

**CS-639 — Interaction Design Studio**

# **Design Elements & Principles**

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# Welcome Back!

- **Last week:** What **is** interaction design?
- **This week:** How **design elements** shape clarity, usability, and delight
- **Focus:** Building blocks, designing from the ground up, building our design muscle

# Why Visual Design?

- Visual design is not just “making it pretty”
- It **directs attention**, builds **structure**, and sets **tone**
- In digital interaction, visual decisions are interaction decisions

# Design Elements & Principles

**What you use vs. how you use it**

**Elements** are the **raw materials** — the visual building blocks like line, shape, and color.

**Principles** are the **rules of arrangement** — how we compose those elements to create clarity, balance, and meaning.





# Let's Deconstruct a Design

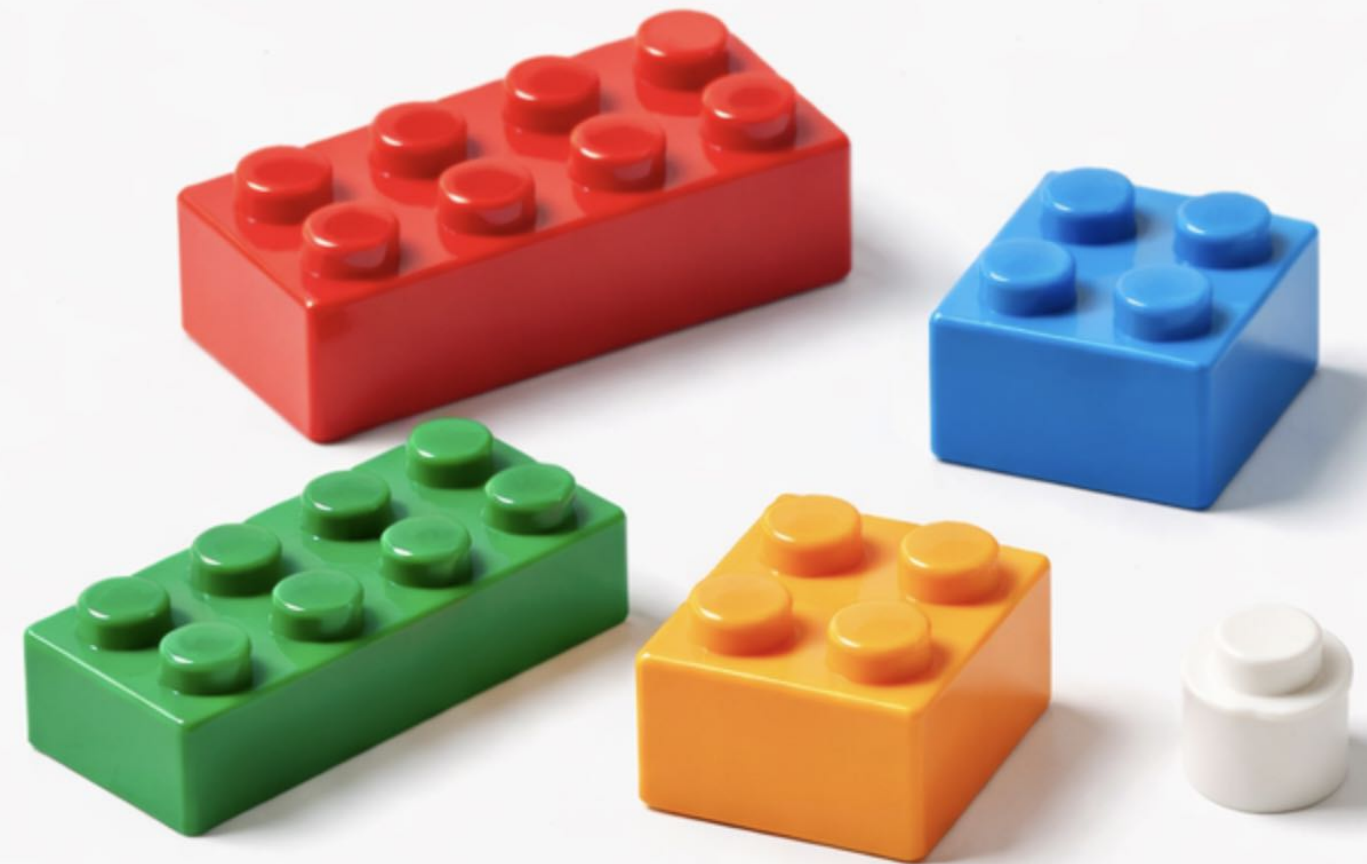
Example: **A Modern Interface**

The Siri webpage:

- What draws your attention first?
- Why does it feel balanced or clear?
- What's working or not?

