

INTRODUCTION

What is the difference between UI which stands for User Interface and UX which stands for User Experience?

user interface (UI) refers to the interactivity, look, and feel of a product screen or web page, while user experience (UX) covers a user's overall experience with the product or website.

Although both elements are crucial to a product and work closely together, their roles are quite different. UX design is a more technical and analytical field, however, UI design refers to graphic design with more complex responsibilities

Example:

If you consider a product like a car, the chassis is the code which gives it a clear structure. The other parts such as doors, fuel filter, etc. represent the UX design which lets the car function properly. On the other hand, UI design represents the appearance of the car, its sensors, etc.





GRAPHIC DESIGN VS UI/UX DESIGN

GRAPHIC DESIGN

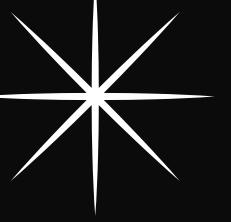
Graphic designing entails creating images and layouts for packaging, business cards, promotional material, and more.

Graphic designers are responsible for the visual design of a product; this includes everything from its color scheme to how it appears in print format. They usually work with clients to brainstorm ideas and then create mock-ups of those ideas using software like Adobe Photoshop or Illustrator. After that, they present their mock-ups as finished products and allow the client to make changes before moving on to production.

UI/UX DESIGN

UI/UX designing is the art of creating an amazing user experience for users when they interact with an application or website through mobiles, PCs, or any other device.

UI/UX designers, on the flip side, work on the user interface and user experience of a product. When a user interacts with a product, they're interacting with the UI/UX design of that product. A good UI/UX designer takes into account the needs and wants of their target audience when designing an application or website.



TOOLS FOR UI/UX DESIGNING

Most Popular Tools are Figma, Adobe XD, Sketch etc..

The main software which we are going to use is called **Sketch**, which is only available for Mac OS, therefore if you do not have a Mac OS device, you may not be able to learn the practical parts.

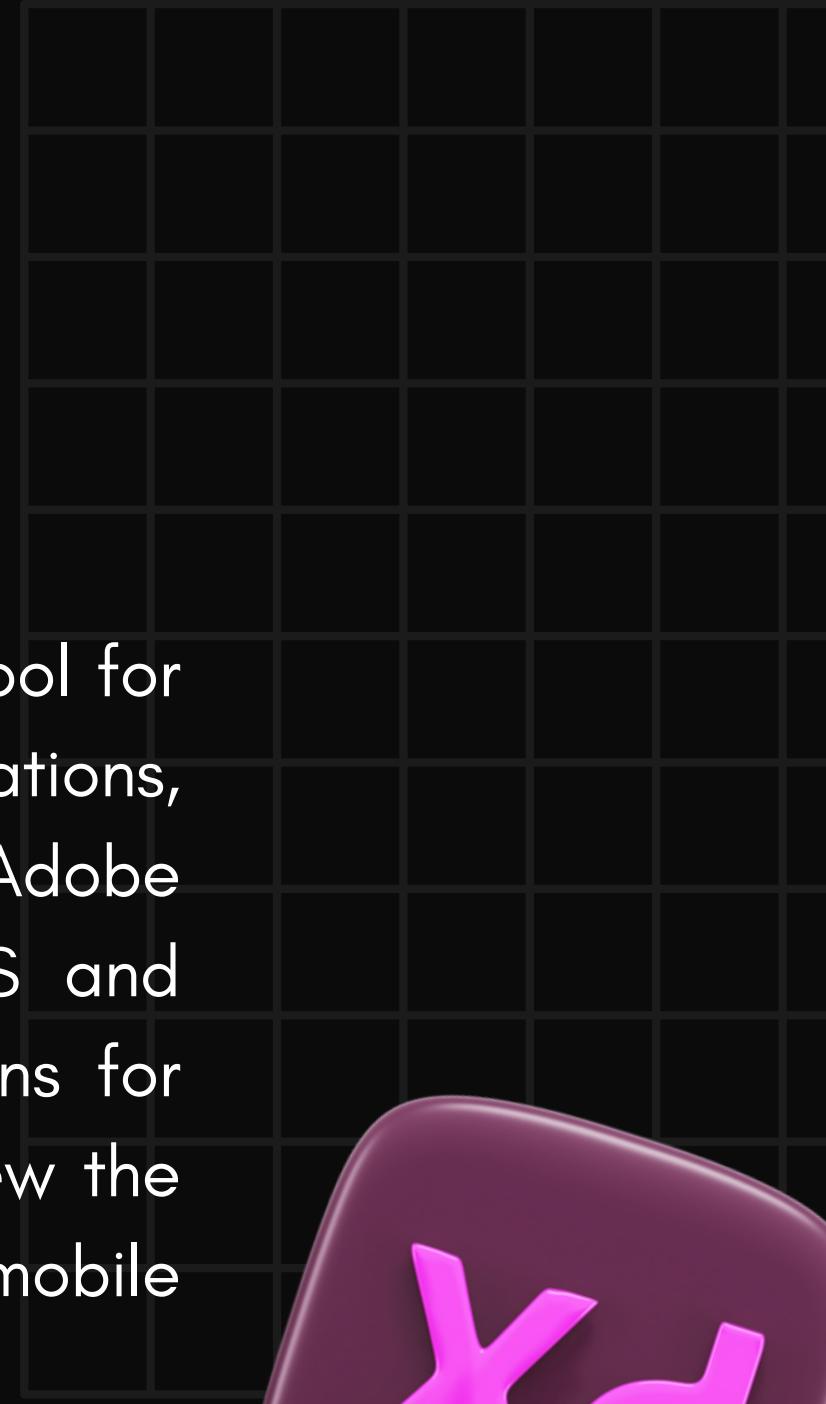
Adobe XD and Figma work in MacOS, Windows, Linux operating systems



