2.1 VISUAL AND UI DESIGN PRINCIPLES

When we look at something, we often instinctively know if it looks good or not, thanks to the emotional response it elicits. Though we may struggle to put it into words, certain design elements can make visuals more appealing and effective in user experience.

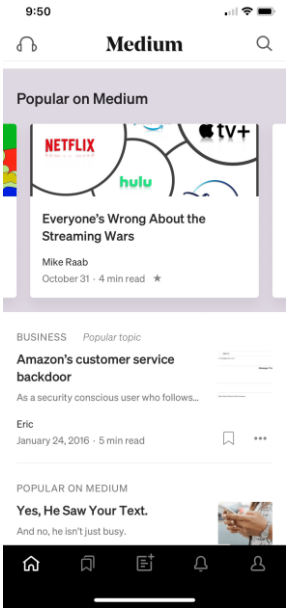
Here are 5 key visual design principles that impact UX:

1. **Scale:** The relative size of elements in a design. It helps create emphasis, guide attention, and add visual interest.
2. **Visual Hierarchy:** The arrangement of elements to establish a clear order of importance. It guides users through content and makes information easier to understand.
3. **Balance:** Distributing visual weight evenly in a design to achieve stability. It ensures that no single element overpowers others, leading to a harmonious composition.
4. **Contrast:** Differences in color, size, or other attributes that create distinction between elements. Contrast enhances readability and draws attention to essential information.
5. **Gestalt:** The idea that our brains perceive elements as a whole rather than individual parts. It emphasizes how elements are organized to form a unified and coherent design.

By adhering to these principles, designers can create engaging and user-friendly visuals that enhance the overall experience.

1. Scale

Scale in visual design involves using relative size to communicate importance and rank within a composition. Important elements are made larger than less significant ones, making them more noticeable. A visually appealing design typically uses up to three different sizes to create variety and establish a visual hierarchy. By emphasizing essential elements through size, users can easily understand and interact with the design

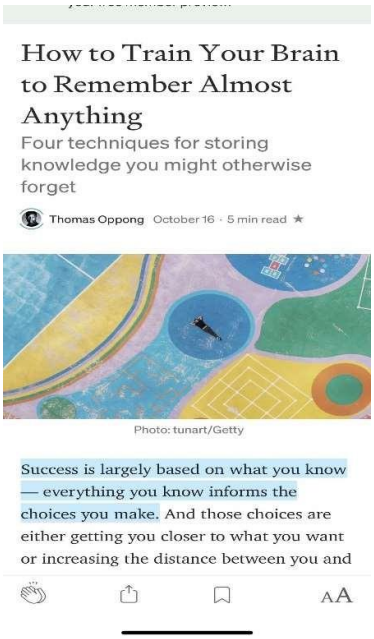


Medium for iPhone: Popular articles are visually larger than other articles. The scale directs users to potentially more-interesting article.

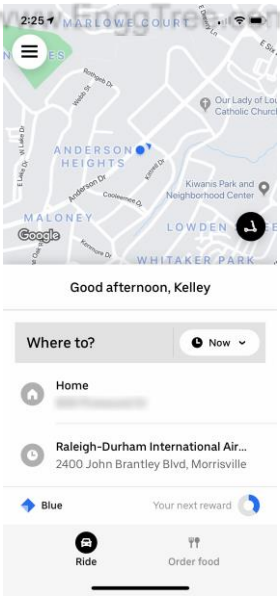
2. Visual Hierarchy

Visual hierarchy is about guiding the user's eye to focus on important elements first. It's achieved by using various design cues like size, color, spacing, and placement. A good layout with clear visual hierarchy makes it easy for users to understand the content and its importance. You can use different font sizes, bright colors for important items, and muted colors for less important ones to create a clear hierarchy.

Including small, medium, and large elements in the design helps establish a balanced scale and reinforce the visual hierarchy.



Medium mobile app: There is a clear visual hierarchy of title, subtitle, and body text. Each component of the article is in a type size equal to its importance.



Uber mobile app: The visual hierarchy is clear in Uber's mobile app. The screen is split in half between the map and input form (bottom half of screen), which enforces the thought that these components are equally important to the user. The eye is immediately drawn to the Where to? field because of its gray background, then to the recent locations below it, which are slightly smaller in font size