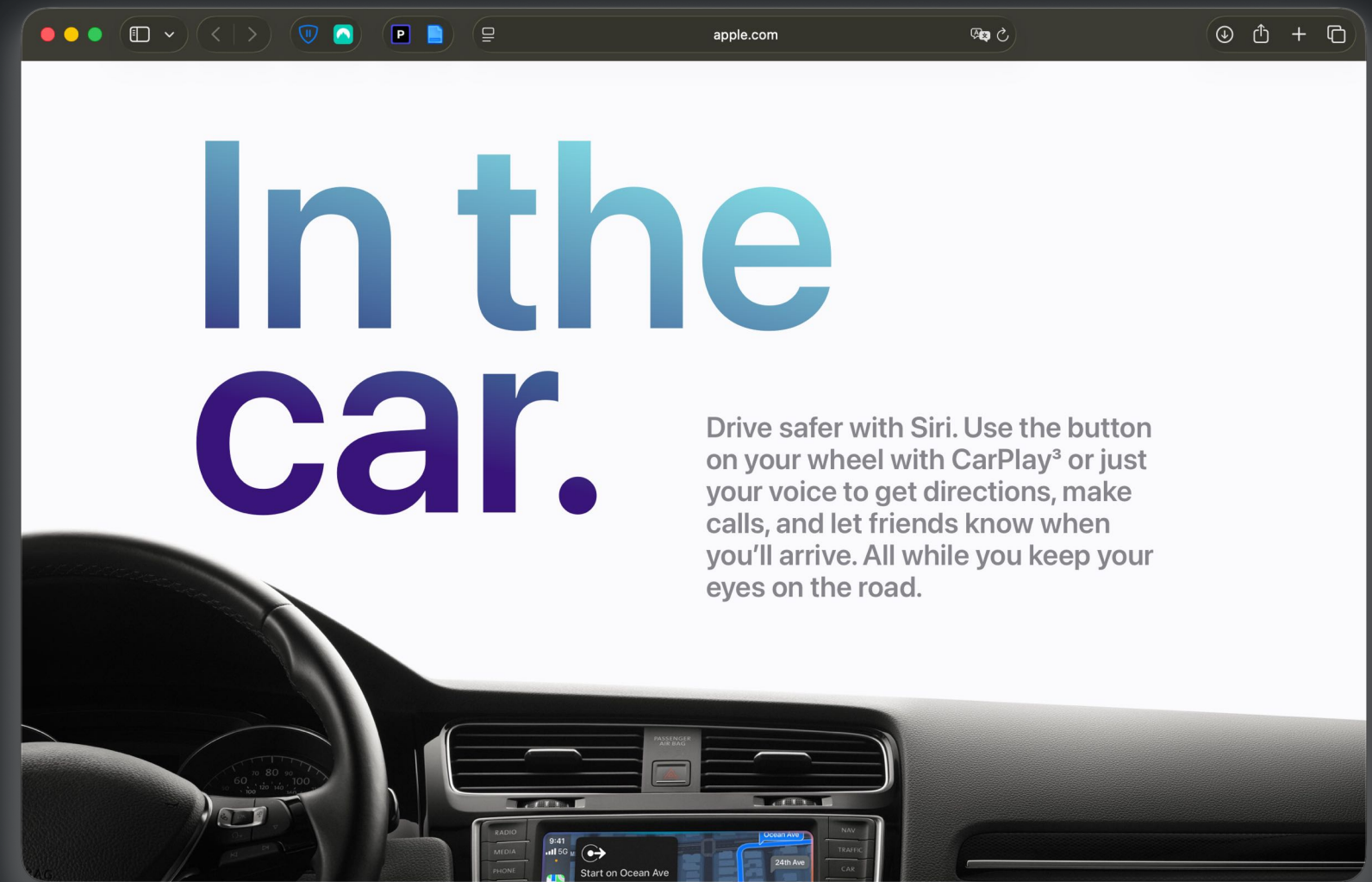


# Design Elements



# Space

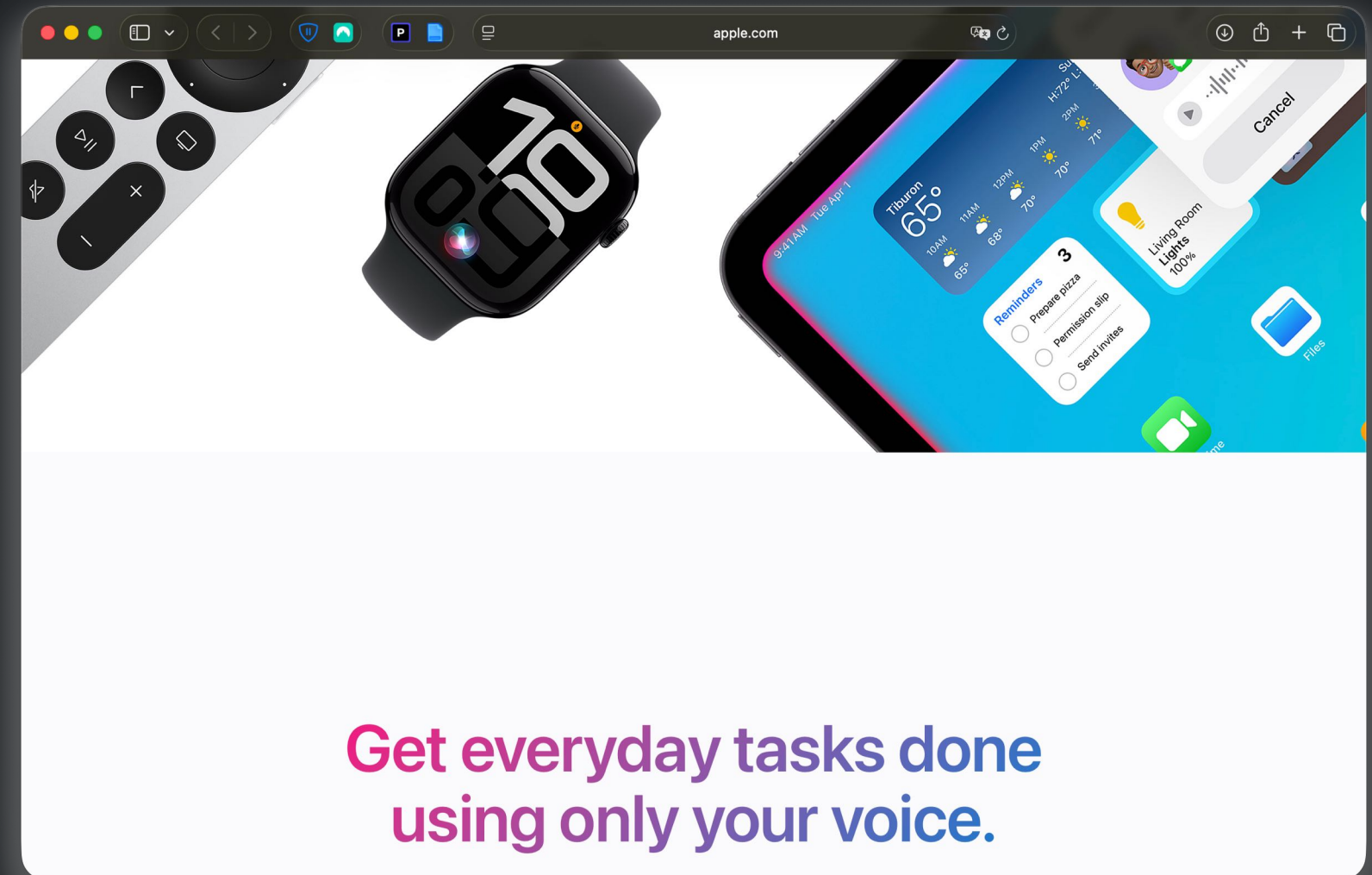
**Space is the canvas. It creates grouping and clarity through negative space.**