FIGMA VS ADOBE XD



Figma is a collaborative web application for interface design, with additional offline features enabled by desktop applications for macOS and Windows.



Adobe XD is a vector design tool for web and mobile applications, developed and published by Adobe Inc. It is available for macOS and Windows, and there are versions for iOS and Android to help preview the result of work directly on mobile devices.



INTRODUCTION OF FIGMA



- Figma is a collaborative web application for interface design, with additional offline features enabled by desktop applications for macOS and Windows.
- Figma can be run entirely from a web browser and, therefore, works not only on Macs but also on PCs running Windows or Linux, and even on Chromebooks.

Introduce Flgma

Visit here

[Figma Link](#)

LAWS OF UX

AESTHETIC-USABILITY EFFECT

Users often perceive aesthetically pleasing design as design that's more usable.

- An aesthetically pleasing design creates a positive response in people's brains and leads them to believe the design actually works better.
- People are more tolerant of minor usability issues when the design of a product or service is aesthetically pleasing.
- Visually pleasing design can mask usability problems and prevent issues from being discovered during usability testing.



DOHERTY THRESHOLD

Productivity soars when a computer and its users interact at a pace (<400ms) that ensures that neither has to wait on the other.

- Provide system feedback within 400 ms in order to keep users' attention and increase productivity.
- Use perceived performance to improve response time and reduce the perception of waiting.
- Animation is one way to visually engage people while loading or processing is happening in the background.
- Progress bars help make wait times tolerable, regardless of their accuracy.
- Purposefully adding a delay to a process can actually increase its perceived value and instill a sense of trust, even when the process itself actually takes much less time.



FITTS'S LAW

The time to acquire a target is a function of the distance to and size of the target.

- Touch targets should be large enough for users to accurately select them.
- Touch targets should have ample spacing between them.
- Touch targets should be placed in areas of an interface that allow them to be easily acquired.



GOAL-GRADIENT EFFECT

The tendency to approach a goal increases with proximity to the goal.

