UI/UX & Figma

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Instructor : Dr.Vahidi asl

Ap Project Fall 403

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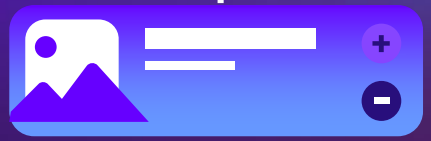


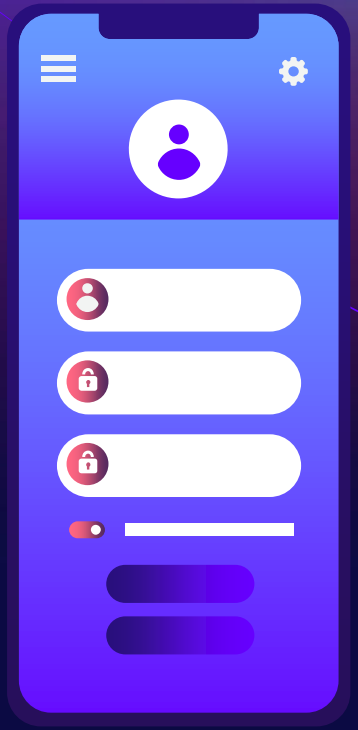
01

Everything you need to know about UI

What is UI ?

"User interface design considers the overall look and feel of digital product experiences you're creating, and applies usability and interaction design principles to all product functions and interactive features," says Hugo Raymond, Designer Advocate at Figma. "This builds an emotional connection with the end user, engaging them with your product."

The user interface is the space where a human interacts with a technology or digital product, often through a screen. UI designers create quick, straightforward ways for humans and machines to communicate, using interactive features like buttons, icons, menus, navigation, and voice-controlled and gesture-based commands. UI designers apply interaction design principles and user psychology to create user-friendly, reliable, logical, and engaging interfaces.



3 common types of UIs :

User interfaces differ, but they all share the same goal: to make user interactions with a product as streamlined and enjoyable as possible. Some of the most familiar types of user interfaces include:

- Graphical user interfaces (GUIs). These image- or icon-based systems are the most common type of user interface, found on many devices. Right now, you're interacting with a GUI on your computer or smartphone screen. Users interact with GUIs through touch or an external apparatus, such as a stylus or a mouse.

- Gesture-based interfaces. As augmented reality (AR) and virtual reality (VR) grow in popularity, gesture-based interfaces become more important than ever. Gesture-based UI translate a user's motions in a 3D space into commands.

- Voice-controlled interfaces (VUIs). These relative newcomers rely on the user's voice to navigate menus and actions. Smart assistants like Siri, Alexa, and Cortana are well-known examples of VUIs.

Key elements of UI

There’s more to UI design than meets the eye. Every user interface has the same general coded components, though they may not always be visible onscreen. These UI elements include:

Input controls allow the user to communicate with the product by entering information. Input controls can be as simple as a button or checkbox. Some are more complicated, including dropdown menus, toggles, and text fields.

Informational components allow the product to provide information to the user. Icons, notifications, progress bars, and tooltips are all familiar examples of informational components.

Navigational components help the user find their way through the product. Wayfinding elements like sliders, search fields, tags, and breadcrumbs all facilitate user engagement for a seamless experience.

Containers keep the user interface organized, grouping similar elements. Containers also set a maximum width for content to be displayed, depending on the user's screen size. Headers, tabs, and accordion menus are just some of the containers you’ll see.

10 Principles in UI Design

Simplicity

minimize complexity and cognitive load for users. By keeping interfaces clean, uncluttered, and easy to understand, designers create intuitive experiences that allow users to focus on their tasks.

Consistency

Consistency ensures that elements and interactions across different screens and sections of a digital product are cohesive and predictable. It provides users with a sense of familiarity, making it easier for them to navigate and understand the interface.

Visual Hierarchy

Visual hierarchy refers to the arrangement of elements on a screen to prioritize their importance and guide users' attention. It helps users understand the structure and organization of information, making it easier for them to navigate and find what they need.

Feedback and Responsiveness

Providing timely feedback and responsive interactions is crucial in UI design. Users should receive immediate visual or auditory cues when they interact with elements, ensuring they understand the outcome of their actions and feel in control of the interface.

Accessibility

Accessibility is an essential principle in UI design, ensuring that digital products are inclusive and usable by individuals with disabilities. Designers must consider factors such as color contrast, font size, keyboard navigation, and screen reader compatibility.

Clarity

Clarity focuses on presenting information and content in a clear and easily understandable manner. It involves using concise and straightforward language, organizing content logically, and utilizing appropriate typography and visual cues to enhance readability.

User Control

User control emphasizes giving users the ability to navigate, interact, and customize the interface according to their preferences. It empowers users and enhances their sense of ownership and engagement with the digital product.

Error Prevention and Recovery

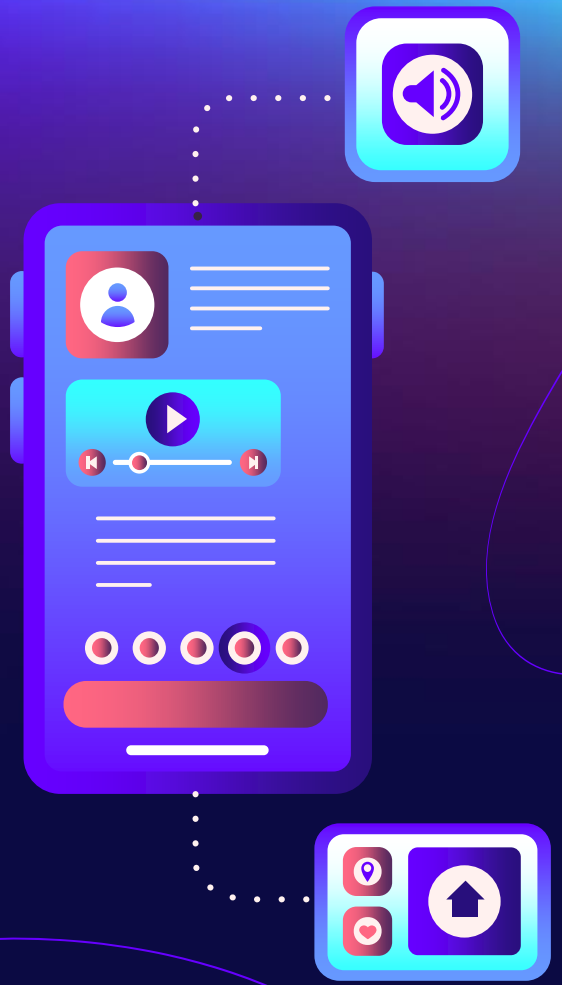
Error prevention and recovery focus on designing interfaces that minimize user errors and provide clear guidance and solutions when errors occur. It involves using validation, informative error messages, and intuitive error handling mechanisms to assist users in resolving issues.

Aesthetics and Visual Appeal

Aesthetics and visual appeal contribute to the overall user experience by creating an interface that is visually appealing, engaging, and aligned with the brand's identity. It involves the careful selection of colors, typography, imagery, and visual elements to evoke desired emotions and create a positive impression.

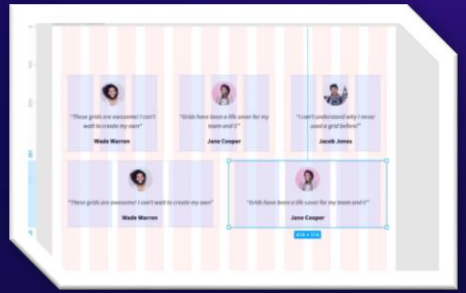
Scalability and Adaptability

Scalability and adaptability involve designing interfaces that can seamlessly adapt to different screen sizes, resolutions, and orientations. With the rise of mobile devices and responsive design, it is essential to create interfaces that provide consistent experiences across various devices.