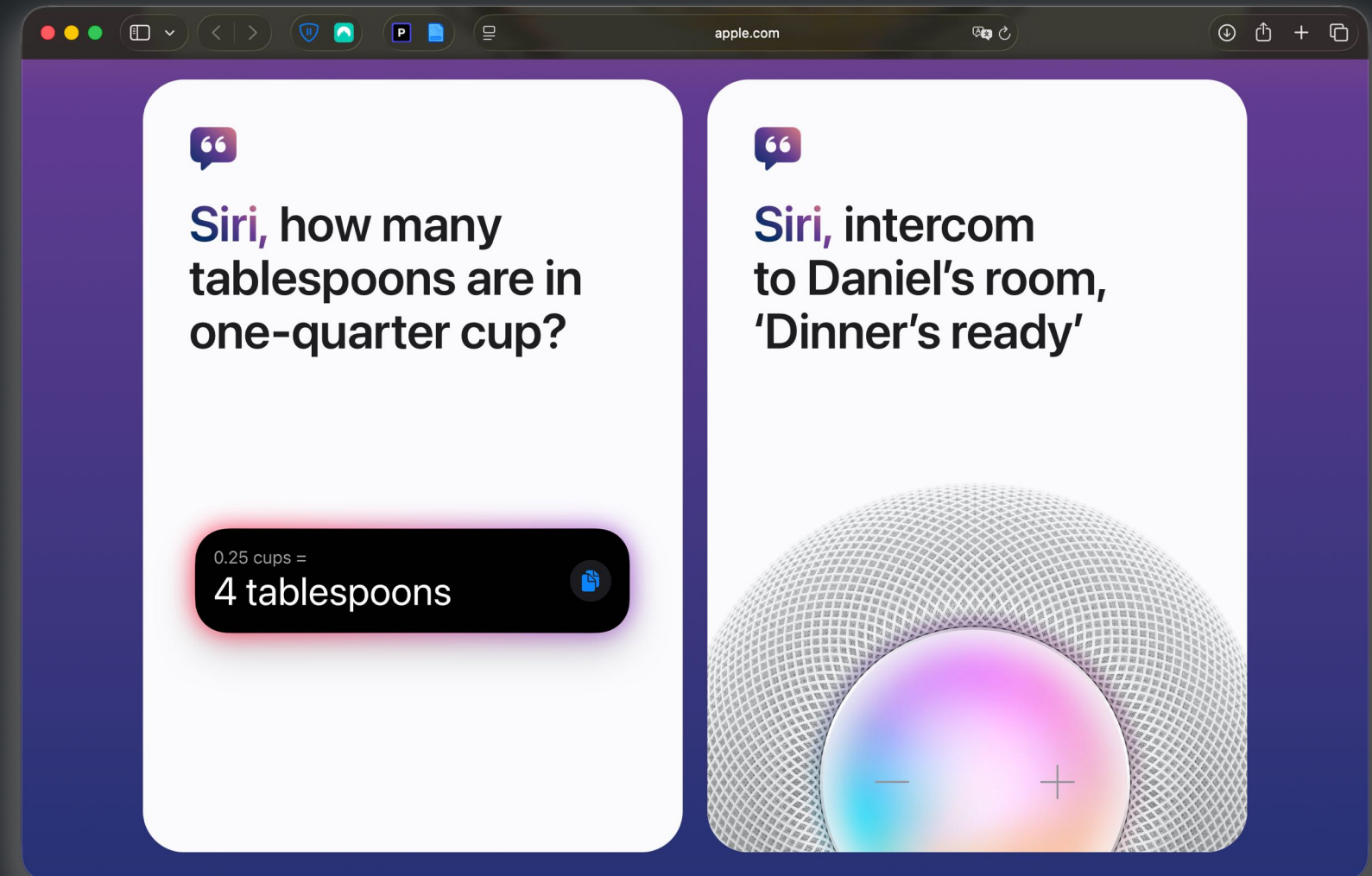
# Line

**Lines divide, emphasize, or connect. Not always visible!**



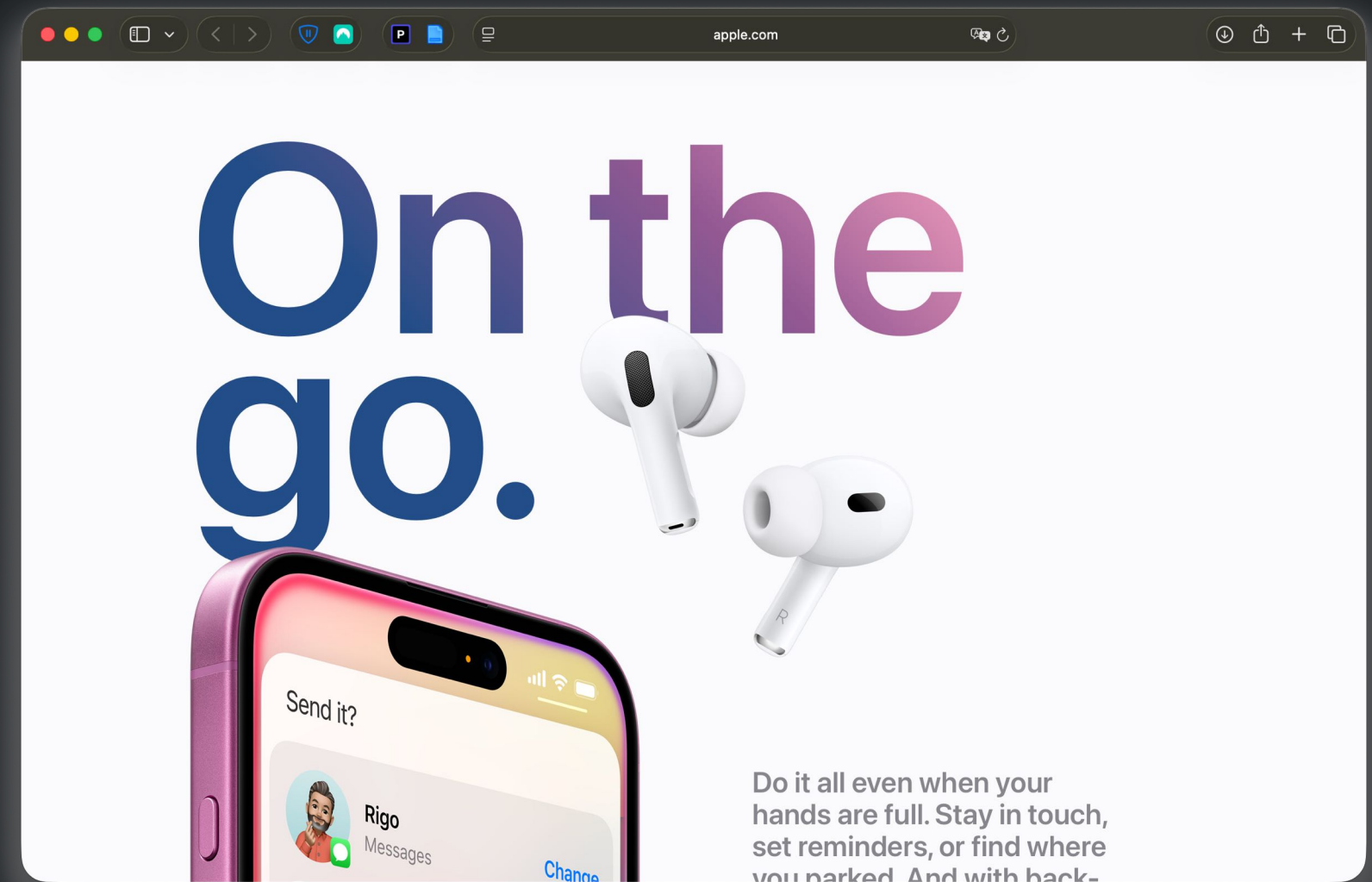
# Shape

**Shape gives structure. Icons, buttons, cards = all shaped affordances.**



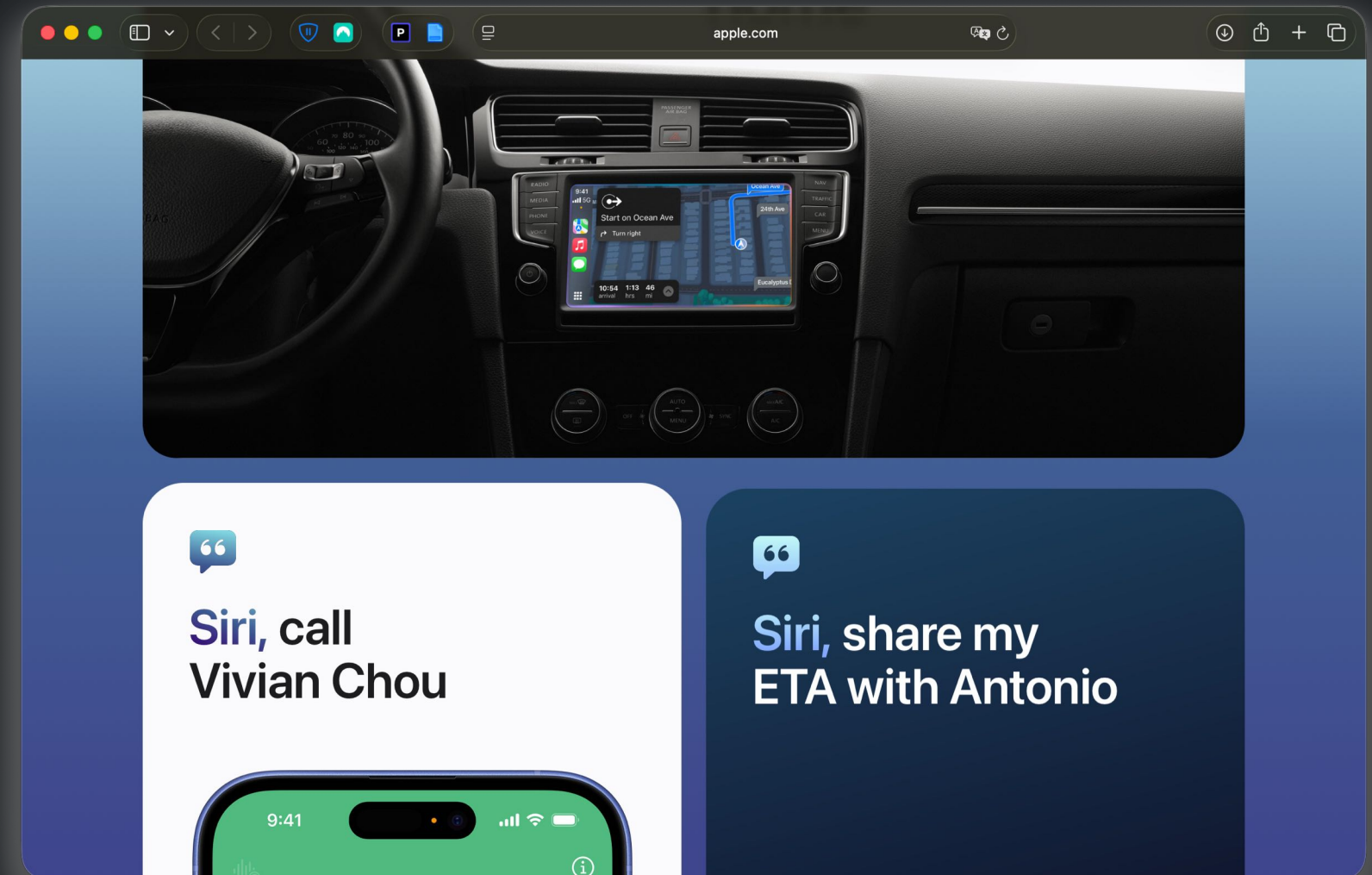