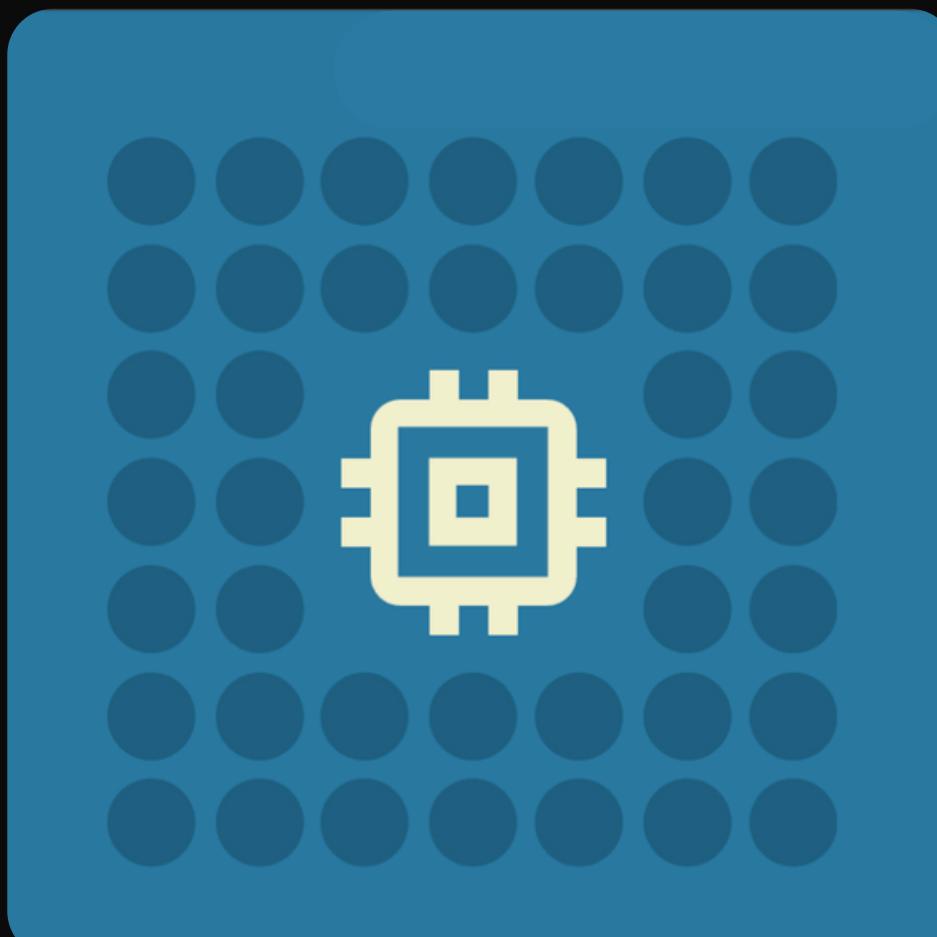
- The closer users are to completing a task, the faster they work towards reaching it.
- Providing artificial progress towards a goal will help to ensure users are more likely to have the motivation to complete that task.
- Provide a clear indication of progress in order to motivate users to complete tasks.



HICK'S LAW

The time it takes to make a decision increases with the number and complexity of choices.