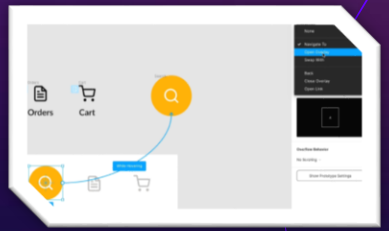
Some important design fundamentals:

Grids

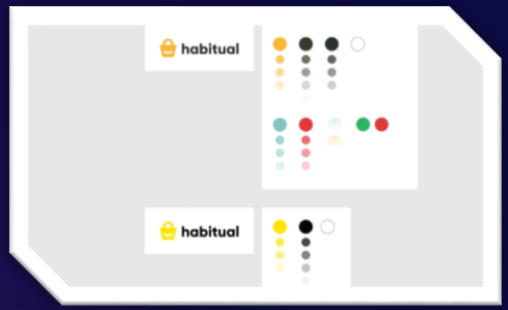


Layouts

Motion and microinteractions

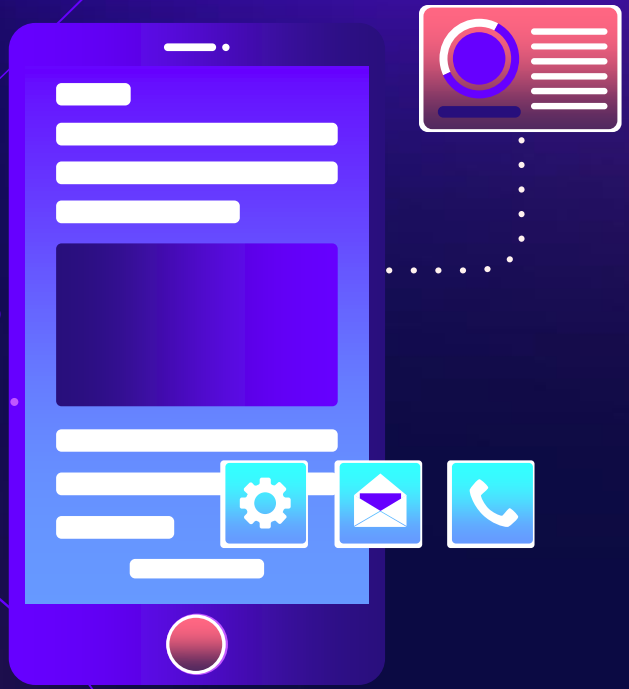


Color



Typography

Accessibility



02

About UX

What is UX ?

- If you've ever felt embarrassed because you pushed on a door when you're supposed to pull it, you know what it's like to have a poor user experience (UX) due to an object that is badly designed.
- User experience (UX) is any interaction a user has with a product. The goal of UX is to meet the user's needs and create easy, relevant, efficient experiences.
- While there is no single definition, the term "UX" is often associated with websites, apps, hardware, and other technology.
- Many digital companies have made positive UX a priority because they know smooth, effortless experiences on websites and apps create happier visitors and customers who are more likely to stick around and return for future visits.
- Positive UX increases the amount of time users spend on a site or app, how much they trust the company, and whether or not they buy. When they have an easy, fun experience on a site or app, that means more users and higher revenue for the company.

What's the Difference Between UX and UI Design?

In the most basic terms, UX is about the user's journey through the product, and what they take away from the entire experience. On the other hand, UI is all of the aesthetic elements that enable someone to interact with a product.

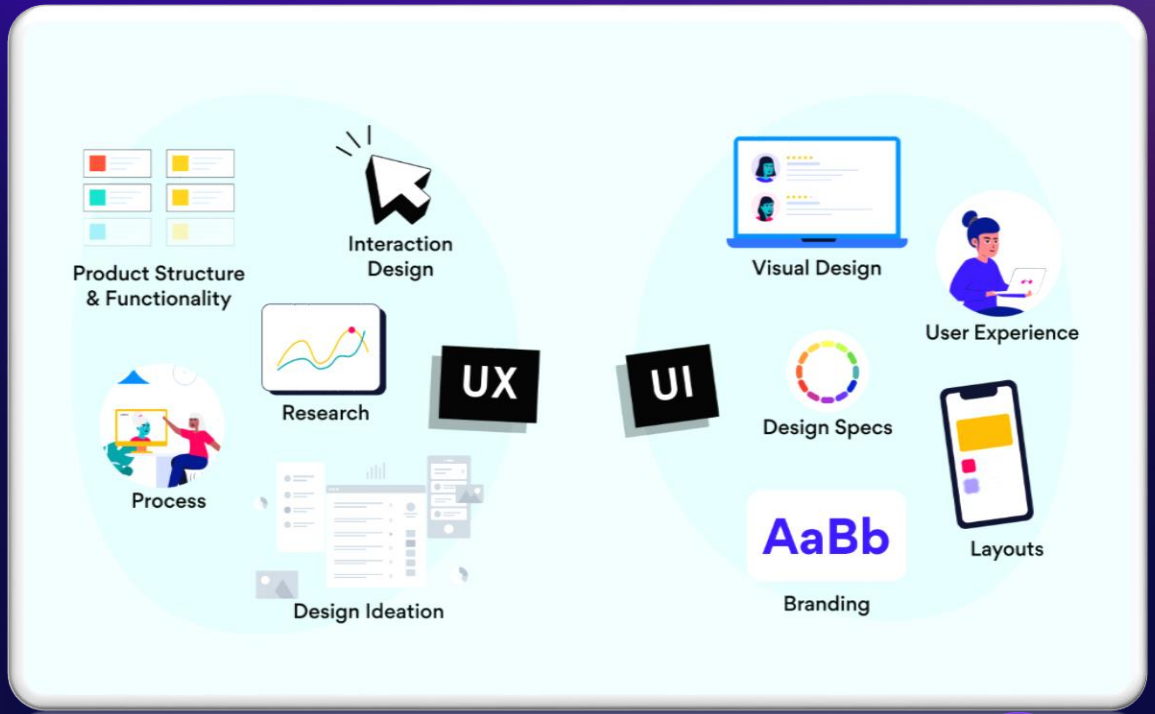
UX and UI designers work together to create the best possible user experience. The digital design process consists of two main steps:

1. Define the user's problem
2. Find the ways to solve that problem

The first part is the responsibility of the UX designer. By researching and analyzing quantitative and qualitative research, then using that data to create wireframes, the UX designer understands the user's needs and maps out the best way to steer someone toward achieving their goals.

The UI designer is responsible for the second step. UI design paves the way to solving the problem with visual elements that guide the user through their journey to reach their desired outcome.