# Size

**Size shows importance. Bigger ≠ better — but bigger = more attention.**



# Texture

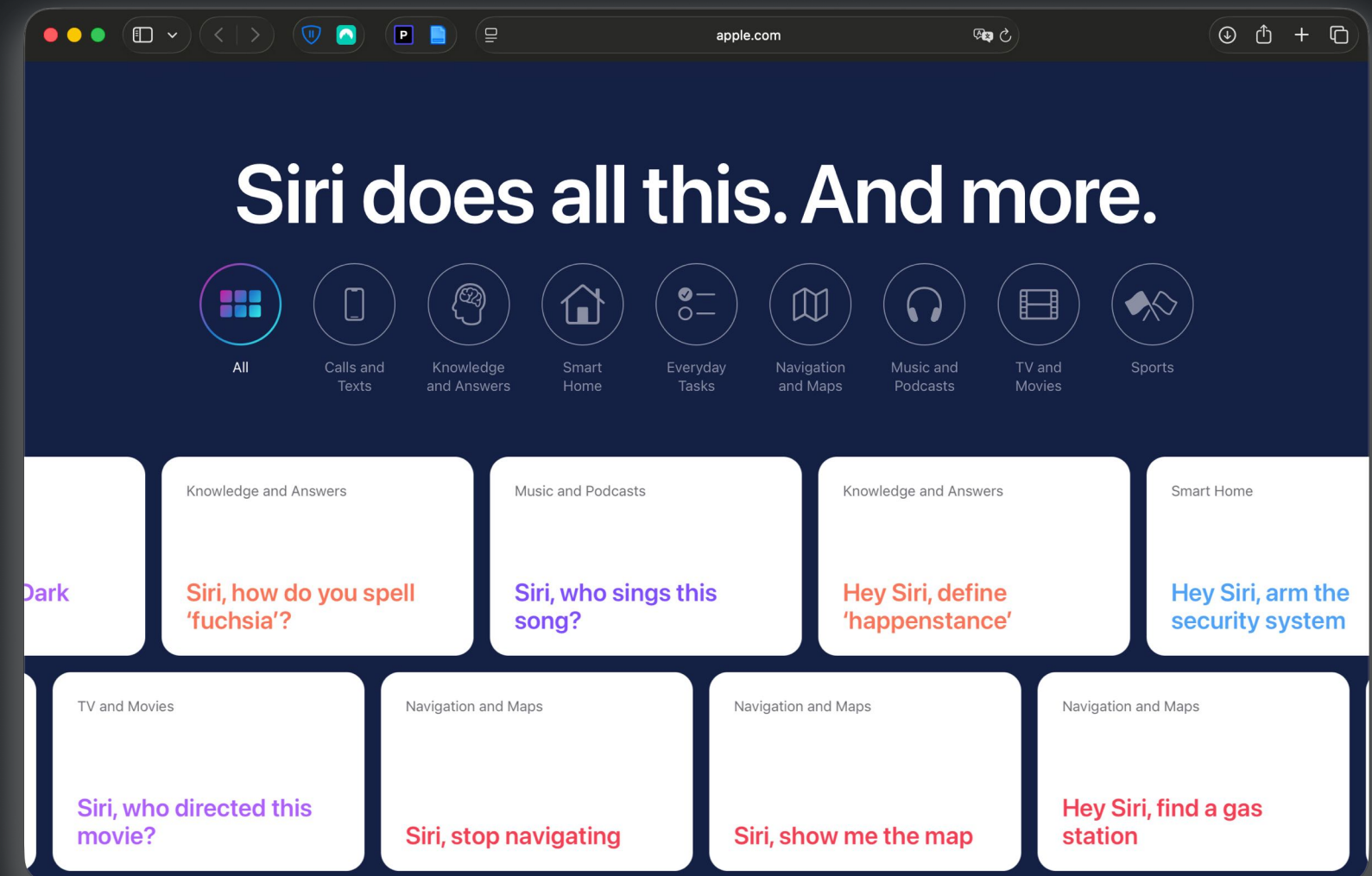
Texture creates **feel**. Often subtle — gradients, shadows, photos.





