

UX/UI DESIGN 2022

A Comprehensive UI & UX Guide to
Master Web Design and Mobile App Sketches
for Beginners and Pros

Carl Jones

UX/UI Design 2022

A Comprehensive UI & UX Guide to Master Web
Design and Mobile App Sketches for Beginners and
Pros

Carl Jones

OceanofPDF.com

Copyright

Copyright©2022 Carl Jones

All rights reserved. No part of this book may be reproduced or used in any manner without the prior written permission of the copyright owner, except for the use of brief quotations in a book review.

While the advice and information in this book are believed to be true and accurate at the date of publication, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Printed on acid-free paper.

Printed in the United States of America
© 2022 by Carl Jones

OceanofPDF.com

Table of Contents

CHAPTER ONE

What is Design?

How is Design Related to Technology?

What is UI/UX Design?

Difference between UI Design and UX Design

Opportunities for UI/UX Designers

User Persona for UX Design

Types of User Personas

Creating Personas

Components of a Persona

User Research for UX Design

Quantitative UX Research

Qualitative UX Research

Attitudinal vs. Behavioral Research

Method Types

User Research in the Design Process

User Flow in UX Design

Creating User Flow

Wireframes in UX Design

CHAPTER TWO

UI Design: Visual Design Principles

Understanding Design Thinking

Concept of Empathy in UX/UI Design

Mindful Users Surveys and Interviews

Creating mindful personas

[Designing Mindful Interfaces](#)

[Tools for UI Designs](#)

[Lucidchart](#)

[Adobe XD](#)

[Figma](#)

[Webflow](#)

[Things to Note While Using UI Tools](#)

[Creating Wireframes](#)

[Starting Out](#)

[Adding Details](#)

[Digital Wireframe & Usability Tests](#)

[How to Use Balsamiq to Create Wireframes](#)

[Overview of Balsamiq](#)

[Creating a Simple Wireframe in Balsamiq](#)

[CHAPTER THREE](#)

[Typography of UI Design](#)

[Why Typography Matters](#)

[Application of Typesetting](#)

[What to consider in Typography](#)

[Applying Contrasts](#)

[Classification of Typefaces](#)

[Scripts](#)

[Selecting and Using Typefaces](#)

[Font Formats](#)

[Using a Typeface](#)

[Text Typeface](#)

[Display Typeface](#)

[Translating Text to Display](#)
[Fonts Weighting and Styles on Figma](#)

CHAPTER FOUR

[Designs System and FIGMA](#)

[Why have a Design System?](#)

[Popular Design Systems](#)

[Material Design](#)

[Human Interface Guidelines](#)

[Atlastik](#)

[Lightning](#)

[Polaris](#)

[Using Figma](#)

[Setting up a Figma Account](#)

[Getting Started](#)

[Creating a Frame](#)

[Creating Shapes and Color](#)

[Corner Radius Adjustment & Circle](#)

[Using Icons and Images](#)

[Figma Community](#)

CHAPTER FIVE

[Psychology of Colors in UI Designs](#)

[Color Psychology](#)

[The Golden Ratio Rule](#)

[Color Rules in UI Design](#)

[What to Consider when Choosing Colors](#)

[Color Palettes](#)

[Studying the Color Wheel](#)

[Contrast is Crucial](#)

[CHAPTER SIX](#)

[Grid System in UI Designs](#)

[12 Column Grid](#)

[Breaking the Grid](#)

[UI Modes and Modals](#)

[About The Author](#)

[OceanofPDF.com](#)

CHAPTER ONE

What is Design?

Design may be a common word used in various spaces but it is more significant than we assume. In simple terms, design is thinking and solving a problem in the most practical manner. It is taking a good look and function of something before it is created or publicized. Design in a more solid term, is the creative process that organizes and presents information for a specific purpose.

Before you design a craft, you must first comprehend the information or message, and then research, envision, and develop and produce a solution or a concept to communicate that information or tell a story vividly. We can only use our skills in line with layout, color, typography, and other creative tools to bring our vision to life once we have a strong idea that has been established through the design process.

Since the invention of the print press, which enabled production on a mass scale, graphic design has been used to communicate and spread messages across the globe. Through the evolution of technology today, we are surrounded by an abundance of visual communication.

Today, design (graphic design in particular), is implemented across a broad spectrum of media both print and digital such as: advertising, branding, web design, interface design, magazine layout, paper engineering and packaging, TV, motion graphics, infographics, signage, art and installations, and digital arts. If you are looking to pursue a career in design, you will inevitably end up creating work across one of those sectors.



How is Design Related to Technology?

The relationship between design and technology is fundamentally about converting ideas and raw materials into the products and services that are needed for our daily activities. Everything around us has been designed from the user interface of our latest digital app, to the car we drive, the clothes we wear, the buildings we live or visit, to the TV programs – they have all been designed.

Advancements in recent technologies have resulted in changes in approaches and adaptation. These technologies have infiltrated every aspect of our lives, as well as the way we solve challenges. On a cultural level, we see trends collide as a reflection of global events. This is also applicable in design, which manifests itself as a kaleidoscope of colors and materials that modify our surroundings in unexpected ways.

What is UI/UX Design?

The term UX/UX is becoming a popular term in the design industry and picking up steam as one of the elite skills to have in the 21st century. UI/UX on the surface of value is essentially understanding the customer and designing an experience that covers various different aspects such as tech, and understanding the requirement of a user or customer.

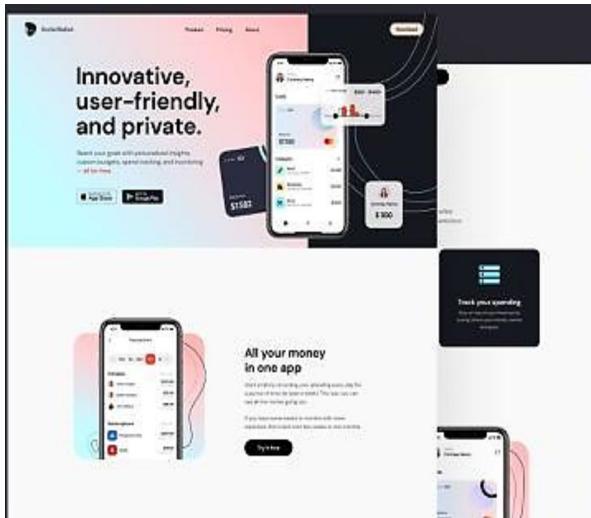
UI which stands for User Interface is one part of the user experience. It is one of the touch points that a customer interfaces with – what they see and what they interact with regardless of whatever medium is used to interact. The interface, which communicates the brand or product or service to the customer, is the User Interface (UI). As a result of its essentiality in terms of communicating to your target audience, UI plays a huge role in the communication of the service of the product or service to the customer.



The optimal advantage of a good user interface is visualization. What is seen on the design interface (the visual aspect) is the UI design. In addition, it is accompanied by the visual presentation, text and how it is read and comprehended. The general customer is naturally not accustomed with reading or assimilating a whole lot of information. This means that giving the content hierarchy by visualizing it, making it legible and easy to understand are the most important decisions that need to be taken while defining a user interface.

On the other hand, UX which stands for User Experience, encompasses the entire process of purchasing or integrating a product. This spans through branding, design, product use and function. The process begins before the

product is finally made available to the users or customers. It is that part of the design that takes into perspective sets of experiences that are integrated from the stage of reflection to the point when the product or service gets to the user.



In UX design, you need to be able to take control of the entire customer journey; having an understanding of the various factors that play vital parts in the experience. This entails being involved in the marketing and research and defining the experience for the user or customer. The User Experience design is clearly in contrast to the User Interface design, which concentrates on the interface of the product or service alone. This is not to say that a UI designer cannot get involved in marketing research and user conceptualization. However, the journey of the UI designer begins at the visualization stage where they make the interface intuitive and easy to use.

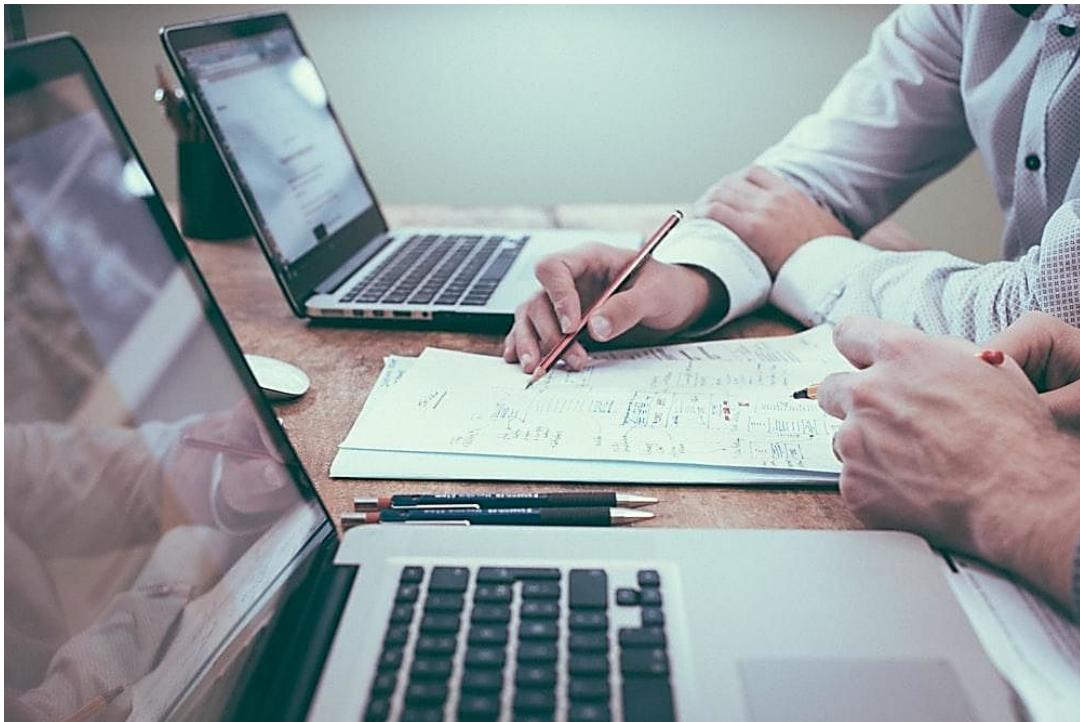
Difference between UI Design and UX Design

In simple terms, UI design or User Interface design is about the aesthetic experience of a product or service, while UX design or User Experience design is about designing the whole experience of a product or service from conceptualization to purchase.

For instance in a mobile app, a UX designer prior to the app being designed has decided what features would be in that product, how they work and how

you feel while using them. On the other hand, a UI designer would have also taken part in designing that mobile app, but they would be thinking about how things should look from the purview of aesthetics and layout while the app is being engaged.

If Netflix was just getting started today and seeks to hire people to push their service, they would want to hire a UX designer to help understand and decipher new ways for users to watch movies. In addition, they would hire UI designers to visually represent those new ways of watching in a way that is easy for people to interact with.



Although both designers work really closely, the UX designer is saddled with the role of understanding people's behavioral patterns and needs, coming up with concepts and new ways of addressing those needs, and giving them new ways to make their movie streaming experience easier. They are designing the experience of watching movies with Netflix. The UI designer, on his part, takes all of that information but is purely focused on the visual representation of those features, ideas, and tools. They lay them out and visually represent them so that users can see how they use what they have created easily.

The skills that you learn as a user interface designer are more specific to typography, layout and the finer or visual aspects of a design (product or service). Notwithstanding, as a user experience designer, it is good to have this understanding but you need to be able to locate the larger picture by understanding the customer better and defining the roadmap for the product or services.

Opportunities for UI/UX Designers

A holistic look at businesses, products or services today, put all of them at a forefront of the digital movement – several businesses in America today own digital interfaces. The minute a business owns a digital interface, the requirement for having a UI or a UX designer arises.

In recent years, this has heavily evolved. There was initially the thought that having the design tech alone would provide an interface, which would be enough for users. However, as a result of the intense competition between businesses, people have realized that the UI or UX designer can add enough value to enhance a business or take it to the next level.

UI/UX design is now becoming a term that businesses and companies are paying more attention to and are always trying to look beyond just the technology. There is the realization now that the UX is just as integral as the UI and businesses are beginning to understand that the design plays a role from the initial stage of a product and this role has become in-depth with more insight than usual.

User Persona for UX Design

In UX designs, personas are fictitious users with fake image and name, but show the goals and behaviors of your real users. They are fictitious, yet realistic and detailed descriptions of the users of your product who exhibit similar attitudes, goals, and behaviors in relation to your product. Usually, personas are extracted from User Interviews. There could be multiple personas based on work roles.

Personas help to shape the design towards the goals and personality of the user while keeping in mind the pain points of the user. They are printed and

hung in front of the design and development team for better alignment with user goals.

UX personas are more robust when paired with an empathy. This way, professionals can get in the shoes of the people that are designing for by keeping the user journey in mind. Before getting ahead to create UX personas it is important to get a hang of why you need a persona to design a tech product:

- **To Help You Make Design and Feature Choices:** Personas help you determine who you are creating the product and service for. This allows you to be able to navigate design and feature decisions to meet the needs, motivations and desires of core customers.
- **To Communicate Consumers' Need Properly to Designers:** In addition to making design choices, by creating personas, you will also be able to settle disputes among product and design teams, since you will have a better way of understanding your primary customers' needs and expectations.

Types of User Personas

There are two main types of user personas: Marketing Personas and UX Personas.

1. **Marketing personas:** Marketing personas are created using market research from your current customers and are valuable for segmenting and targeting.
2. **UX Personas:** UX Personas are created to help product teams empathize with a real group of people to understand their goals and aspirations. UX personas are created from various research methods and are used to drive product user experience.

While it may be tempting to construct a large number of UX personas, it is crucial that you stick to one or two. This can be a little far fetched because you may feel like your product users have so many different behaviors and motivations, so they should each have a different persona. However, a

persona is a combination or aggregation of those behaviors and motivations. In light of this, one or two personas should represent a larger group.

Furthermore, it is important to note that creating too many personas can allow your team to lose focus on the most pertinent part of your core user group that the persona is meant to represent. If you have five personas, for example, it may be too difficult for you to keep all of them in mind while making decisions. In addition, your team may have a hard time referencing, let alone recalling, those personas on a day-to-day basis.



Focusing on one or two personas allows your team to develop empathy for them. User researchers, designers and product managers are aware that empathy is the key to designing world-class products.

Creating Personas

In order to create accurate personas, your personas must be based on research. Research is used to understand the shared behavior and needs among your product users. It is highly recommended that you speak to at least five users per product type. For example, if it is identified that your business needs two personas, you should speak to at least five users for each persona type – 10 users total.

Ideally, you should conduct moderated research sessions. The benefit of a moderated session is that you have a discussion guide to guide the

conversation. Consequently, you will then have the ability to sidetrack and ask follow-up questions to unravel relevant details.

If your business or the business you are designing for does not have the time or the budget to complete the full research, you can always begin with the persona that is based on assumptions, competitor analysis or internal stakeholder interviews.

Look for trends, personalities, qualities, and traits that the participants share when examining the findings of the moderated interviews. For instance, if you notice that your participants mentioned that they do not trust companies to protect their data and have recently stopped using social media because they are increasingly concerned with personal security, it is a good data point to add to your persona.

It is also worth noting that the purpose of designing personas is to assist product and business teams in focusing on their consumers' goals and needs. Personas, when used effectively, can assist the team in resolving design and feature issues. This way, the team is able to focus on the wants and needs of their core persona rather than their own personal views about the design questions at hand while making these selections.

Components of a Persona

Image: In selecting an image, you must keep in mind that it should be a real individual – someone who represents your target customer. Rather than a celebrity or a cartoon, use someone that represents the age, gender and personality of your persona.

Name: Giving your persona a name is the next step. Your persona is a reflection of your primary user, thus, it is critical to give it a name. When it comes to design and feature decisions, you should think of them as a real person with thoughts, feelings, and behaviors to which you can relate. The name adds a human element and creates a storyline narrative to aid problem solving.

Bio & Quote: Next, give you a short bio based on the research you conducted. You can use personal and employment data points that were shared during your interviews. On the other hand, a quote for your person

should be included. Your quote can be a quick snapshot of their personality or something that is important to them.

Brand: You should include different brands that represent your persona. These brands allow you to add contacts to your persona and will act as your mood board. When you look back at your persona at a later date, those brands can help trigger empathy for your persona.

Behaviors: Next, you should add beliefs and behaviors. These behavior patterns will help unravel a lot about your personas attitudes towards different situations.

Goals: The next thing you should outline is your persona's goals. It is pertinent to understand their aspirations since you want your product or service to fit into these goals.

Pain points: Next, you should attempt to understand their pain points. What things frustrate your persona? Once you understand their frustrations, you can solve for them and build better products that fit their needs.

Personality: While including personality is a great touch, it is not completely necessary.

Motivations: Next, you should include what inspires or drives your personas. It can be beneficial to show this in a more visual way.

User Research for UX Design

The deliberate process of gathering insights about your users in order to make accurate and smart design decisions is what is referred to as UX Research. It ensures a user-centric approach and is key to defining the right problem statement and coming up with effective solutions.

Using the most-appropriate research methods, the needs, goals and pain points of your users will be unearthed. UX research also allows you to validate and invalidate your assumptions and continuously test the usability of your design.

When opting for a research method, it is important to consider the kinds of outcome that each can deliver. The data gathered throughout the research process may be qualitative or quantitative, and attitudinal or behavioral.

Quantitative UX Research

Quantitative data is anything that can be measured. Quantitative approaches allow you to quantify your product or service's usability. Furthermore, they enable you to compare different designs and see if one performs much better than the other.

Qualitative UX Research

Qualitative research focuses on the motivations or reasons for the behavior of users. Quantitative data is more rigid, whereas qualitative data is more descriptive and open-ended.

Another distinction that could be made is the data collection methods used in qualitative and quantitative studies. Qualitative research is based on direct observation. You may, for example, get information on users' behaviors or attitudes by watching them in action. Quantitative studies, on the other hand, could use an online survey to collect data.

Attitudinal vs. Behavioral Research

When conducting UX user research, you will also make a distinction between attitudinal and behavioral research. This takes into perspective the distinguishing feature between what people say and what they do.

Attitudinal research gets the user to report certain information about themselves. This helps to understand people's stated beliefs, expectations and expectations. For example, you might conduct an interview with a user to find out their opinions on certain concepts or to discover their motivations for using a certain app. This research is particularly used for gleaning insight that would not be apparent when observing the user. In the event that your user would like a specific feature to be added, they can tell you this through their interaction with a product and its current state.

Behavioral research, which is often termed the holy grail of UX research, refers to any direct observation method and seeks to understand what people do in a given situation. Direct observation is incredibly beneficial since it provides an accurate picture of how people interact with your product in the actual world. A/B testing and eye tracking, for example, can

show you exactly which action a user does when presented with a specific layout.

Method Types

A/B Testing; A/B testing is a quantitative behavioral research method used to compare two different design options.

Surveys and Questionnaires: This method is an extremely flexible technique for collecting both quantitative and qualitative data. Surveys and questionnaires are attitudinal in nature as they are based on what the user says.

Card Sorting: Card sorting is a quantitative research method used for determining information architecture labels and structure.

Eye Tracking: This is another quantitative method used to collect behavioral data. Using special equipment you will track users' eyes as they move around an interface.

Diary Studies: Here, users discuss and describe certain aspects of their daily lives that are relevant to the products you are designing.

Interviews: User interviews are a qualitative attitudinal technique where you will engage with the user one-on-one at a face-to-face or via video.