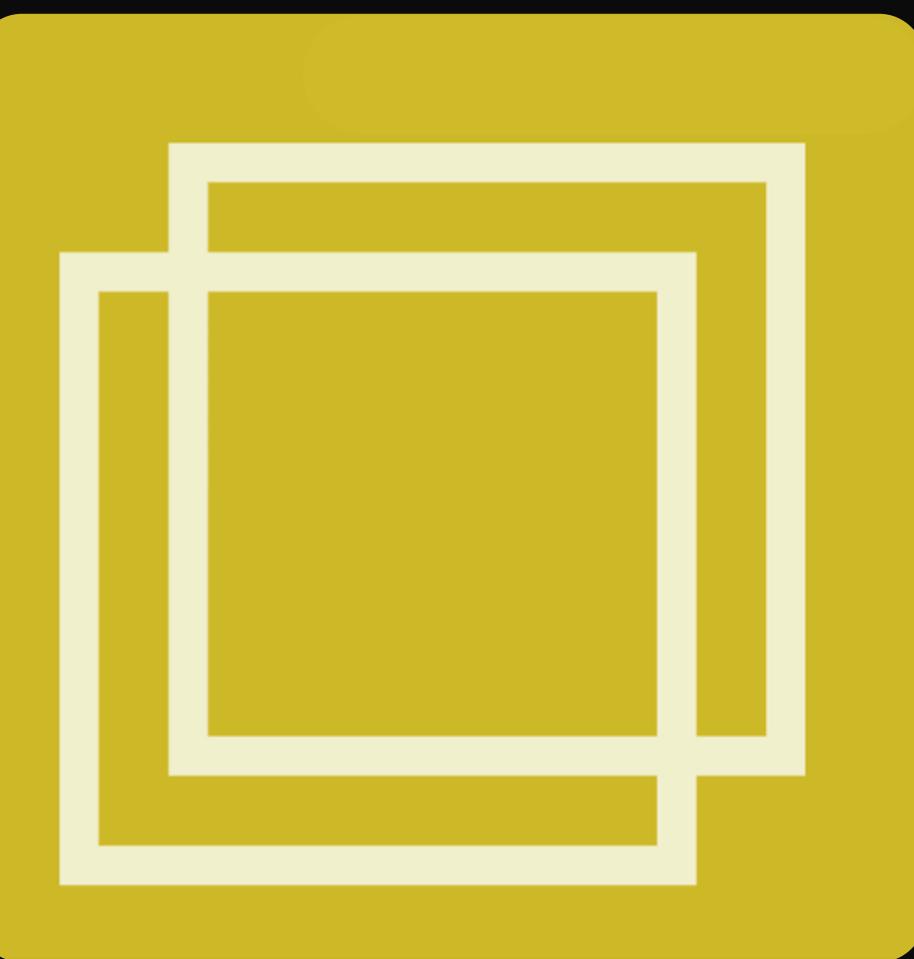
- Minimize choices when response times are critical to decrease decision time.
- Break complex tasks into smaller steps in order to decrease cognitive load.
- Avoid overwhelming users by highlighting recommended options.
- Use progressive onboarding to minimize cognitive load for new users.
- Be careful not to simplify to the point of abstraction.



JAKOB'S LAW

Users spend most of their time on other sites. This means that users prefer your site to work the same way as all the other sites they already know.

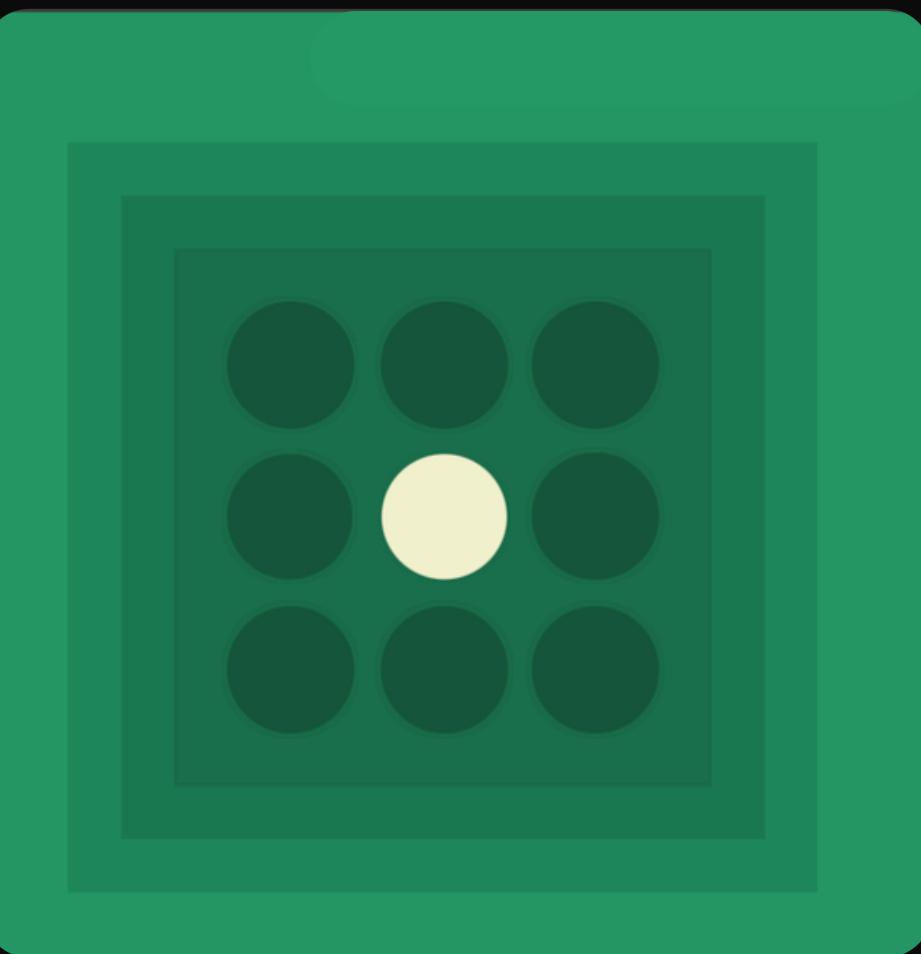
- Users will transfer expectations they have built around one familiar product to another that appears similar.
- By leveraging existing mental models, we can create superior user experiences in which the users can focus on their tasks rather than on learning new models.
- When making changes, minimize discord by empowering users to continue using a familiar version for a limited time.