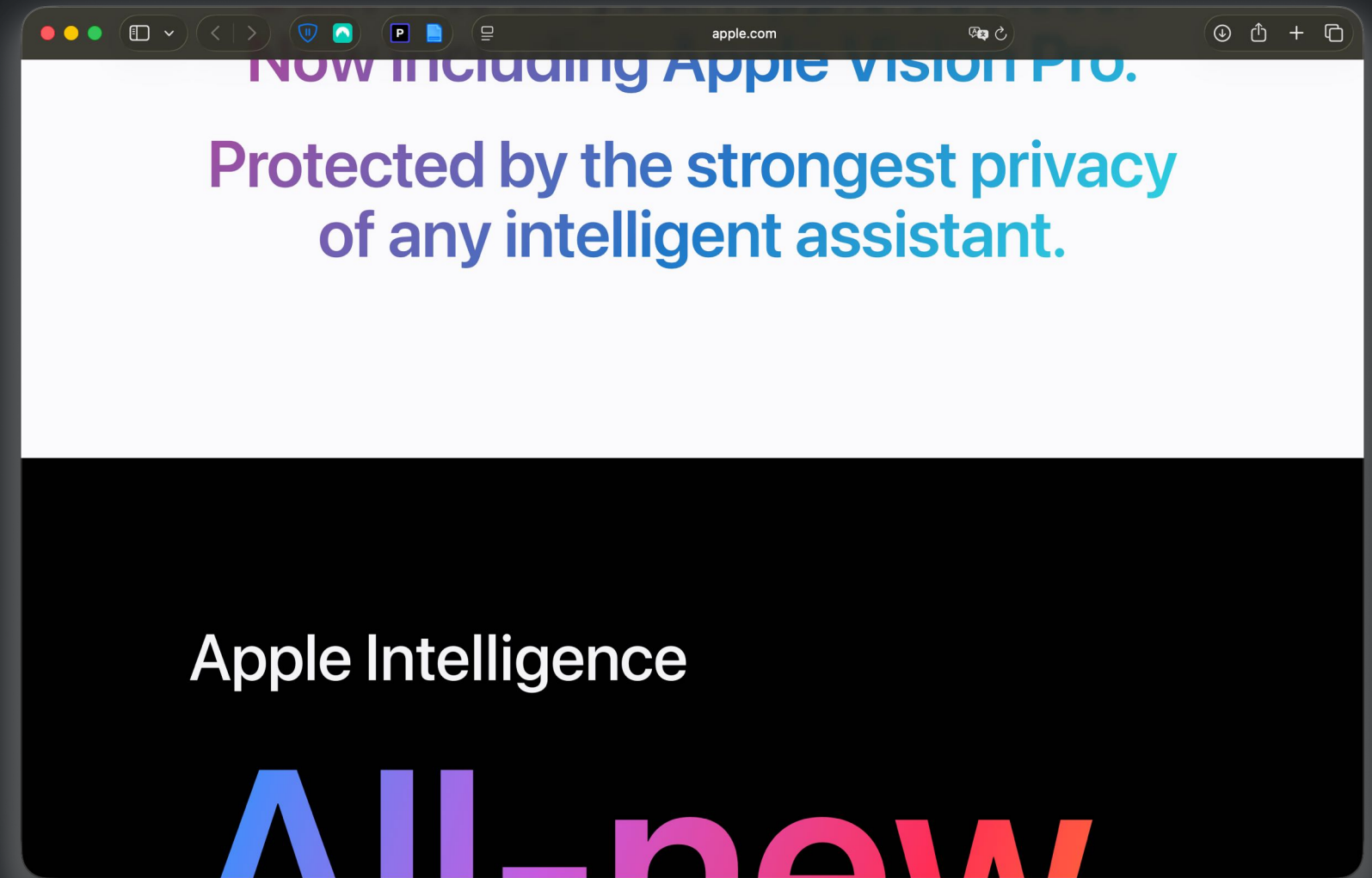
# Pattern

**Patterns repeat structure.  
Repetition = familiarity =  
usability.**



# Value

**Lightness or darkness of a color or area**



## Your Turn

What elements can you find in this screen? Option 1,  
Option 2

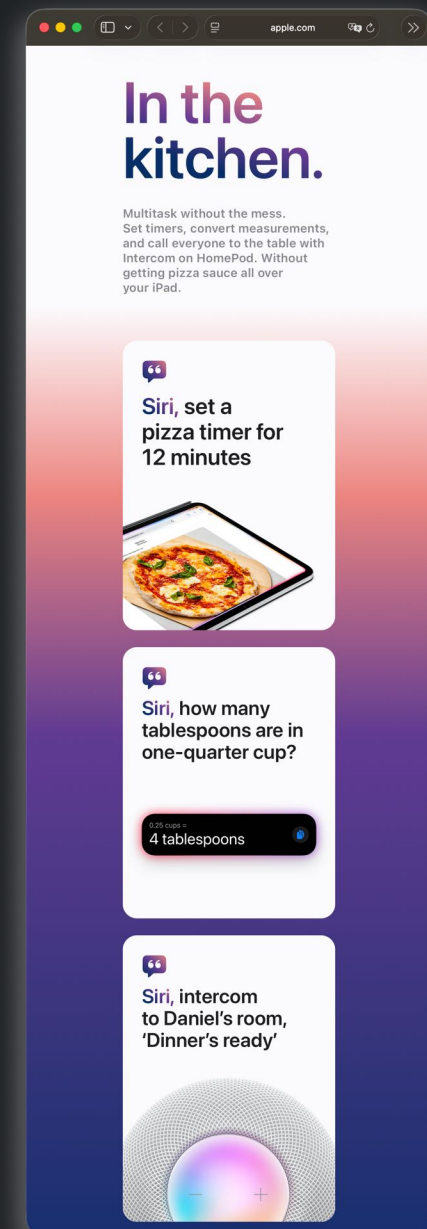
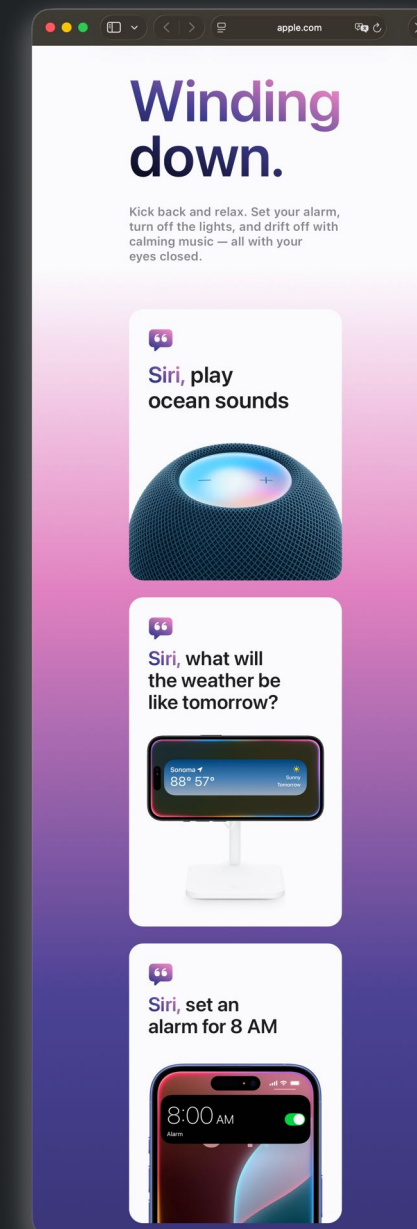
# Principles of Design

**Note:** There is no one set of principles. See [principles.design](#) for a comprehensive collection.



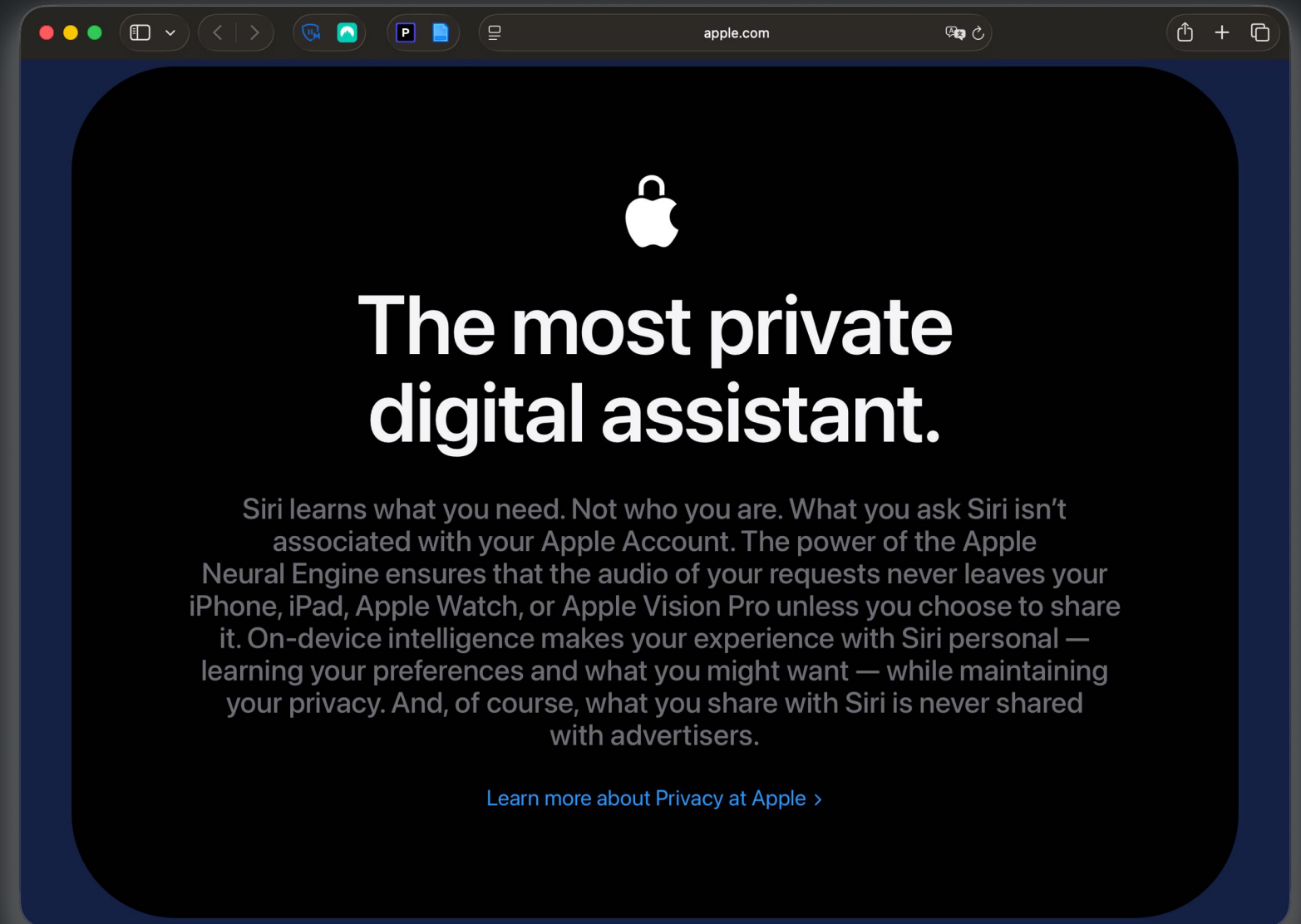
# Hierarchy

Visual structure that guides the viewer's attention and information flow



## Scale

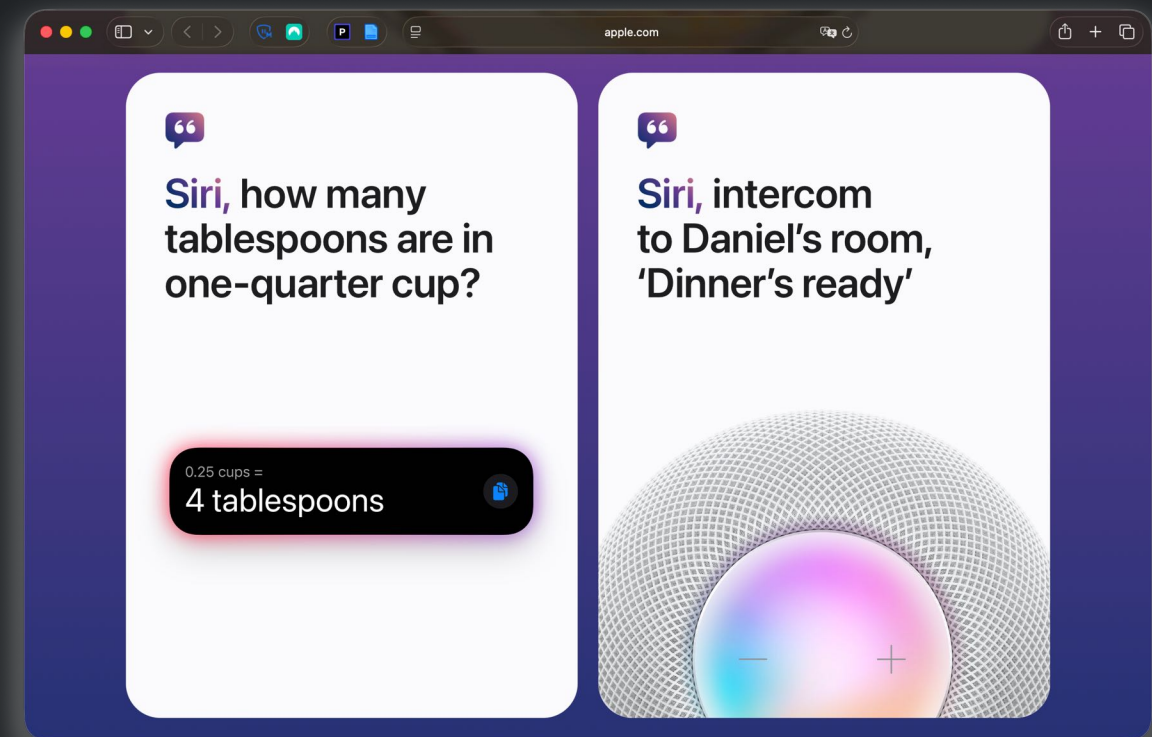
**Relative sizing that conveys proportion, emphasis, or structure**