User Research in the Design Process

When you're just starting out, you'll want to concentrate on getting to know your users and the problem at hand. Your purpose at this point in the design process is to look for fresh ideas and directions. Typically, designers will use a mixture of both qualitative and quantitative methods such as still studies, diary studies, surveys and data mining.

Once you have established the direction for your design, you will move into the building or execution phase. In terms of user experience research, the emphasis will now be on analyzing your designs and ensuring that they are meeting the needs of your users.

At this point, your research methods will be aimed at improving the usability and optimization of your designs. You will mostly use qualitative methods such as card sorting, usability studies and desirability studies.

Once you have finalized your designs and you have a working product, you will want to gauge how well it performs. This may be in comparison to the previous version of the product or a direct competitor. To do this, your focus will mainly be on quantitative UX research methods such as usability benchmarking, surveys and A/B testing.

Throughout the product development process, new questions or areas of investigation will arise. Whenever you decide to conduct fixed research, it is vital to determine specific objectives and then choose the research methods that best serve these.

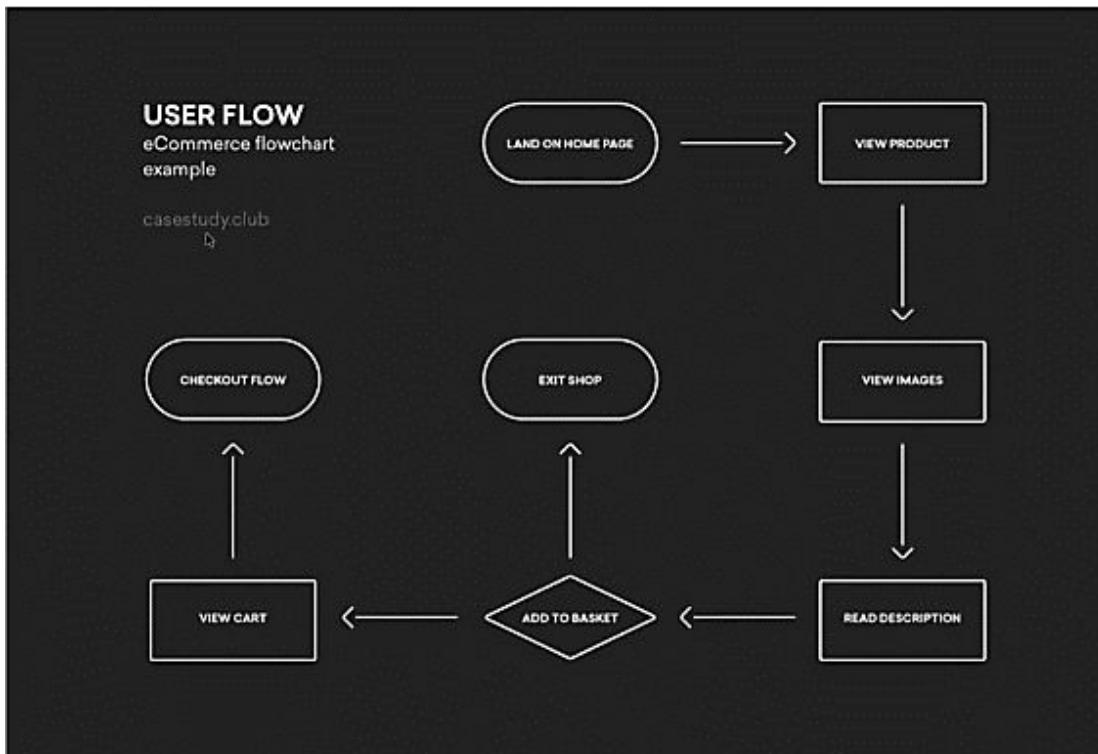
Whatever method you have decided to opt for, it is also important to be mindful about conducting both qualitative and quantitative research together. Note that you cannot skip one in favor of the other. A good mixture of both methods will help you paint a full picture and ultimately avoid misleading conclusions.

A qualitative interview, for instance, will give you great insight into your user. However, unless you verify these findings later on with quantitative methods, you can be sure if your observations relate to just a single person or a large group of people. This is also the same for quantitative data. It is great to have all the data in your possession, but unless you understand the meaning behind it, you cannot use it to its optimal potential.

User Flow in UX Design

A user flow in the UX design space helps visualize the path taken by a customer or user on a website or app to complete a task. The user flow takes them from an entry point through a set of steps towards a successful outcome in final action such as purchasing products.

The user flow shown below is an ecommerce flowchart example. Essentially, what this showcases is the actual flow of a user when they are on an e-commerce website and they are trying to purchase a product. As depicted, they will be starting on the homepage, and then they go and look at a product they are interested in. In addition, they can view images, read the description of the product and might take action and add that product to their cart or wish list. They might also exit the shop there or continue shopping.



A user flow can be used to communicate to your team the end-to-end view of a customer's journey and attaining their goal. It is broken down step by step in a way that is easy for your broader team, development or project managers, stakeholders to understand. Additionally, it shows where your team can optimize certain areas within their app, platform or experience.

Creating User Flow

To create a user flow, it is important that you put into consideration three vital factors:

- Who they customer is and denomination do they represent
- What the goals and objectives of the customer are
- What the required steps are for the customer or user to achieve their goals

Creating user flows is all about breaking down and reverse engineering each possible step and option a user can take in attempting to accomplish their goal. This way, you can help and account for ways to help them in getting to their goal a little bit easier and faster.

Wireframes in UX Design



In UX designs, wireframes are commonly used to layout content and functionality on a page, which takes into account the controls of the page, what the user ultimately needs and what would be the user's journey from start to finish. All of this helps you establish in your research what you have done before, so you know what the user is going to need and what their journey through the product is going to look like.

The aim of a wireframe is to provide a visual understanding of an app or website page. Think of it as the skeleton or bare bones of your final design. They loosely shape the final product, giving you reliable ideas of where everything will eventually go. It would also provide you with a base so that you can do usability tests on your real users.

There are low fidelity wireframes, which means they are very simple, minimal and most importantly static – they do not include any interactions or animations. On the other hand, high fidelity wireframes are usually more complex and require using a specific tool. They are, however, not yet clickable or interactive. Once you have completed the wireframe phase, you are ready to move on to prototyping.

With your wireframe, you do not need to worry about things like the color scheme, type of fonts, or imagery to use. All you need to get is the fundamentals on a page. You can decide what elements to include, the position on the page and how they will interact with each other.

Wireframes can be designed both on a pen on paper or digitally. Some designers prefer pen on page as it is easy to sketch all your thoughts on paper, while others prefer to go down the digital route so that they can share and collaborate with their team much easier.

Programs used for digital wireframing can include - but not limited - Adobe XD, Figma, and UXPin.

OceanofPDF.com

CHAPTER TWO

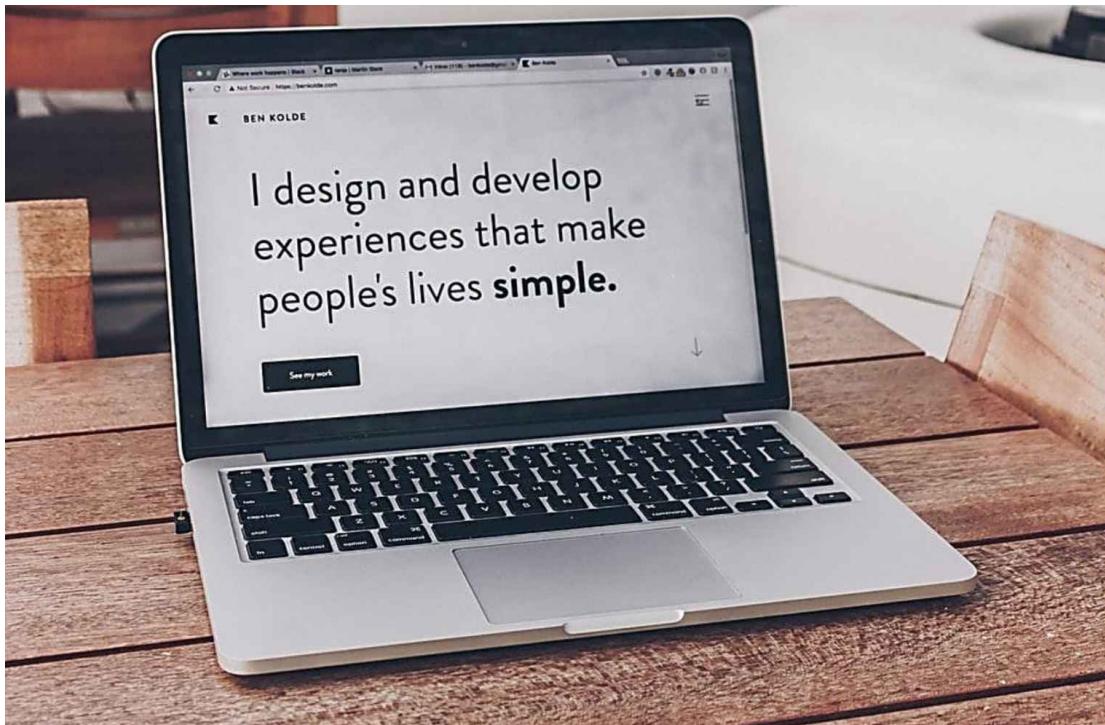
UI Design: Visual Design Principles

Design principles are guiding stars for designers. They ensure designers make the best decisions for their users and for the product or the service they are working on. The design principle is essentially a value statement that is tied to the goals of the product or service. This includes what it wants to achieve for users and the overall objective of the design.

Design principles should not be mistaken for team mottos or manifestoes. Mottos do not help designers know what to do in a given situation where they need to make a trade-off time decision. Instead, design principles need to be clear about what they advocate and why. They should take a stand on which value will trump others. In addition, they should inspire empathy for the user, because after all, that is whom you are designing for.

When designers have design principles to refer to, it is more likely that they will make decisions that help products and services meet the desired goal. In addition, they will less likely make decisions based on their own personal preference.

More importantly, design principles are only useful if they are being used. If you do not have a design principle, create them with others rather than creating them on your own. Design principles are more likely to be accepted and remembered if others have had a hand in creating them. Once created, don't let them build dust, socialize them.



Understanding Design Thinking

Design thinking can be explained in two ways. The first being just a mindset: it is an ideology of approaching every problem in a user-centered way. Where the complexity comes in is in the second part of that definition which is a six-step process.

These six steps are instituted to help you practice that ideology of user-centered design.

Empathize: Here, you want to pull qualitative data like user interviews, direct observation, contextual inquiry, diary studies and what your real users need.

Defining: A lot of people think about coming up with ideas in the opposite way. They come with a ton of different ideas and then narrow. Design thinking flips this on its head. It stipulates that you come up with the idea and define the problem before you consider the solutions.

Ideation: Once you have identified the problem, you bring that into the ideation stage. This is when you start to consider the wide range of potential solutions. You generate your ideas and slowly start to narrow them down.

Prototyping: This is when your ideas start to manifest for the first time. Here, you can test them with end users and start to iterate until they are at a place where they represent what the end product may be.

Testing: At this stage, you test your ideas to make sure that your user knows how to use them and they truly resonate with their needs.

Implement: This final stage is where you become proactive. You put your vision into effect so that it actually touches an end user's life.

It is important to note that design thinking benefits extend far beyond the process itself. It fosters collaboration, helps create design artifacts that you can return to and most importantly, it gives you a tangible way to always make sure that you are keeping the user at the center of your products.

Nothing in design thinking is new. Instead pulls methodology from all of the different genres that have existed much longer and applying them in a new way.

Concept of Empathy in UX/UI Design

Empathy should not be confused for sympathy. Empathy refers to the capacity or ability to imagine oneself in the situation of another experiencing the emotions, ideas, or the opinions of the users or perhaps conjuring up a similar personal experience that has occurred. It is seeing things from the point of view of the other by truly imagining being in their position and trying to feel what they are feeling.

Empathy goes a step further into engaging with and imagining the feelings of the users through your emotions. This does not always have to be associated with bad things, as you also understand how excited someone feels.

Many times through UX research, you may feel a great deal of sympathy for your users, but you may fall short of empathy because you are not really trying to tap into the experience they are having either through imagination or actively reliving your own similar experience. Even after you feel that, you understand the user holistically through your research.

Empathy is an exercise that you get better at overtime by being clear about your intentions and consistent with your practices. The first step towards empathy is to start to become mindful of your intentions with each thought and action you take and then practice going deeper into your engagement with yourself and with others.

Mindful Users Surveys and Interviews

If you are about to conduct an interview or survey, you can center yourself and set an intention that makes the user feel relaxed and comfortable. Ensure that you practice the interview questions in a natural and relaxed manner with the intention of truly encompassing that feeling.

Creating mindful personas

If you are creating a user persona, you can have the intention that you want to be as accurate as you can and paint a true picture of the user and imagine yourself living their life or having their experience. Once you have created the persona, role-play as if you were them. Rely on your imagination and get in tune with your feelings about it. Don't just imagine you understand the persona, try and imagine feeling what the person might be feeling.

Designing Mindful Interfaces

If you are designing the user interface for a product and the business people demand that they want the text bigger, even though that might throw off the entire visual hierarchy and balance, rather than be upset with them, try to put yourself in their shoes. Imagine all the research and reasoning they must have gone through to arrive at that conclusion. Set aside your ego, step into their shoes and feel what they must be feeling. This way, you can take the action with the intention of choosing a font size that works for everyone by both calmly and clearly defending your decisions and openly listening to feedback without judgment. Empathy takes practice; you start by taking an honest look at our motivations.

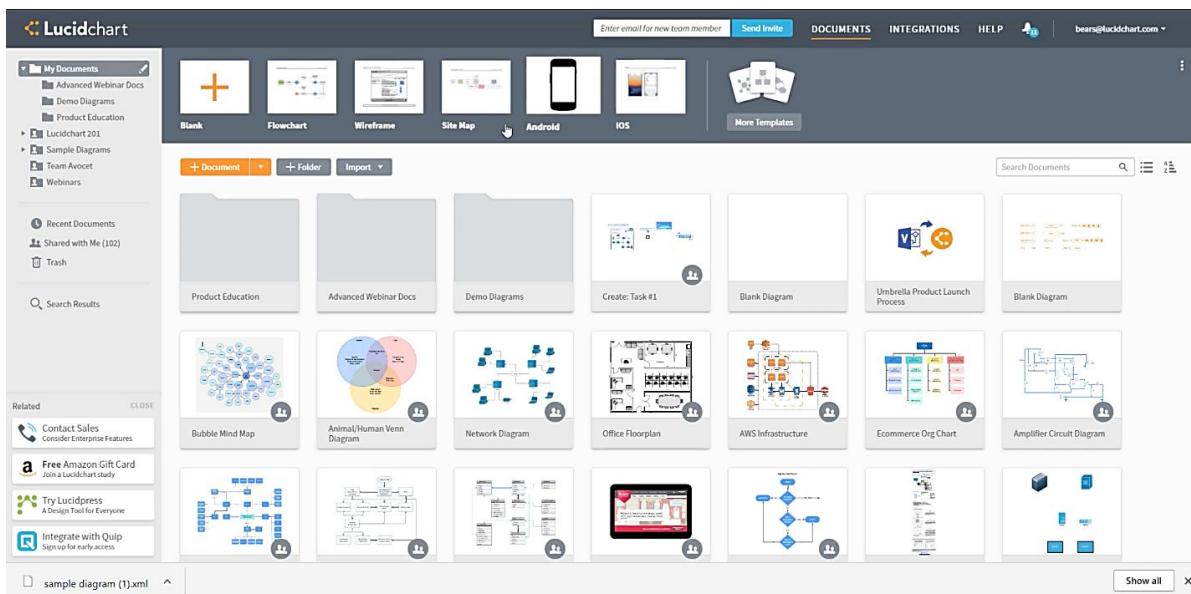
Tools for UI Designs

Every designing tool has two main criteria: it should deliver high quality output and in the least possible time and effort. The more these differences, the better the tool is considered.

There are several tools and techniques you can use to build wireframes and prototypes but it also depends on what your client or the organization you represent wants.

Lucidchart

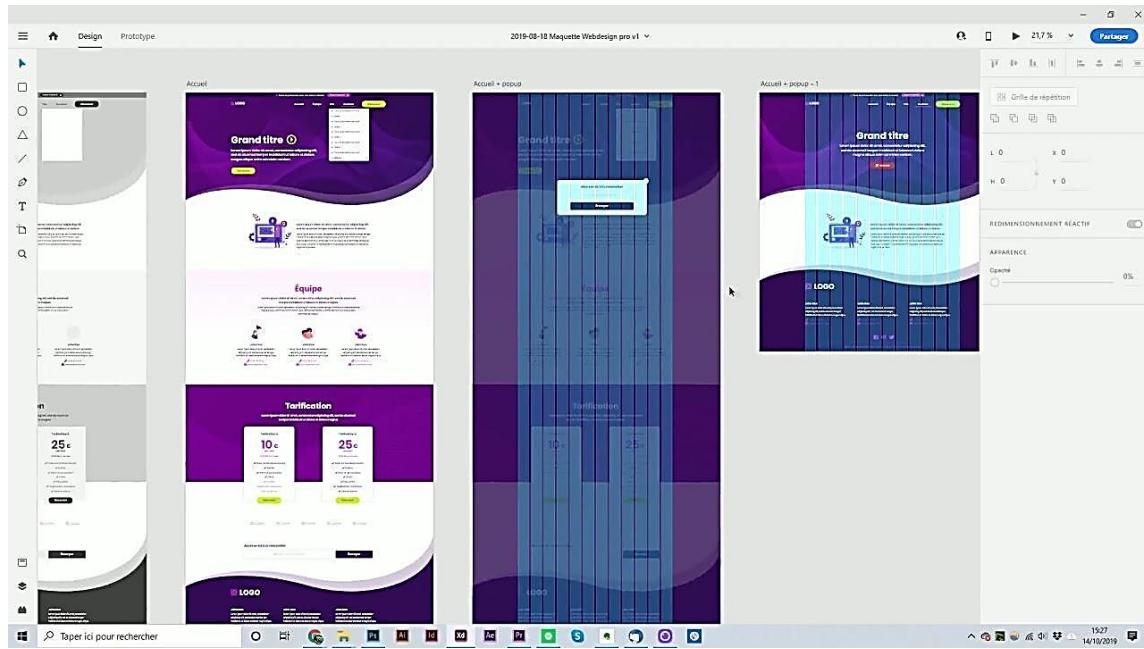
Lucidchart is a visual and cross-platform collaboration tool for businesses and individuals that aids the creation of diagrams and flowcharts and wireframes. This tool can be used across products and in collaboration with engineering teams for brainstorming and managing your projects.



As a product designer, Lucidchart can be used to create user flows, user journeys and the wireframes at the beginning of the design process to gain clarity around the whole project. If you work with stakeholders, clients or people who are not familiar with design tools, using Lucidchart will help you facilitate remote collaborations, share your process, and gather feedback all in one piece. Additionally, the tool comes with tons of free templates you can use in your project.

Adobe XD

Adobe XD is a vector based design tool for designing and prototyping products. The tool is often described as similar to Photoshop or Illustrate. Although you can achieve similar results using XD, the tool has been specially created for designing websites and apps.



