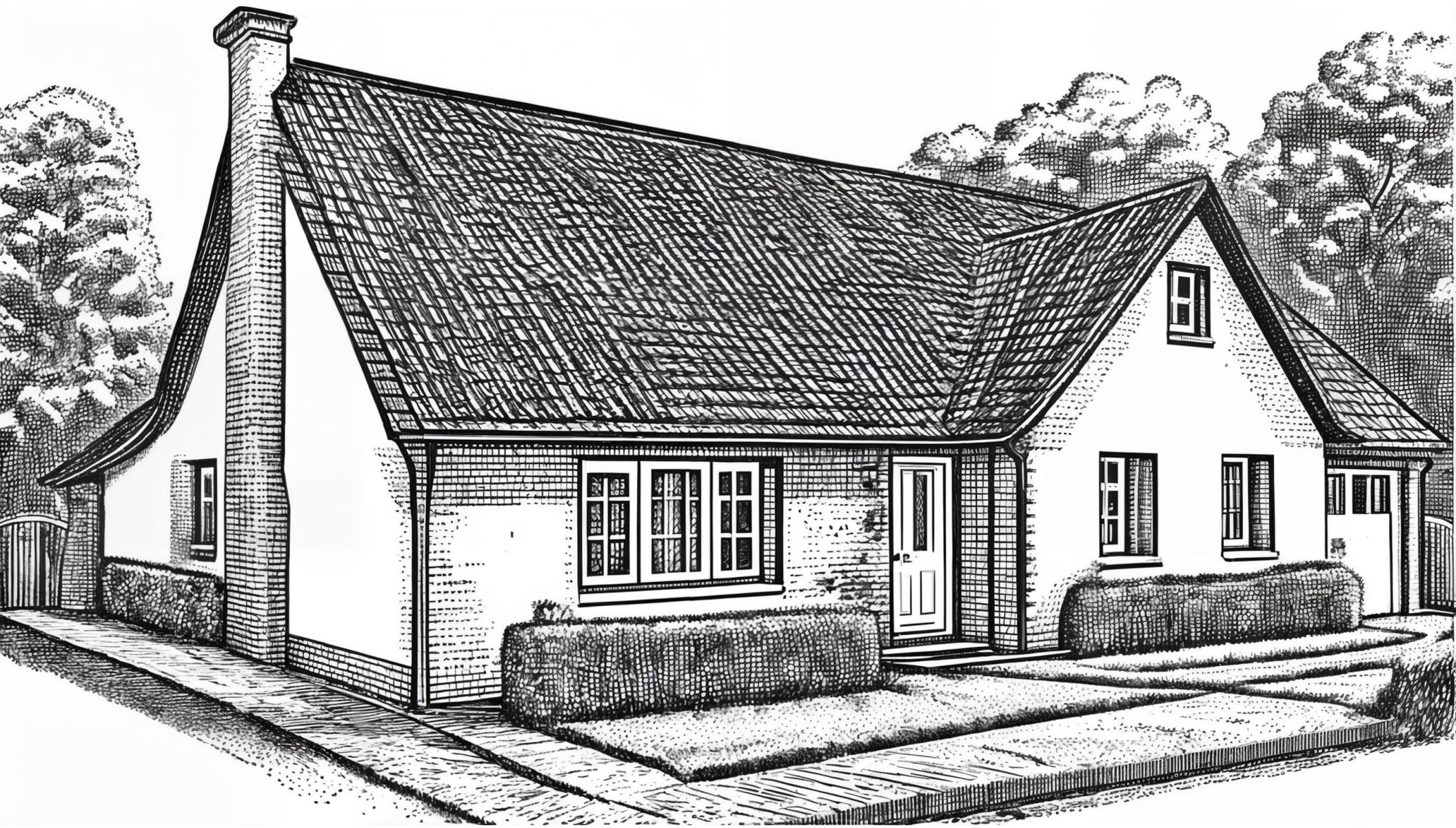
Designing Buildable Apps

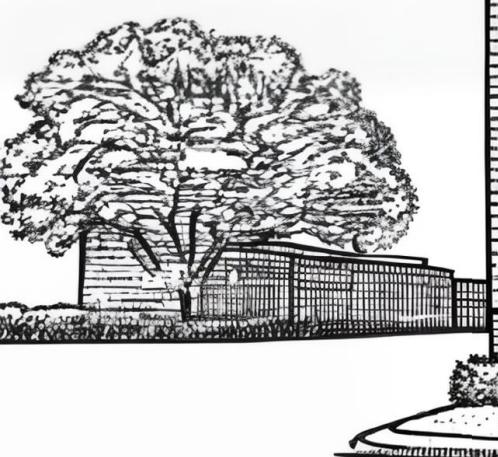
Caitlin Steele & Jeff Watkins

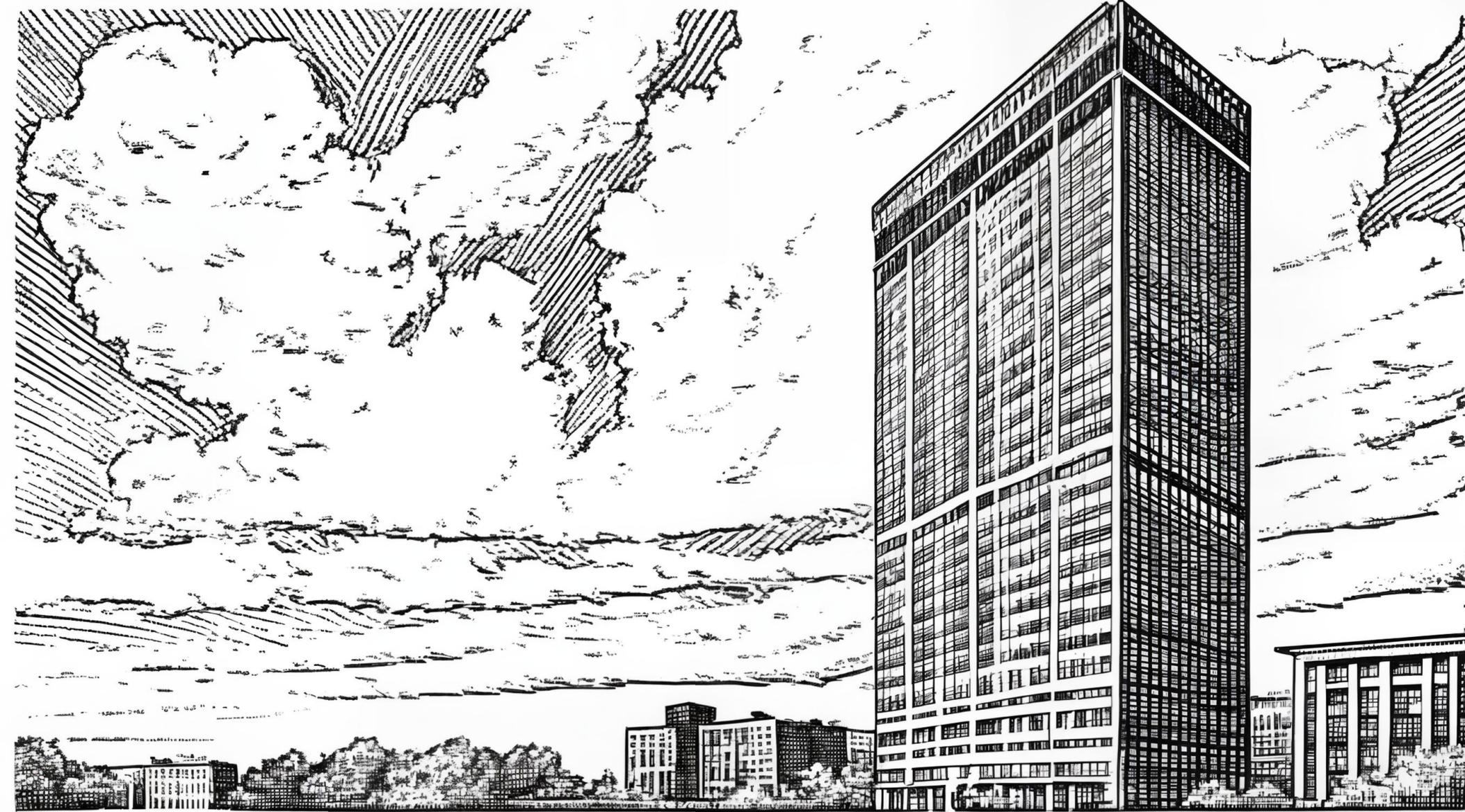
Designing Buildable Apps

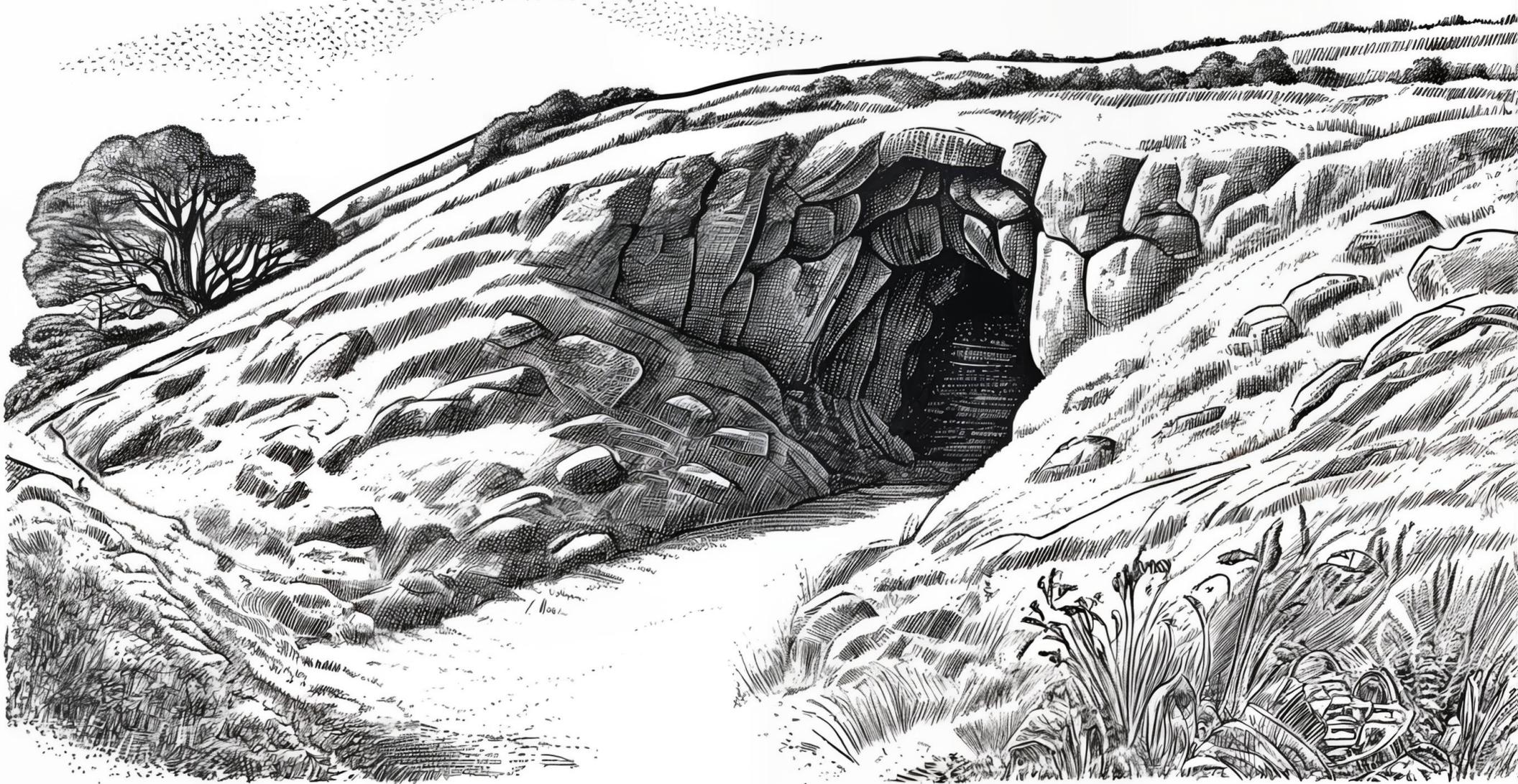






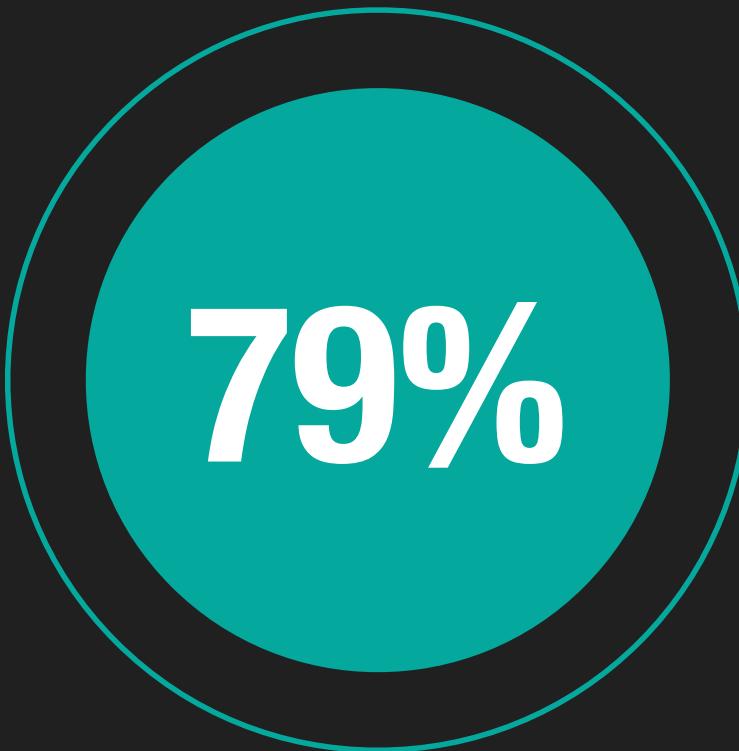






Collaboration