UI vs UX


Product Structure & Functionality
Interaction Design
Research
UX
Process
Design Ideation
UI
Visual Design
User Experience
Design Specs
AaBb
Branding
Layouts

There is always more to know…

If you are interested in knowing more about UI/UX, design fundamentals, etc.
here are some links you can visit:

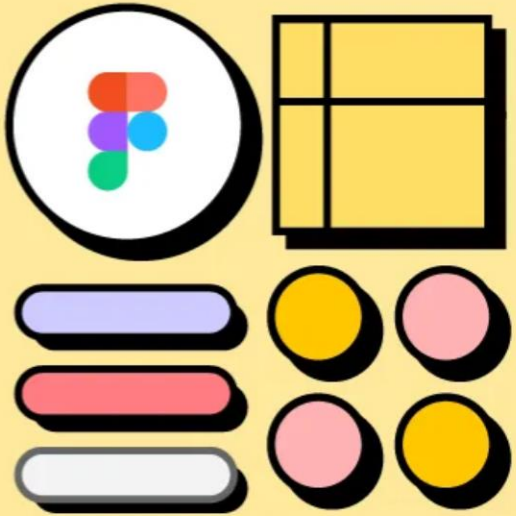
UI/UX Design Cheat Sheet + PDF

https://baymard.com/learn/ui-vs-ux

UI UX in depth

Or you can always search for UI/UX yourself ☺

03
Figma

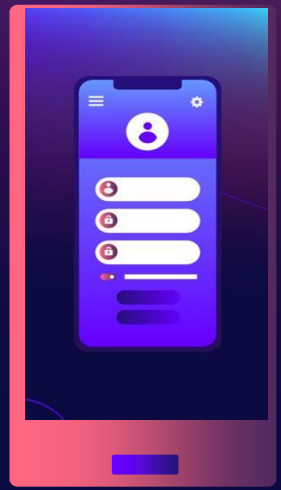


Why do we even need Figma?

To answer this question, first we need to know about wire framing.

Wireframing is a process where designers draw overviews of interactive products to establish the structure and flow of possible design solutions. These outlines reflect user and business needs. Paper or software-rendered wireframes help teams and stakeholders ideate toward optimal, user-focused prototypes and products.

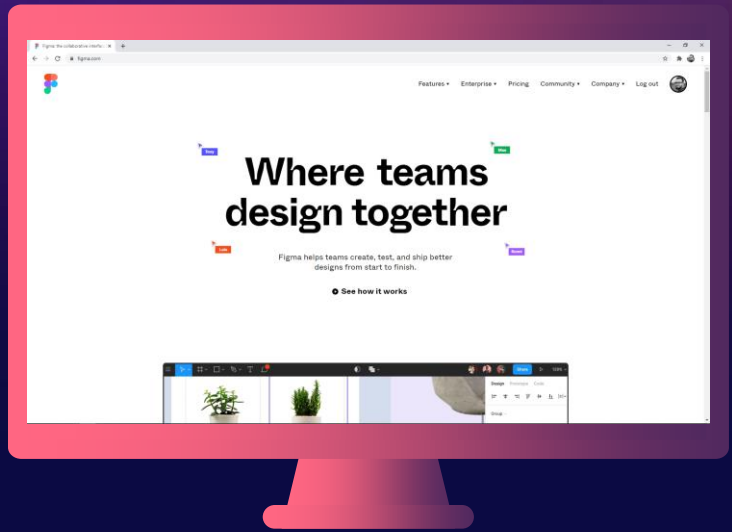
Therefore, it is necessary for designers to wireframe and see the overall picture of their product before they get to coding, and Figma helps us to do exactly that.



What is Figma?

- Figma is called **the collaborative interface design tool**. And it stands out for its collaboration feature. It gives users the ability to share a design file with multiple team members and get instant feedback from each other via comments. These days most of the other design tools have also implemented the **collaboration** feature but Figma is the one that first brought this to the table.

- Figma also provides a lot of useful resources, plugins, and techniques that make your workflow smoother.

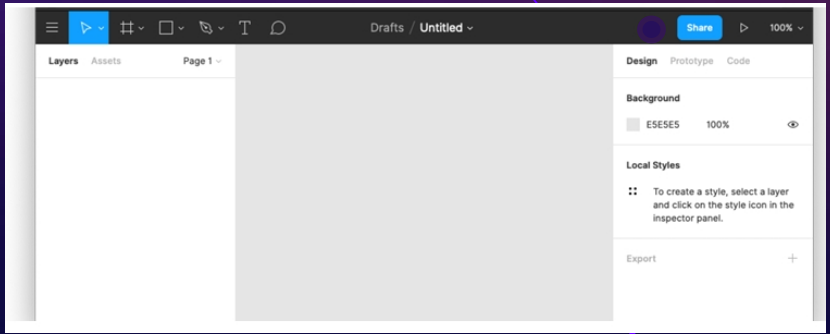


Get started

1. Go to https://www.figma.com/ and create an account

2. Create a new project using the + icon in the upper left corner and create a new project

3. The new project screen will appear, like so:



There are 4 parts to the Figma UI:

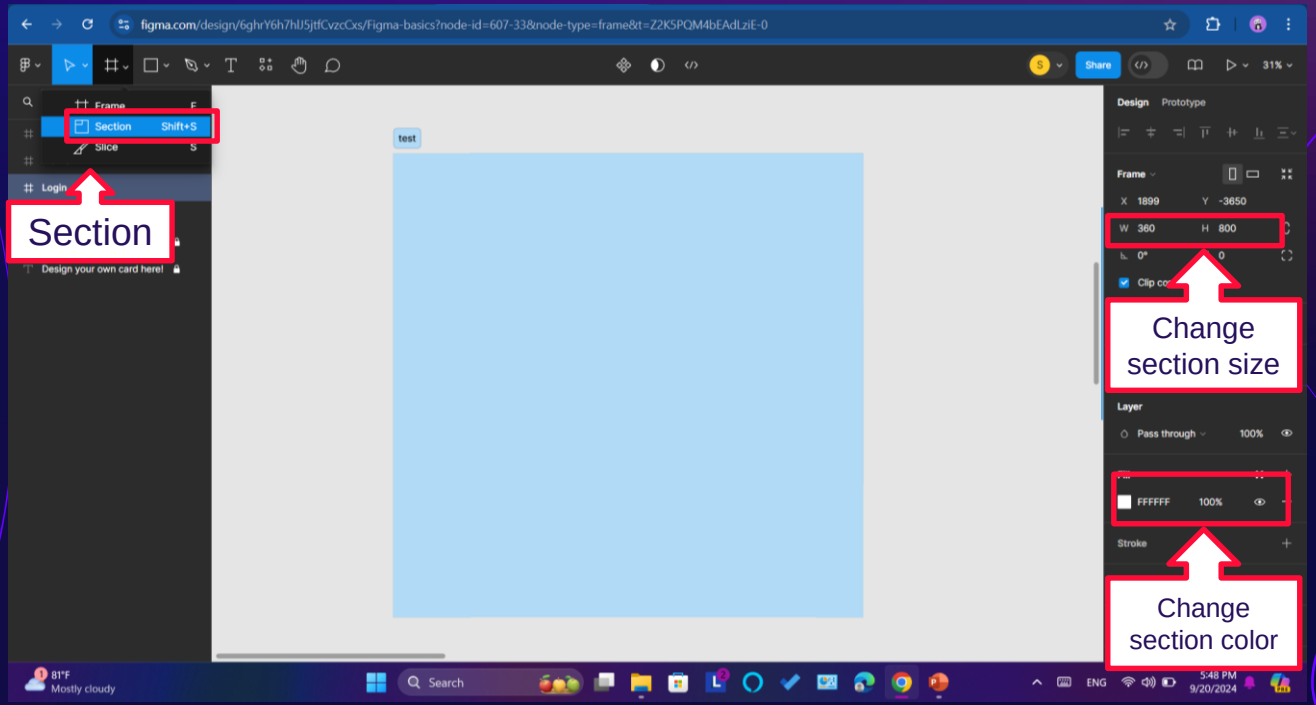
1. the toolbar (top), containing different design manipulation tools
2. the layer list (left)
3. the inspector (right)
4. the canvas (middle). Notice that the inspector has 3 tabs: design, prototype, and code.

We'll spend most of our time in the design tab.