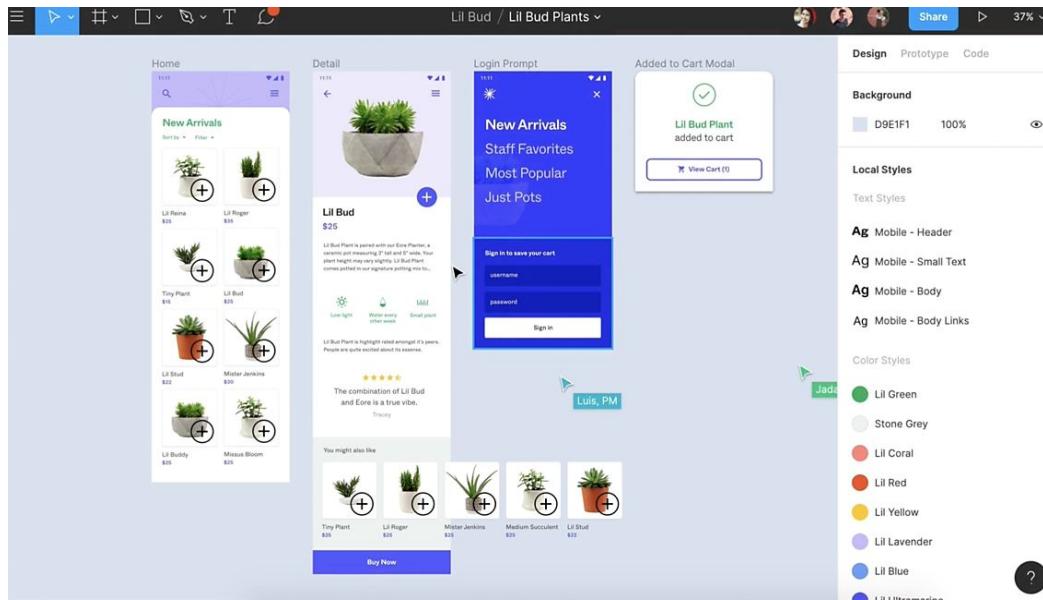
Adobe XD is majorly used for designing landing pages for marketing websites. You can easily link your sets from the component library and use them in your projects. Adobe XD works astutely in gathering feedback from users or other team members.

If you are familiar with Photoshop, you should not have any problems using Adobe XD as they both share a similar interface. In addition, Adobe XD has an incredibly useful feature called Auto Animate and the results are impressive.

Figma

Figma is an interface tool but is fully functional in your browser window, meaning that your files are all saved online and you do not have to worry about losing them. With its free web-based feature, platform-wise compatibility is not an issue. Figma comes with tons of useful plugins and

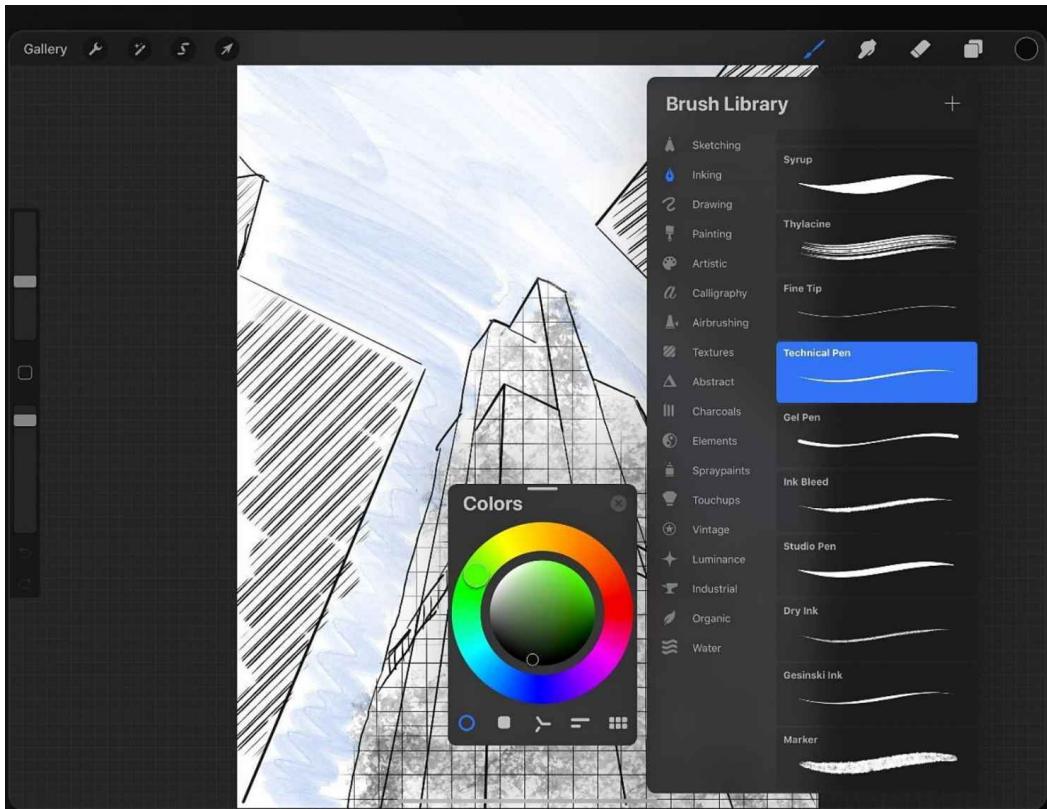
an app called Figma Mirror that allows you to see your design from your smartphone or table.



Figma is also an outstanding tool when it comes to collaborating. On Figma, multiple designers can work on the same file in real time just like Google Docs. While designing, you can see the pointers of other designers and the changes being implemented in real time. It is very astute for collaboration and working together in a team.

Procreate

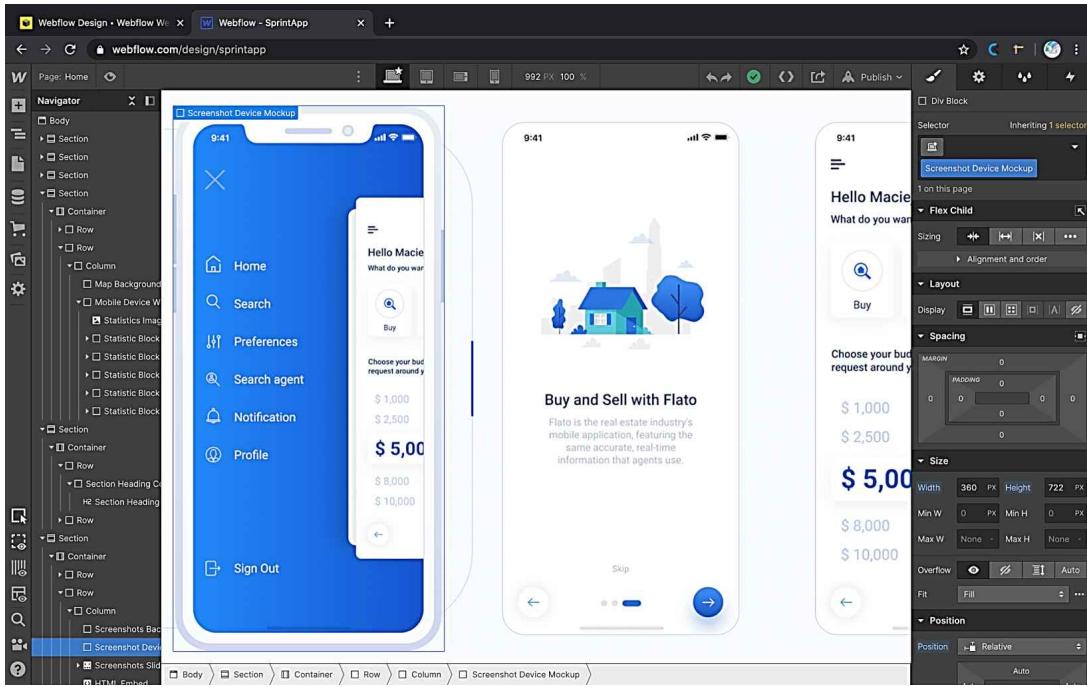
Procreate is a powerful application for sketching, illustrating and prototyping artworks, all exclusively from your iPad. If you are familiar with Photoshop, you are going to find features such as brushes or layers very easy to use.



Procreate can mostly be used for wireframing landing pages during the ideation phase to explore a variety of different options and select the best one. The goal is to generate as many ideas as possible and iterate the best possible solution. The faster you can generate ideas, the sooner you move on to the next step.

Webflow

Webflow is a website building tool that gives you the power to design, build and launch responsive websites in hours. Although it is just one web building platform, you can go from wireframing to the final product.



Webflow can be used to build interactive prototypes, but only after you have prepared different solutions in Adobe XD or Figma. In most cases, it takes more time to build a functional prototype in Webflow than designing a mock-up on Figma or Adobe XD.

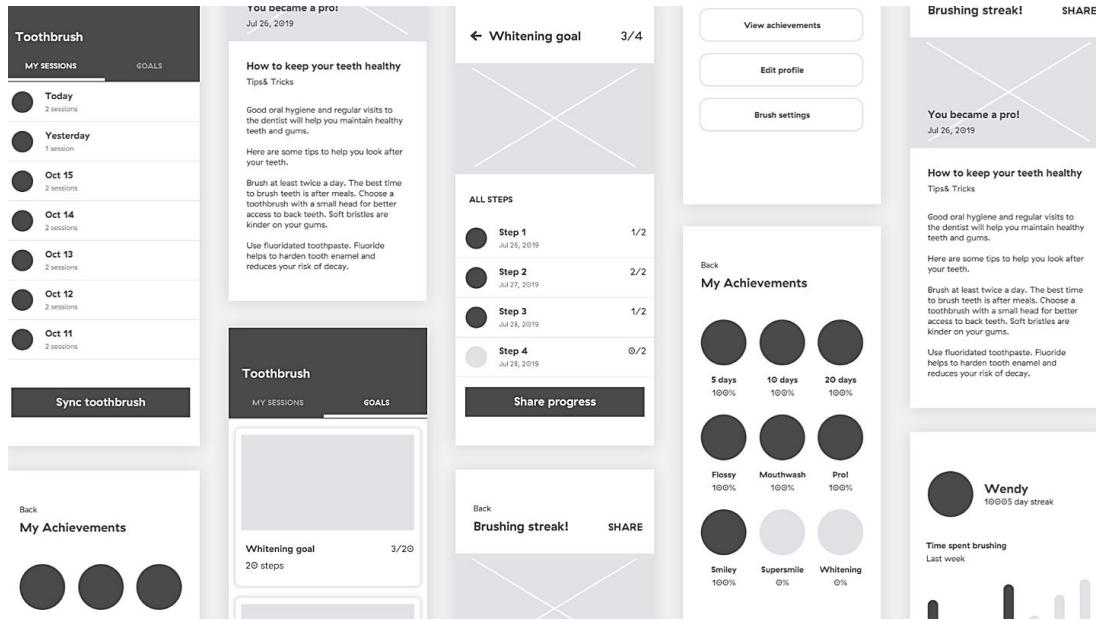
Things to Note While Using UI Tools

- A prototype is not the final product so do not expect it to be pixel perfect. Instead, ensure that it has a high degree of interactivity so it can be built and tested fast.
- You do not need an expensive tool for sketching. Simple tools such as pen, paper, and sticky notes can suffice. More importantly, you do not need to be a fantastic drawing artist to sketch designs.
- Do not get too obsessed with the details, or too attached with a particular solution, in case it fails the usability testing. If you do not get things right the first time, ensure that you get feedback from the users to improve your prototypes.

Creating Wireframes

Essentially, wireframes are used to define and plan the information hierarchy on a page or screen. This gave a first-hand layout of how items in the page should be organized and what content should be included. Additionally, it gives a description of how space should be allocated and what functionalities are available. This includes positioning elements such as buttons, menus and headings.

Working out the information hierarchy for your wireframe depends on how you want the user to process the information on the page and this is based on your user research. A wireframe is a very basic blueprint of the eventual product's appearance. It's basically a black-and-white diagram, either hand-drawn or digitally generated.



Wireframes are helpful for a number of reasons, but above all, they allow you to organize your ideas and get clarity on how the final product should be laid out. In addition, they help you to ensure consistency throughout the user interface, as you will determine how certain types of information should be displayed on every screen.

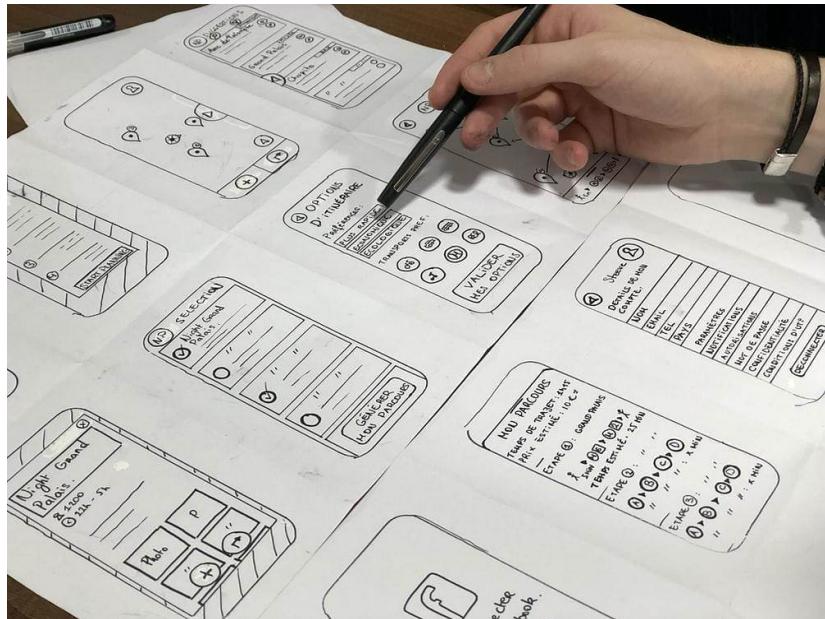
It is important to have layout and functionality clear before you start adding things like color and fonts, as they can be distracting. Wireframes are necessary in-between steps without all the bells and whistles. It is also a good technique to figure out how your user interacts with your interface.

Starting Out

Once you have done your competitor analysis and conducted the initial user research, you are ready to start hatching ideas. You may start by sketching out ideas in their roughest form exploring different avenues you might take with this particular product. You are ready to move on to proper wireframes when you have refined your ideas and they start taking shapes.

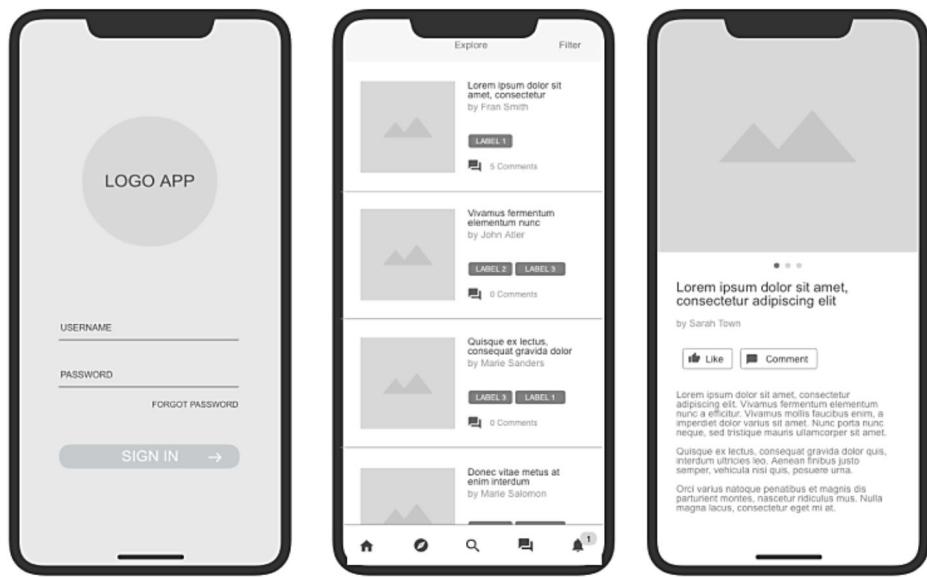
There are different methods of producing wireframes. They include:

Hand-drawn Wireframes: These can be created with pen or paper, or on a whiteboard. These are handy for getting your designs down quickly and they are easy to edit. Hand-drawing your wireframes is a great method to keep things simple and avoid getting bogged down in superfluous details.



Digital Wireframes: Once you have completed your hand-drawn wireframes, you will move on to digital wireframing. To create digital wireframing, you will need a wireframing tool or software. There are several wireframing tools out there to choose from.

The good thing about digital wireframing is that it allows you to keep track of the progress of your wireframes and document certain decisions you make along the way. Digital wireframes are also easier to share.



Find Inspiration: Before you start designing your own wireframes, it is important you find a good source of inspiration. Take a look at some examples of wireframes for a similar product to the one you are designing. Most decent portfolios will contain wireframes, so browse through platforms such as Dribble and Behance to see what other designers have done.

Building Blocks: To create building blocks for your wireframes, start by hand – grab a pen or marker and a stash of paper. At this stage, you need to ask the following question: what are the intended user and business goals when interacting with this page? In other words, this looks at what the user wants to achieve and the actions the business wants the user to complete. This could be something like adding an item to a shopping cart for example.

The next set of things you should put into consideration is how you can organize the content to support the goals of the user and business. In addition, you should also consider what information should be prominent and what buttons or touch points the user needs in order to complete the desired action. This in turn will get you thinking about where your main message and logo should go, and what the user should see first when they land on a page. You also need to consider where to place your call-to-action and what the user expects to see in certain areas of the page.

Adding Details

Once you have got the foundation in place, it is time to fill in the details. It is recommended that you work from top to bottom, then left to right. For the details you are going to be filling, at this stage it is important that you define usability conventions such as putting the navigation at the top next to the logo. In other cases, you could place a search box in the top right corner for example.

At this juncture, you also need to put into consideration spacing, layout and information hierarchy. Here, you take a holistic look at what information is most and least important, as well as what your calls to action are. For instance, if you are building an e-commerce app your call to action may be a button with the text “**Add to Cart**”. Next, think about what images you want to include, where you want to include them, and what size they should be.

Throughout the entire wireframing process, there are three big boxes you should be looking to tick: clarity, user confidence and simplicity.

In clarity, your wireframing needs to make it clear what the page is depicting and what the user can do there. Moving forward, you have to ascertain that the page satisfies the user needs by completing their desired actions without too much thought.

The goal of user confidence is to instill trust in your business through effective design. The product interface should be predictable and comfortable through easy navigation and clear calls to action. If your page is unpredictable with buttons and boxes in unexpected places, user confidence will rapidly sink. When creating your wireframe, use familiar navigational processes, place buttons, and commonly use intuitive positions.

On the other hand, simplicity is all about keeping out the noise. When creating your wireframes, avoid information overload. Excessive content, links and buttons can be overwhelming and distracting for the user. Ultimately, it makes it difficult for them to achieve their goals. The user journey should be as smooth and seamless as possible, hence the need to think carefully when deciding what needs to be included on each screen.

Note that wireframes are not about colors or aesthetics; they are about intuitive and logical layout, as well as information hierarchy.

Digital Wireframe & Usability Tests

Before converting your hand-drawn wireframes into digital format, you might need to get feedback on your work so far. If you have got the time and resources, consider conducting some quick usability tests to highlight any big flaws that you might have missed.

There are several and countless digital wireframing tools out there in the digital space. Take your time to experiment and find the one that is suitable for you. This author recommends **Balsamiq** as it limits you and keeps you from adding too many colors and details. Most tools, like Balsamiq, offer plenty of guidance, so you will easily get a grip in no time.