Cross Discipline Collaboration



79%

Designers who reported
collaborating with developers



23%

Developers who reported
design collaborating with them

Credit: Lacey Kobriger “Unpacking cross-discipline collaboration” on Designing Atlassian

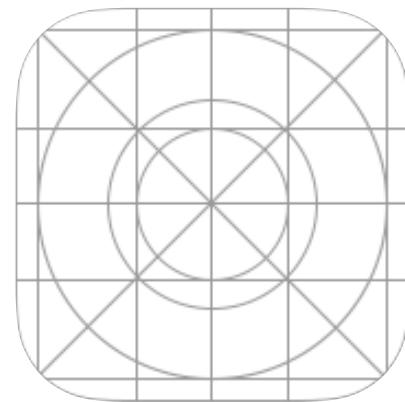
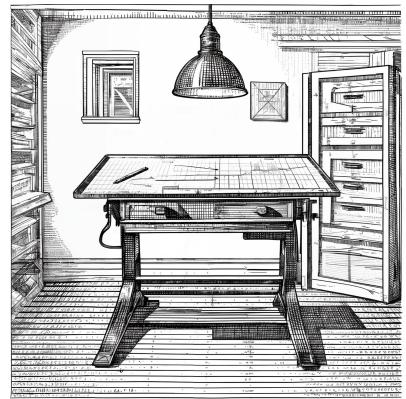