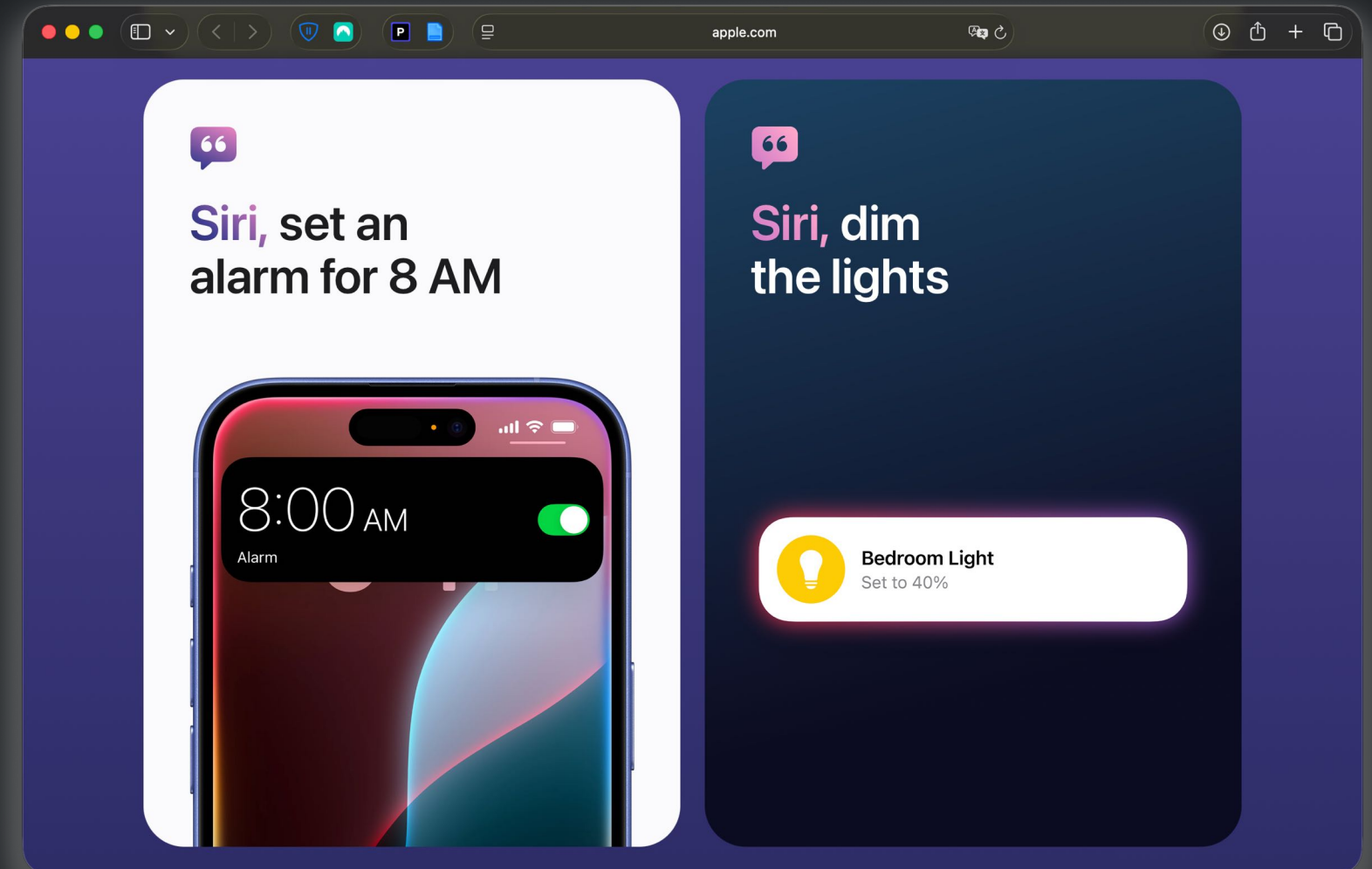
## Balance

**Visual stability through distribution of elements.  
Symmetry or asymmetry can both feel “balanced.”**



# Contrast

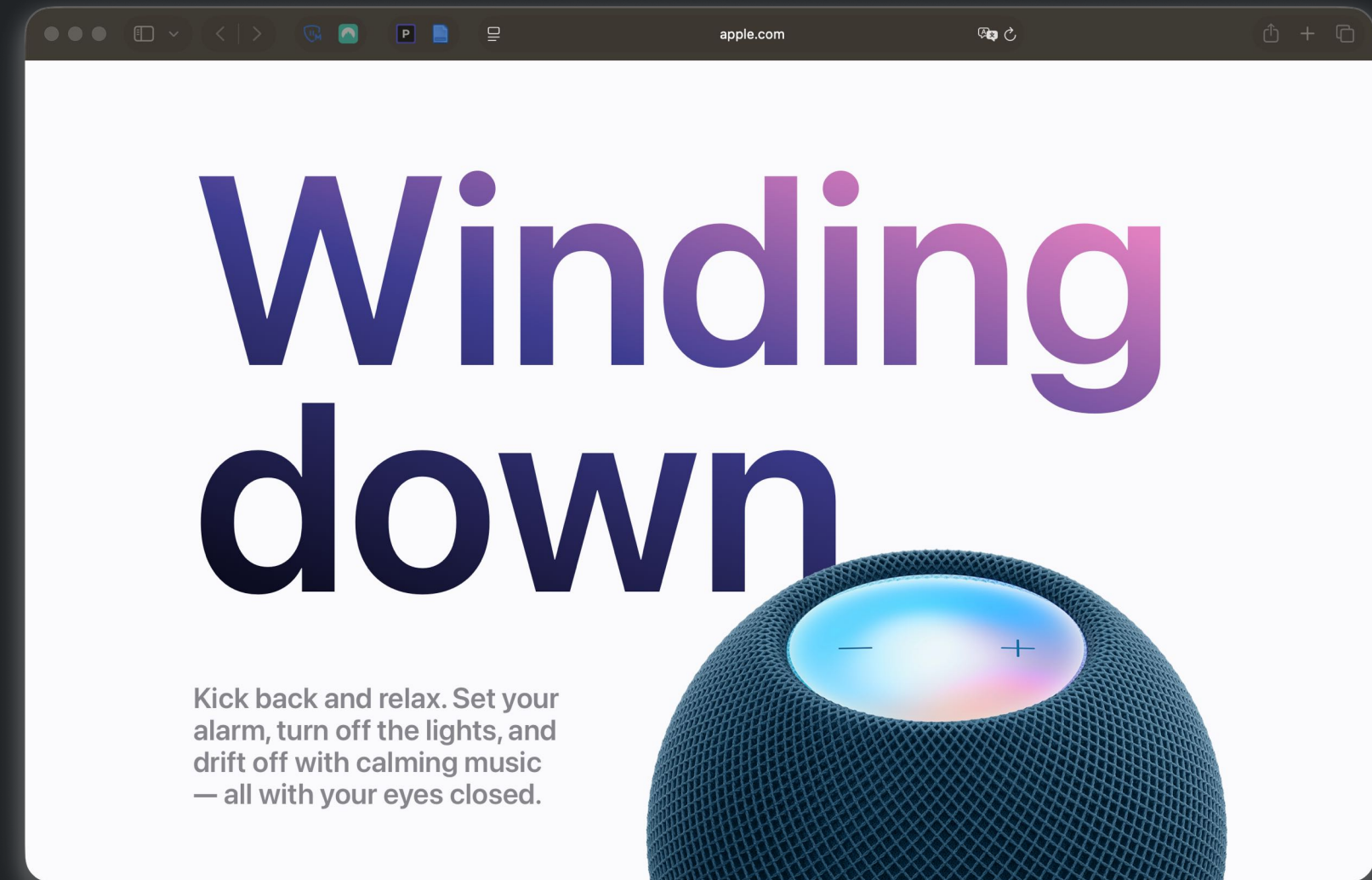
Differences that make elements stand out



