



# Wireframes and Storyboarding

by Sophia



## WHAT'S COVERED

In this lesson, you will learn about two design tools used in the planning phase of a website: wireframes and storyboards. Wireframes are a simple and effective method of designing a webpage's layout and content structure. Storyboarding is a process wherein designers plan the user's journey through a website while using the site.

Specifically, this lesson will cover the following:

- [\*\*1. Website Design\*\*](#)
- [\*\*2. Designing With Wireframes\*\*](#)
  - [\*\*2a. Figma.com Wireframe Basics\*\*](#)
  - [\*\*2b. Real-World Wireframe Example\*\*](#)
- [\*\*3. Planning With Storyboards\*\*](#)
  - [\*\*3a. Real-World Storyboard Example\*\*](#)

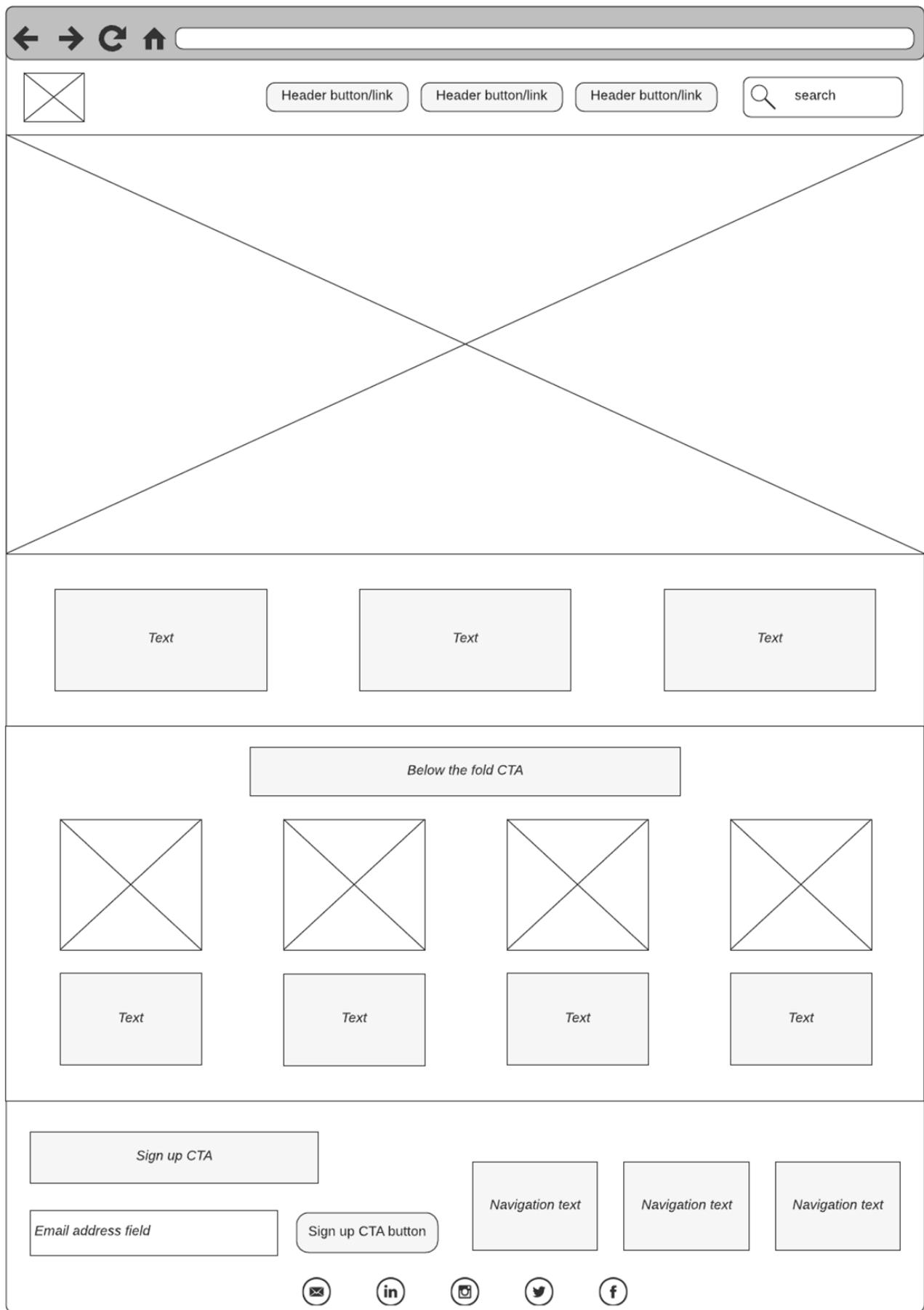
## 1. Website Design

Web development involves numerous factors that complicate the seemingly straightforward task of displaying content to end users. It includes the visual aspects of the page along with considerations of software engineering, human-computer interaction, quality assurance and testing, project management, modeling, and system analysis and design. Studying website design principles will improve your ability to work efficiently on projects and write more effective code that meets client needs.

Websites are becoming more sophisticated, adding further complexity to our projects as we strive to meet real-time data demands, address security vulnerabilities, and provide ongoing support and maintenance typical of robust software applications. In response to these advancements in complexity and capability, web developers have adopted many of the same processes used in software development. Let's explore some of these processes, beginning with wireframes and storyboards.

## 2. Designing With Wireframes

A **wireframe** is a quick and easy-to-create design aid that serves as a visual tool for planning the layout of pages within a website. A wireframe may include things like the location and size of elements such as a login button and where banners and content sections will sit, and it provides an overall idea of how a site will operate. When wireframing a website, the idea is to create a model of one or more designs that portray how the interface might appear to the user. Wireframes are effective since they can be created without content (images, written text, working **hyperlinks**, etc) and allow the developer to focus on the site's functions and the strategic positioning of important content.