CAITLIN STEELE
Design Leader



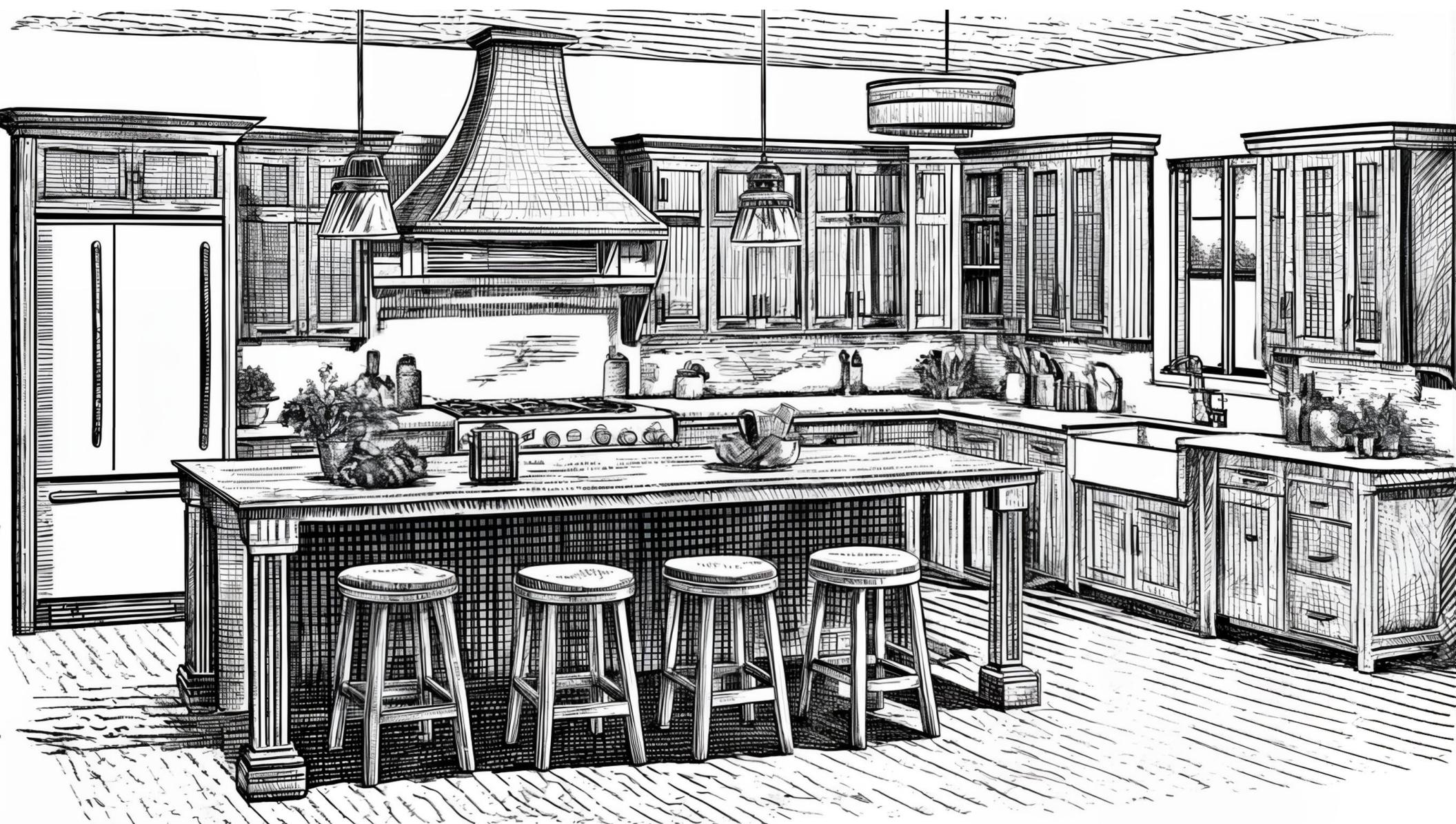


JEFF WATKINS
Engineering Leader



Design
Lay a strong foundation

One *weird* trick



Nouns

Kitchen

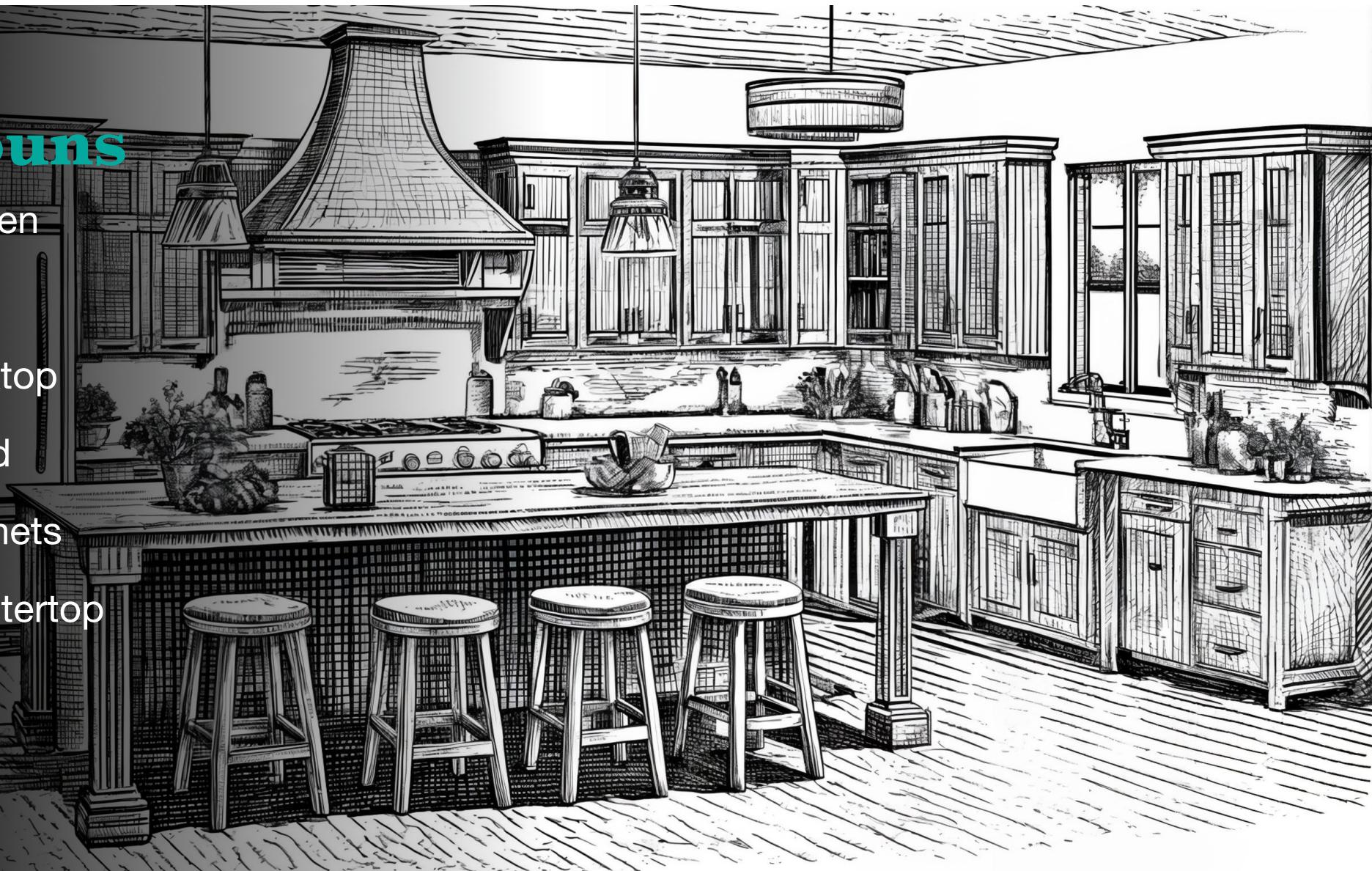
Sink

Cooktop

Island

Cabinets

Countertop



Nouns

Kitchen

Sink

Cooktop

Island

Cabinets

Countertop

Verbs

Saute

Bake

Chop

Eat

Clean

Organise



Start *with* Nouns

Object-oriented User Experience

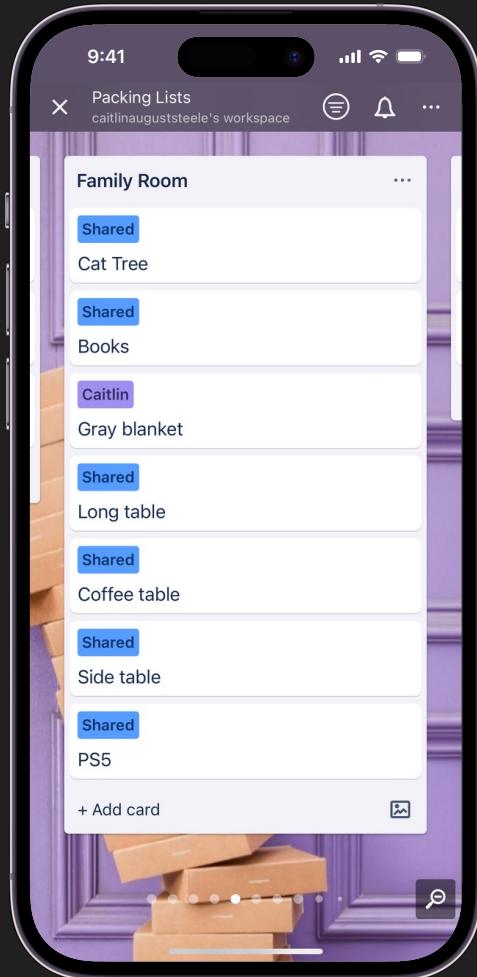
OOUX

“OOUX is a philosophy for designing digital systems that respects the fact that people think in objects and need consistent, recognizable objects to understand an environment or product.”

Sophia Prater, chief evangelist of Object-Oriented UX



Objects \neq Components



Workspace
Board
List
Card
Label

Objects

WORKSPACE

CORE CONTENT

Title

Example *"Acme & Co. workspace"*,
"Caitlin's Workspace"

NESTED

1 Workspace to N Boards

Board(s)

Example *"Packing Lists"*

METADATA

Private

Example *Yes* || *No*

METADATA

Date CRUD

Example *{name} created this workspace Jan 4 at 8:15 pm*

CALL TO ACTION

Invite

Example *"Invite workspace members"*

CALL TO ACTION

BOARD

CORE CONTENT

Title

Example *"Go to Market for AI"*,
"Packing Lists"

CORE CONTENT

Background image

Example *gradient* || *photo*

NESTED

1 Board to N Lists

List(s)

Example *"Unassigned"*, *"Dining Room"*

METADATA

Starred

Example *Yes* || *No*

METADATA

Workspace visible

Example *Yes* || *No*

METADATA

Date CRUD

LIST

CORE CONTENT

Title

Example *"Marketing Assets"*, *"Dining Room"*

NESTED

1 List to N Cards

Card(s)

Example *"Homepage hero image"*,
"Dining room table and chairs"

METADATA

Number of cards

Example *12*

METADATA

Ordinality

Example *1st list*, *2nd list*

METADATA

Expanded state

Example *expanded* || *collapsed*

CALL TO ACTION

CARD

CORE CONTENT

Title

Example *"Homepage hero image"*,
"Dining room table and chairs"

CORE CONTENT

Cover

Example *solid color fill, image*

CORE CONTENT

Description

Example *A captivating hero image that instantly communicates the essence of the Thoughtful Apes brand and captivates the attention of visitors.*

CORE CONTENT

Attachment(s)

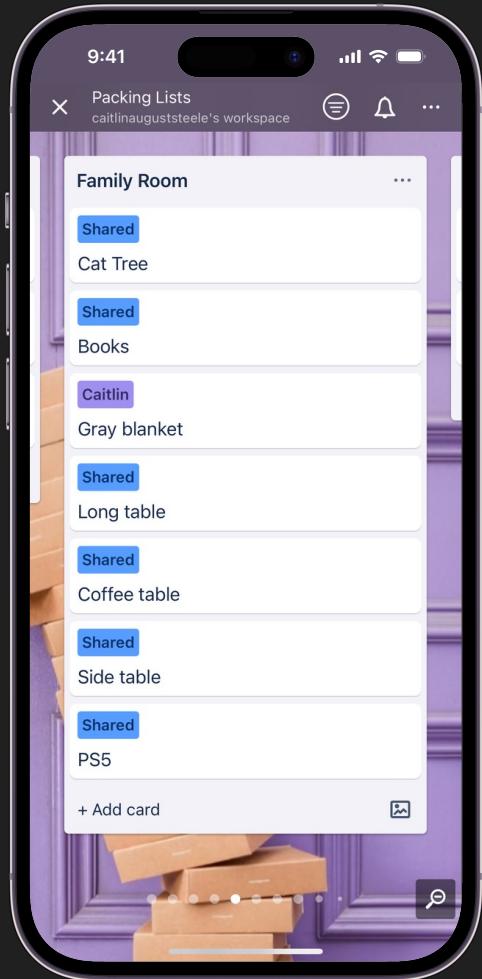
Example *image, doc, link, video*

NESTED

N Cards to N Checklists

Checklist(s)