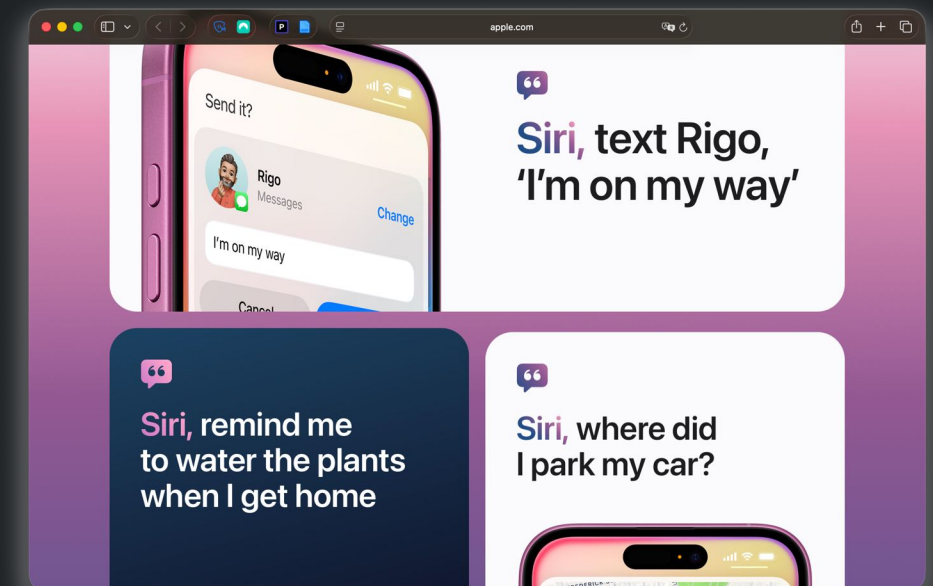
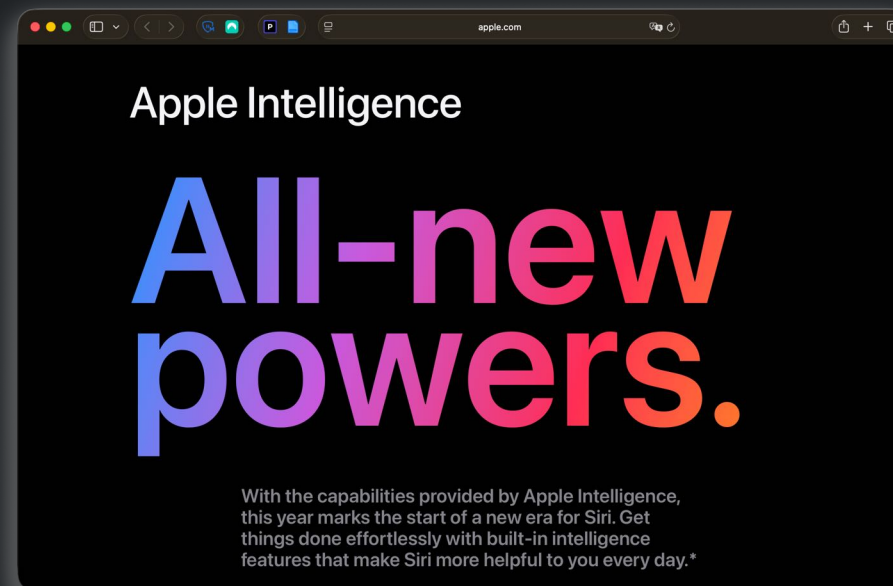
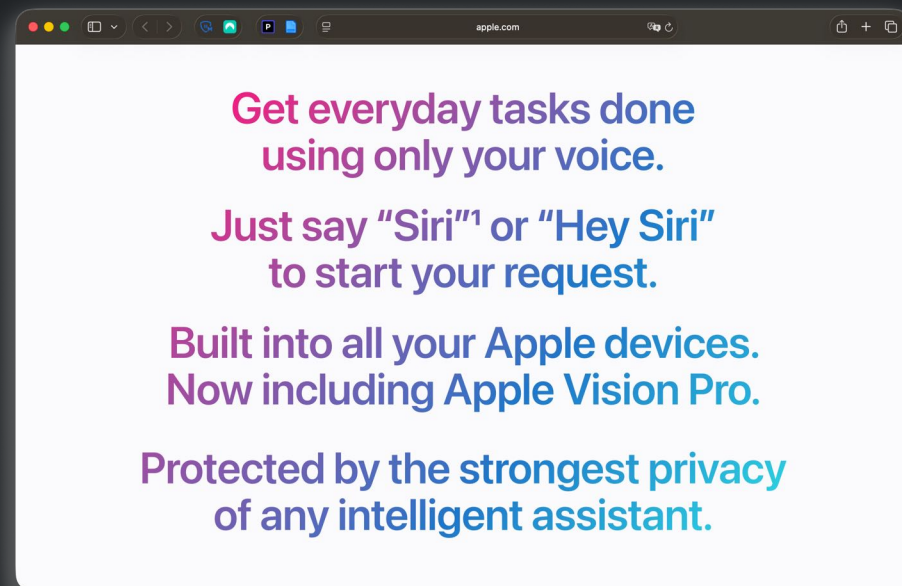


## Dominance (or Focal Point)

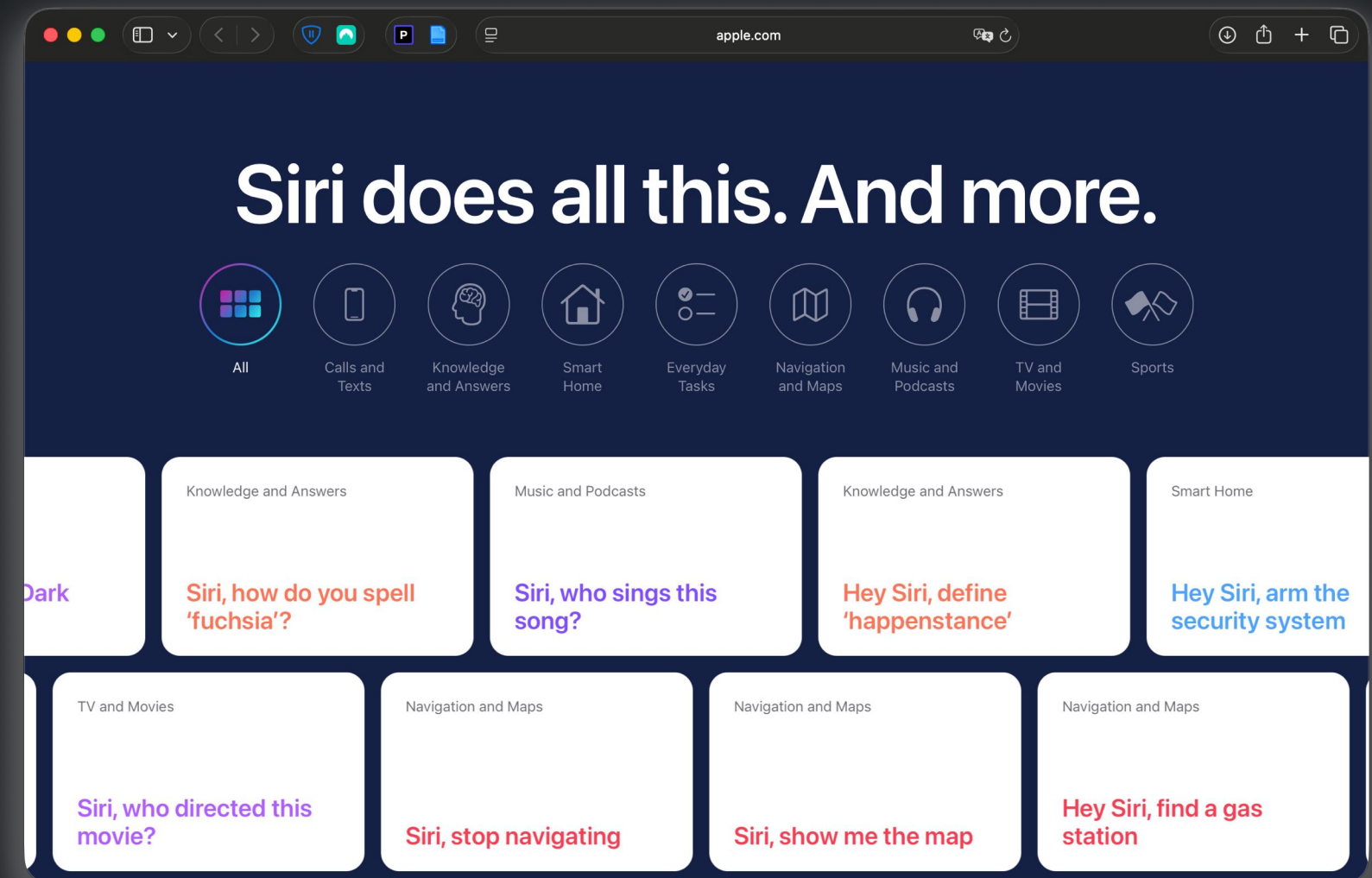
One element stands out as the focal point