Wireframes only include boxes, lines, and simple titles as placeholders for sections and elements that should be included on the page. For example, the boxes with an X through them represent placeholders for images. Depending on the complexity and detail needed, wireframes may also include annotations and notes to explain the reasoning or functionality of an element. Colors, images, and written content (often referred to as **copy**) can be developed separately from the wireframe layout. This allows changes and revisions to be made to the layout and positioning and helps ensure that all critical elements are included and positioned appropriately, all before any code or content is written.



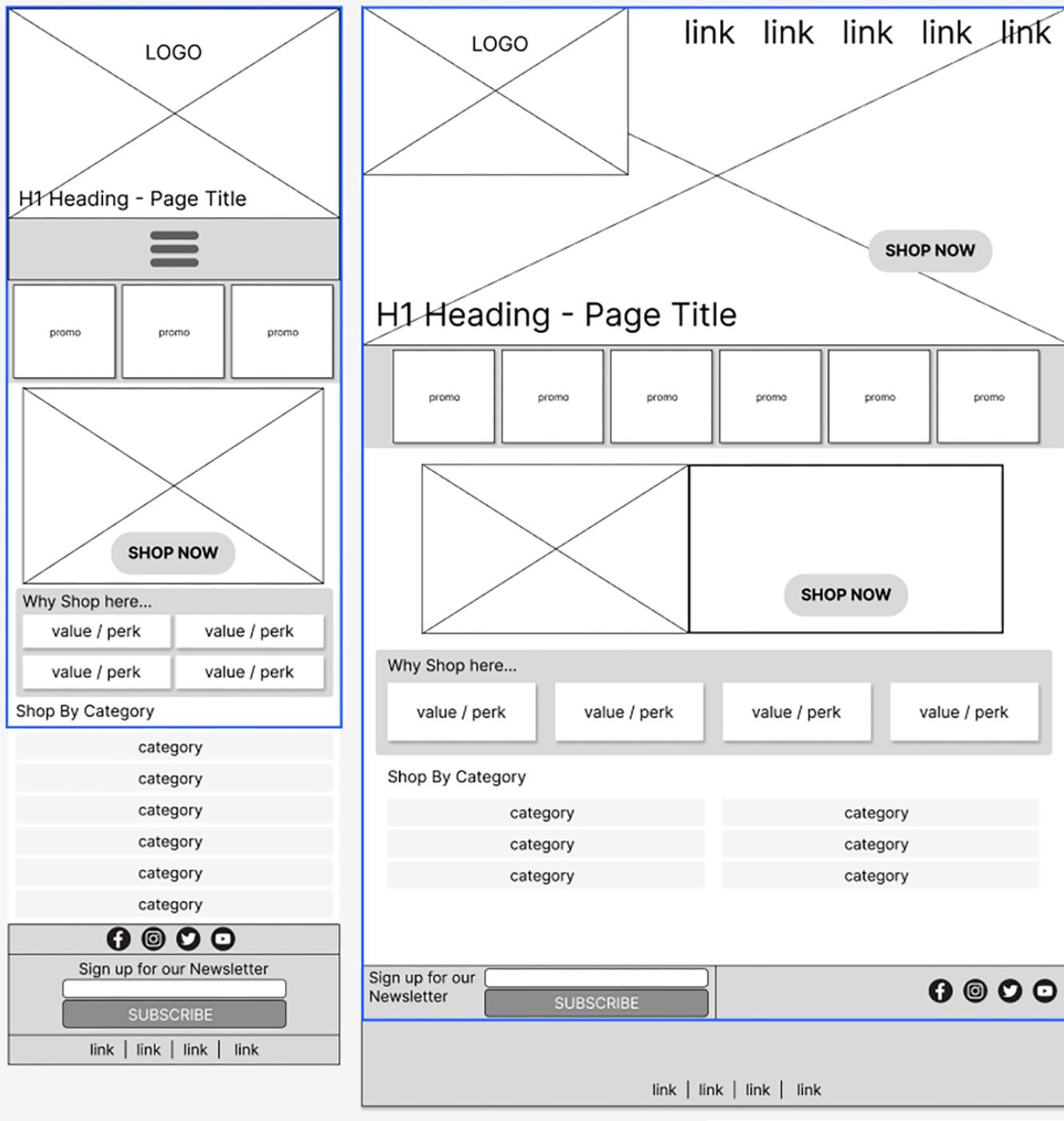
#### HINT

You will learn more about the specific elements of a wireframe later in this Challenge.

Wireframes are also very helpful when designing for mobile devices as well. When a website is designed for a computer screen, the content has more horizontal screenspace and is distributed to take advantage of that space. However, when the site is viewed on a mobile device, the screen is often much narrower and the elements' positions have to be adjusted. The repositioning of the content is handled by the site's code in real time, but planning for how the content will be repositioned requires careful thought. Wireframes are an ideal tool for planning out content arrangement when viewing the content from screens of different sizes.

# Mobile

# Desktop



There are a variety of methods that can be used to create wireframes, including using pencil and paper or using shapes and lines in Microsoft PowerPoint and Word. However, there are several diagramming applications available for creating wireframe design documents.

## ↗ EXAMPLE

Figma.com is a cloud-based web application for creating and collaborating on wireframes and other design documents. A free account with Figma includes the ability to create one project that contains three files; each

file can contain three pages, which is often enough for beginners.

## TERMS TO KNOW

### Hyperlink

A webpage element that, when clicked, triggers the browser to request and navigate to another page from the web server.

### Wireframe

A simple, low-detail, rapid visual method that is used to design the layout of an application or website's interface.

### Copy

A term used in publishing, marketing, and other related fields that refer to written text or written materials.

## 2a. Figma.com Wireframe Basics

To get started, you will create a new project that will house all of the design documents and assets related to a single website design project. Figma also gives you the ability to add other users to the project to enable access and edit privileges for collaboration on the project.