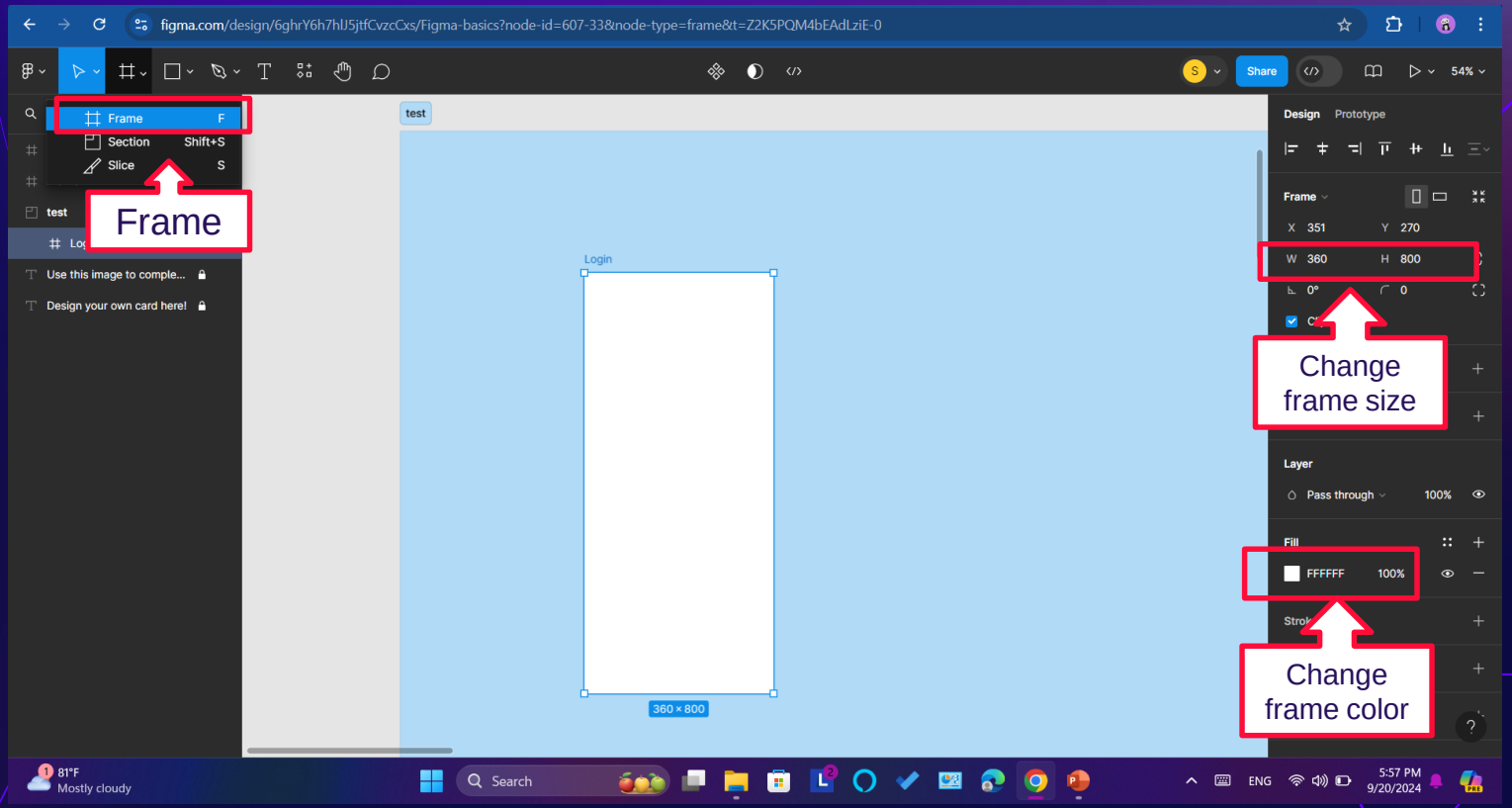
Login Page

In this document, we will design a sample login page as an example for you to understand Figma better ☺

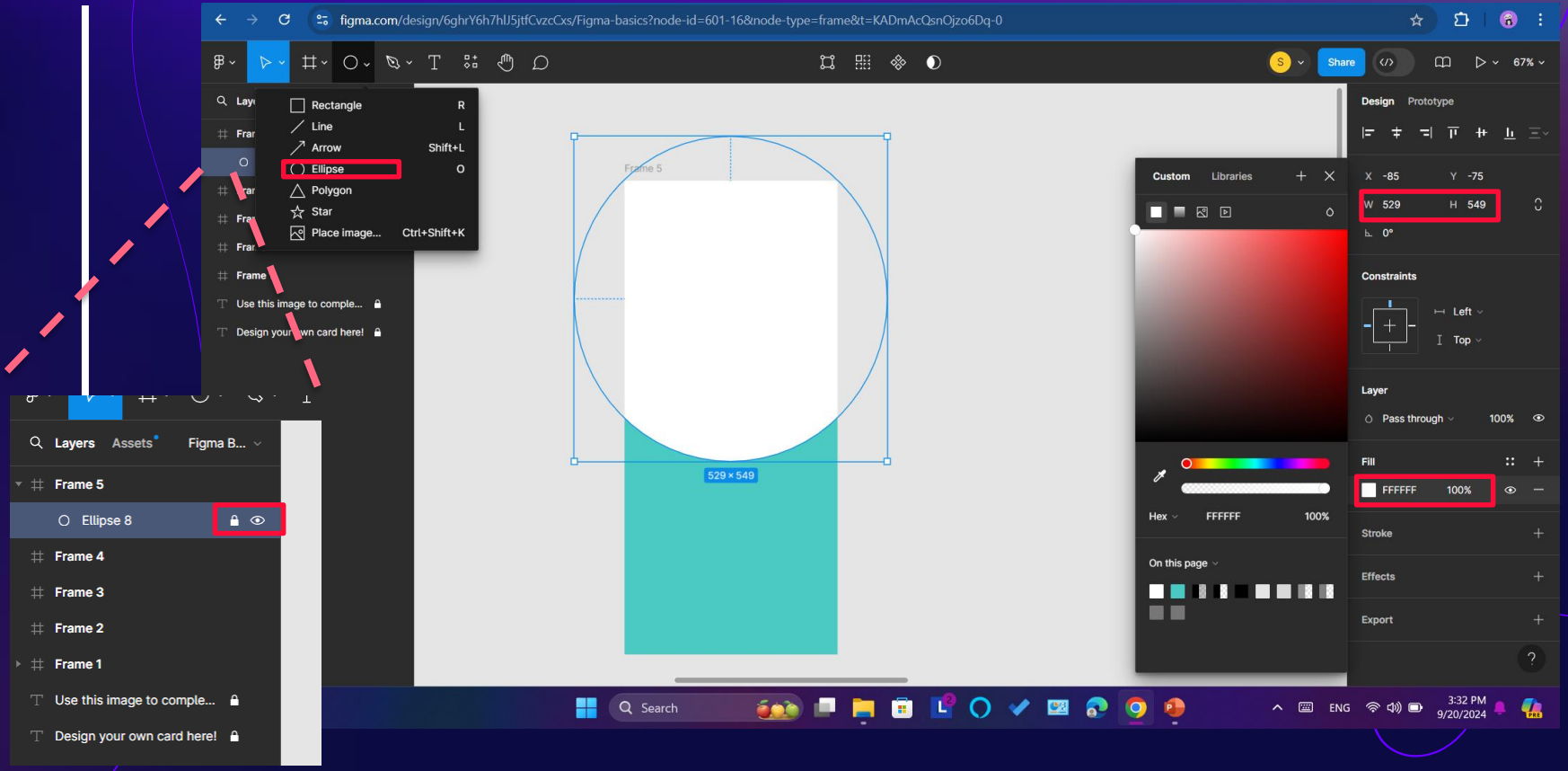
First, you need to define a section for your design. The reason for using section is that we can connect the elements in it.
For example, here we define a section for all application pages. Separate sections can be defined for each page.