# Design feels coherent and consistent



## The mind groups elements based on patterns



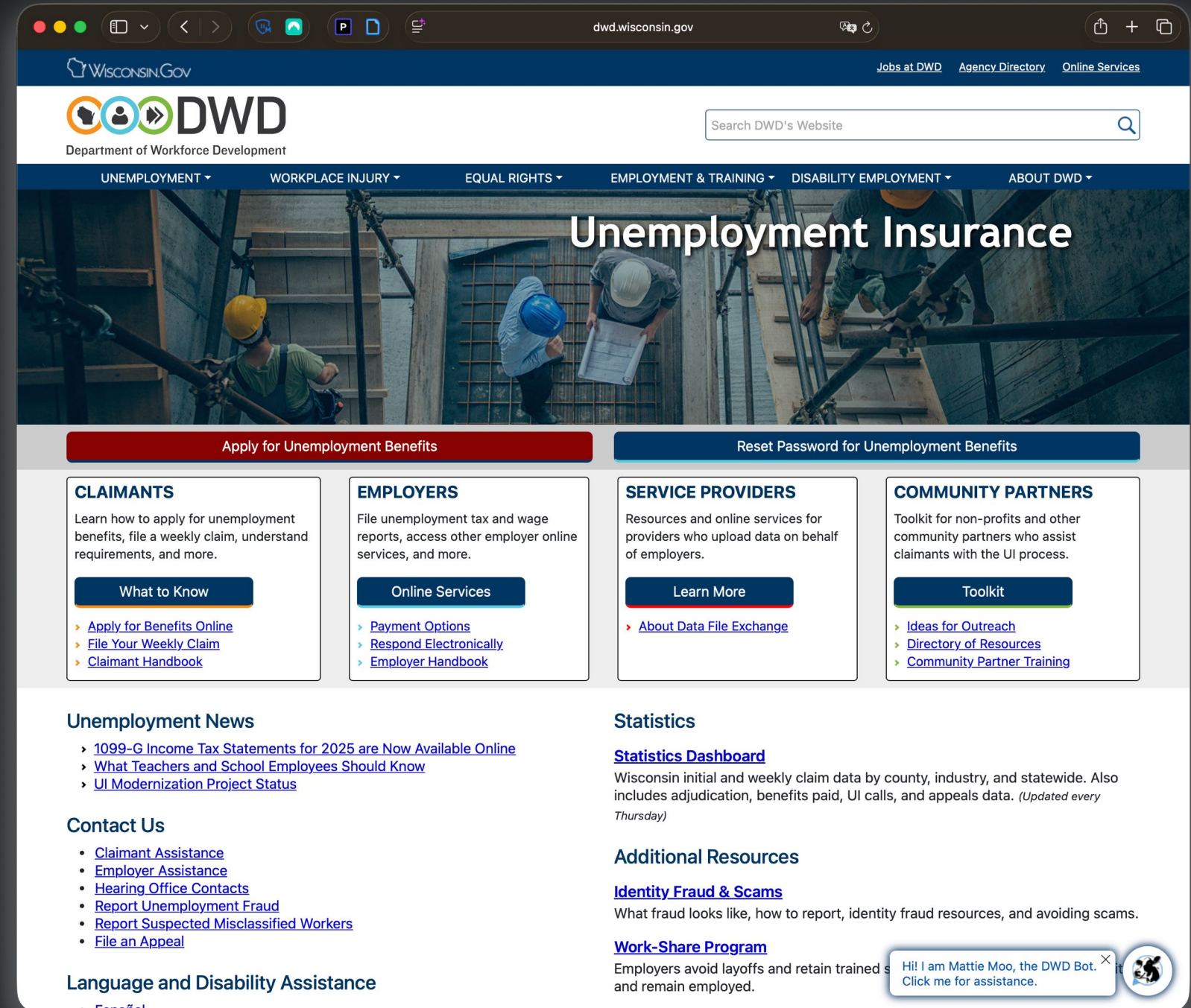
## Your Turn

What principles are used in these designs? Option 1,  
Option 2



# More Practice...

What principle is being violated?



# The World of Design Principles

**What if I synthesized all principles from principles.design into a universal set? And which ones would be most relevant to us?**

# Universal Design Principles

- Put users first  
(user-centered design)
- Simplicity & clarity
- Consistency & unity
- Accessibility & inclusivity
- Feedback & communication
- Performance & responsiveness
- Flexibility & adaptability
- Ethical & responsible design
- Iterative refinement
- Brand coherence

# Interaction Design Principles

- Clarity of intent
- Consistent affordances & signifiers
- Visual hierarchy for interaction flow
- Responsive feedback
- Error forgiveness & recovery
- Inclusive interaction
- Efficiency & minimal cognitive load
- Scalable patterns
- Emotion & delight
- Ethical transparency



# **What Makes Good Interaction Design?**

**Design = Design Thinking + Design Process**

1. **Understand People** — Start with real users, needs, and contexts
2. **Communicate Clearly** — Use layout, hierarchy, and feedback to guide interaction
3. **Think in Systems** — Build consistent patterns that scale and adapt
4. **Iterate & Refine** — Sketch, test, and improve through critique and revision
5. **Create Meaningful Experiences** — Aim for usability and emotional resonance

# From Parts to Systems

- Elements form **patterns**
- Patterns form **systems**
- Systems drive **consistency + scalability**

# Takeaways

- You now have a **visual design vocabulary**
- These are **tools**, not rules
- We'll apply these in this week's design challenge

# Design Challenge

**Use your new knowledge of visual design **elements** and **principles** to create a clear, well-composed interaction screen.**

# The Design Brief

Design the **main screen** for a digital interface that communicates a **community-based event or service**.

You're designing this as if it were part of a **real app, website, or kiosk** — not a concept sketch, but a screen someone could use.

# Purpose

This screen should clearly convey the **core information** and visually guide the user through it.

Even though we're not designing full interactions yet, the screen should **suggest interactivity** — e.g., buttons, sign-up prompts, or follow-up actions.

# Example Topics

Pick a community-based event or service such as:

- A student-run **theater performance**
- A local **composting program**
- A free **clothing exchange**
- A mental health **relaxation room**
- A pop-up **bike repair booth**



# Format Options

Design this screen for one of these digital contexts:

- A **mobile app**
- A **website landing page**
- A **public kiosk** (e.g., in a library or student union)

# What to Focus On

This week's challenge is **one screen**, not a full app or flow.

Design for:

- Content hierarchy
- Visual grouping and spacing
- Typography, balance, and alignment
- A sense of intent and interactivity

# Framing Questions

Before you sketch, ask:

- Who is this screen for?
- What's the **core message** or call to action?
- What should the user see **first**?
- What kind of visual tone fits the event?

# While Sketching

Focus on:

- Boxes and visual zones
- Spacing and balance
- Labeling and grouping
- Implied actions (e.g., “Sign Up,” “Learn More”)

# Use Your Principles

Apply what you learned on Monday:

- Use alignment and hierarchy to build clarity
- Use contrast and repetition for emphasis and structure
- Think about scale, weight, and flow

# Timeline

- **Today (Mon):** Challenge released — choose your topic and format
- **Wednesday:** In-class studio — sketching + feedback
- **Friday:** Bring your **refined version** for critique

# What You'll Submit

Due next Monday. Submit:

- Your **final screen design** (PDF or image)
- **2–3 photos** of your sketchbook showing:
  - Early layout ideas
  - Revisions from feedback
  - Iterations or alternate directions

# What's Next?

By Wednesday:

- Complete reflection activity (< 30 min)
- Make some decisions on your design challenge



# Media Sources

Siri | WI DWD