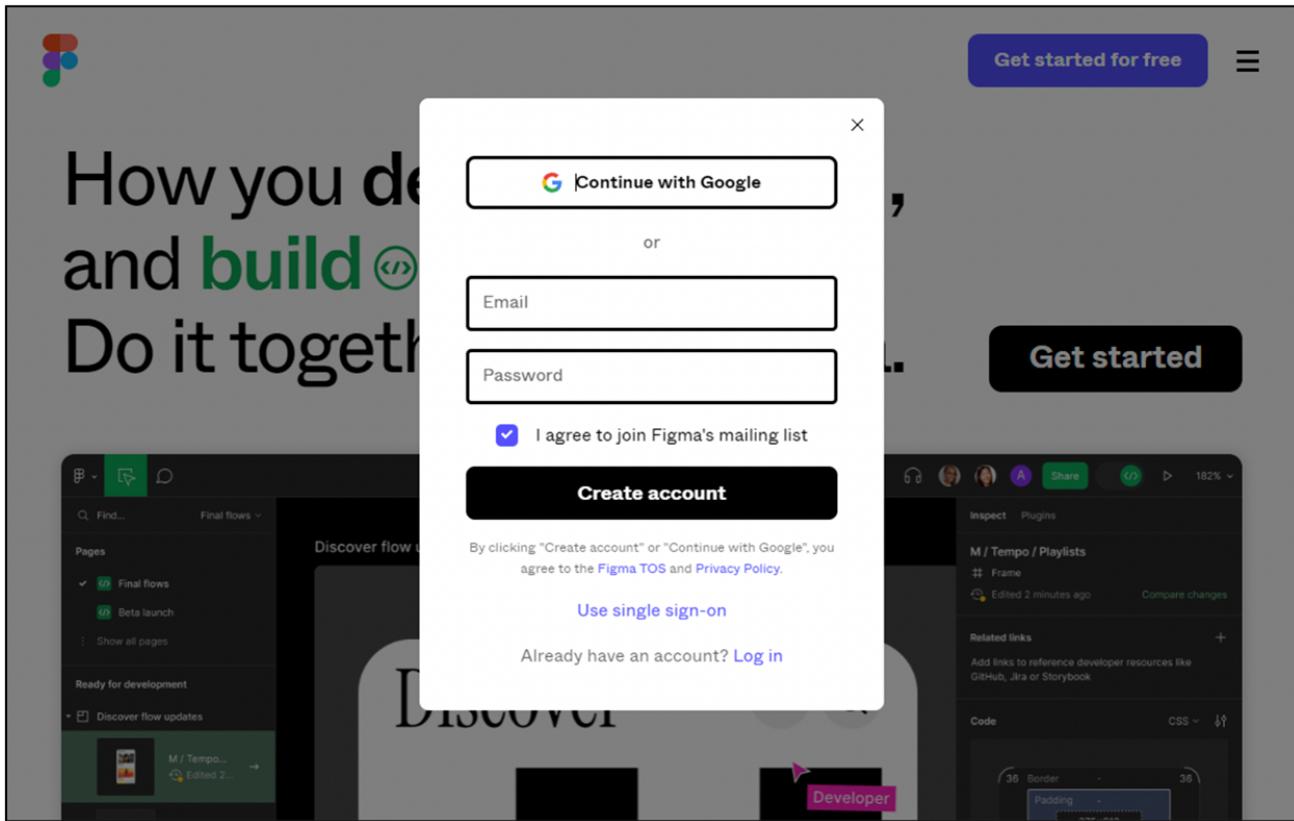


## STEP BY STEP

1. Visit [www.figma.com](https://www.figma.com) and click on any of the “Get started” buttons.

The screenshot shows the Figma homepage. At the top right, there is a blue "Get started for free" button and a menu icon. The main headline reads "How you design, align, and build matters. Do it together with Figma." Below the headline is a large "Get started" button. At the bottom, there is a wireframe of a design interface titled "Design updates". The wireframe includes sections for "Discover", "Filters (4)", "Genre (1)", and "Tempo / Weekly status". There are various annotations and callouts in purple, pink, and yellow, such as "Does this pairing meet adjy?", "ALIGN FILTER ORDER TO DATA", "SHARE WITH COPYWRITER?", and "Let's run a test on this new format".