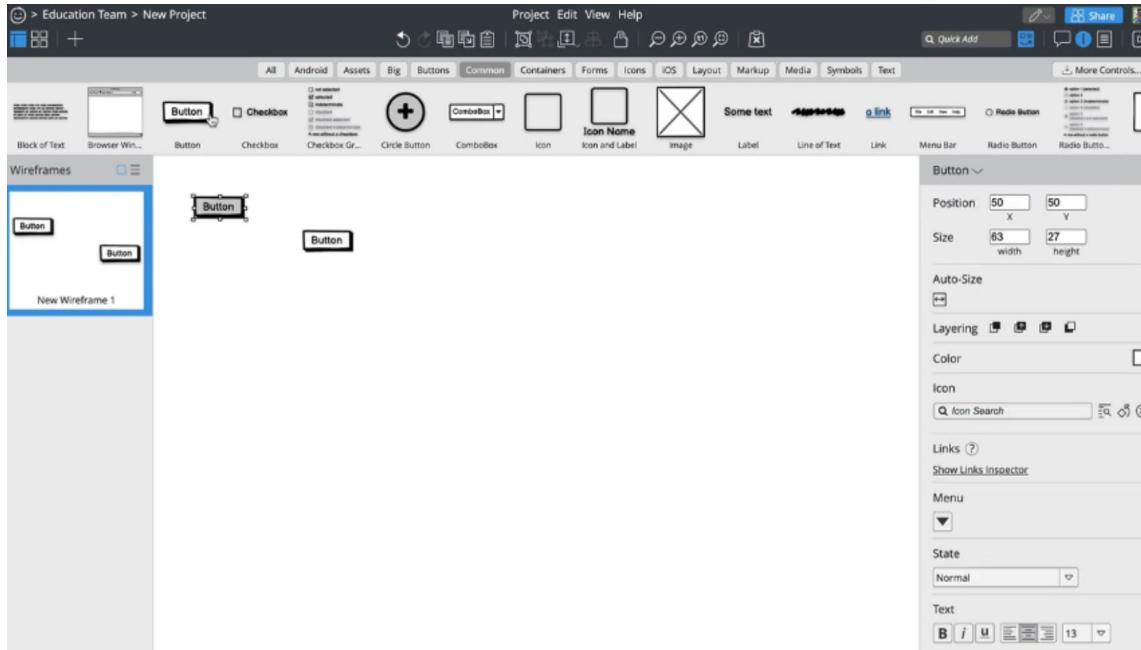
When designing an app or a website, you will create a wireframe for each screen or page, eventually ending up with a complete set of wireframes. You will need to turn your wireframes into prototypes in order to test them. This can be accomplished with the use of software that converts your wireframes into a clickable mock-up. Next, you will conduct user testing to see how the user interacts with your design identifying any bugs, flaws or blind spots.

How to Use Balsamiq to Create Wireframes

Balsamiq wireframes is a digital application for creating wireframes, which are like digital sketches of a user interface. It helps you visualize and communicate your product and feature ideas before building them. Balsamiq also has pre-built user interface templates for web, desktop and mobile applications.

The application is used by entrepreneurs, product managers, designers, developers, and more. Balsamiq wireframes save development time, because changes to wireframes are fast and easy. In addition, it allows everyone involved in the project to participate and come to agreement before development begins.

Overview of Balsamiq



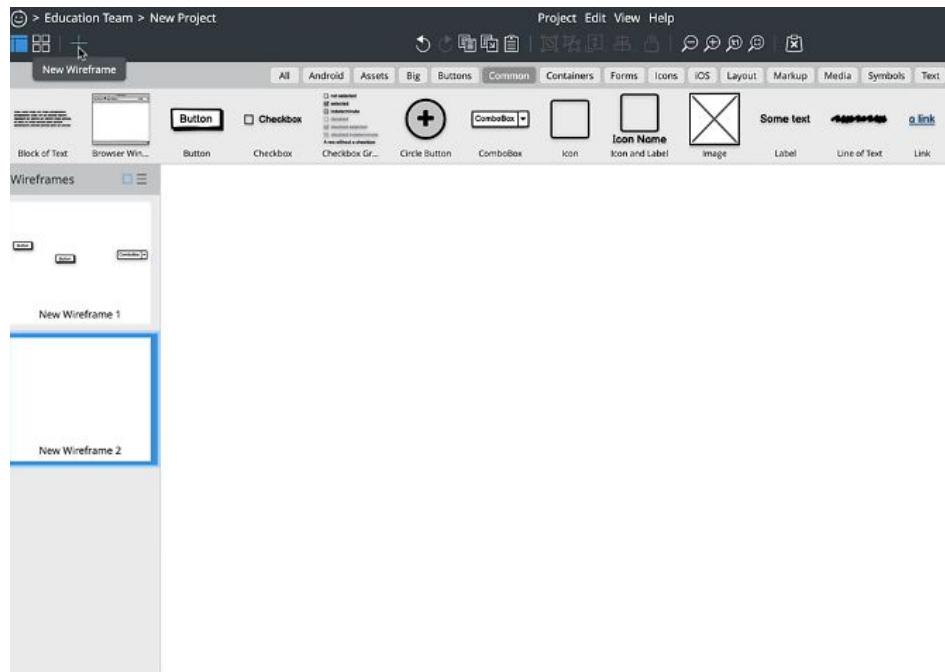
When you launch Balsamiq, the first thing you notice is the canvas, which is the blank area in the center where you will be creating your wireframes.

The basic process for creating a wireframe is to first select a control from the User Interface Library, located at the top of the screen. It has different types of controls that you can add. There are two ways to add a control. One is to drag it from the User Interface Library onto the canvas. The other way is to simply double click it.

The next thing to point out is the Property Inspector on the right side of the canvas. This is where you can select and change properties for the various types of controls – the size of the text and colors for example. Depending on which control is selected, you will see different properties there. Also, when no control is selected, you will notice that the panel gives you an option to edit notes for your current wireframe. Each wireframe can have its own set of notes. In addition, there is a panel for the project as a whole, so you can enter notes for the overall project. There are also some other properties for the overall project such as the font size, default selection color and the skin.

On the left corner of the Balsamiq interface, you will see the Navigator, which houses the list of all your wireframes. If you want to create a new

wireframe, click on the ‘plus’ + button on the top left corner of the screen. As you build your wireframes, they will be previewed on the canvas.



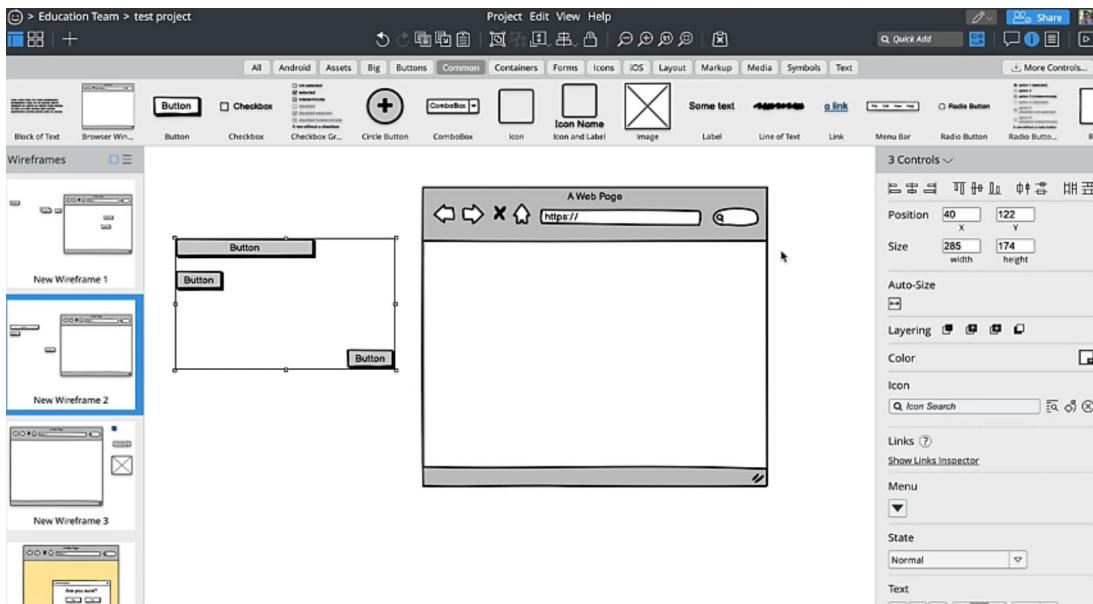
When you have the thumbnail view shown and you add controls, they are updated in the thumbnail as well. You can also rearrange them in a different order by dragging them. There is also the list view, which you can see by clicking the icon on the left. This is useful if you have a lot of wireframes and want to see a list of all of them.

There is also something called the Thumbnail Grid view. This is where you can see all of your wireframes as thumbnails at once. You can also rearrange them in any manner you choose. This is a good way to see an overview of all of your wireframes.



Another thing you can do is turn the various panels on and off to use the space more efficiently or more to your liking. If you want, you can turn off the navigator panel so that you only see the canvas. When this happens, you will see some new icons appear which allows you to navigate to the other wireframes that you have, or you can click on these arrows to quickly switch between them. Additionally, you can turn on and off the panel on the right as well as the UI Library. Controls can also be added to the canvas with the UI Library hidden.

In both the thumbnail and grid views, you will see a small arrow. When you click on the arrow, there will be some other actions such as rename, duplicate, trash and alternates. You can also right click to bring up the same menu. If you want to quickly rename a wireframe you can simply double-click and click **Rename**. To rename the project as a whole, you can double-click on the name of the project and enter a new name.



As you would expect, you can cut, copy and paste controls using the standard keyboard shortcuts. You can also duplicate controls by pressing **Ctrl** or **Command > D**. By default, the control will be slightly offset from the original. However, if you move it and duplicate it again, it will be offset by the same amount as the first control you duplicated. This can be quite useful to space things out evenly. To delete a control, press the **Delete** key.

You can select a control by clicking on it at once. To select multiple controls, you can draw a rectangle around the controls you want to select with your mouse. You can also press Shift while clicking on other controls to add them to the selection. You can deselect the control by pressing Command or Control when clicking on it. Furthermore, if you double click on a control, you can edit its contents.

Creating a Simple Wireframe in Balsamiq

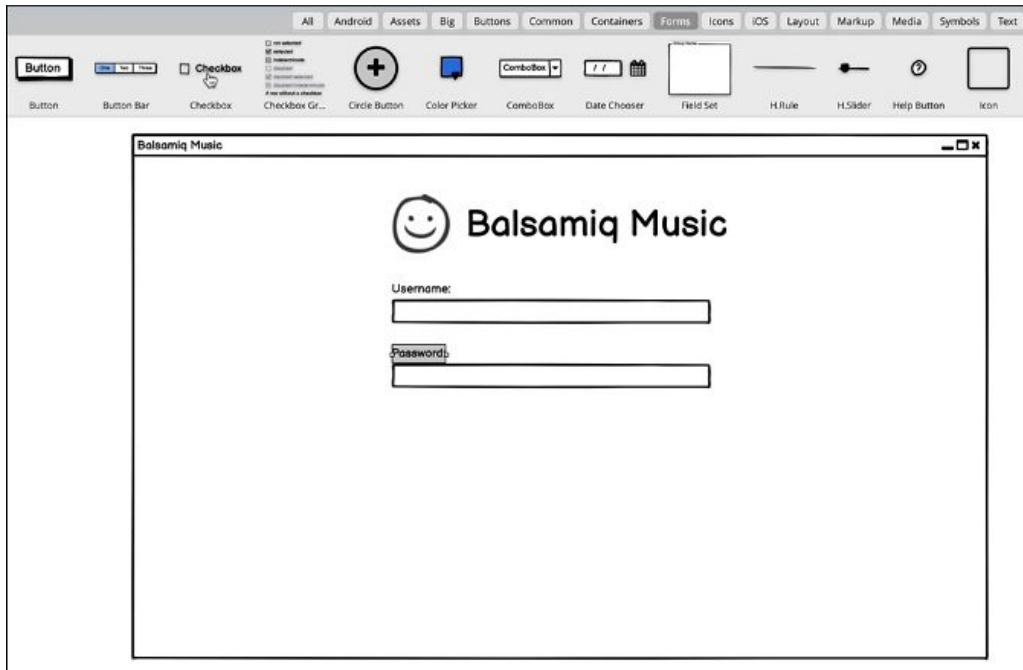
In this guide, we will be creating a simple login page for a new music app. For emphasis, we will be naming this page Balsamiq Music.

To begin, start by dragging a window control onto the canvas and hand it a specific name. Once this is done, customize the properties based on your preference and then resize it. Next, add a title and logo to the screen. Use the image control and select an already-imported image. You could select

the image for the assets category of the UI Library. Once this is done, use the alignment guide to align the properties. Group them to make it easier to align them with other controls you will be including.

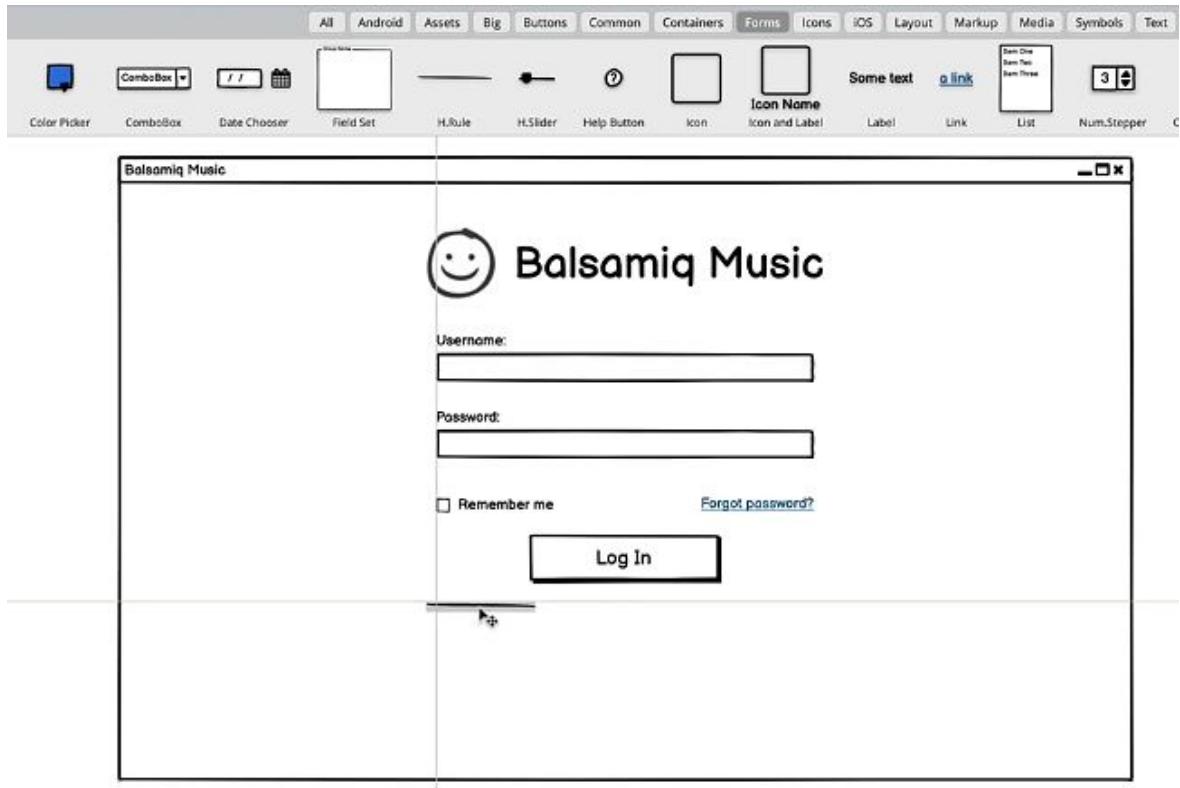


Next, you will have to build the login form. You can switch to the forms category of the UI Library to see what you have available to work with. Use the label and text input controls for the **Username** field. For the **Password**, you can duplicate the Username controls and change to Password. Next, show a checkbox to allow the user information to be remembered. The checkbox control is domicile in the UI Library, but instead of dragging it, use the Quick Add Search to add it. Once you get familiar with the controls, this will become a much faster way to add them.

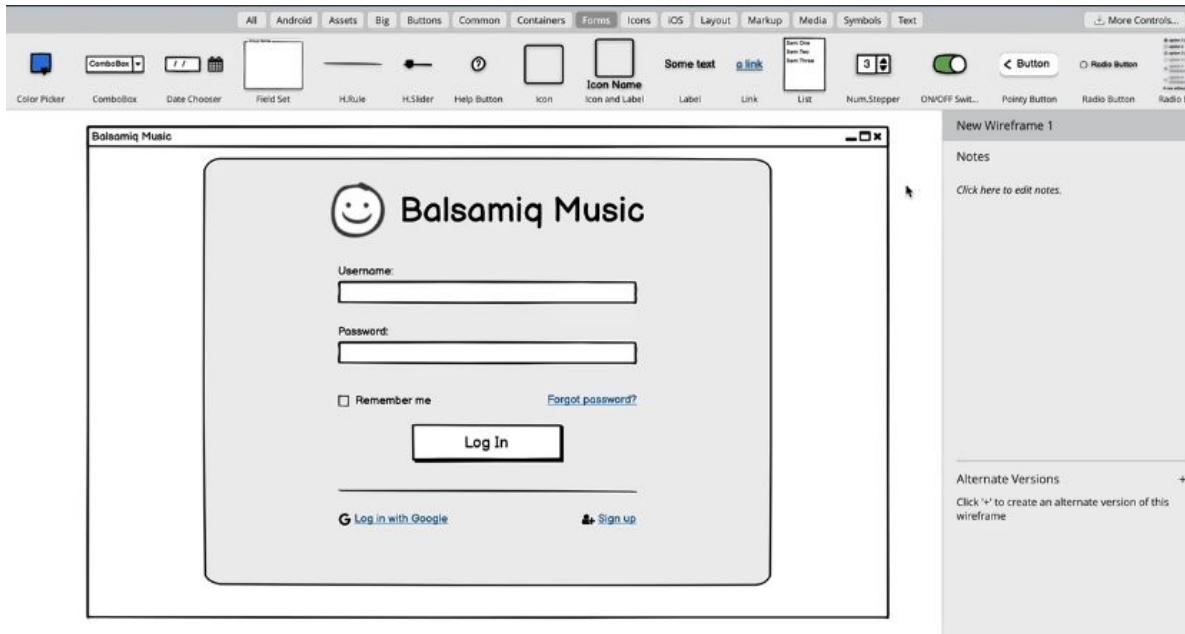


The control names are also aliased to other common names, so you can try some keywords if you do not remember the name of the control. The combobox control for example shows up if you search for a drop down, pull down, or list. Next, edit the checkbox control and move it below the Password field. Add a link to help the user if they have forgotten their password. Once you are satisfied with the content and alignment of these form controls, group them so that you can move them around as a whole as you keep building the wireframe.

Next, add a button to log in. You can do this using the Quick Add option. Press the forward slash key to put the cursor in the quick add box. If you want it to be a bit bigger than the default size, increase the text and resize the button. At this point, it is important that you do some fine-tuning on the spacing and alignment to see how it looks.