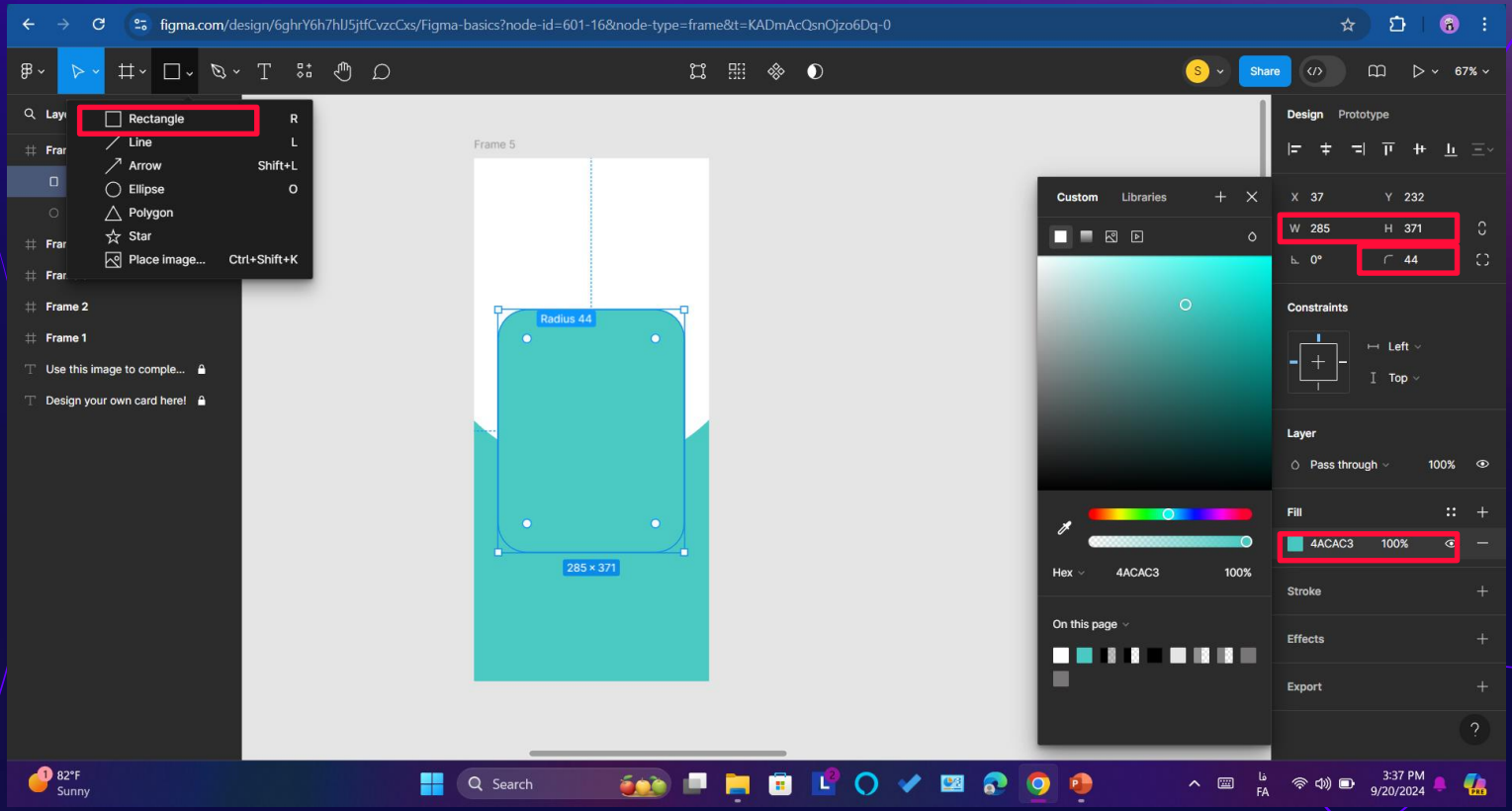
Then, you need to create the frame of your desired application page with the Framing tool .



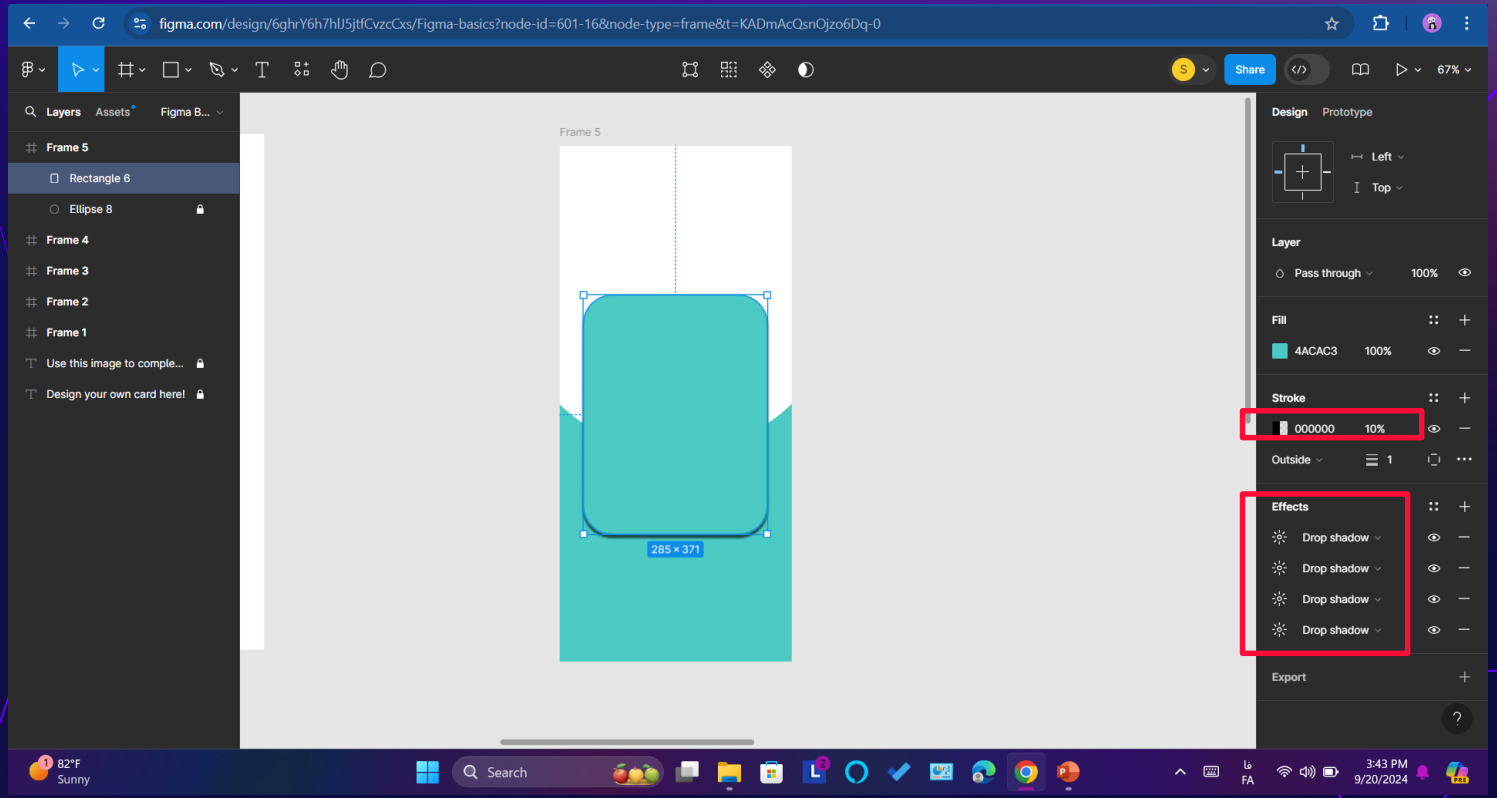
Just to add a creative touch to our background, we use a white circle as shown below. Then we lock it so that it does not move in other changes.