Example *"Preflight"*, *"Marketing approvals"*



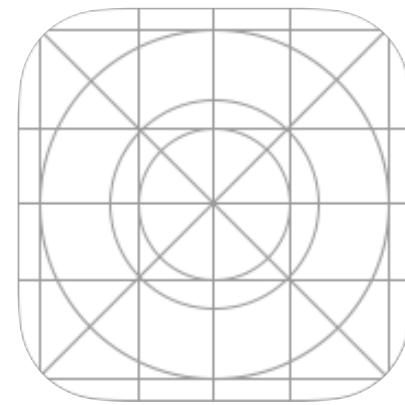
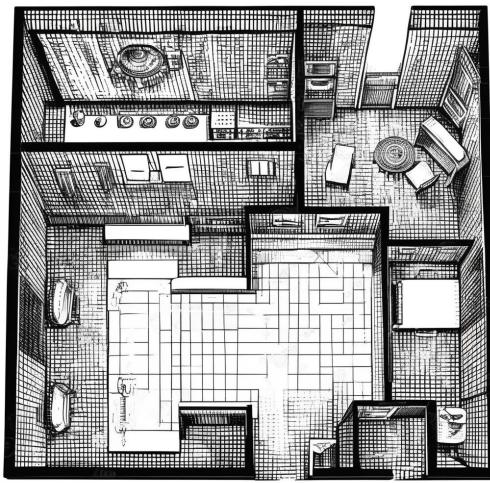
A screenshot of the Trello desktop application. The interface includes a top navigation bar with "Trello", "Workspaces", "Recent", "Starred", "Templates", and a "Create" button. The main area is titled "Packing Lists" and shows a "Board" view. The "Family Room" column contains the same items as the mobile app: Cat Tree, Books, Gray blanket, Long table, Coffee table, Side table, and PS5. The "Kitchen" column contains Silverware and Mugs. The "Basement" column contains Bike, Memorabilia, Rowing machine, Exercise bike, Yard furniture pillows, Holiday decorations, Closet clothes, Safe, Tools, and Bikes. The "Foyer" column contains Mirror, Round table, and Coat rack. Each column has a "+ Add a card" button at the bottom. The background of the desktop app shows a stack of cardboard boxes.

Column	Items
Family Room	Cat Tree, Books, Gray blanket, Long table, Coffee table, Side table, PS5
Kitchen	Silverware, Mugs
Basement	Bike, Memorabilia, Rowing machine, Exercise bike, Yard furniture pillows, Holiday decorations, Closet clothes, Safe, Tools, Bikes
Foyer	Mirror, Round table, Coat rack





Nouns
before
Verbs



Layout

Navigating your app & home



Cottage

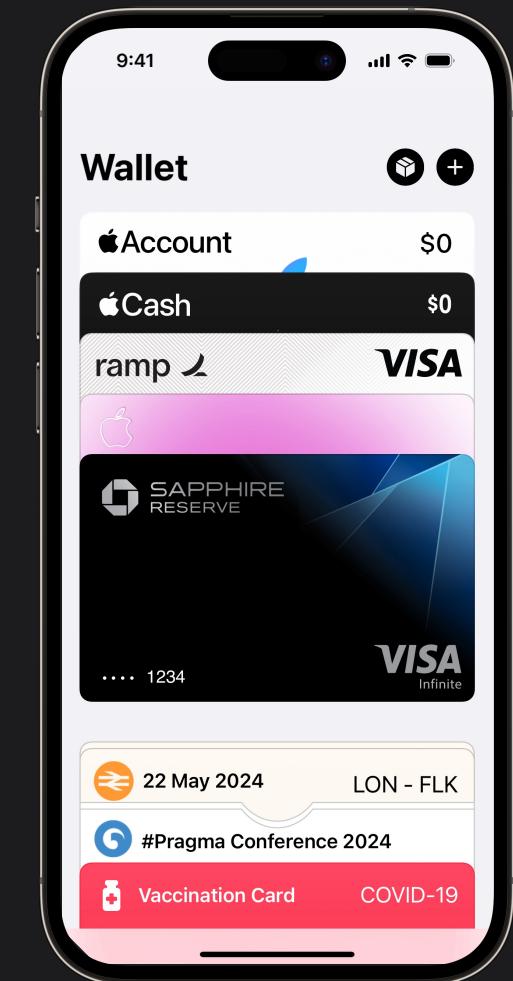
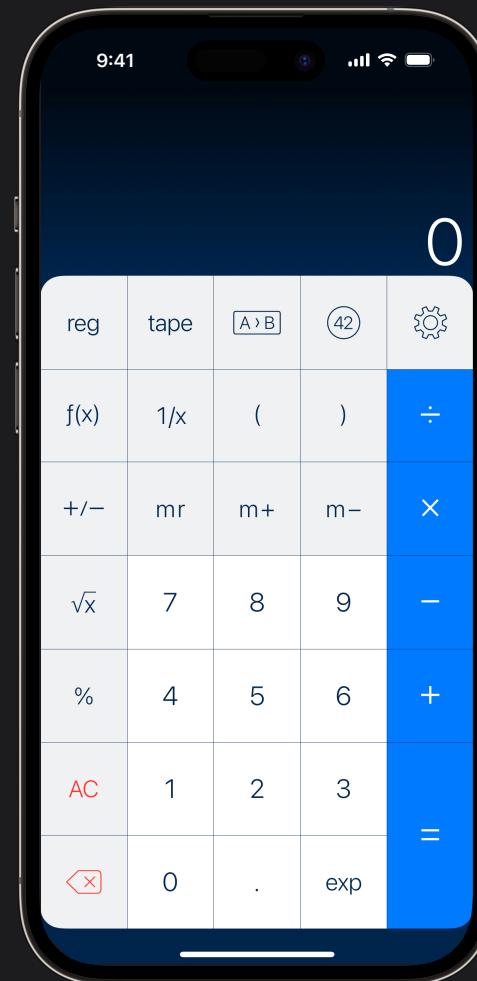
Cottage

Everything in easy reach

Comfortable
Easy to learn and remember.

Deceptive depth
Often hides substantial
functionality.

The “right thing”
Arguably, how iOS apps were
meant to be.





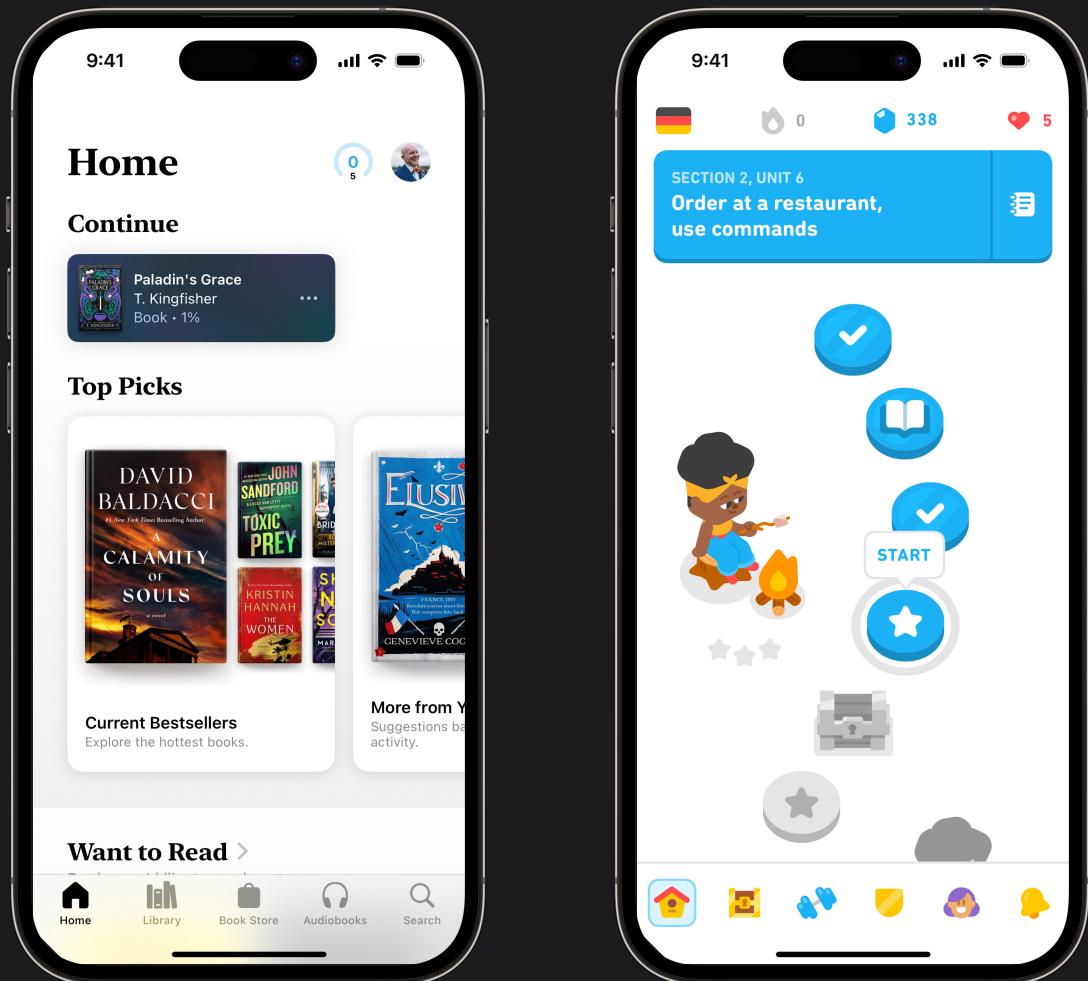
House

House

More rooms

Feel at home
Often features a feed of content including marketing.