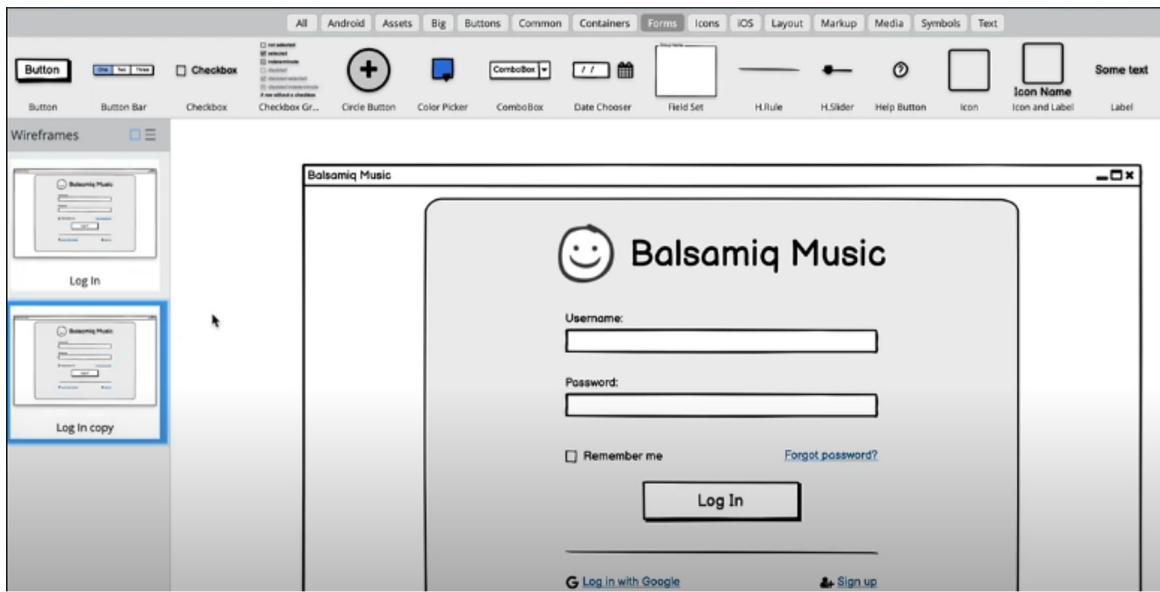


Moving forward, add a few more controls to complete your first screen. Balsamiq wireframe has the Font Awesome icon set so there are tons of icons to choose from. The icon and label control is a nice way to use an icon and text together. You can use some of the text markup codes to make the text look like a link. You can also add a rectangle around the properties to make it stand out a bit more, as shown below. You can right click to move it to the back. To better define it, you can also include a background color. Note that colors in wireframes should be used sparingly especially in their early phases. Shades of gray can be helpful for defining different sections of the page, but anything more than that can be distracting at this point. Next, align everything together.



Creating a Complex Wireframe

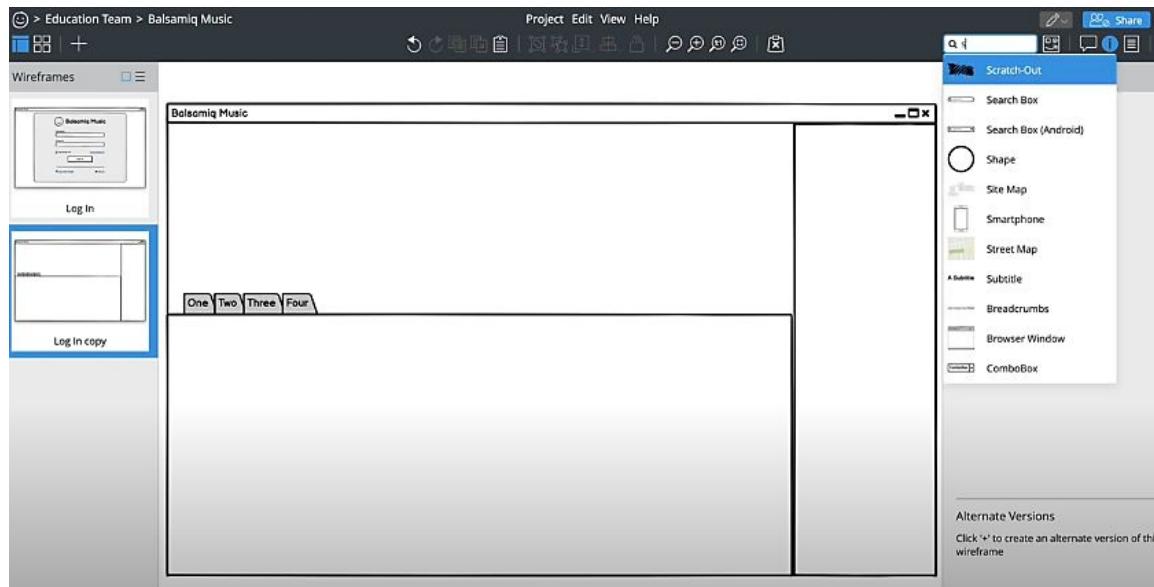
Once you have created a simple wireframe, you are set to use some new controls to create a more complex screen. With the previous example (Balsamiq Music) that was highlighted, you will create the homepage, which you see after you have logged in. Here, you will have all the music content, a panel on the right depicting what is currently in play, as well a featured artist area at the top.



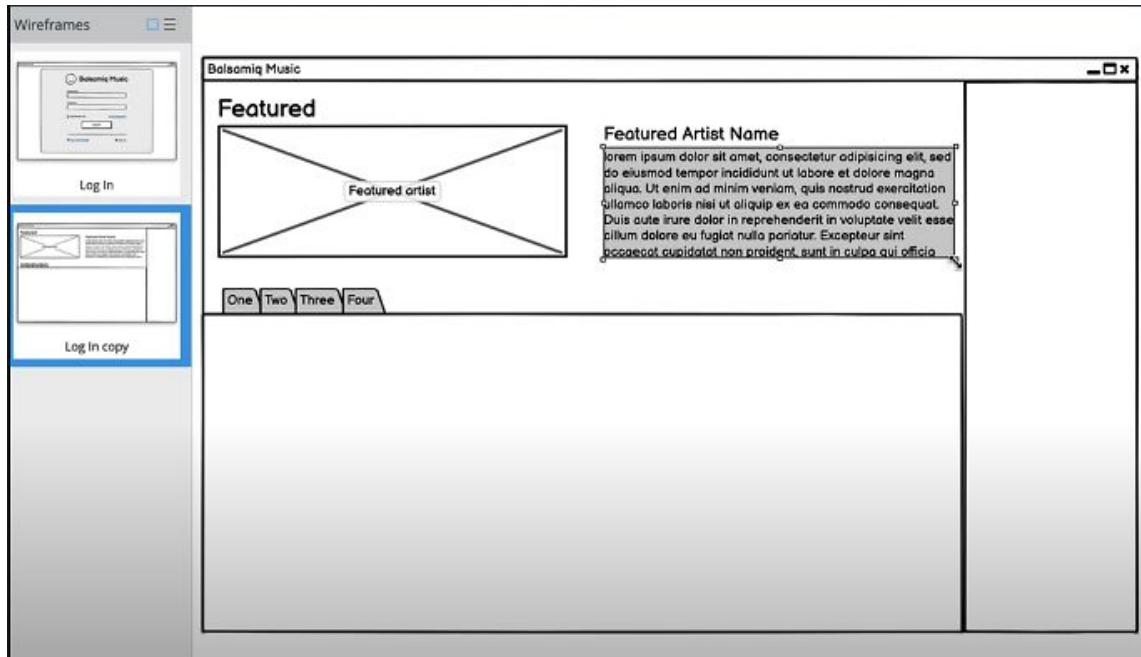
Start by cloning the previous wireframe and then clear out the contents. Begin the wireframe by defining the different parts of the screen. You can

always show the UI Library by pressing Ctrl or Command > L. Remember that many controls can be searched by other names, so you do not have to remember the control name exactly.

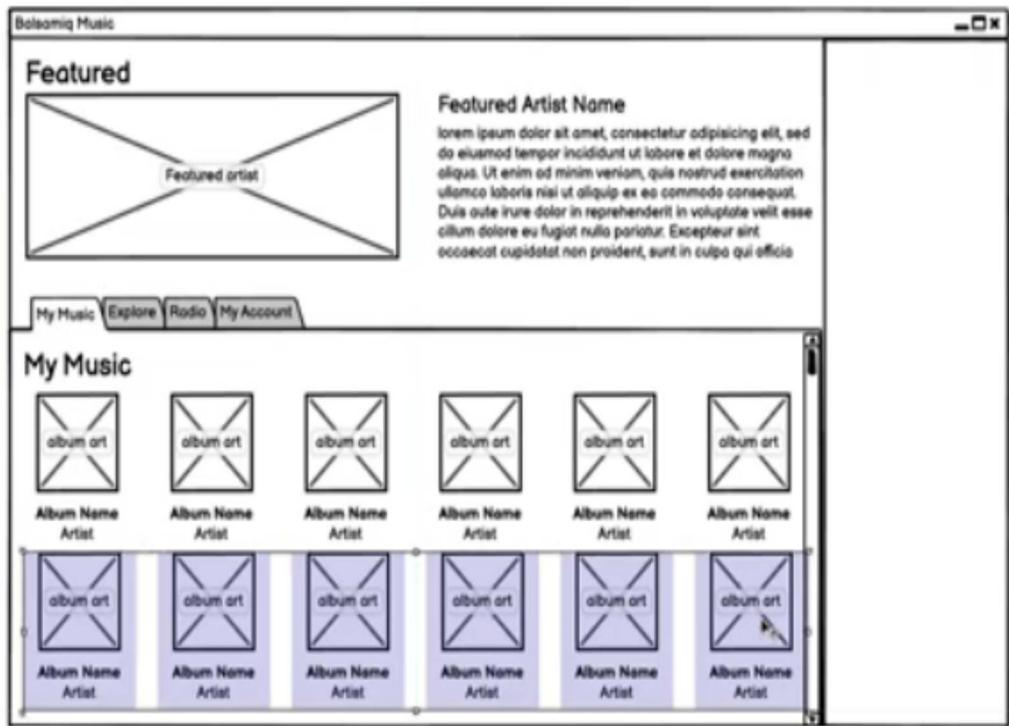
On the canvas, you will have the list of albums and some tabs for accessing the other parts of the app. Next, add a rectangle at the bottom right corner of the canvas for the “now playing” area. The area at the top will be for the featured artist.



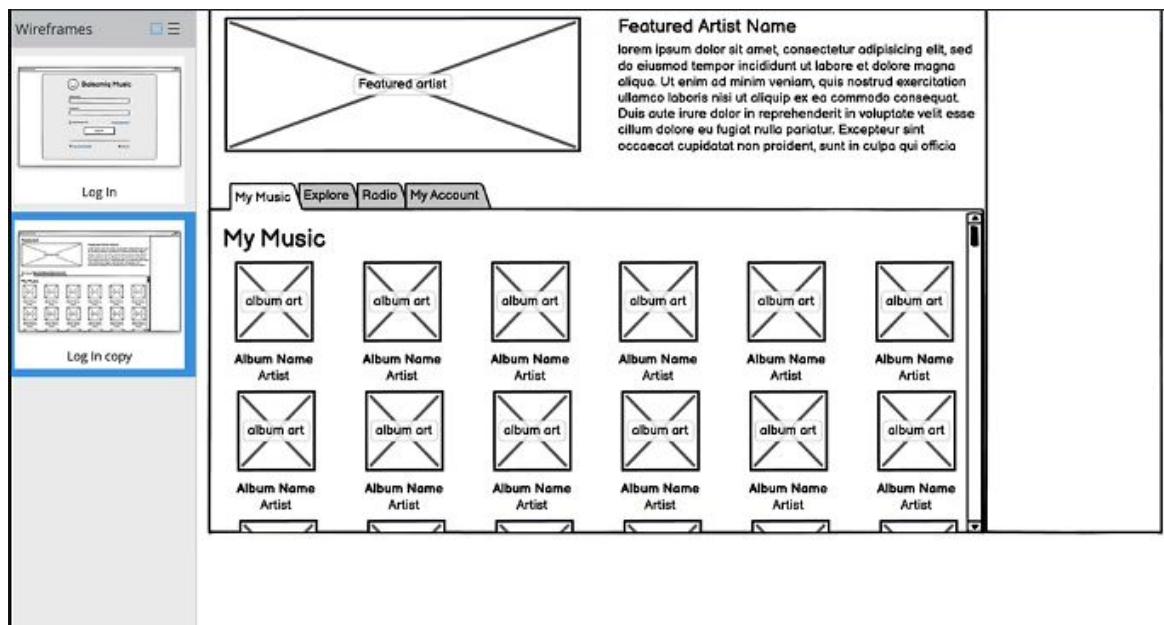
Titles or subtitles are good for labeling sections. Add a subtitle called “Featured” for the featured artist section, then add an image. Add another subtitle but make it smaller so it does not compete with the other one, as well as some placeholder text. To better indicate that this will be a longer block of text, you can type the word “lorem” and get lorem ipsum placeholder text.



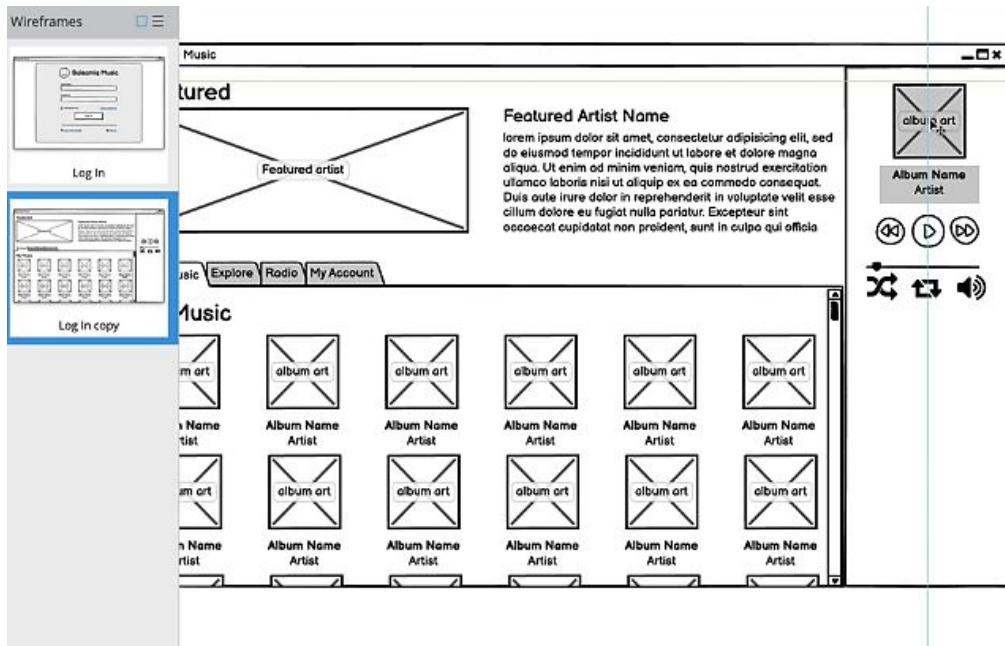
Next, move on to the tabbed area below. You can have four different sections there: My Music, Explore, Radio, and My account. The My Music tab will be a list of all the albums in the user's library. You would want to show that it might be a long list by showing a scroll bar using the **Property Inspector**. Add another subtitle to label this section. Next, create some thumbnail placeholders for the albums. Use the image control for the album art, and add some text for the album name and artist. Use the text formatting codes to make the first line bold, and center the test using the Property Inspector. Align them both and duplicate a bunch of times.



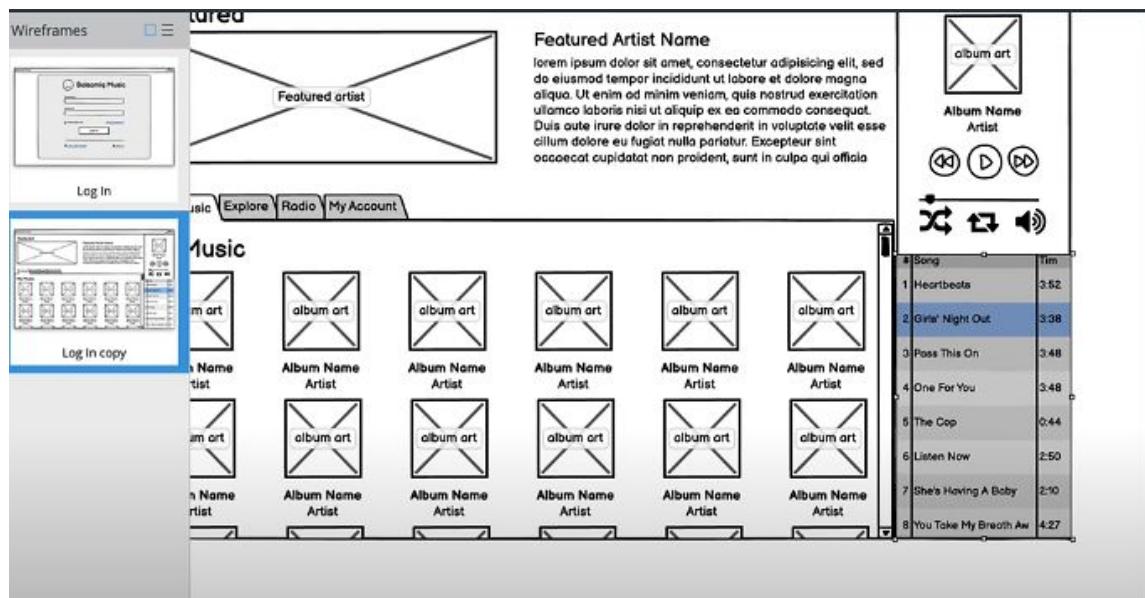
Notice that the last row goes outside of the window border. You could just resize the window to make it fit, but it will look even more realistic if you can show the last row as cut off, because it is a scrolling list. Images and group controls can be cropped to only show a part of them. Use this technique to cut off the bottom of the group.



For the “Now Playing” panel on the right, start by quickly adding some audio player control and icons. Once you get familiar with the controls and icons, you will find any icon you need for the section. In this case, you can use icons such as volume, shuffle, repeat and the likes. Next, take one of the album thumbnails and put it over on the now playing section. You can double click into the groups and copy it, then press the home icon to get back out. This is an easier way than ungrouping, copying, and regrouping.



Next, all that is left for this wireframe is a track list. For that, use the data grid control. Paste some text on the control, resize and rejig the properties a bit.



OceanofPDF.com

CHAPTER THREE

Typography of UI Design

Typography

In UI design, it is normal for you to hear common terms such as typeface, font, typography, type family used interchangeably. Knowing their distinct differences can be very helpful as a UI or web designer.

Type classification is the main style category or group. The most common ones used on the web for UI designs are Sans Serif, Serif, Slab Serif and Handwriting or Script. There is also Display/Decorative, Monospace and Blackletter. While there are other type classification, those are more commonly used in graphic and print design where the focus is more on aesthetics rather than readability, usability, responsiveness and interaction.

Typeface is the design or style of the actual alphabetic letters themselves. The most common typefaces used are Helvetica Neue, Alfa Slab One, Times New Roman, and Open Sans.

On the other hand, a font is a digital representation of a single version of a typeface with one weight, one width and one style. For example, Helvetica Neue Bold is completely different from Helvetica New Italic or Helvetica New Regular. Likewise, Alfa Slab One Regular, Time News Roman, Open Sans Condensed are all individual fonts.

Type Family is the collection of all of the fonts. For instance, Helvetica Regular, Helvetica Oblique, Helvetica Light Oblique, Helvetica Bold, Helvetica Bold Oblique all together form the type family of Helvetica with all of the fonts.