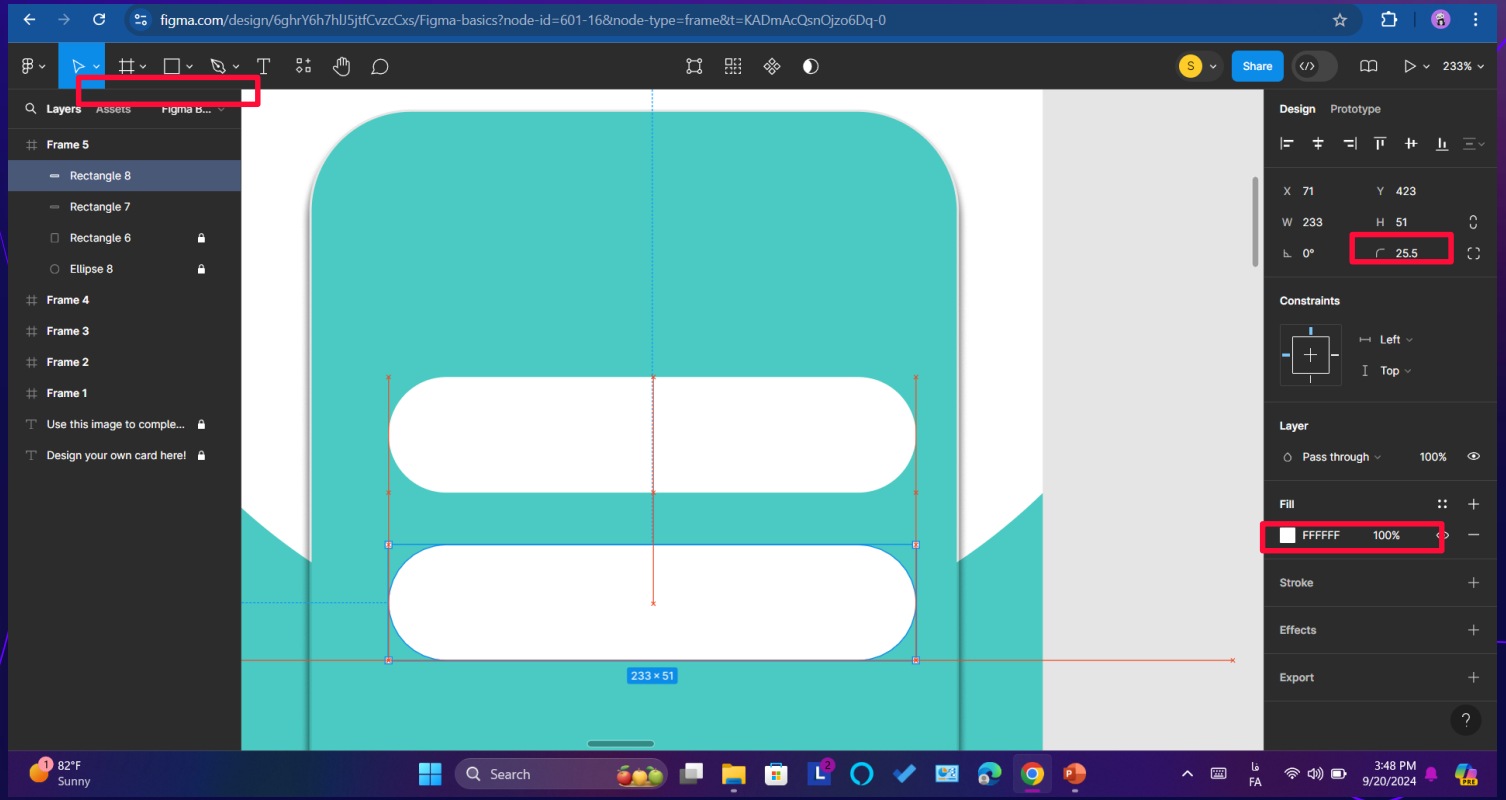
Then we take a rectangle and set its color as the background. The value of its radius is 44



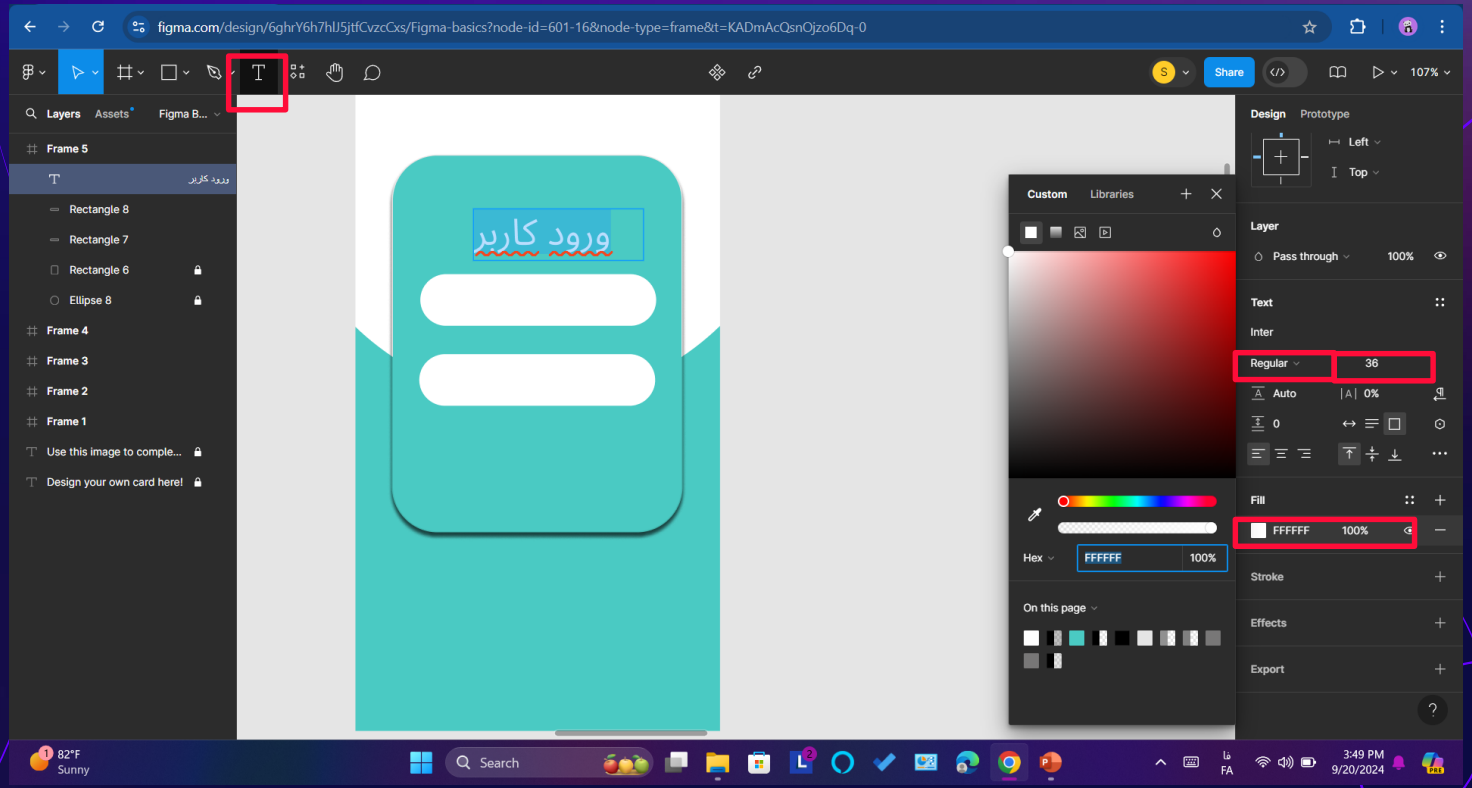
Then, in order for the added rectangle to be distinguishable from the background, we give it an effect. We use drop shadow for this and add 4 of it.
Then we lock this too. You can try other effects as you wish.