LAW OF COMMON REGION

Elements tend to be perceived into groups if they are sharing an area with a clearly defined boundary.

- Common region creates a clear structure and helps users quickly and effectively understand the relationship between elements and sections.
- Adding a border around an element or group of elements is an easy way to create common region.
- Common region can also be created by defining a background behind an element or group of elements.



LAW OF PROXIMITY

Objects that are near, or proximate to each other, tend to be grouped together.

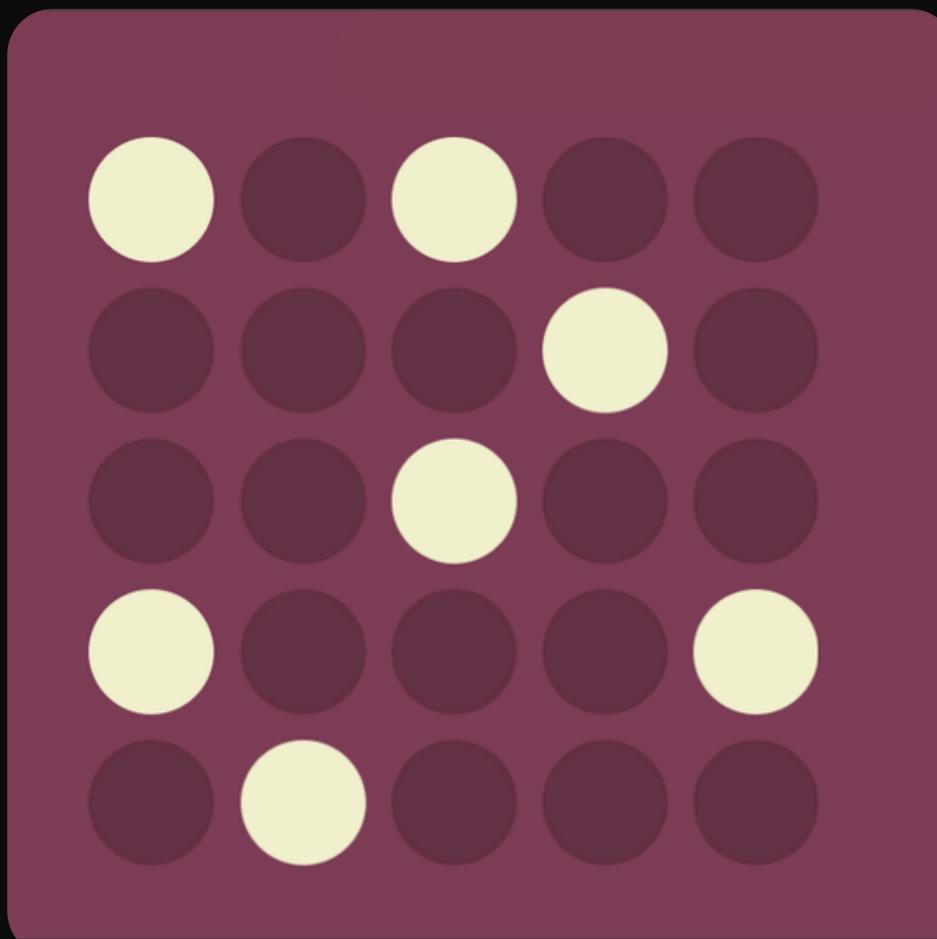
- Proximity helps to establish a relationship with nearby objects.
- Elements in close proximity are perceived to share similar functionality or traits.
- Proximity helps users understand and organize information faster and more efficiently.