Typography is how the font is applied, arranged and treated in context. For example, you could have some texts with a header that is in a thick black letter Serif font, a Sans Serif body and a subtitle that is all-caps and has

your brand color. Typography typically refers to the placement of text, how much spacing is between them and the grouping.

Why Typography Matters

The right typography harmonizes with the other components on the interface. It also invites the user to understand what their next step is and ultimately helps them accomplish their goal. The most important characteristics of typography is clarity and readability, which are key in how they interact with a website or application.

A design is made or broken by its typography. It evokes emotions and creates a sense of understanding or connection to a brand when done well. Equally just as successfully, it can slip away unnoticed as it makes reading so easy and pleasurable that the readers do not fixate on the letterforms themselves. This way, the typography communicates without getting in the way. Poor typography gives people a lower impression of a brand, product or service. Even worse, it can make an experience difficult or confusing.

Typography is a major component of branding. When you look at other products you use and observe their typography, you will notice that the company has chosen a typeface that aligns with the brand message. It also aligns and differentiates itself from other brands. Typefaces conjure various connotations that are influenced by culture and cognitive biases and they affect how we feel about the brands.



Topographical hierarchy is the process of using sizing, colors, contrasts and alignment to guide the users on what they should pay attention to first. The following should be put into consideration:

Size: In most cases, your headings will be large, while your subheadings are going to be smaller than the heading and the body text even smaller.

Contrast: Like hierarchy, contrast helps you to emphasize which message and ideas you want the user to pay special attention to. For example, if you have a darker and bolder font, users are going to pay more attention to that.

Consistency: This is applied when you want to avoid cluttered and messy interface, which is integral in UI design. It is important to establish a consistent hierarchy for your typography. This way, all of your headings and body copies stay consistent throughout the user experience.

White or Negative Space: Although this typically goes unnoticed by the users, it is also vital in establishing hierarchy and making sure that the interface is uncluttered.

Alignment: This is the process of unifying and composing text graphics and images to ensure equal spacing, sizing and distance between each element. For example, aligning your text to the right might seem very counterintuitive for people who read left to right.

Application of Typesetting

UI designers spend a lot of time composing the text and adjusting the spacing between letters and lines. This art of arranging text is what is referred to as typesetting. There are three fundamental techniques that you will need to typeset your text:

Kerning: Kerning is the practice of adjusting the spacing between each character making it feel evenly distributed across the interface.

Tracking: Tracking is more concerned with the spacing between the words to ensure that they are not too close together or too far apart.

Leading: Leading is the practice of adjusting the space between the lines of text.

What to consider in Typography

Reflect on Personality and Tone

Before selecting your font and text placement, it is important that you think about your chosen app and website and intended audience. Here, you are

more concerned about how you want them to feel when interacting with your app. In addition, you take a significant look at the tone you want to achieve from your audience. Once you have put these factors into consideration, it will help you narrow down the interface options and help you choose a font that reflects the type of feeling that you want your users to have.

Stick to One Typeface

With aesthetics being a key part of UI design, it might be tempting to use several types of typefaces. However, using too many typefaces will make the app cluttered and disoriented, especially for the users. Sticking to one typeface will not only help you achieve a cohesive interface, it will also make it a lot more interactive with the users. Ideally, your chosen typography will have enough range so that you can choose your primary and secondary fonts. Your primary font is going to be used for all of your larger text like headings, while the secondary fonts will be used more for buttons as well as body text.

Readability

Readability of texts is essential when putting out texts on an interface. Shape of letters, space between letters, space between lines and width of lines all affect a person's ability to easily read texts. It is a common trait in humans to quickly scan texts instead of reading every word. Improving the scan ability of text is something that UI/UX designers should seek to achieve.

When selecting a font, it is very important to put readability into consideration. Some of the most readable Serif fonts are Times New Roman and Georgia. You will also find readable Sans Serif fonts such as Helvetica, Futura and Arial.

Accessibility

Accessibility is a core component of product design because it seeks to make a product service easy to use. Designing for accessibility means the product is easy to use, not just for those who are differently abled. Note that the people who use a product you are designing may have a physical

cognitive language or learning disability. They may have color blindness, low vision, or use a screen reader to navigate the web.

As far as a design goes, if you adhere to the best practices of typography your design will naturally be set up to be quite accessible. Your users will benefit immensely when you select a typeface with distinct, easy-to-read characters and sufficient contrast, as well as effectively applying heading levels, generating clear visual hierarchy, preserving proper alignment, and keeping the text adequately sized.

Applying Contrasts

In typography, contrast can refer to a variety of things. The first is concerned with the letter shapes of a typeface. The vertical and horizontal strokes of a typeface with great contrast would be thick. There would also be little to no change in stroke thickness in a typeface with low contrast.

Contrast can also refer to the text itself and how it interacts with the interface. For instance, pure black text on a pure white background creates high contrasts, whereas a light gray on a medium gray creates low contrast. According to the WCAG contrast guidelines, body text color should have a contrast ratio of at least 4.5:1, when compared to its background color. Large text that is 18 points and larger, should have a contrast ratio of at least 3:1.

Text Color Contrast

In the same vein, contrast can mean a few different things in typography. The first is the simplest and it is probably what comes to your mind. This is the actual color of text, such as red, blue, yellow etc. Page contrast can be created with changes in color. To make your interface readable by all, it is important that you also put those with color blindness conditions into consideration.

Common color blindness conditions include red green and blue yellow. People with color blindness have difficulty discerning the differences between the two. Avoid pairing color text and backgrounds in those colors. Thankfully, there are browser plugins and other tools, which allow you to test how those with color blindnesses see your design.

Another important aspect of color contrast is the overall density of ink or text on a page. If you want, you can utilize different weights of the typeface at different sizes to create even color on a page. There are lighter weights at larger sizes and regular weights at smaller sizes. Alternatively, you can create uneven color by setting your headings to be bolder weights while keeping the paragraphs the same. Heavy areas of color can create emphasis if needed.

Classification of Typefaces

Knowing different type genres will help you select a proper typeface for the projects at hand and make you a better designer overall. For example, if you are working with a client that wants the mood of their website to convey eloquence, you need to know what classes or styles of typefaces that lean towards that bent.

In another instance, if you are designing a website that is heavily influenced by a certain time, you should utilize a typeface that would have been appropriate to genres at that time. The way typefaces look conveys a message to the reader. Knowing these genres will help you see how your type interacts and what makes it distinct.

Over the years, typefaces have been classified in different ways; however, there are three major genres (along with their sub-genres) that are key to your designs: Serif, Sans Serifs and Scripts.

Serifs

As you have previously learned, typefaces can have serifs on their letter forms. Within the serif genre, there are a lot of nuances that sets apart different serifs into sub-genres. These sub-genres include: Humanist, Old Style, Transitional, Didone and Slab.

- 1. Humanist Typefaces:** These have strong calligraphic influence on interface. They tend to have diagonal stress, lower stroke contrast and a relatively small height. While they are not as common today, they include fonts such as Janson, Kennerly, and Centaur.



2. **Old Style Typefaces:** With the introduction of Old Style, letter forms were getting more refined as type and less influenced by calligraphy. These tend to have less diagonal stress and the serifs are more wedge-like. Some examples include: Goudy Old Style, Palatino, Perpetua, and Plantin.



3. **Transitional Typefaces:** The trend of decreasing calligraphic flow continued after Old Style. Transitional typefaces have vertical stress, thinner and flatter serifs, alongside exaggerated contrast between thicks and thins. Some examples include: Baskerville, Bookman, and Clearface.



4. **Didone Typefaces:** With the introduction of these typefaces, the influence of the pen was nowhere to be found. The serifs became even thinner without any sign of bracketing. Here, contrast is taken to the extreme with thick verticals and ultra-thin horizontals. These

typefaces can be regarded as reminiscent of high fashion culture. They work great at large sizes with ample amounts of white spaces around them. However, as body copy at small sizes, their serifs and horizontals can quickly get lost. Some examples include: Bodoni and Didot.



5. **Slab Typefaces:** Slab serifs have extremely thick slab-like serifs and low contrast. This came about in the early 19th century and was heavily used for headlines and advertising due to their bold appearance. Most of these are utilized at large sizes but they are also great in small text sizes. Some examples include: Rockwell, Clarendon, and Egyptienne.



Sans Serifs

Sans Serifs do not have serifs on their letter forms. They include typefaces such as Grotesque, Neo-grotesque, Humanist Sans and Geometrics.

1. **Grotesque Typefaces:** These became popular in the late 19th century. Although sans serifs are seen as completely normal today, they were not as referenced when introduced as they are now. The design of an earlier one – Akzidenz-Grotesk – has been theorized to be derived from Didone, because the typefaces have similar metrics when the serifs from Didone are removed. As seen in other genres, san serifs

are typically low contrast. Some examples of Grotesque also include Franklin Gothic.



2. **Neo-Grotesque:** The Neo-Grotesque refines some of the peculiarities in early Grotesques. Helvetica and Univers are some of the common sans serif typefaces. Although there is a desire for simplicity, Neo-Grotesques are not always great candidates for body copy due to their simplicity and similarity in letter forms. These can often affect legibility at small sizes.



3. **Humanists Sans Typefaces:** Not to be confused with Humanist serifs, these go back to calligraphic roots with greater variations in line width. They are often the most legible of the sans serif typefaces, hence their popular use as website body copy. On their legibility, the modulation of the line thickness creates distinct character shapes. This makes it easier to distinguish, so it is easier to recognize words. Humanist letter forms also have wide apertures which in most cases help to avoid mixing up letters. Some examples of Humanist sans include Tahoma, Gill Sans, and Frutiger.



4. **Geometrics Typefaces:** As the name implies, Geometrics letter forms are based on geometric shapes like circles and squares. Some examples include Futura, Bank Gothic and Gotham.



Scripts

Scripts are typefaces based on handwriting. They are subdivided into two: Formal and Casual Scripts.

formal script
casual script

The image shows two examples of script typefaces. The top example, 'formal script', is a more structured, cursive script. The bottom example, 'casual script', is a more fluid, handwritten-style script.

1. **Formal Scripts:** These are based on letter forms from writing masters in the 17th and 18th centuries. They have some contrast between thick and thin as they were inspired by the way a quill or nimble pen would handle the letter forms. They tend to be more elegant and work well for events like weddings in this day and age.

2. Casual Scripts: These are somewhat freer and casual. They tend to be more lighthearted or easygoing than their serious eloquent counterparts. The contrast can range from low to high, depending on the typeface. They were often inspired by the way; a brush or marker would handle the letter forms.

Selecting and Using Typefaces

The standard set of fonts on your computer are called system fonts. Android, IOS, Windows and Mac each have a different selection. These are immediately usable on your computer; however, there is a relatively small selection.

If you choose to design with a system font, when it is time to develop it with code, you can either find a web font that allows everyone to see the font, even if they do not have it installed, or you can create a font stack in your code. Luckily, system fonts are not the only option for UI designs, there are tons of fonts available for download and they are easy to install.

To install a font, find a font foundry or a font distributor website, and sort by the features you are looking for. When you find your preferred font, download and install it on your computer.

The screenshot shows the Google Fonts website interface. At the top, there is a search bar with 'Search fonts' and a dropdown menu 'Sentence'. Below the search bar are two buttons: 'X Sans Serif' and 'Language'. A modal window titled 'Font Properties' is open, showing settings for 'Number of styles' (radio button selected), 'Thickness', 'Slant', and 'Width'. The main content area displays a list of font families. On the left, 'Robo' is listed with 'Christian Robertson (12 styles)'. In the center, a sample sentence 'All their equipment and instruments were still before we had left the round.' is shown in a sans-serif font. On the right, 'Lato' is listed with 'Lukasz Dziedzic (10 styles)'. Another sample sentence 'A shining crescent far beneath the flying vessel.' is shown in a sans-serif font. At the bottom, other fonts listed include 'Montserrat' (Julietta Ulanovsky, Sol Matas, Juan Pablo del Peral, Jacques Le Bailly (18 styles)), 'Roboto Condensed' (Christian Robertson (6 styles)), and 'Source Sans Pro' (Paul D. Hunt (12 styles)).

Font Formats

You may notice that there are more than one file per font style. This can happen if there are different formats. The common font formats include: OpenType (.otf); TrueType (.ttf); EOT (.eot); WOFF (.woff); WOFF2 (.woff2); and SVG (.svg).

- Files with an (.otf) extension are opentype fonts. This is the preferred format because it includes the most customization options and has widespread support across platforms.
- Files with a (.ttf) extension are truetype fonts – they were previously used before the open type format. While they still work well, they do not have the extras that opentype fonts have.
- Files with an (.eot) extension use a format created by Microsoft. They are meant to be used on the web, however, they only work in internet explorer.
- Files with a (.woff) extension are the preferred format for web fonts. These files are compressed, which means they load even faster.
- Files with a (.woff2) extension are newer iterations of WOFF. The difference between the two is that they are more compressed. It is well supported across all the major browsers.
- Files with a (.svg) extension are not recommended unless you are trying to support a very old version of Safari.

Using a Typeface

Good typography starts by choosing a good typeface. No matter how nice a graphical element looks on a page, a choice of a bad typeface can ruin it rapidly. When entering into the process of choosing a typeface, it is important to consider where it would appear.

A good consideration of the aforementioned will determine if you are looking for a text type face that is engineered for small sizes to a variety of

settings or a display typeface which tends to be more flashy and works well on larger size. These two descriptors deal with the size and function for which a typeface is intended.

Text Typeface

It is often smart to choose a text typeface before a display, because much of the copy on a website will be set in this choice. When choosing a text typeface on the web, your first priority is legibility. If a site's body copy is hard to read, then visitors will not stick around for long.

The first thing to consider is if the typeface has a good x-height. An x-height that is too low will make the lowercase letters hard to read and tell apart at small sizes. An x-height can also be too high if it is nearing the cap height making it hard to discern what is uppercase or lowercase. A general measurement to go by is if the x-height is around 60 to 75 percent of the cap height, then you have got yourself a good candidate for a text typeface.



Additionally, the white space around the letter forms also has an impact on legibility. If the space between letters - also known as letter spacing – is too narrow or too tight, then at smaller sizes, the letters can be muddled together, which has an adverse effect on legibility. Looser letter spacing allows the letter forms to still breathe at small size. While it is true that you have some form of control over letters spacing with code, it is not advisable to manually letter space body text. Find a typeface that already has proper looser letter spacing for text.

Next, you would want to ensure that the typeface has overall even color as it balances the positive space of characters and the negative space of white space. It is necessary to avoid making the text too dense in certain areas or characters, which can break the reading flow. A trick you can employ is to blur your eye as you look at the typeface. If dark splashes or uneven places of color show up, mark the typeface off your list.

Other areas that deal with whitespace are counters. A counter is the fully or partially closed white space inside letter forms like “o”, “b”, or “e”. Large or open counters can also aid legibility because they are less prone to close up at smaller sizes.

Another thing you should consider is the mood of the typeface matching the content at hand. Familiarize yourself with the content by taking the time to read it thoroughly. Next, write down some ways to describe it in your own words – is it serious, light-hearted, witty, pointed or classy? As you peruse typefaces, have these in the back of your mind and see if a typeface speaks in that certain mood.

Always consider who your audience is and what kind of styles of typefaces they might be accustomed to. It is important to consider what their industries and genres are. You might not want to choose something that has been overused, but you can still plan according to these norms and create familiarity or earn trust by choosing a proper typeface that speaks in the right mood.

Furthermore, with text faces, it should be noted that mood could be conveyed with the slightest subtleties in the letter forms. A simple change in the way a serif is handled can mean the world of a difference in text, because there is a lot of it on the page. Ensure that you do not go for something that is overly ornate or has a lot of character, as it will have too much going on for body copy. The mood of the typeface should fit the content at hand, but do not sacrifice legibility just because you like the mood of another typeface better.

Most pertinently, a typeface has everything you need to make it legible and alluring. You would hate to get halfway through designing a layout and realize that the font does not contain a certain character or symbol that is needed. Things to consider are: the range or weights of the typeface, italic styles of the typeface, different widths for versatility, small caps, and the accent or characters included for language support.

In addition, you should also consider what kind of numerical figures are needed. To clarify these, there are a few different styles of numerical figures including Old Style and Lining figures.

Old Style figures vary in height and descend below the baseline in most cases. These are very apt for text and body copy as they flow well with the rhythm set by the text and they are necessary when using small caps.



On the hand, lining figures all have the same height and baseline and they are generally apt for display, headlines or setting with uppercase only.



Conclusively, designers sometimes utilize a versatile text family that works for both small and large text sizes. Other times, a single typeface will not work for all text sizes because abnormal intricacies can appear in the letter forms at different sizes. Additionally, you might want to have some variety with your type.

Display Typeface

Display Typefaces are meant for larger sizes such as big headlines, site titles or pull quotes. This allows for a bit more expressive and creative opportunities with letter forms.

Great intricacies like thin serfs would be lost at small point sizes, but they can shine as displays. Big bold condensed texts with narrow counters would close up at body text sizes, but here you can soak them all in. A nice casual sign painter script would hardly be legible in paragraphs, but as displays, it can flow beautifully as heading.

To choose a display typeface, first ensure that it is legible and readable. Just because the type is bigger does not mean that every character of a typeface

will be legible. If a user cannot read a headline or a title, then the message has not been enhanced by good typography.

While there is much more room for expression with display typefaces, it is critical that you choose a well-designed legible typeface. A cool typeface in a specimen image does not translate to being usable. Ensure that you make use of the blurry eye test to see if the typeface has an even overall color in all of its characters. Most font sites include a type tester with their typefaces. Write out example headlines to make sure it is evenly spaced and see what sizes it works best at. Display types should have a bit tighter spacing than text typefaces.

Other things that can help readability and display faces are short ascenders and descenders. In the setting of headlines, these features help reduce choppiness in the text. One of the big questions you would want to ask is: does the mood of the typeface match the content? For text faces, it all boils down to channeling the mood with subtle nuances in typefaces. However, with display, you have a bit more room for expressiveness in the mood.

If you are creating a website or app that is set around a certain period, look for typefaces that are true to that period. Although this might be more extensive research, instead of choosing the mood you think the period should look like, you will be truly conveying the real message.

Next, you will also want to think about who your users are. If you are creating a site for people in a specific industry (web developers for example), then that affects how you choose a typeface. For instance, if you want to display snippets of example code in a blog post, coding programs like Atom or Sublime text are used by web developers and default to monospaced typefaces. These are fonts originally created for typewriters whose characters all occupy the same amount of horizontal space. They are great for codes since it is easier to distinguish symbols and layout tabular data in plain text.



However, they would not be a great choice for body text due to decreased legibility and long paragraphs. Although you can still play into that industry norm with the code snippet. By utilizing a monospaced font, you can typographically make the snippet appear as it would in an actual code environment.

Essentially, you should take into account who your readers are and what styles of typefaces might be the right fit for their industry. Similar to text typefaces, take into account the budget and make sure a display face has everything you need in regards weights, style or accents. It is also possible to have good typography with a single weighted font for your display face.