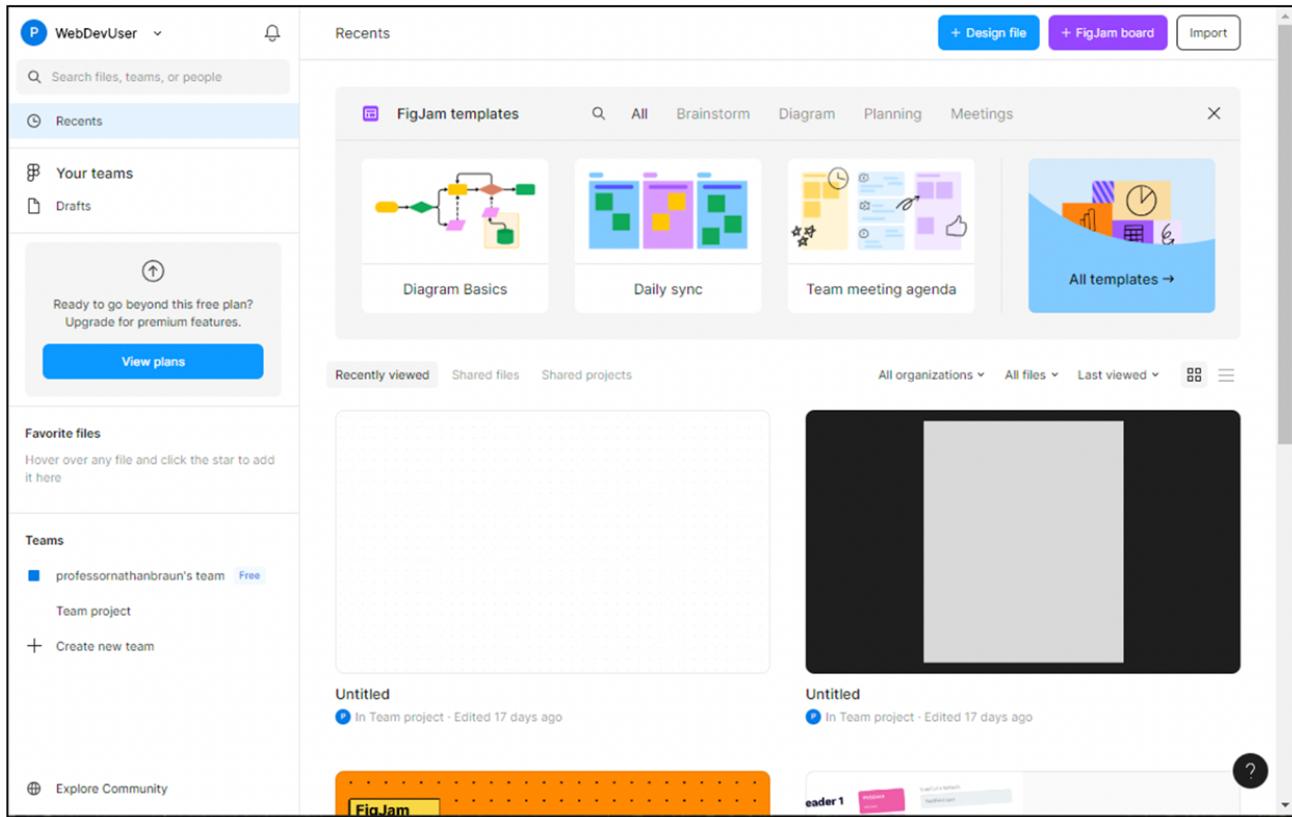
2. Either select “Continue with Google” to use the Gmail account you are currently signed into, or create a new account by providing your email and a new password and then click the “Create account” button. Tip: You may be prompted to answer additional questions based on your personal preferences. Your answers at this stage will not impact your ability to complete the assignment.



3. Once you are logged in, you will be taken to your dashboard and presented with a popup discussing some of the latest features. You can review them and then click the “X” to continue.

4. You should now be at the dashboard where you can see and access recently edited files, create new documents, and manage your team and projects. You will locate your account settings and information by

clicking on your username in the top left corner of the dashboard.



Now that you know more about wireframes, it's time to create your Figma account.



TRY IT

#### Directions:

1. Visit [www.figma.com](https://www.figma.com) and create a free account.
2. Create a browser bookmark to the figma.com website to add it to your Web Development Toolkit.



REFLECT

You will use your new Figma account to complete your Touchstone assignment.

When you start a new project, you will need to give it an appropriate name and add the contributing members. Next, Figma offers a choice of documents. There are two types of documents: a design document and a FigJam whiteboard document. The details of each type are explained in the table below.

Document Type	Description
Design	Design documents are files that allow you to create wireframes and detailed page layouts. This document's functionality is set up for an individual designer to focus on the task at hand.
FigJam	FigJam documents are files that function more like an online collaborative whiteboard. The page is open and free for any user to add and customize content. Collaborators can communicate with each other and see each other's actions and modifications.

	<p>There is even a voting timer for making decisions and gathering feedback from collaborators within a set amount of time.</p>
FigJam Template	<p>FigJam templates are pre-built documents and are designed for specific use cases and provide a number of pre-built assets and resources that can be easily used and customized within the template. Templates can save a lot of preparation time and can provide the necessary tools and elements for a complete website design. Figma templates are ideal for new developers and designers as they help ensure you include all of the necessary items.</p>

Additionally, [figma.com](https://www.figma.com) has templates that will provide you with variants of pre-built page components. These components include navigation headers, a value proposition section, pricing comparison, and footers. You will copy and paste or drag and drop these components to build your wireframe.

Now that you have your Figma account, it's time to start a new project and add template components to your project.



TRY IT

**Directions:**

1. Visit [www.figma.com](https://www.figma.com) and sign in to your account.
2. Return here and add the template to your account by clicking the Figma Template hyperlink below:  
[www.figma.com/file/GBCGqs11KNeUyPksQzEMw0hr/Wireframing/duplicate](https://www.figma.com/file/GBCGqs11KNeUyPksQzEMw0hr/Wireframing/duplicate).
3. Rename the template by clicking on the title “Wireframing (Copy)” at the top middle portion of the screen and type a new name for this document.
4. To use the template, you will use the different components to assemble a webpage wireframe. Start by clicking and dragging to select the component that you want to use, such as the navigation bar, copy the selected items, and paste them onto the document. The copies you create will be selected after using the paste feature, so you can drag them below to begin assembling your wireframe.
5. Next, grab the next element, such as the **Hero header**.
6. Continue copying and pasting the parts and moving them together to continue building your wireframe. You may want to edit and adjust some of the elements within to best fit the needs of the project.
7. This document currently exists in the “drafts” folder of your account. You can move this document into a project by clicking on the dropdown attached to the right of the title you just edited. From that menu, select “Move to Project,” select the project folder you want to move it into, and click “Move.”