LAW OF SIMILARITY

The human eye tends to perceive similar elements in a design as a complete picture, shape, or group, even if those elements are separated.

- Elements that are visually similar will be perceived as related.
- Color, shape, and size, orientation and movement can signal that elements belong to the same group and likely share a common meaning or functionality.
- Ensure that links and navigation systems are visually differentiated from normal text elements.



MILLER'S LAW

The average person can only keep 7 (plus or minus 2) items in their working memory.

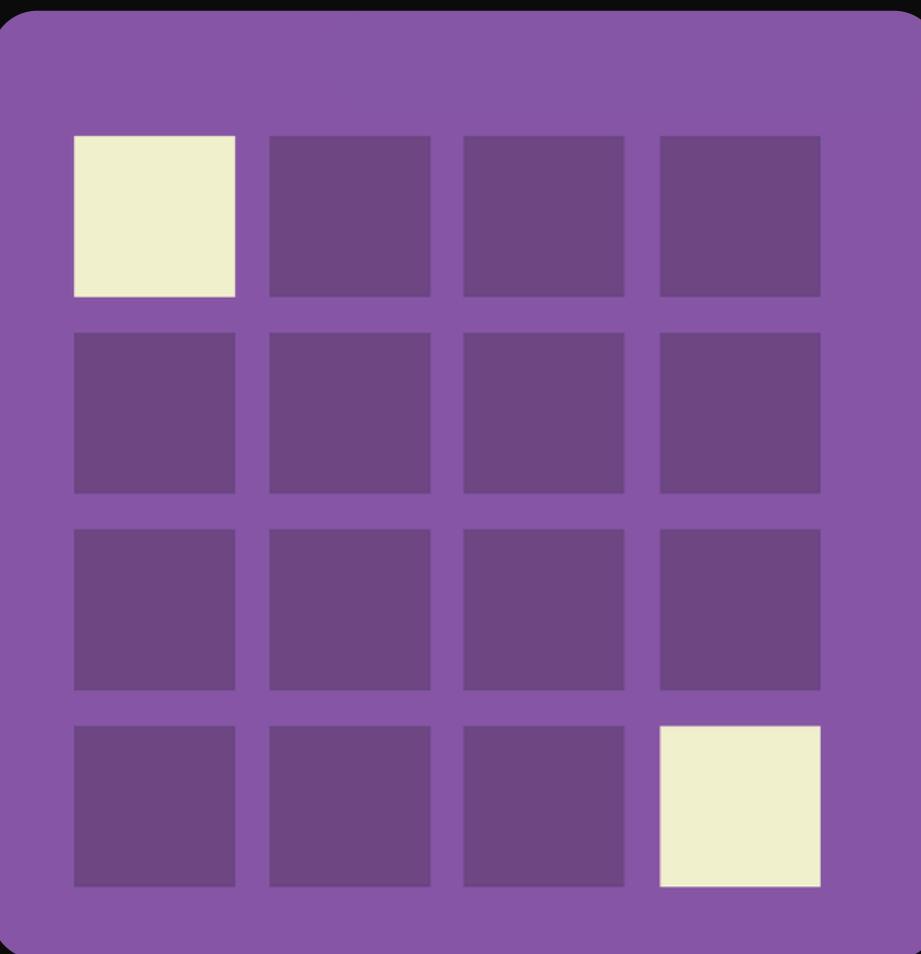
- Don't use the "magical number seven" to justify unnecessary design limitations.
- Organize content into smaller chunks to help users process, understand, and memorize easily.
- Remember that short-term memory capacity will vary per individual, based on their prior knowledge and situational context.



SERIAL POSITION EFFECT

Users have a propensity to best remember the first and last items in a series.

- Placing the least important items in the middle of lists can be helpful because these items tend to be stored less frequently in long-term and working memory.
- Positioning key actions on the far left and right within elements such as navigation can increase memorization.



PARETO PRINCIPLE

The Pareto principle states that, for many events, roughly 80% of the effects come from 20% of the causes.

- Inputs and outputs are often not evenly distributed.
- A large group may contain only a few meaningful contributors to the desired outcome.
- Focus the majority of effort on the areas that will bring the largest benefits to the most users.