Translating Text to Display

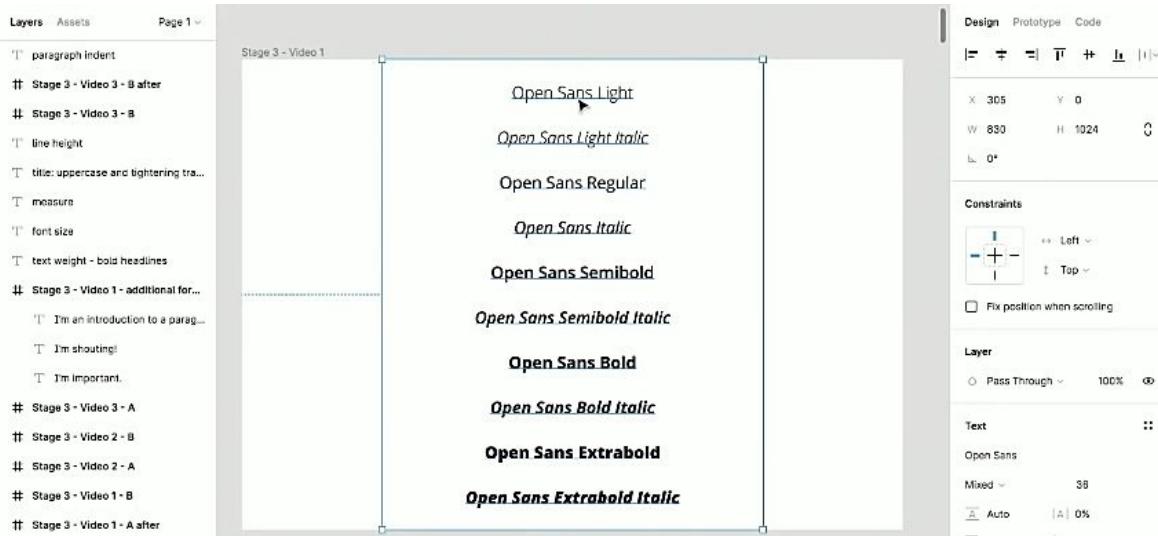
In some cases, there might be a scenario where you land a client who already has a typeface for their brands. This process is sometimes as simple as finding the web font version of that typeface. Other times, there might not be web font licenses available for the type face yet. In this case, you would want to find a typeface that channels a similar mood and style to the print version, as you translate their brand for the web.

You could run through the internet to get alternatives to the typeface. However, it is important that you utilize all the knowledge in this guide to make a well-informed decision for an alternative that best fits the client's needs. You might arrive at a different conclusion than those online forums.

Think about where the typeface fits in best, what makes it legible, if its mood matches the content and audience, and what factor will cosplay in the design. The answer to these questions should help guide you in a good direction and leave room for your own personal taste and design choices.

Fonts Weighting and Styles on Figma

In this section, we will be looking at the different weights of Open Sans using Figma. As shown below, there are different weights including light, light italic, regular italic, and so on. Some fonts have additional styles such as hairline, which is thinner than thin and ultra which is thicker than extra bold or black.



For the entire text block, the family name is set as Open Sans, however the text within is a different weight or style. To operate, click into the text to see what it is set to. If you see a message about missing fonts, download all the styles of Open Sans from Google fonts. Figma only has a few styles pre-installed.

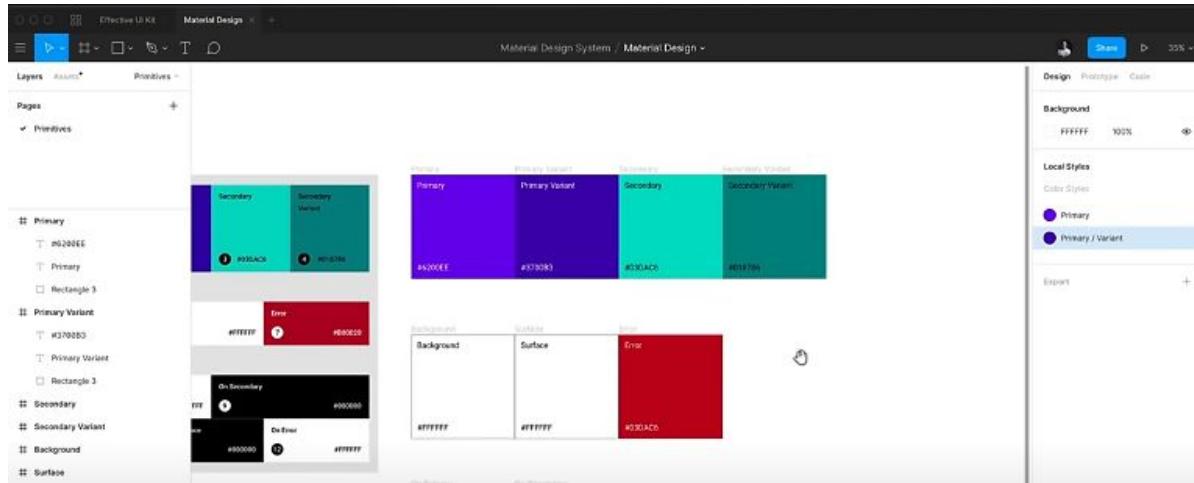
In addition to these settings, you can also make the text underlined, and also format it in all caps. This is preferable to typing it in all uppercase letters. It is much easier to switch back to the title case if you decide to change it later. Texts can also be formatted in small caps, but only if the font supports it. In the case of Open Sans, small caps are not supported.

CHAPTER FOUR

Designs System and FIGMA

According to Audrey Hacq, a design system is the single source of truth, which groups all the elements that will allow a team to design, realize and develop a product. Design systems not only help designers to create more scalable, efficient and consistent design projects, it also helps the business owners, developers and other members of the team to be on the same page in an easy and efficient way.

Design systems enable so much, like enormous time savings for designers, developers, and product teams. They also ensure better UX design and code inter/intra products. In addition, you get a higher consistency in design, code and brand. Increased team communication and collaboration is also one of the vast benefits of having a design system. Positive by-products of these are more satisfied users and customers and a shared design vision among and across product teams.



Why have a Design System?

Consistency: Consistency plays a vital role in the application of a design system. For instance, if you are working on a project which has a hundred screens, a design allows you to essentially create a one point source of truth in order to be consistent when it comes to factors like typography, color styles, and other components – elements that are going to be used multiple

times in design project, such as buttons, input fields, menus, headers, footers and the likes. Consistency is for sure one of the most important things to consider when you want to have a solid system.

Higher Quality: Another advantage of having an apt design system is that the project is going to have a higher quality. Due to the influx of a consistent flow and the establishment of certain rules, your design project becomes more scalable. Consistency throughout an upper throttle website indirectly gives a sense of professionalism and makes the branding looks good. When designing for a client, for instance, the project must be treated like a personal brand. A design system can surely help in raising the quality of a project – both the actual quality and the perceived quality by the users.

Enhanced Communication with Development Team: Design systems helps to promote better communication with development teams and other team members involved in the project. It allows them to be on the same page and flow effectively. For instance, if you are working between designers, a design system can help the team balance the choice of color, typography, buttons, as well as the use of a shared library. Additionally, a design system can also help for team members to be shareholders – since they are on the same page as regards the elements of the project. With design systems, a design can also be approached from the approach of hierarchy regarding decision-making. It helps to make viable decisions and help the development and branding team.

Design systems typically consist of three parts: a style guide (or multiple style guides), a pattern library, and a component library.

- 1. Style Guide(s):** A style guide contains information about, and examples of, how things should be done consistently across a product, a website, or suite of products or websites. The most common types of style guide relates to brand design: elements like font, colors and trademarks. UI/UX style guides that tell design directions and visual interaction design standards are necessary for any design system.

Content style guides that include information about areas like language and tone of voice are also highly effective. Style guides

usually come in the form of a document. They can be a section of an intranet but are often saved as a PDF or some other static medium. This, of course, makes it hard to edit and it brings forth document management issues.

2. **Pattern Library:** Pattern libraries include UI elements, like forms and buttons, what they are formed, and when to use them. Here, every pattern library has been usability tested, and the design has been iterated. This inadvertently means that the designs that make it to the library are the team's best work in that area.
3. **Component Library:** Component's libraries take things to the next level and are UI patterns, including code. Most organizations see huge cost savings at this point because not only do designers get a head start on designs, but developers do not need to rewrite code that a colleague has already done. Additionally, just as UX designs have been tested for usability, code has been reviewed and improved. The code that makes it into the library is tight and fast.

The style guides, pattern library, and component library, comprise the design system. As for the library you use for your design system, it will depend on your front-end technology stack – this you can do using popular tools.

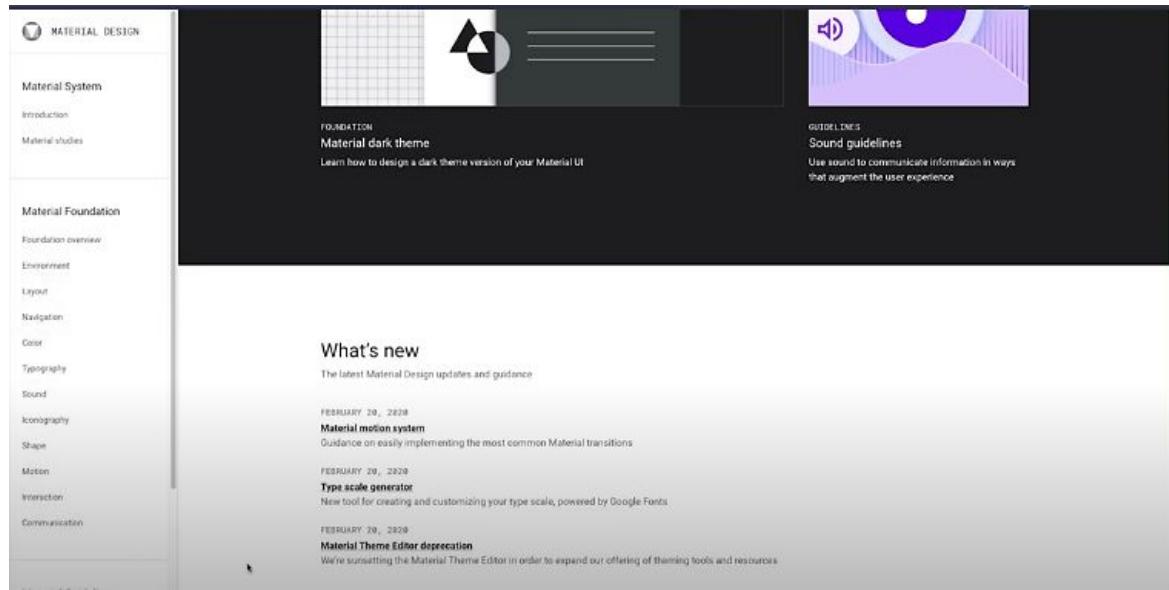
Popular Design Systems

With the prevalent rate of a lot of design techniques and applications on the internet, it is not out of place for anyone to be lost in the hundreds of design systems available all over the internet and not be able to decide which the right fit is for them. Here are the top five designs systems you can use or learn from:

Material Design

Google's Material Design is the most popular of the bunch. Introduced back in 2014 during the announcement of Android 5.0 Lollipop, material design has come a long way and can be considered as one of the most mature and widely used design systems of them all. Material design is inspired by the

physical world and its textures, including how they reflect light and cast shadows.



Material surfaces match the mediums of paper or mink. You can even diversify further on material design existing guidelines to expand your visual language and provide a flexible foundation for innovation and planned expression. If you want to dive deeper and understand the system, there are material resource guidelines to help you get started.

In addition, material design is the most well-documented design system there is, which makes it even more user friendly, adaptable and easy to use.

Human Interface Guidelines

Apple's Human Interface Guidelines has always been in the spotlight as regards whether it is truly a design system. Whichever the case may be, the human interface guideline is more inclined towards explaining different UI elements and patterns along with guidelines of uses, rather than a common repository for both developers and designers to refer to.

Human Interface Guidelines

Overview Resources Videos What's New

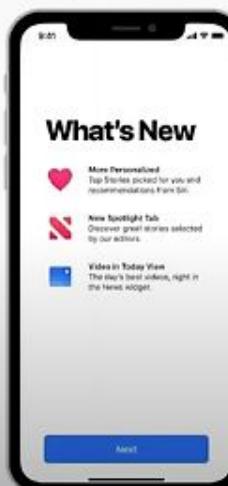
> iOS
✓ App Architecture
Launching
Onboarding
Loading
Modality
Navigation
Requesting Permission
Settings

User Interaction
System Capabilities
Visual Design
Icons and Images
Bars
Views
Controls
Extensions

macOS
tvOS
watchOS
Technologies

Onboarding

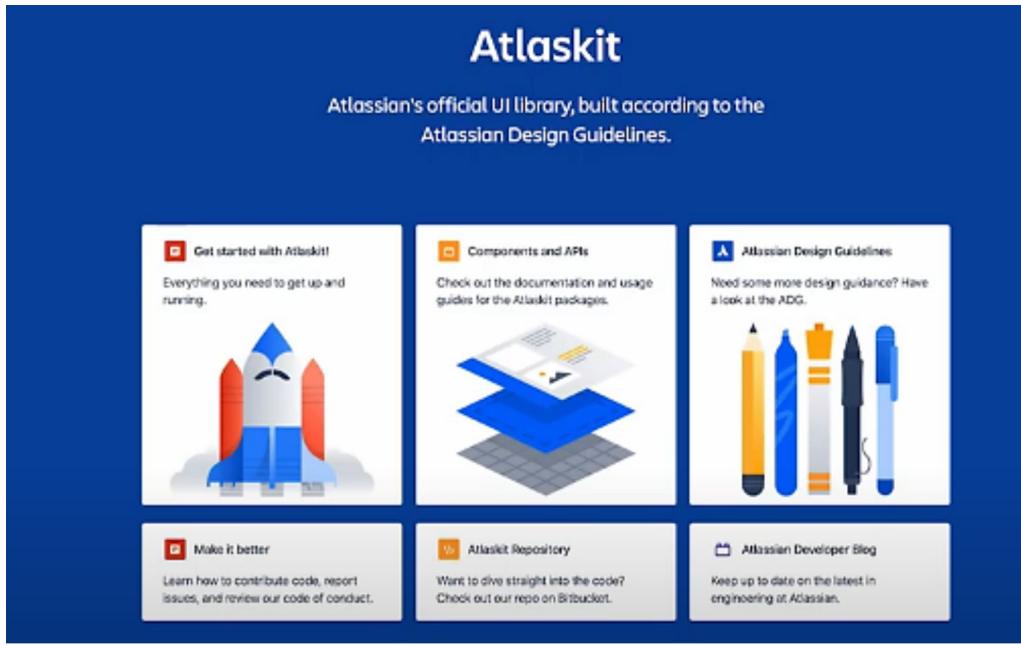
Onboarding lets you welcome new users and reconnect with returning ones. An optional onboarding experience that's fast, fun, and educational can help people get the most from your app without getting in their way.



Apple always has a way of doing things differently. This is evident in the provision of the component library for the UI design tools and the guidelines to apply them. Although, there is a separate documentation for developers. The human interface guideline by Apple provides in-depth information and human resources for designing apps that integrate seamlessly with their platforms.

Atlassian

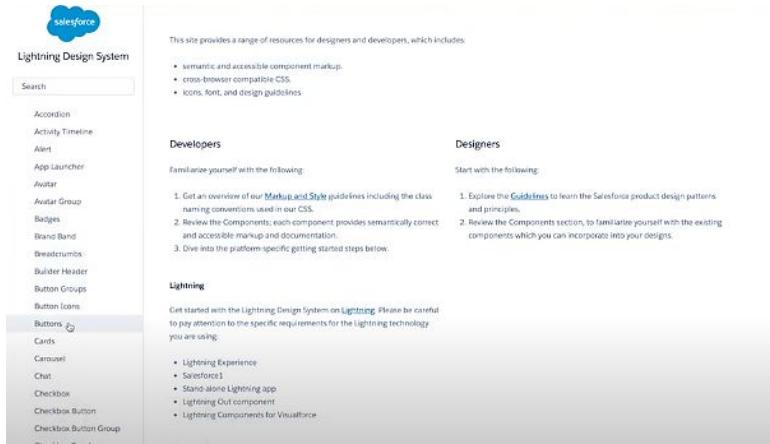
Atlassian by Atlassian is the most complete design system used in their product. Atlassian tries to solve problems such as design inconsistency and scalability. Atlassian designers wanted to spend more time on core problems and less time answering the same questions.



Atlassian's design system is certainly one of the ambitious products created from the need to solve complex problems. Atlaskit is a blueprint for product development. It incorporates design patterns and code components to form a common language. Atlaskit documentation has been reviewed to be extremely good. It comprises a 'getting started' guide, component, an API documentation, design guidelines and code repository. Additionally, it is open to feedback and welcomes code report issues and review – all bound by their code of conduct.

Lightning

Another incredible design system is Lightning by Salesforce. Lightning has everything from design guidelines to an enormous component library. The component library is one-of-a-kind; each UI element is documented in detail with different states that you can interact with. It has also progressed from a design system to a CSS framework.



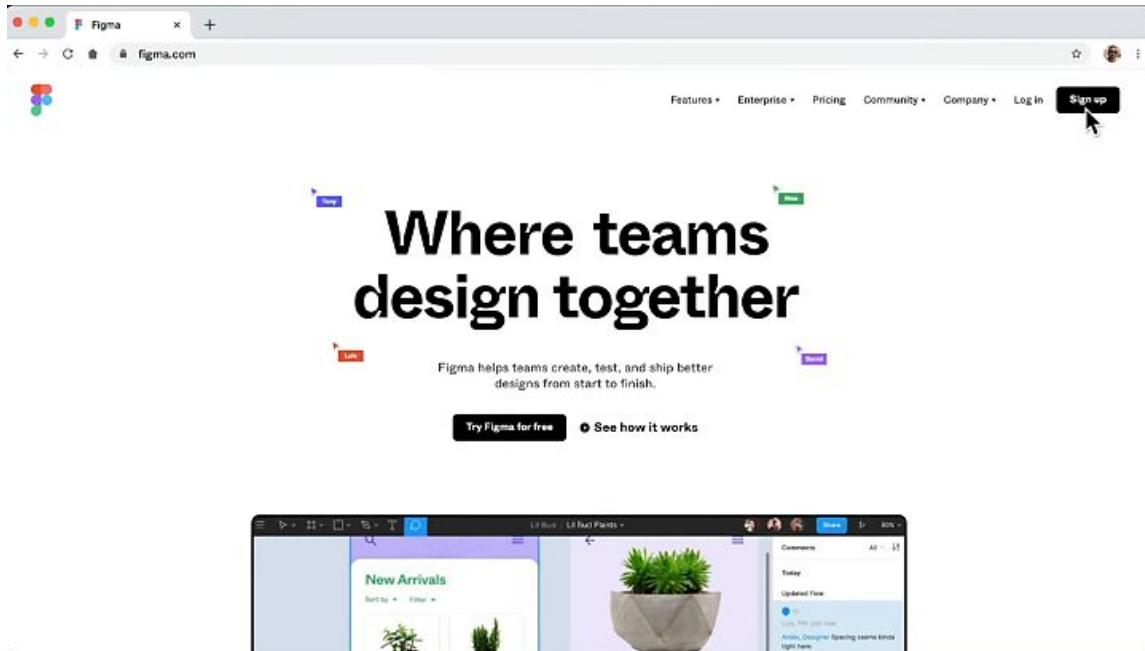
With this design system, you can build application with the look and feel of lightning experience without writhing a single line of CSS. Salesforce Lightning Design System has a CSS framework that gives you access to the icons, color palettes and fonts that developers use to create lightning experience. This is evidently the power of component-based design.

Polaris

Polaris is Shopify's design system. While Lightning is based on pure HTML and CSS, Polaris has scored snippets for both react and HTML. Although you may not be impressed with the component library, it is important to note that a good design system is not one that looks split and fancy, but one that is the most usable across the company or team to build models faster. Ensuring consistent experience across the platform should be your main goal. You can refer to the documentation of lightning and Polaris to pull your own design system.