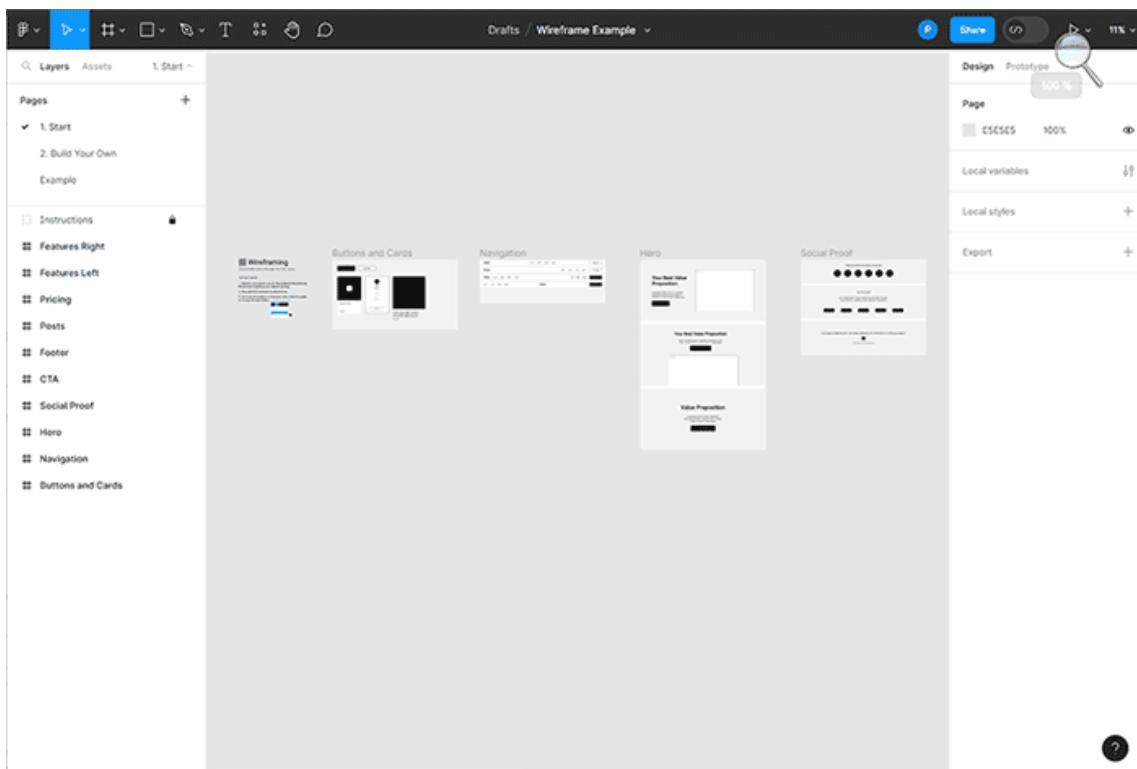
REFLECT

Congratulations! You have prepared your Figma account by adding a template and building your first wireframe with components. Taking time to organize your work inside of your Figma account will help you easily find it later.



WATCH

View the following demonstration of how to use Figma to create a basic webpage wireframe.



## TERM TO KNOW

### Hero Header

The top part of a webpage that serves as the visitor's first glimpse into what the company has to offer.

## 2b. Real-World Wireframe Example

Now that you are aware of the process of wireframing a website, let's work through an example of building a wireframe for the homepage of a local bakery website.

### IN CONTEXT

Good Harvest is a local bakery that sells breads, cakes, and other baked goods, both savory and sweet. The bakery opened less than a year ago and has been running off word of mouth and social media posts, but it has yet to create a website for its establishment.

The client wants a website that reflects its style and theme of fresh natural wholesome goodness. It focuses on sustainability and creativity in its operations and products.

The purpose of the site is to increase the client's visibility in the market and to generate more foot traffic as well as increase custom orders, which have never taken off as the client is currently using manual written forms for custom orders.

The target audience is the people in the local downtown area, and the client wants to present itself as a wholesome alternative for breakfast and lunch.

First, decide on the aspects of the site layout that will be consistent across all pages. This usually includes the majority of the header and footer content, such as the logo, the page's top heading level, and the navigation menu. Using simple shapes, lines, and labels, frame the page with the appropriate elements like so:

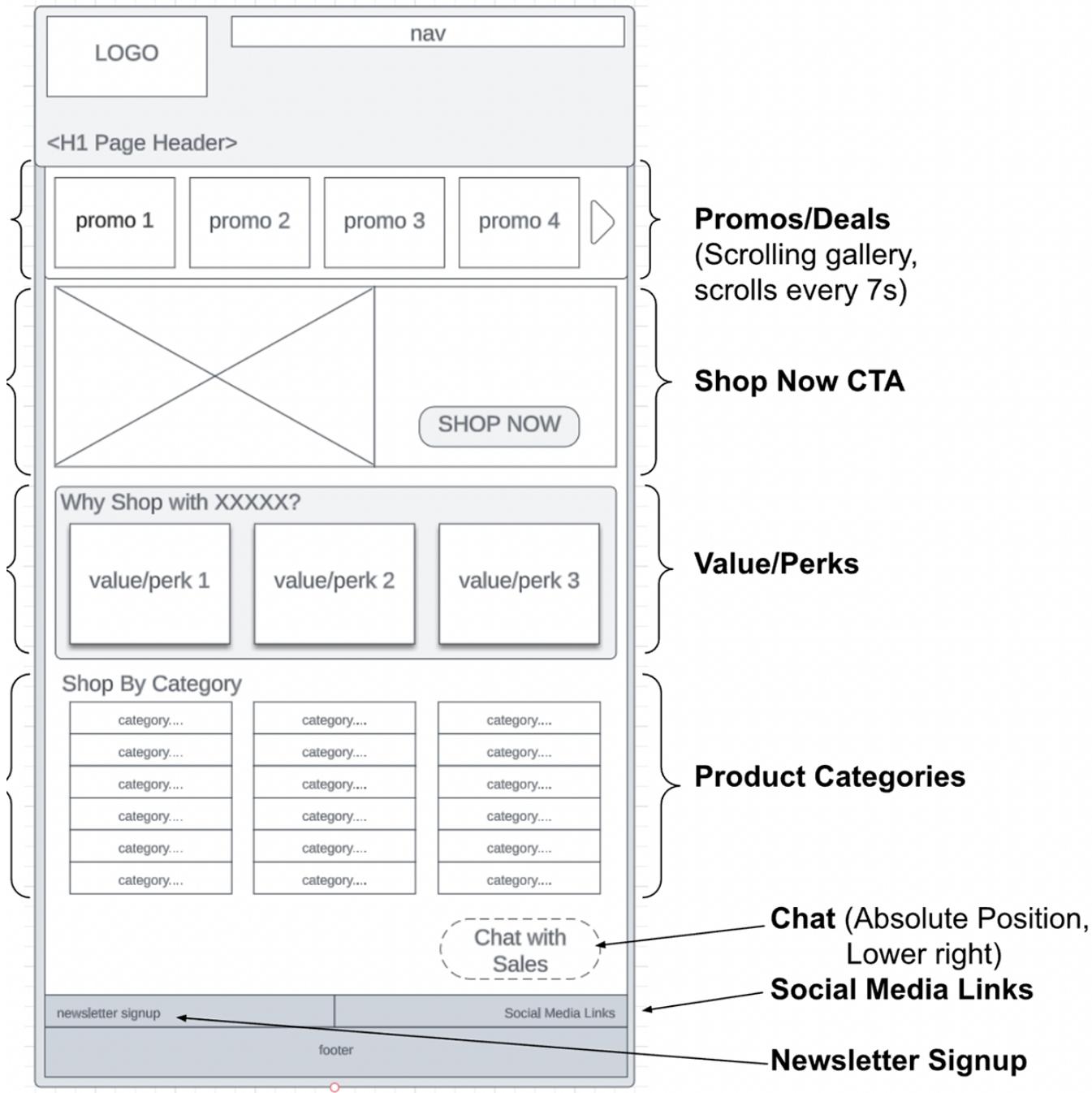
Home  
index.html



Next, we need a list of all the elements that will be included on the particular webpage:

- Deals/promotions banner
- Shop now call to action
- Product categories menu
- Value/perks
- Newsletter signup
- Social media links
- Chat utility

Again, by using only shapes, labels, and basic shading, the items above can be positioned on the page's main section:



At this point, any additional notes, comments, or annotations can be added to the page to describe special features, programming, or behavior that is required. For example, the “Chat With Sales” button should always remain at the lower right corner of the screen using absolute positioning, or the promos and deals banner is actually a scrolling gallery.



REFLECT

Even at this point in the process, we still have not introduced a lot of specifics or details about the content into the design. Instead, we have only handled the inclusion of the needed elements and their positioning. After a

review with the marketing and design teams, who have suggestions and recommendations to improve the layout, this design could still easily be rearranged or recreated without much of a time commitment.



THINK ABOUT IT

You will want to consider the layout from the perspective of a mobile device user and consider how the elements on the page can be adjusted to fit a narrower display. The promo gallery can remain the same as it will still work on a mobile screen. The Shop Now CTA can easily be stacked using CSS so that the image is just above the CTA button. Value/Perks, Shop by Category, and the newsletter and social media links can all be easily stacked as well.

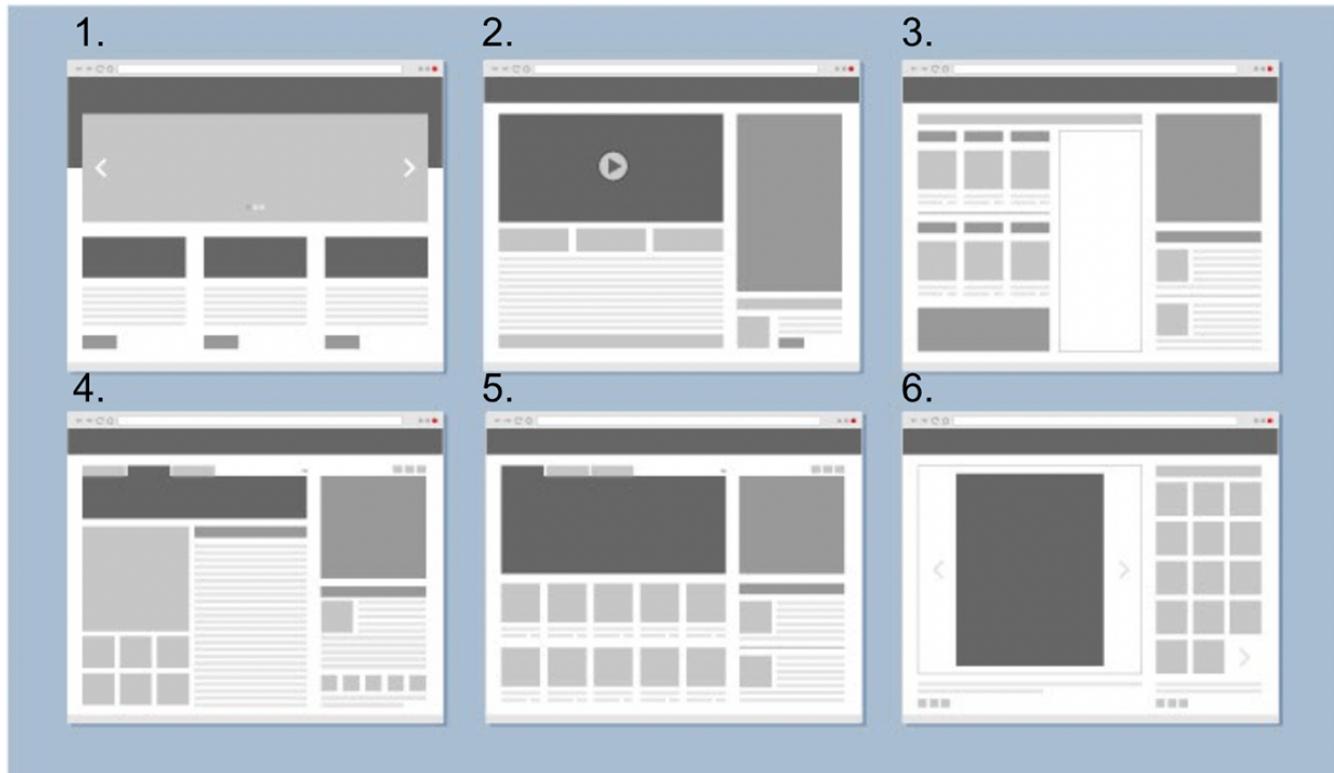
### 3. Planning With Storyboards

While wireframes are ideal for designing the layout of content on a webpage, a **Storyboard** is a visual process used for planning the flow of an entire website or parts of a website. Similar to how movie producers visually plan out the sequence of shots and camera angles using sketches, a website storyboard uses sketches of the site's pages, titles and labels, and arrows indicating flow, arranged sequentially. The sequence of images illustrates the process a user should move through when using the site. The processes described in a website storyboard could include the following:

- Registering for an account.
- Purchasing a product.
- Creating documents or projects using the site's features.
- Using the site's services.

Not all websites will require the use of a storyboarding design phase, especially if the site is static with no user interaction. However, most websites today include some sort of process that users go through to engage in or take advantage of the services the site has to offer. By working through this process, designers are given the opportunity to visualize the user's journey through each process, which helps ensure the process is well organized and important information and content are prioritized. Additionally, storyboarding also helps identify and address additional technical requirements of a particular process, such as at what point the data should be sent to the database and when we should verify success.

Storyboard sketches do not contain any details such as color, images, or actual written content, making it easier to adjust and rearrange the pages and steps involved in the process.



Figma.com is also an ideal tool for storyboarding website processes. The service allows you to quickly take the site page wireframes and easily arrange them to represent a process flow. Furthermore, the whiteboard option allows the contributors to annotate and add notes along the process flow to ensure all of the technical and visual details are addressed.



#### TERM TO KNOW

##### **Storyboard**

A simple method of planning the flow of a site visitor's journey through the site and the site's functions, features, and services only using sketches of the pages arranged in a sequence.

### 3a. Real-World Storyboard Example

Let's take a look at a real-world example using a storyboard to plan out the registration and sign-in process for a bakery website.

#### IN CONTEXT

In this scenario, the client wants users to be able to register for an account with which users can place orders, track orders, and communicate with the bakery. Additionally, the client also wants to collect interest and hobby information about the registered users in order to tailor products, specials, and events to the more popular interests as indicated by the user.

Starting with the homepage of the site, we include the Login/SignUp button in the main navigation menu in the upper right corner.

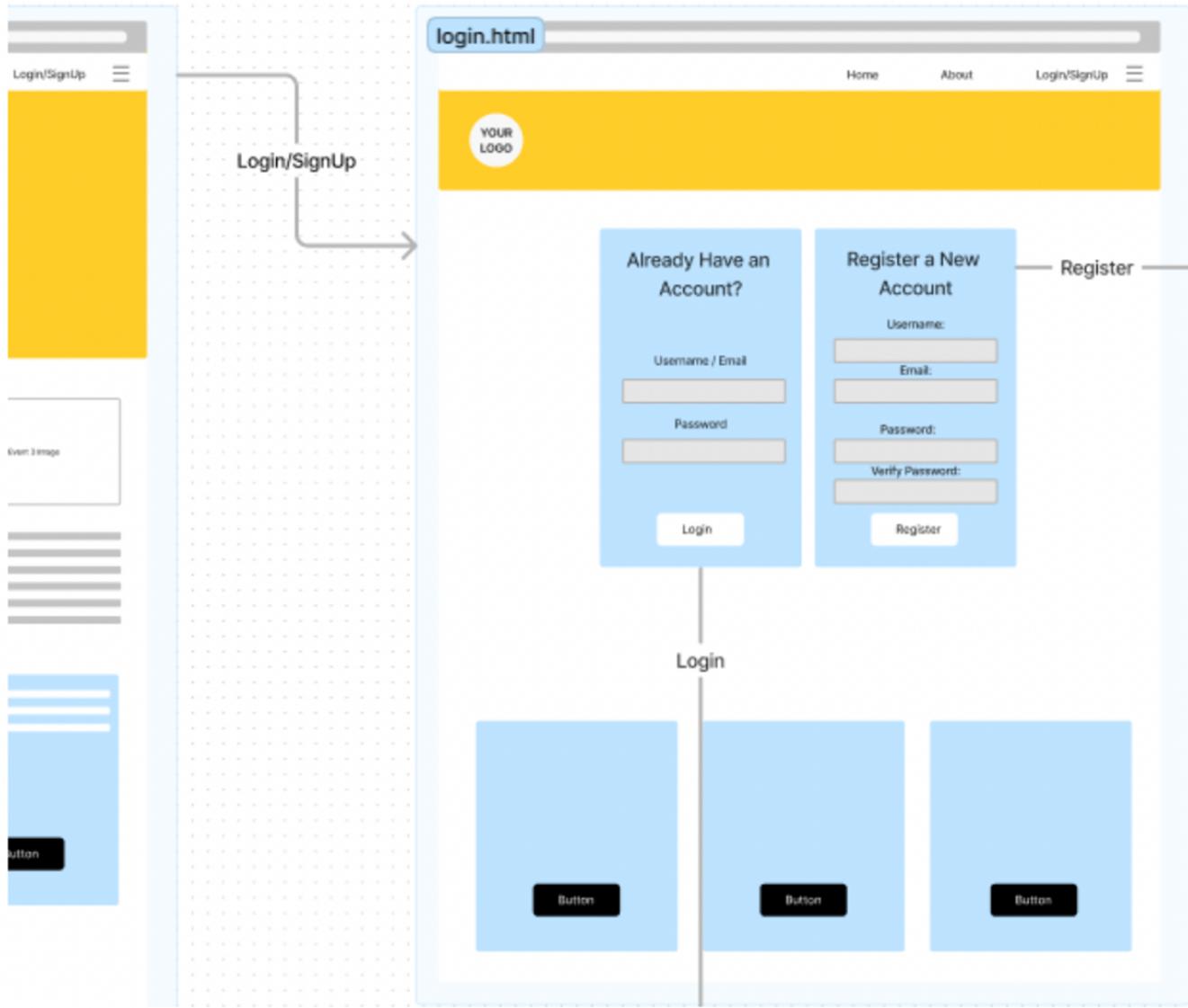
☞ EXAMPLE

index.html



Next, we create a wireframe for the login and registration page. Since this page is second in the sequence, we indicate that by using an arrow and a label indicating what action leads the user along this path, in this case a clicked “Login/SignUp” button or just the label of the button “Login/SignUp.”