Well defined sections
Clear what everything does without much overlap.



Apartments

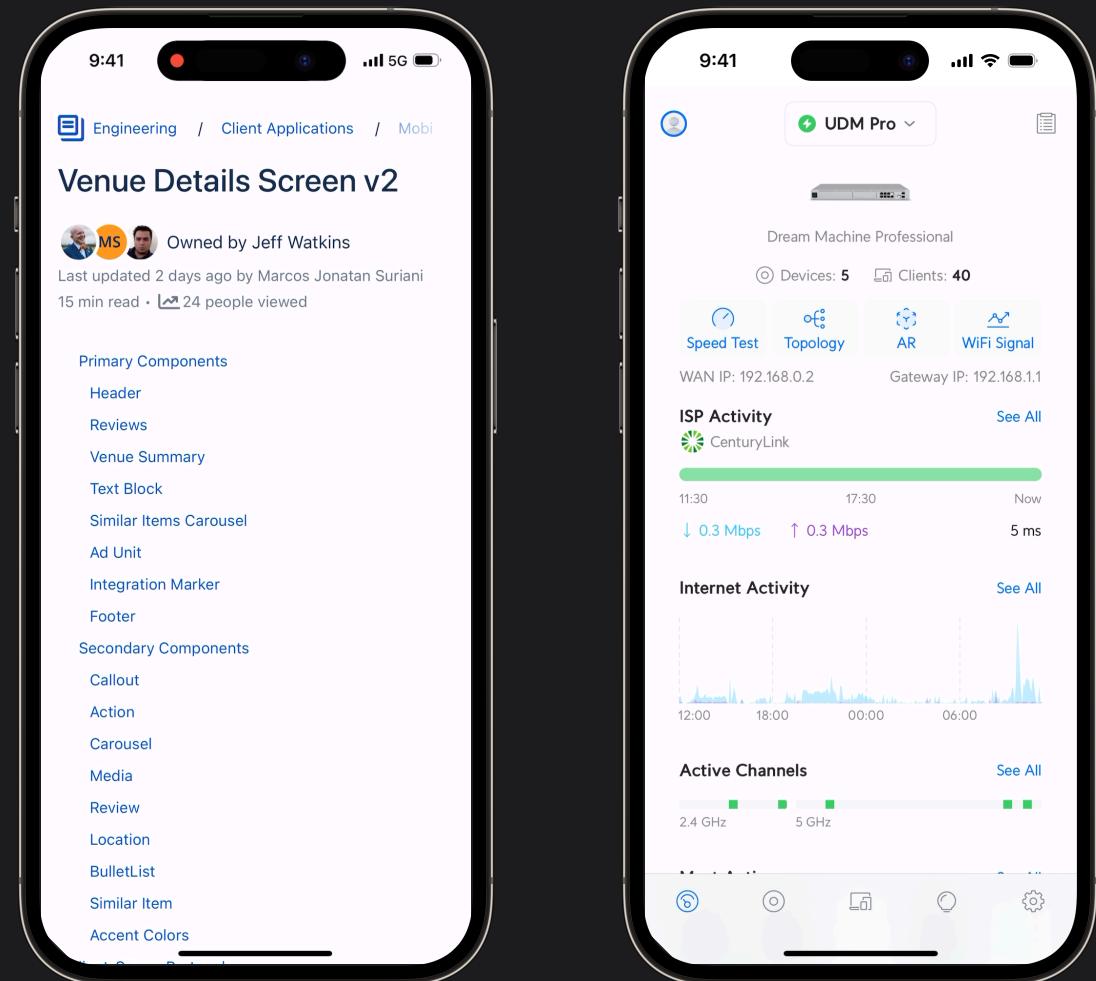


Apartments

Managing complexity

Complex navigation
Navigation tree is deeper than
initial inspection suggests.

Functionality at leaves
Complex functionality at the
nodes or leaves of the
navigation tree.



Skyscraper

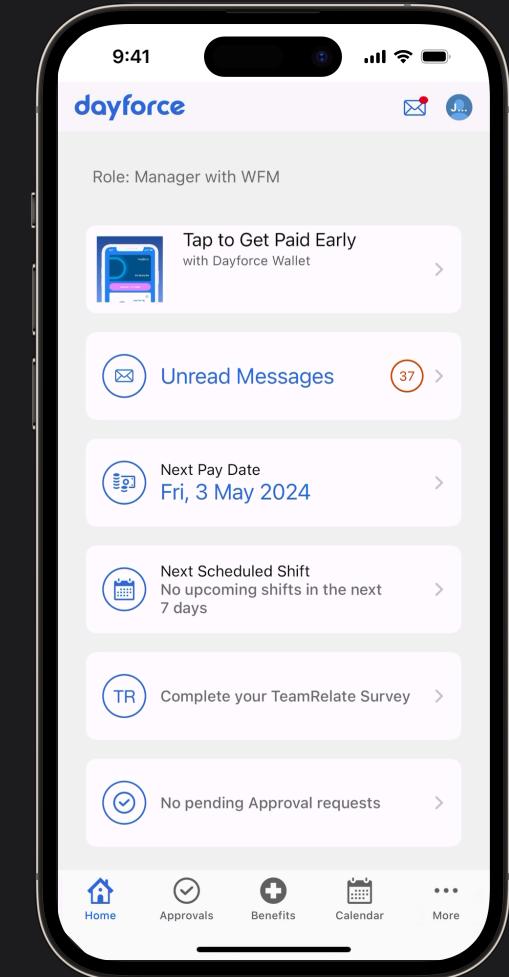


Skyscraper

So many modules

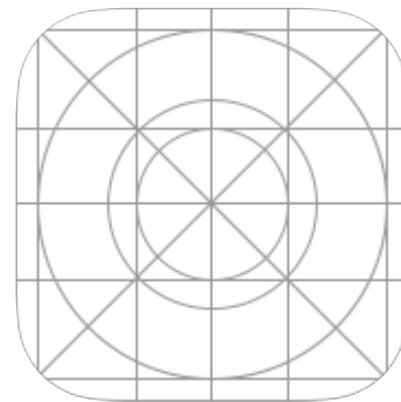
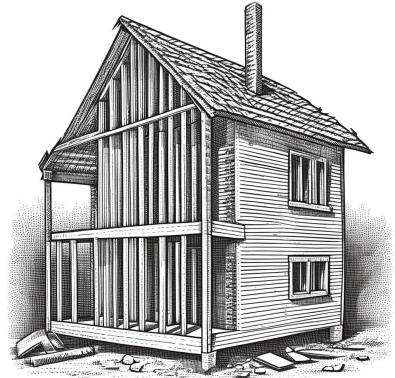
Modules are king
The modules provide all the functionality.

Many teams
Modules often developed by different teams with
different goals.