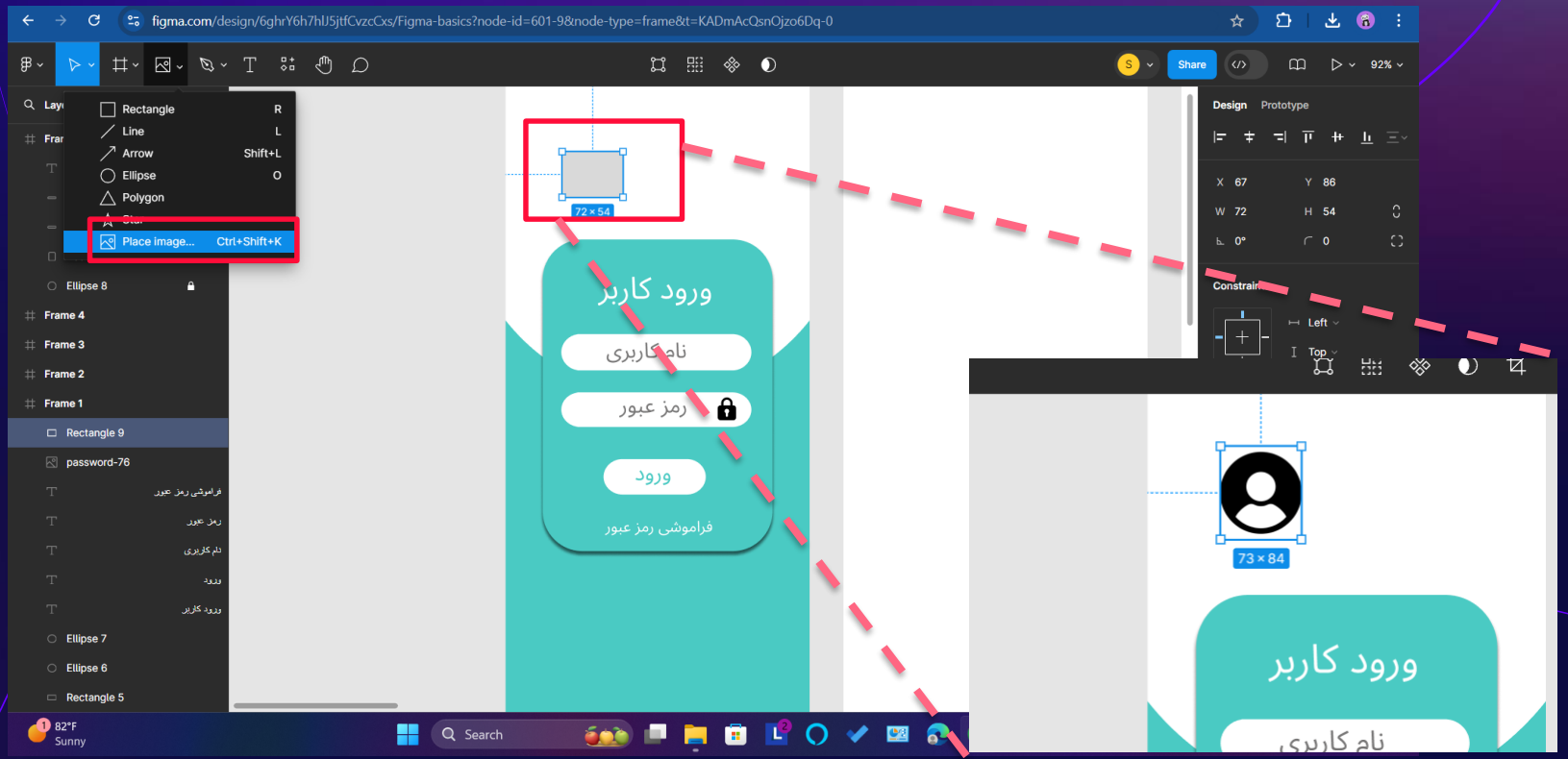
To create username and password fields, we use withe rectangles with rounded corners.



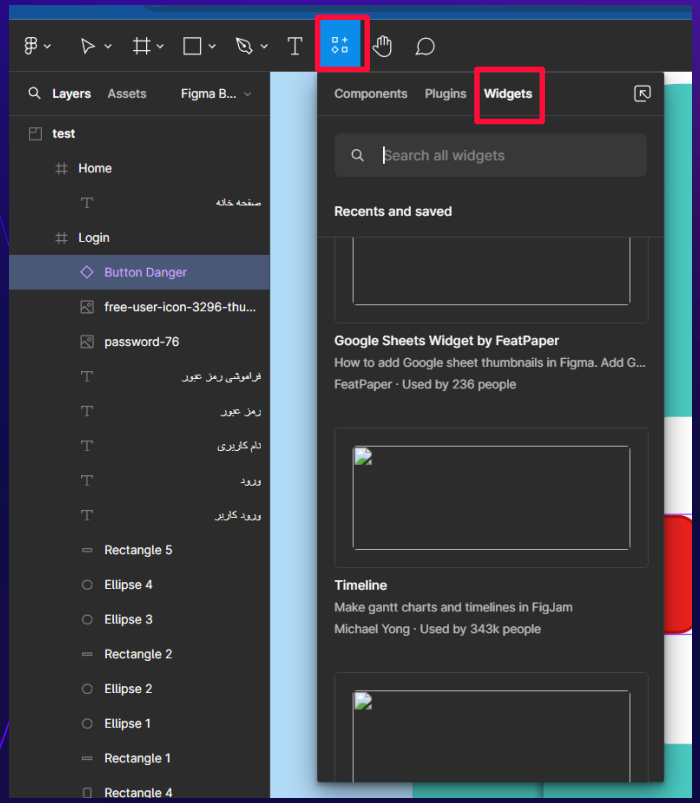
To add text, just use the Text tool. Then we change the font, color and font size as shown in the image below.
We add the text of the password and username fields in the same way.