#### ☞ EXAMPLE

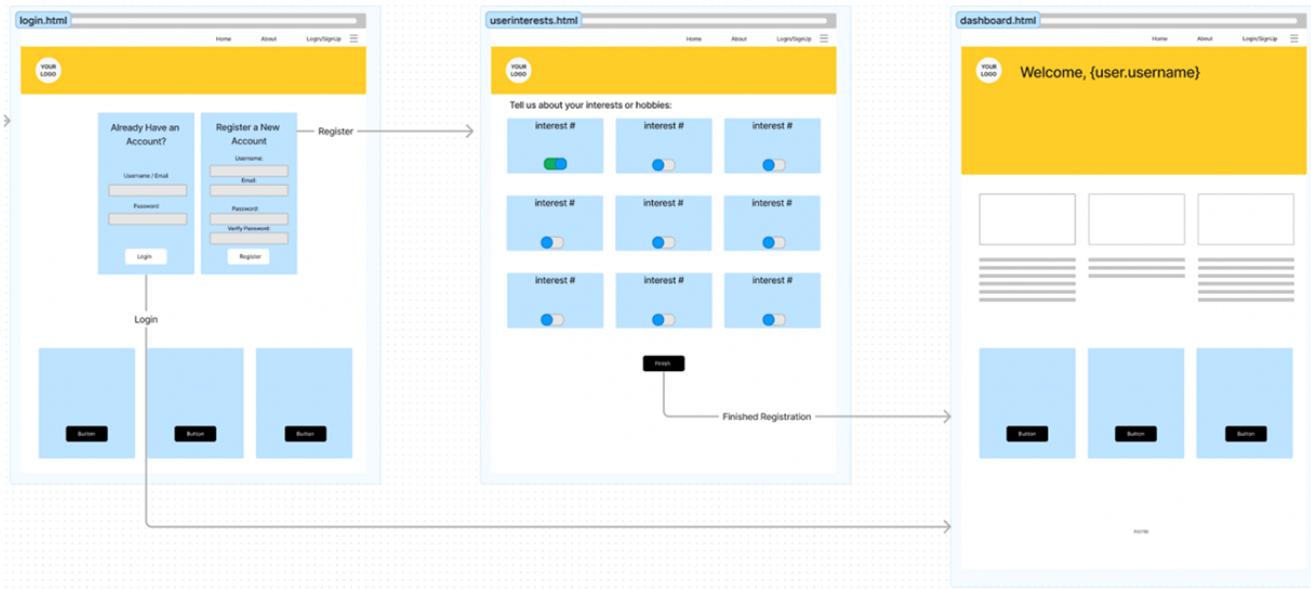


#### REFLECT

As you can see from the storyboard, this page includes both a login form as well as a form to register a new account.

The next page in the sequence is determined by whether the user used the Sign In form or the Registration form, and we indicate that using arrows with proper labels of “Login” or “Register.”

#### ☞ EXAMPLE



## REFLECT

Notice that the arrow from the Login side links the user directly to the dashboard page once they are authenticated. If the user is registering a new account, they are taken to a second registration page where the user can indicate their hobbies and interests by clicking on slider buttons under a grid layout of interests and hobbies. The wireframe then indicates that once the user is finished selecting their interests, they will click the “Finish” button, which will complete the registration process and link the user to their new dashboard page.

The wireframe and the storyboards took little time to develop and even less time to modify. If the client decided they wanted to change the sequence by adding an additional page to the registration process, it involves simply creating a new wireframe (or copying an existing one and modifying it) and then rearranging the storyboard to reflect the new step in the process.



## MAKE THE CONNECTION

You will use Figma to create the wireframes for your Touchstone project in Touchstone Task 1: Selecting Your Client and Planning Your Website Design. A step-by-step walkthrough of the Figma tool is provided in a future lesson. Now is a good time to add Figma to your web developer toolbox by creating an account. You may also want to create a “Development” bookmark folder in your web browser and add Figma to the collection.



## SUMMARY

In this lesson, you learned how **designing with wireframes** is a fast and effective planning tool for designing the layout and organization of content for each page of a site. You learned about the **basics of Figma.com**, a diagramming website for creating design documents and diagrams for development. Furthermore, you were introduced to **planning with storyboarding**, wherein the wireframes are arranged in a sequence to plan the journey of users through a website’s different processes.

Source: This Tutorial has been adapted from "The Missing Link: An Introduction to Web Development and Programming" by Michael Mendez. Access for free at <https://open.umn.edu/opentextbooks/textbooks/the-missing-link-an-introduction-to-web-development-and-programming>. License: Creative Commons attribution: CC BY-NC-SA.



## TERMS TO KNOW

### **Copy**

A term used in publishing, marketing, and other related fields that refer to written text or written materials.

### **Hero Header**

The top part of a webpage that serves as the visitor's first glimpse into what the company has to offer.

### **Hyperlink**

A webpage element that, when clicked, triggers the browser to request and navigate to another page from the web server.

### **Storyboard**

A simple method of planning the flow of a site visitor's journey through the site and the site's functions, features, and services only using sketches of the pages arranged in a sequence.

### **Wireframe**

A simple, low-detail, rapid visual method that is used to design the layout of an application or website's interface.