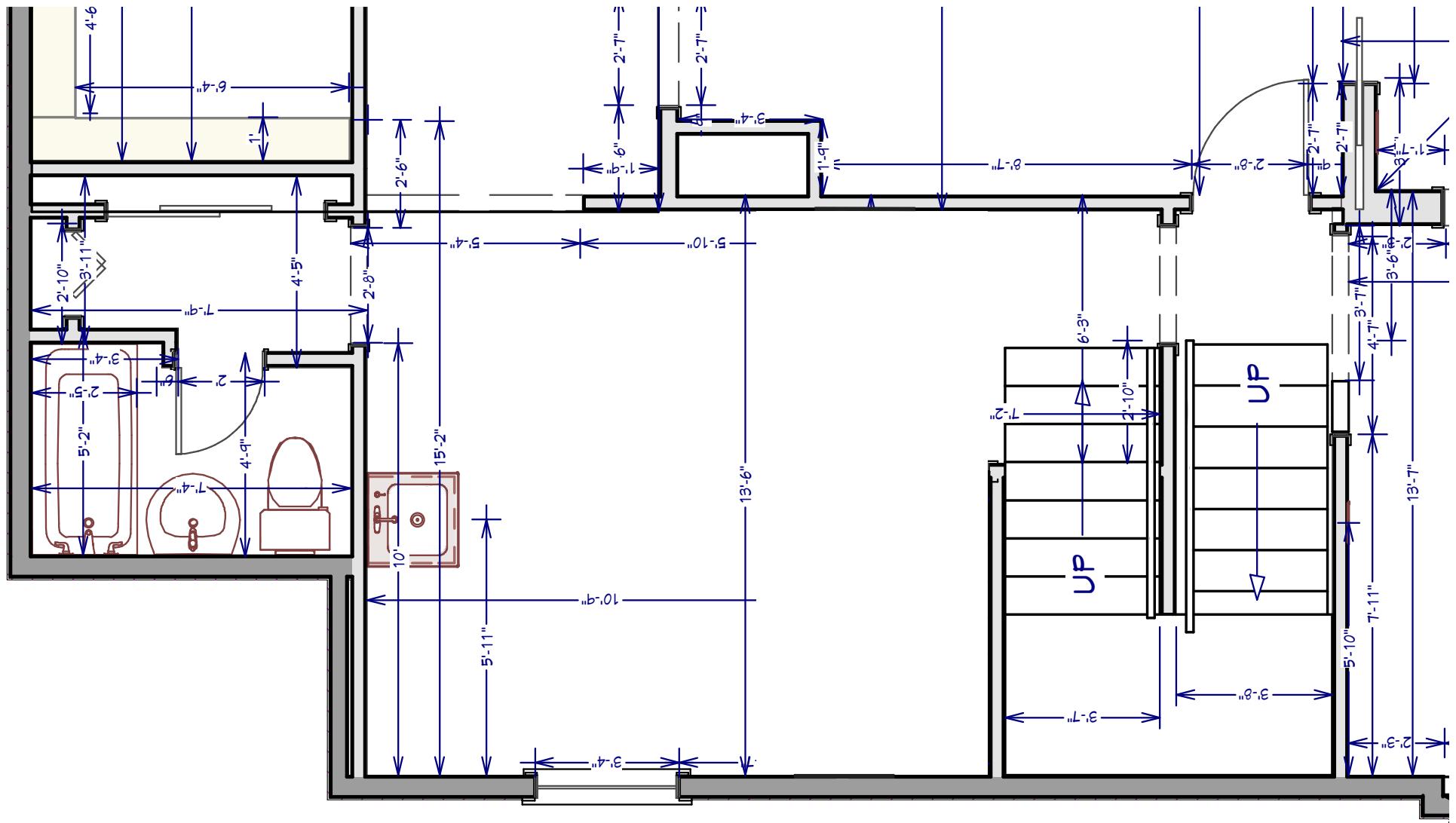
Plan
Ahead

REPO ON MASS. ZENITH
MAY 2000 2293
DATE
SOUTH DIRECTION AS 8 AM 2293
ORIGIN 2340 0000
ASPECT BY NRP - 2340 0000
BOGIMOLTOA 2340 0000
200475HUN18 0000 0000
SD0189



Framing

Change it at your peril







ALAMOFIRE

Caching
Shared or private

Authentication
OAuth? Bearer token?

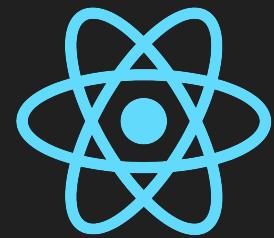
Multipart Form Data
Do you need this?

TLS Certificate pinning
Tricky to get this right.

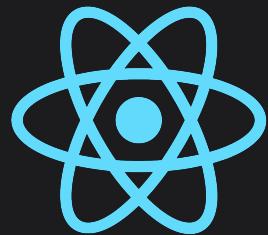


URLSession

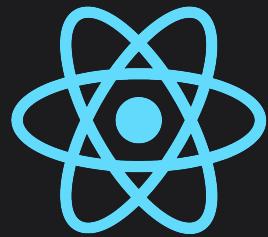




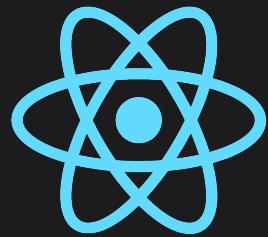
One View Controller



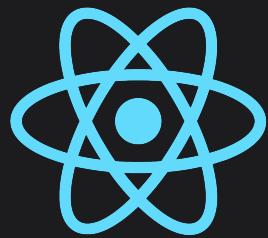
One View Controller



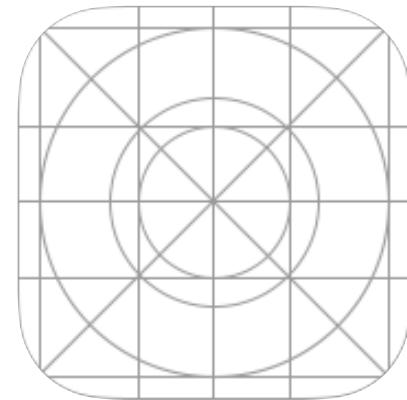
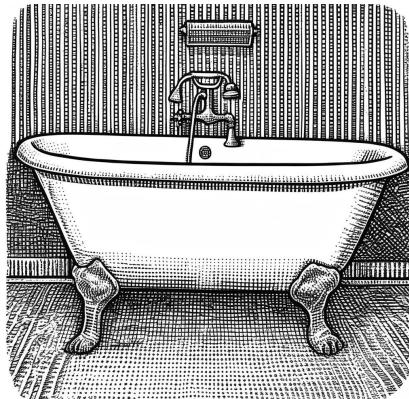
Individual View Controllers