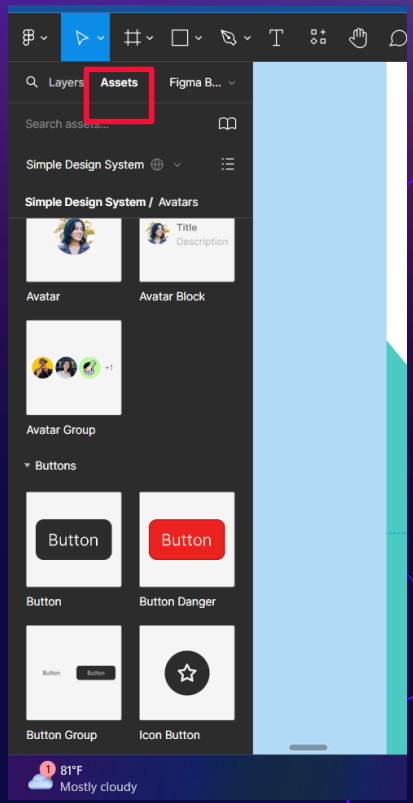


To add a desired photo or icon, you can first select a basic shape with the shape tool to place the image inside. Then select place image from the Shape language and enter the desired photo.

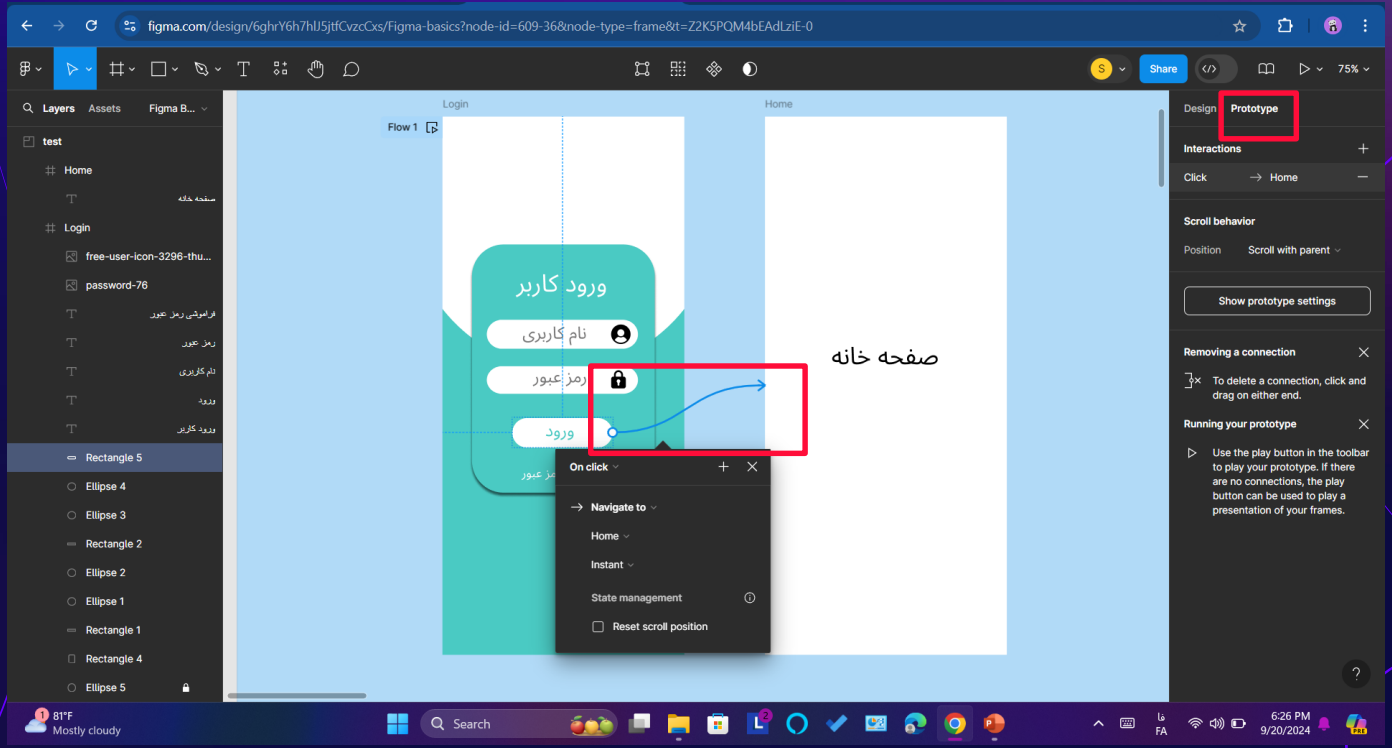


You can also use assets , plugins and widgets to add functionality to your design

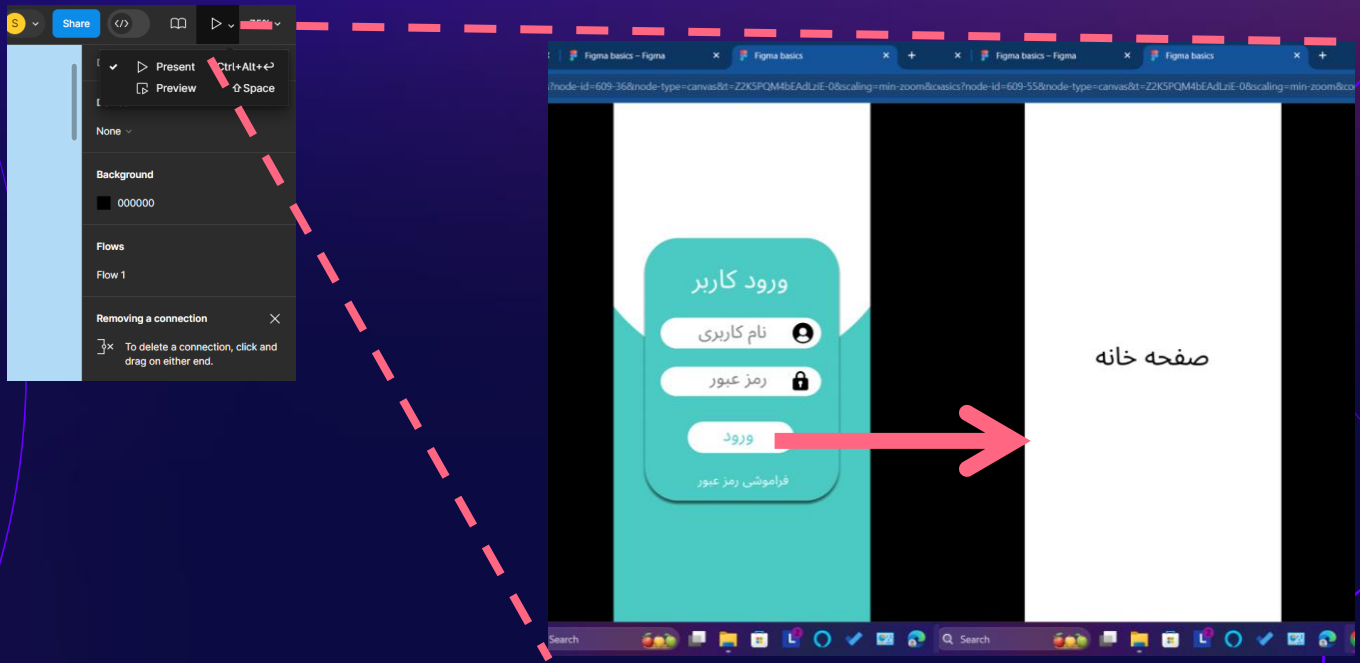




To navigate between pages and even create links between different objects, you can link pages and objects to each other from the prototype section. To do this, you can just select the corner of the desired object and link it to the destination



Finally, by clicking on the presentation, we can see the output of the design with all the actions



This was a very basic example just to show you how figma works.

- For better and more advanced training, here is a very useful handbook you should definitely visit:

https://designcode.io/figma-handbook

- There are also tons of videos and crash courses on YouTube that will help you a lot, if you are interested in Figma. Here are some suggestions for you:

youtu.be youtu.be youtu.be

- View the designed page in this Link

THE END!

I hope this document has been useful for you ☺