3. Balance

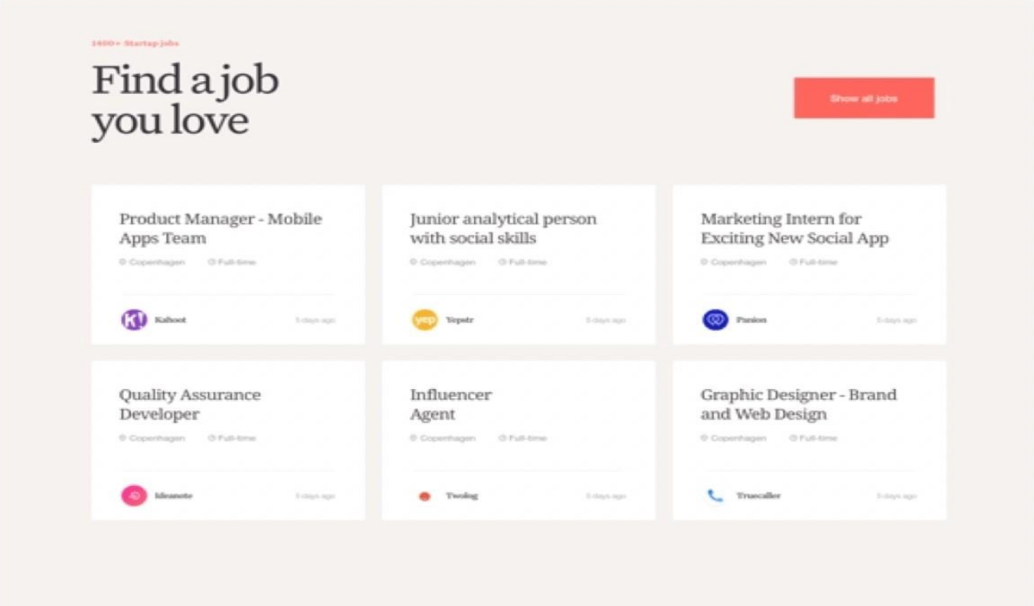
Balance in visual design is like a seesaw, where you arrange elements to create a pleasing proportion. It means having an equal distribution of visual elements on both sides of an imaginary line running through the middle of the screen. This line can be vertical or horizontal.

To achieve balance, you need to consider the size and space taken by elements, not just their number. If one side has a large element and the other side has a small one, the design feels unbalanced.

There are three types of balance:

1. **Symmetrical -** elements are evenly distributed on both sides of the central axis.
2. **Asymmetrical** - elements are unevenly distributed, creating a sense of movement and energy.
3. **Radial** - elements radiate out from a central point, guiding the eye to the center of the composition.

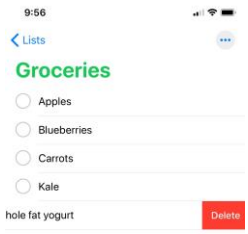
The choice of balance depends on the message you want to convey. Asymmetry is dynamic and engaging, while symmetry is calm and static. Radial balance always draws attention to the center. Achieving balance ensures that no area overwhelms others, creating a harmonious and pleasing design.



The Hub Style Exploration: The composition feels stable, which is especially appropriate when you're looking for a job you love. The balance here is symmetrical. If you were to draw an imaginary vertical axis down the center of the website, elements are distributed equally on both sides of the axis. (Image source: dribbble.com)

4. Contrast

Contrast is a powerful principle in design that highlights differences between elements. It involves placing visually dissimilar things together to show that they belong in different categories or serve distinct purposes. For example, using bright colors like red to signify deletion in a UI design makes the element stand out from the rest, emphasizing its unique function. Contrast helps users quickly identify and understand important information, making the design more effective and user- friendly



Reminders app on iOS: The color red, which has high contrast to its surrounding context, is reserved for deleting.

Often, in UX the word “contrast” brings to mind the contrast between text and its background. Sometimes designers deliberately decrease the text contrast in order to deemphasize less important text. But this approach is dangerous — reducing text contrast also reduces legibility and may make your content inaccessible. Use a color-contrast checker to ensure that your content can still be read by all your target users.

Greenhouse Juice Co: The legibility of the text on the bottle relies on the color of juice. Although the contrast works beautifully for some juices, labels for bottles with light colored juices are nearly impossible to read. (Image source: www.instagram.com)

5. Gestalt Principles

Gestalt principles are a set of ideas from psychology that explain how humans make sense of complex images. Instead of seeing individual parts, our minds automatically organize them into a whole. This means we tend to perceive the complete picture rather than separate elements.

These principles include similarity, continuation, closure, proximity, common region, figure/ground, and symmetry and order. One important principle for UX is proximity, which means that items visually close together are seen as belonging to the same group. These principles help designers create visuals that are easy for users to understand and navigate

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It is the Gestalt closure principle that allows us to see two figures kissing instead of random shapes in Picasso's painting. Our brains fill in the missing pieces to create two figures.

We also often see applications of the Gestalt theory in logos. In the NBC

logo, there is no peacock in the white space, but our brain understands there to be one.

UI Design Principle:

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   Equitable Use: The design should be usable by all individuals, regardless of their age, abilities, or background. It ensures that everyone can access and interact with the product or environment in a fair and inclusive manner.

2. **Flexibility in Use:** The design should accommodate a wide range of individual preferences and abilities. It offers multiple ways to interact with the product or environment, allowing users to choose the approach that suits them best.

3. **Simple and Intuitive Use:** The design should be easy to understand and use, requiring minimal effort to figure out its operation. Clear instructions and logical layouts make it intuitive for users to navigate and perform tasks.

4. **Perceptible Information:** The design should present information effectively to all users, regardless of their sensory abilities. It ensures that important information is available through multiple senses (e.g., visual, auditory, tactile) so that users can perceive and comprehend it easily.

5. **Tolerance for Error:** The design should minimize the risk of errors and provide ways to recover from mistakes. It avoids critical consequences for unintended actions and offers clear feedback to guide users in correcting errors.

6. **Low Physical Effort:** The design should require minimal physical effort to use. It considers the needs of users with varying physical abilities, making interactions comfortable and not overly demanding on strength or dexterity.

7. **Size and Space for Approach and Use:** The design should provide adequate space and reach ranges to accommodate users of different sizes and mobility. It ensures that individuals using mobility aids or who have limited reach can comfortably access and use the design.