Individual View Controllers

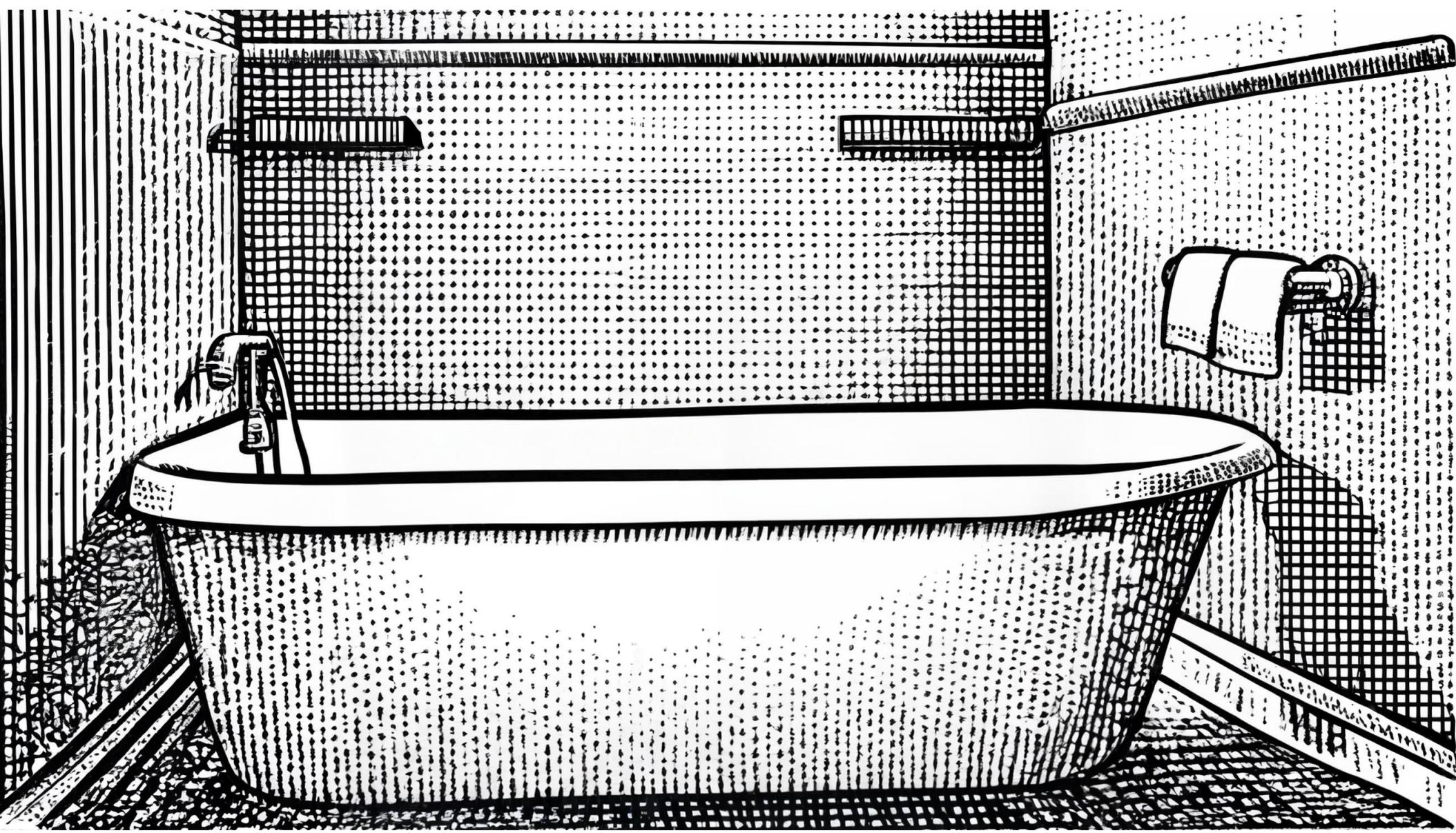


Build
Thoughtfully



Fixtures

Standing out or fitting in



Standard UI

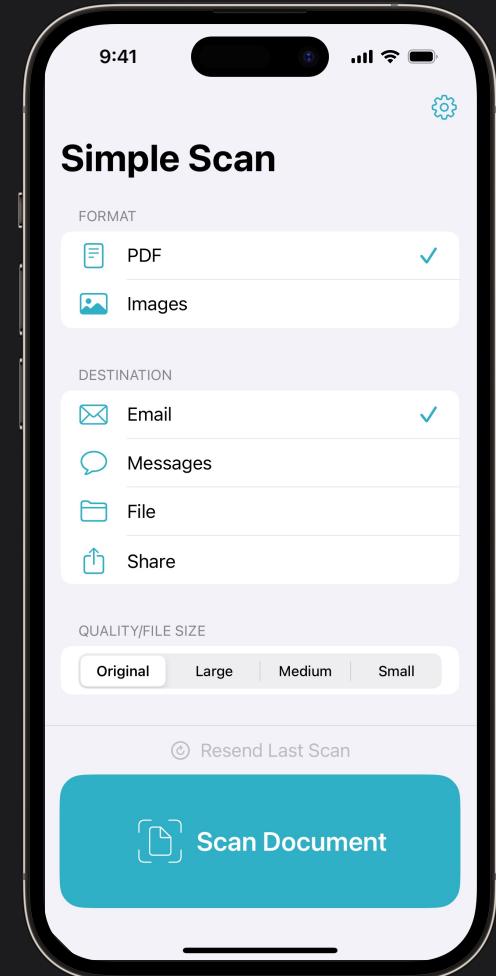
Out-of-the-box functionality

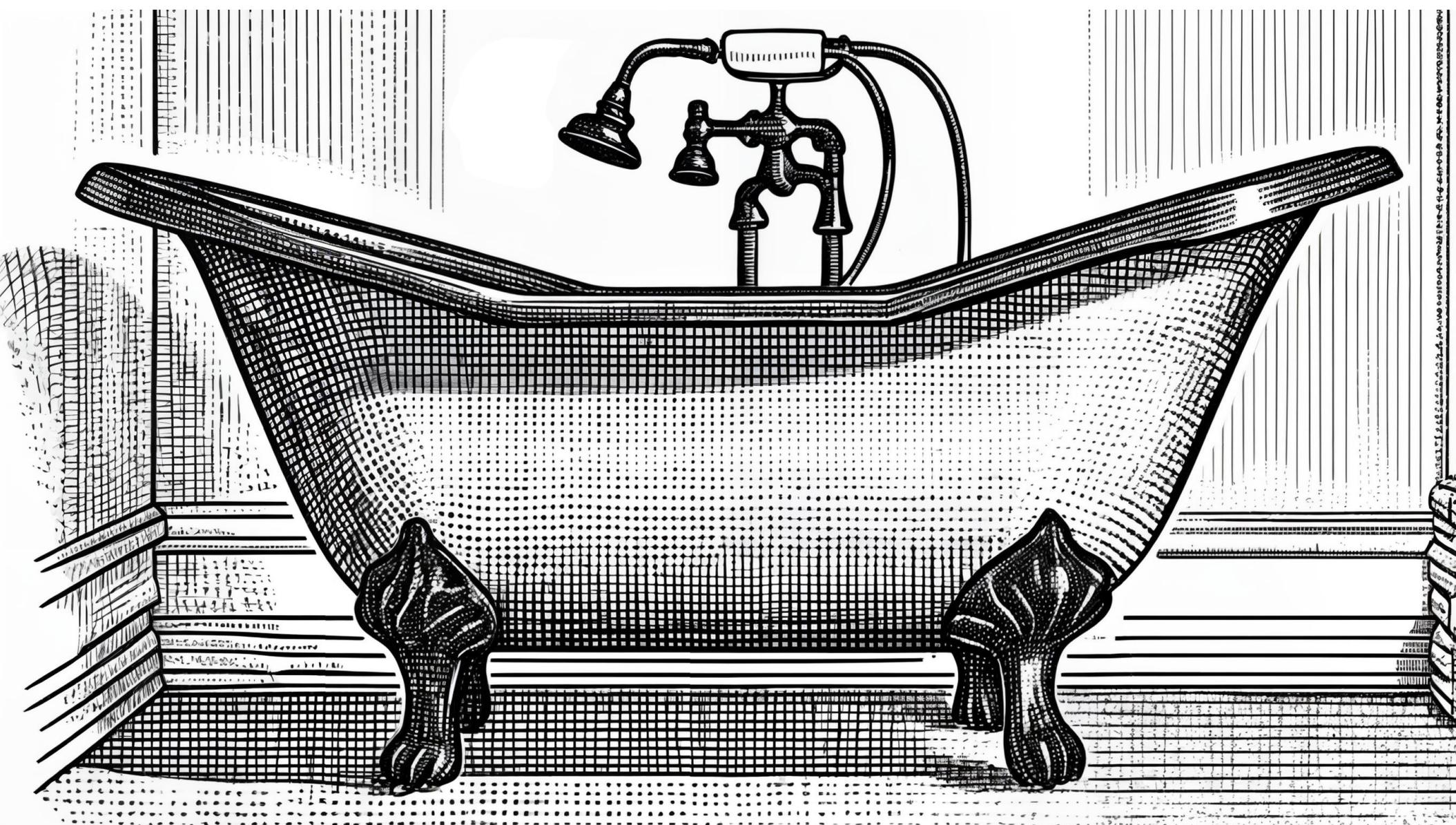
App looks like it belongs

This was once the norm on iOS. Users immediately understood how to use new apps.

Changes when the OS changes

When system themes change, there's little or nothing to do to ensure the best look and feel.





Themed UI

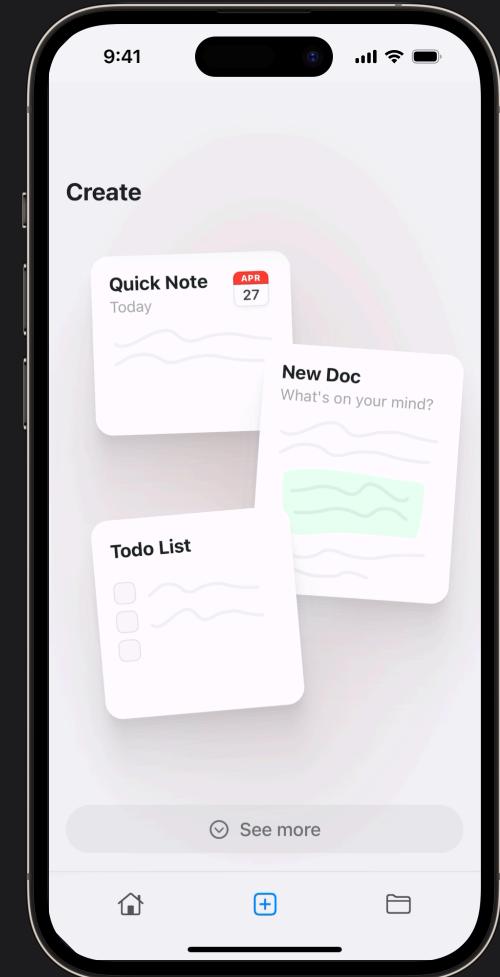
Smart visual configuration

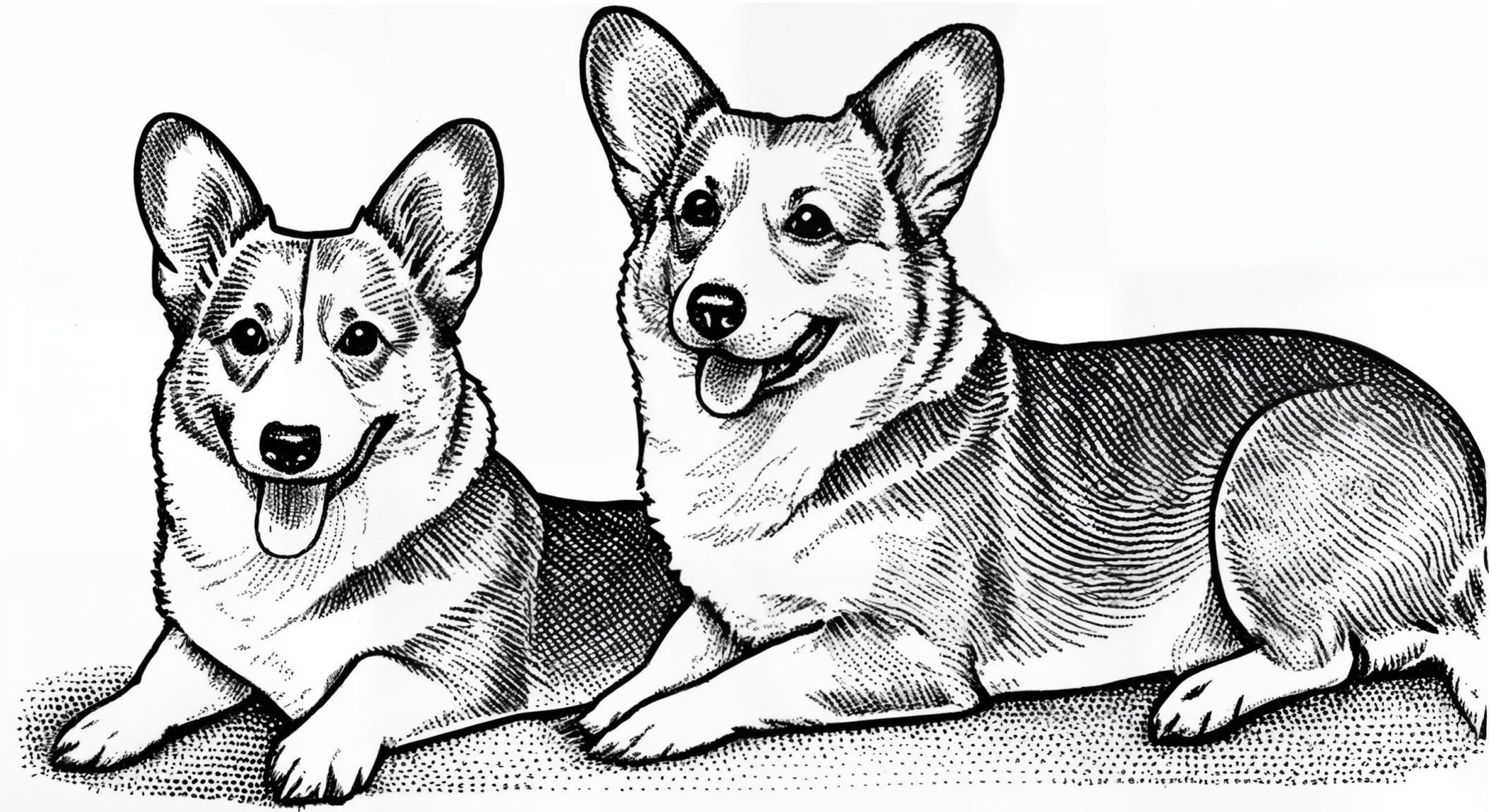
Uses standard controls

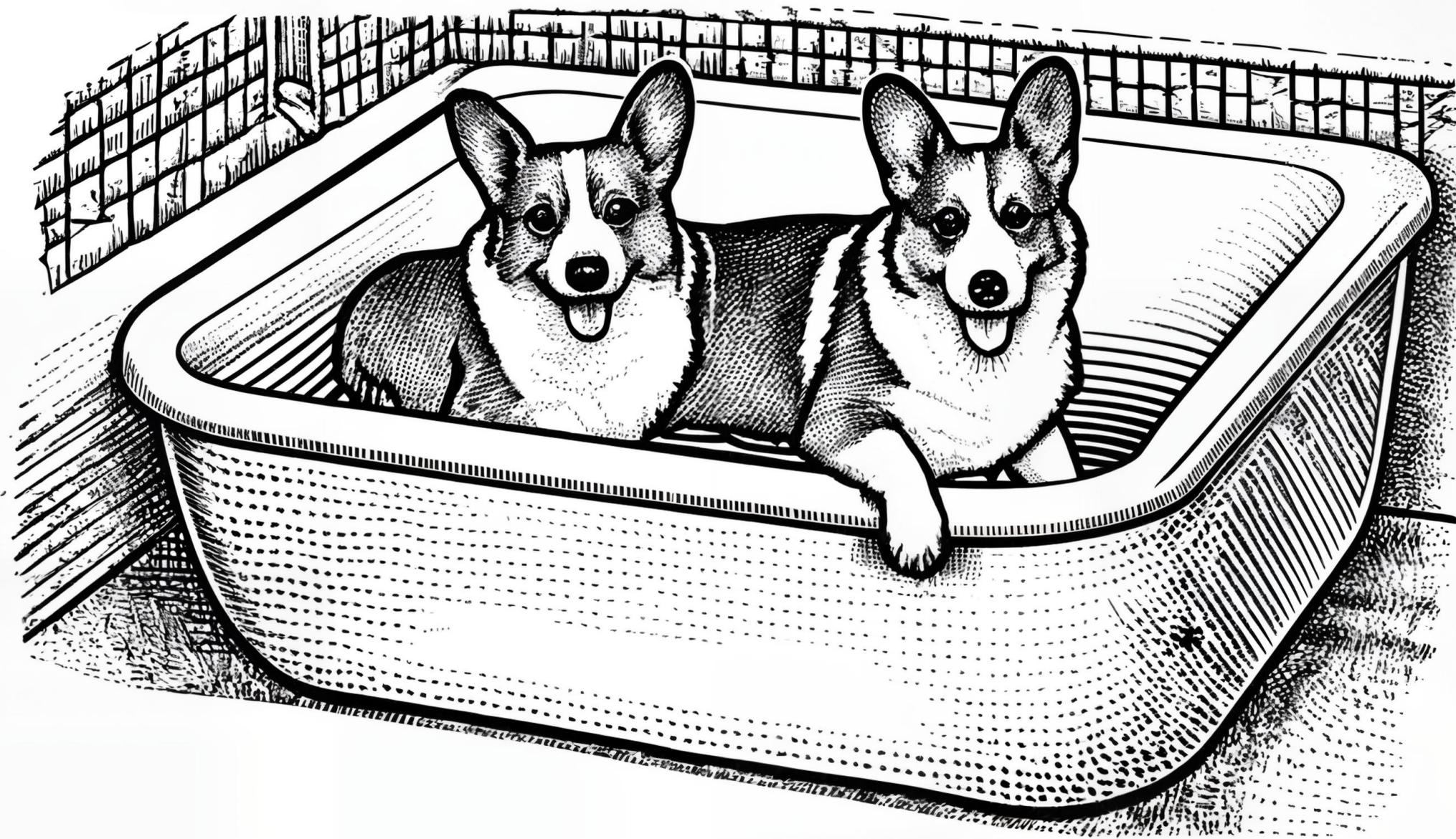
Here Craft is using a UICollectionView with multiple layouts

Distinguishes your app from others

Without investing in a complete unique UI, your app can stand out from the crowded field.







Custom UI

Expensive, but distinctive

Wharby Parker AR try-on

Very specific use case not covered by a common component but key to product experience quality.

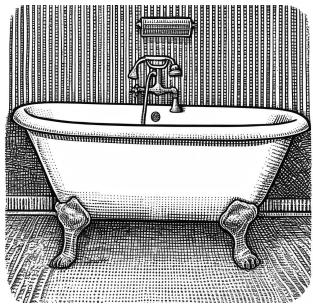
High maintenance cost

Expect a steep learning curve for new developers fixing bugs and adding features.

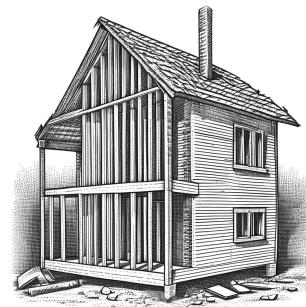




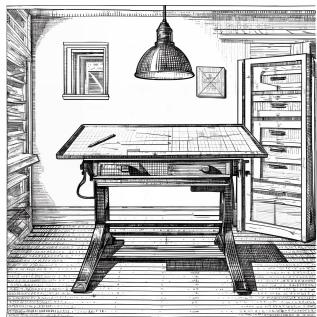
Customize
Selectively



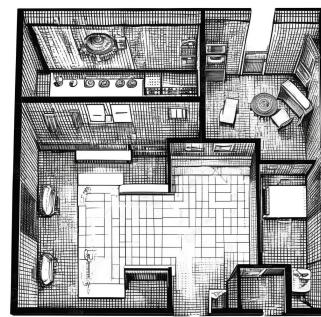
Fixtures



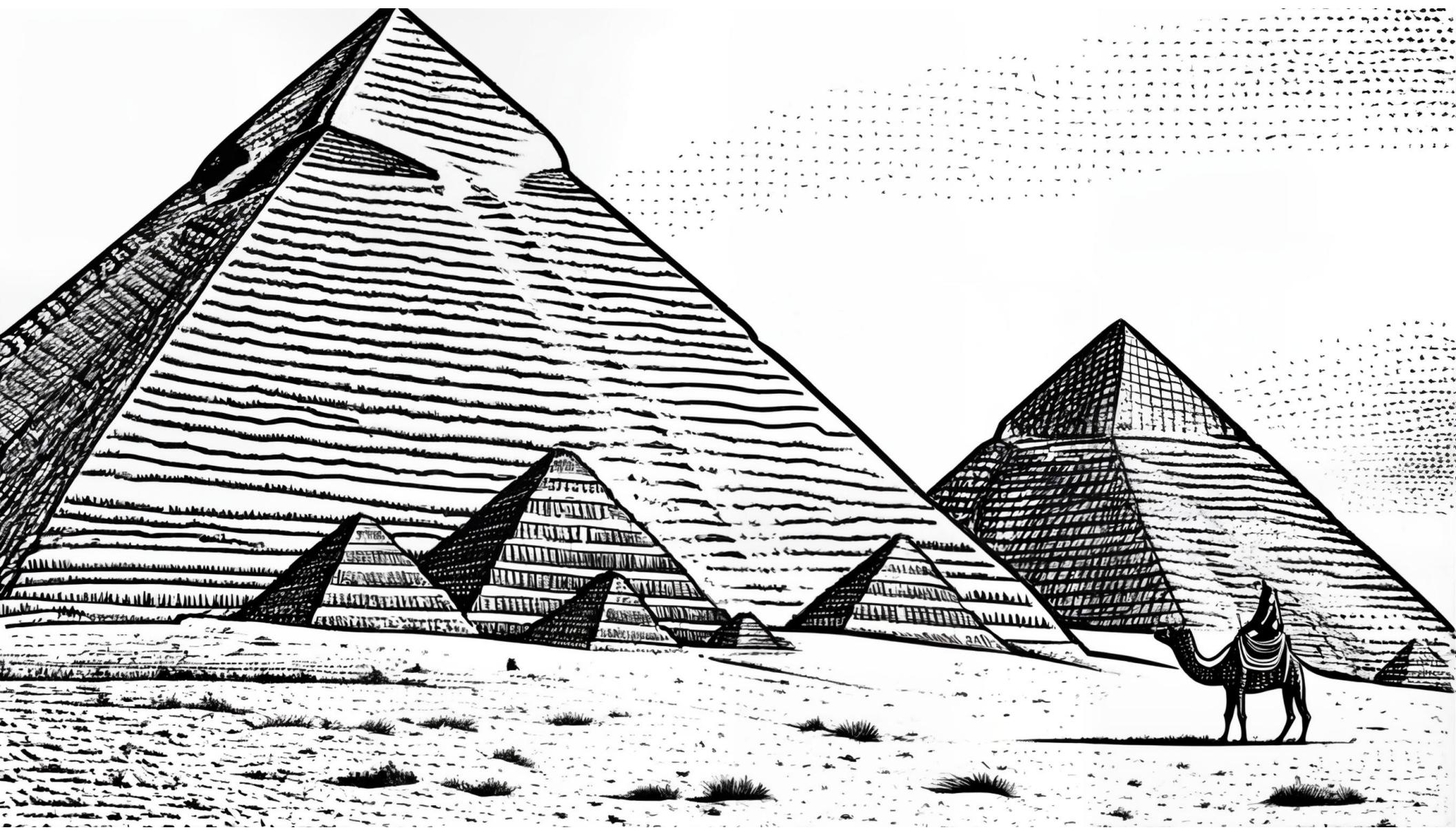
Framing



Design



Layout



thoughtfulapes.com/swiftcraft2024



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