Using Figma

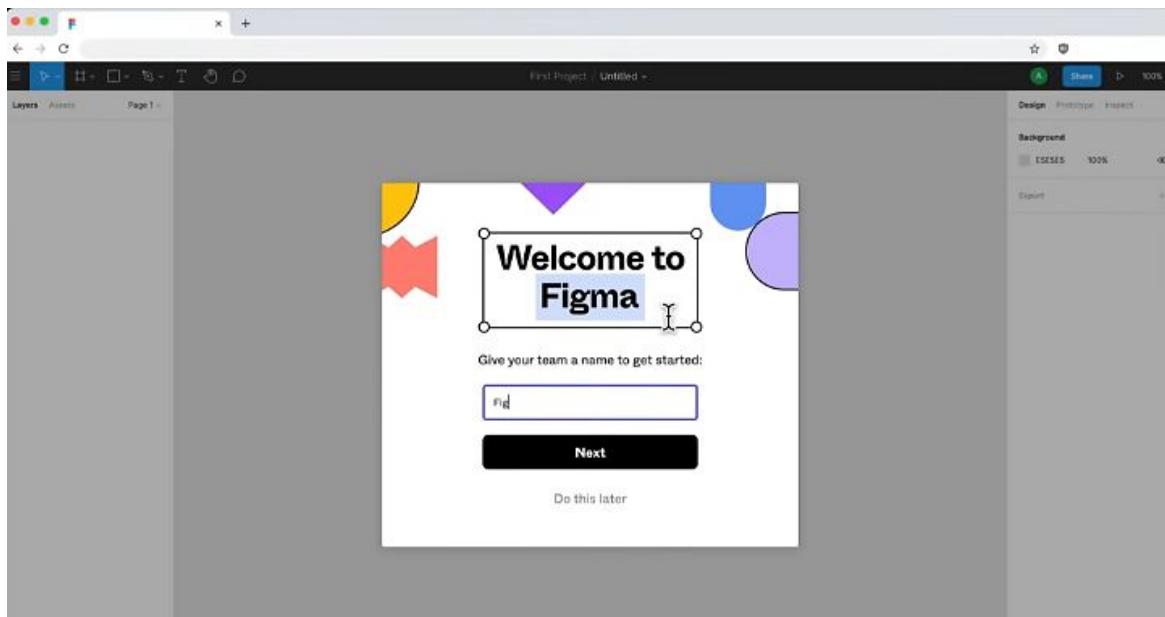
Figma is a vector design tool that runs in the browser. It can be used to brainstorm ideas, iterate on designs, create prototypes, and get feedback at any stage of the creative process. Figma has a few advantages that makes it the most-preferred among UI designers.



First, and most importantly for beginners, it is free to get started if you are working all by yourself. It also has great collaboration that allows members of a team to work in sync and share their works, having multiple people working on the same design file at the same time. Figma is also a very fast software that works on any computer – whether you have a Mac or a Windows PC. In addition, it has a mobile companion app where you can preview your designs on a mobile screen.

Setting up a Figma Account

On the official Figma website (figma.com), you can set up a free Figma account. With the Figma account, you can create teams and shared workspaces where you can collaborate on files and organize them in projects. You can also select between a free beginner team and a paid professional team. You can obtain all of Figmas professional features for free if you are a student or educator.



Once you have created your team, you can invite members to collaborate. This will grant them access to all of your team's projects and files. Here, you have complete control over the level of access each team member gets. In the Figma help center, search for "Teams" to learn more about forming teams and inviting members.

Getting Started

To kick-start your Figma adventure, there are a lot of free Figma resources on the internet that you can use to practice and incorporate into your designs so you do not have to begin from scratch. On Google, search for "Figma resources" and select from the option available. Once you locate a resource, you can copy the template to your Figma account. As a beginner, this is a lot better than creating a new file and building your resource from scratch.

Once you select a resource, you can see it in a new browser tab, and there might be others viewing the file at the same time. At the top of the template, you will see a "View only" inscription, which means that you cannot make edits or adjustments to the file. To be able to make edits to the file, click on the name and select **Duplicate to your Draft**. If you are signed into Figma, it is going to create a copy of the template in your Figma account.

With the template in your Figma account, you can scroll up and down to see the different screens in the file. In addition, you can rearrange them as opposed to the original file. In your Figma account, you will have a vertical arrangement, which allows you to move any of the screens around. You can also zoom out to see all of your screens or zoom in to see a particular screen.

Creating a Frame

The Figma editor is where your journey on canvas starts. The canvas serves as the foundation for all of your designs; it is where you will place all of your frames, images, text, and shapes. There are no bounds to your creativity but you should know that the canvas extends approximately 65,000 points in each direction. With the great expanse – the canvas – you need something to put your designs in.

On the left side of Figma's interface is the layer panel which gives you access to a bunch of layers. When you select an element, you get the settings for that element on the right side of the interface. In this guide, we are going to be creating a rectangle out of the resource that was adopted for our design. Note that the template on the screen is known as a **Frame**.

Frames are the containers you place your shape, text and image layers in. You can think of each frame in the canvas as a single screen of your design. The toolbar contains the tools you need for creating layers. You can select the frame tool in the toolbar or activate it by pressing the **F** key on your keyboard. You can create frames with precise size using the frame presets in the right-hand sidebar.

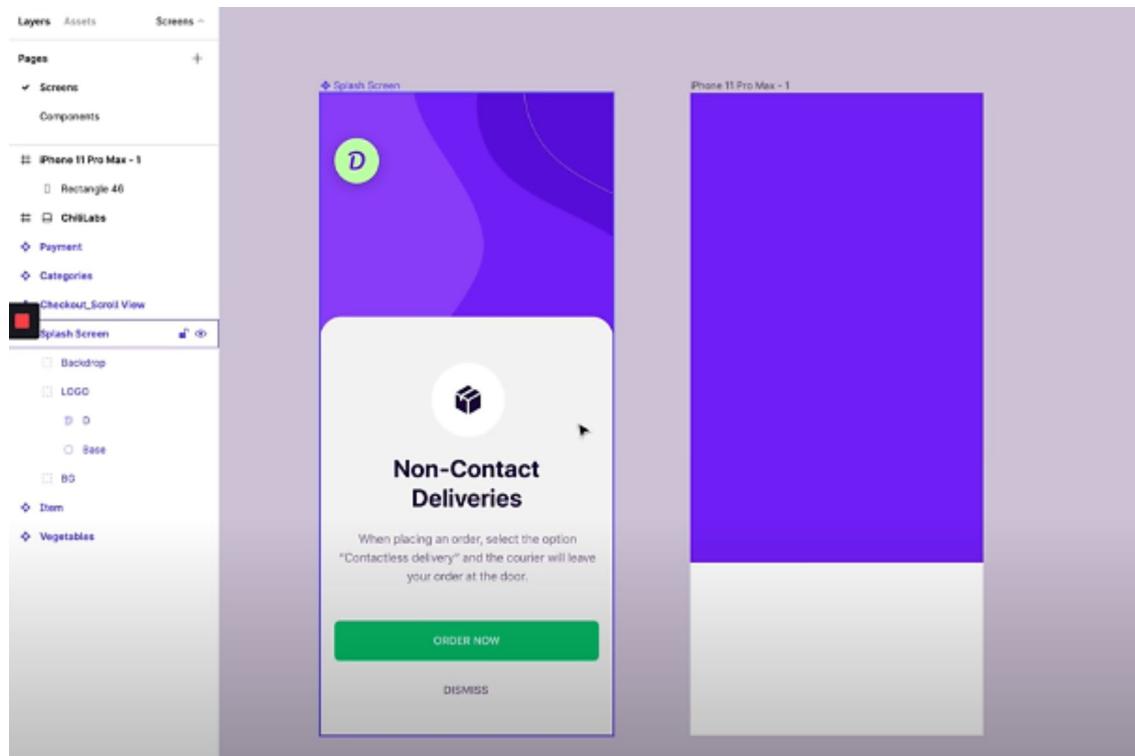
Figma adds a frame to your canvas when you select a preset, and the sidebar on the left is no longer vacant. Everything you put on the canvas will end up in the layers panel as well.

For the template that was adopted, when you click on the preset, it shows that it uses an iPhone 11 pro max – a standard size. Hit the “**F**” key on your keyboard again to go into the frame mode and select the iPhone 11 pro max template. Once this is done, Figma automatically puts in a frame of the accurate size. Next, place that next to the original frame and start copying the design.

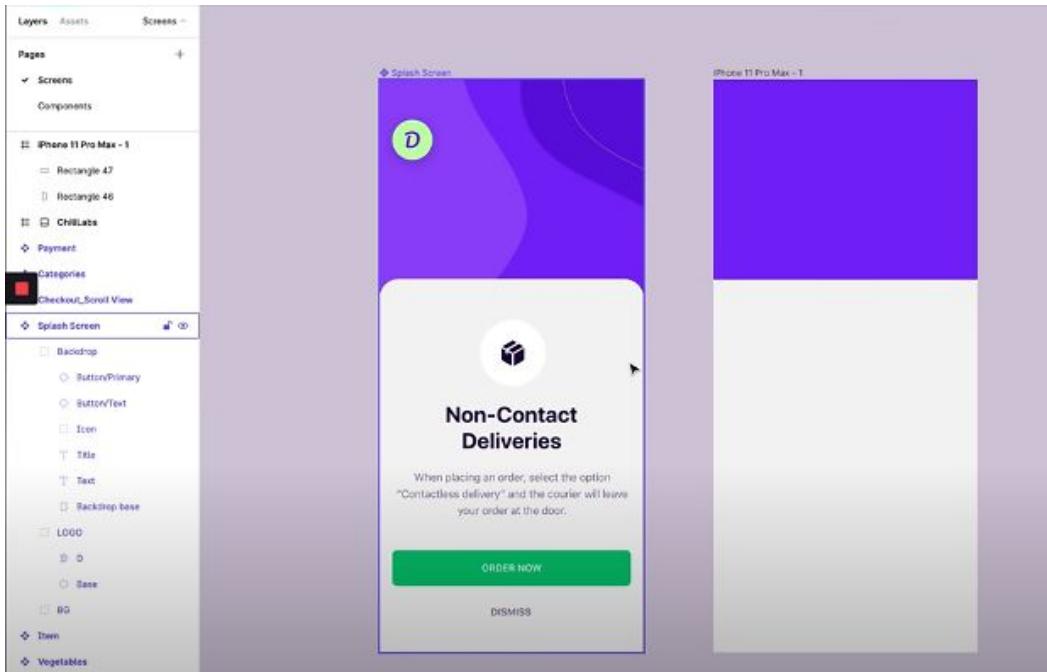
Creating Shapes and Color

Assuming you want to replicate the colors on the original frame, the easiest way to accomplish this is to give the whole frame a background color or draw a rectangle (flowing from what was depicted in the template). Hit “R” on your keyboard to initiate the rectangle and draw it to your preferred size.

To change the color of the frame, click on it and select from the options on the right side of the screen. Note that, when you select something on your canvas, the settings for that element will be on the right. You can use the eyedropper from the color panel to pick the color on the original frame to your frame.



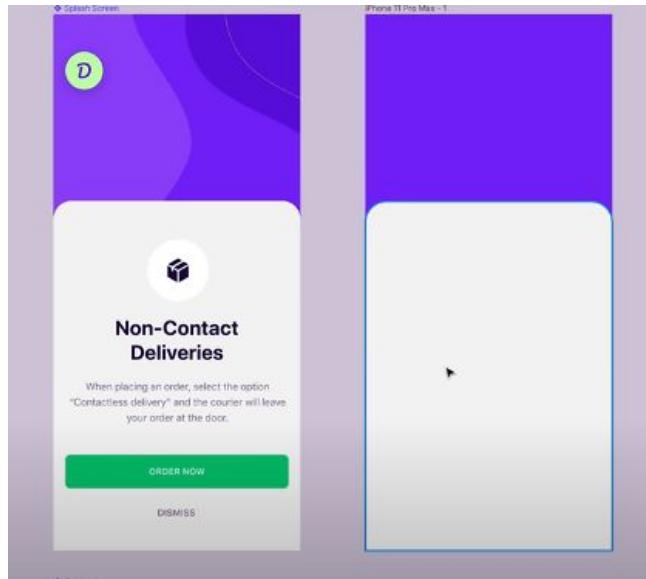
Since we are creating a similar design to the original frame, create the second card by drawing another rectangle and try to have it to be approximately of similar height. Again, grab the eyedropper tool to pick the color from the original frame to the new rectangle you have created.



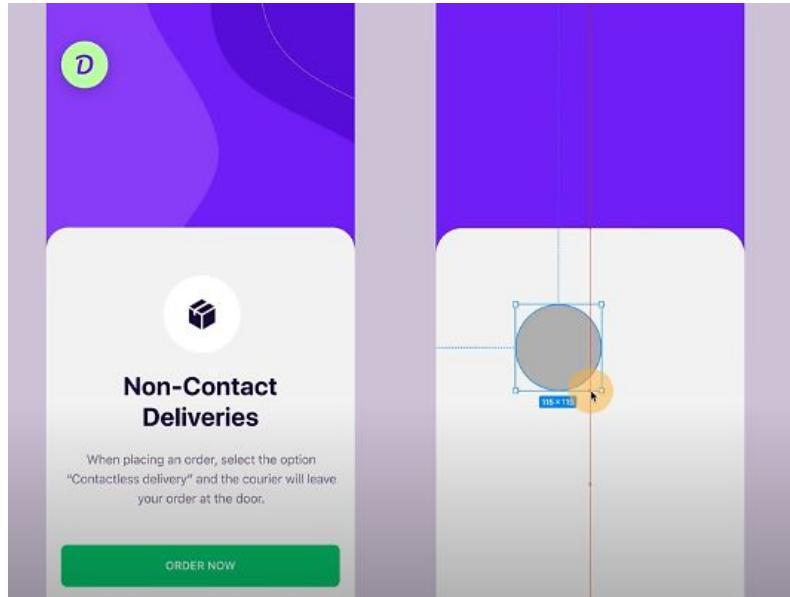
Corner Radius Adjustment & Circle

If you have a keen eye, you would notice that the original frame has some adjustment in its corners. Under the position and dimension properties in the **Design** panel, you would find the tool for corner radius adjustment. Here, you can change the X coordinate, the Y coordinate, the Width, Height and the angle of rotation of a shape or text.

With the corner radius tool, you can adjust how rounded the corners on the original frame are. If you have an additional corner radius not needed, simply extend the frame to get rid of it. Alternatively, you can go to the corner radius tool and click on independent corners. What this allows you to do is set each corner independently. If you change a corner of your shape to zero, it will no longer be rounded.

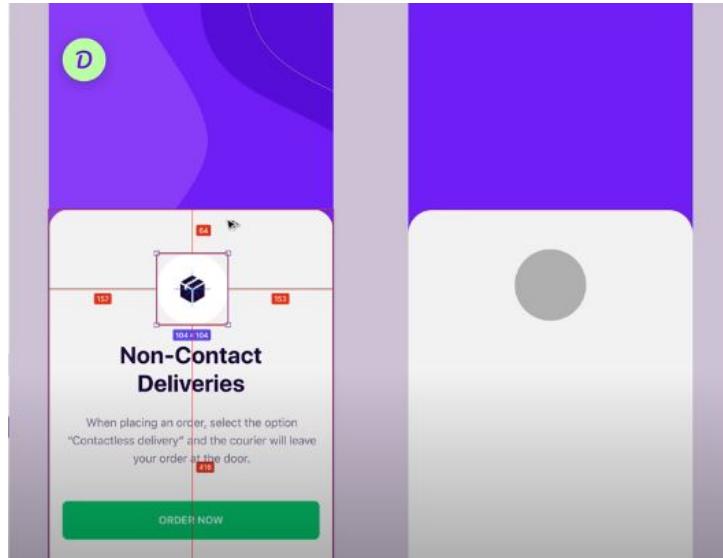


The next step to take here is to create the circle. To create one, go to the shapes menu and select **Ellipse** (you can also initiate this tool by clicking “O” on your keyboard. With this tool, you will be able to draw a circle with an aspect ratio. If you want it to be a perfect circle, hold shift on your keyboard, and it will be a well-rounded circle.



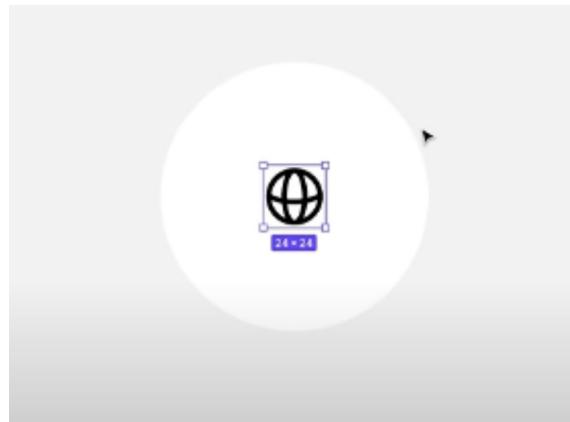
If you want to find out the exact dimension of your circle, double-click on the circle in the original frame to view the dimension (104 in this case) and replicate on the frame you are creating. To replicate, go to the options on the right and change the dimension of the circle (type 104 in the box).

To copy the position of the circle, double-click on the circle on the original frame. Next, hold the Option key (Mac) or the Alt key (Windows), and it will show you the distance from all of the neighboring elements surrounding the circle. Do the same on the circle on your frame and navigate to get the same number on the original frame.



Using Icons and Images

Icons are elements that you will often need when designing mobile interfaces. You can run through Google for free Figma icons. When you see a preferred icon from any resource, simply copy and paste in your frame. Additionally, Figma also helps you with positioning of the icon – it automatically centralizes it as you move it around. Alternatively, you can double-click on the icon on the original frame and paste in your frame.



Another part of Figma that will be very handy for you is getting free images to use in your designs. One good resource that you can use is Unsplash, which allows you to have free images. Once you locate an image, right-click on it and copy. Go back to your Figma file, select the background and hit **Command** or **Control** > **V** to paste.

Figma Community

The Figma community is a space where creators can share resources in the form of design files and plugins. For instance, if you use a wireframe UI kit, you can duplicate a file and add it to your drafts. From the files, you can copy components and paste into your wireframes. In addition, you can publish these components to a library instead to make them available to your team.

Next, open the file in the editor, click the arrow next to the file name, and select move to project. Since components can only be published in a team, move them to a project in your team. Go to the same menu and select **publish components and styles**. You can also enter a description of your library and press **publish** to share it to your team.

Back in your original file, you can access the library in the assets panel on the left side bar. Click the book icon to open the library's modal. Next, toggle the switch to enable the wireframe in your file. To resize the left side bar, hover over the edge until the cursor appears, then click and drag to resize.

OceanofPDF.com

CHAPTER FIVE

Psychology of Colors in UI Designs

Colors refers to the different colors of each element within the interface it is used to evoke feeling or emotion. The art and science of using colors is key in UI/UX designs. Color theory is a concept that explains how people perceive color and the visual impact of colors that mix, match, or contrast with one another. This includes the messages that colors convey as well as the techniques employed to recreate color.



There are several elements of color and they include Hue, Chroma, Value, Saturation, Tones, Tints and Shades.

Hue: Hue is the base color of pure pigment of color at a base level. This is also referred to as the colors of the rainbow. In order to apply Hue, you use the Hue Scale.

Chroma: Chroma is the purity of a color. It can be thought of as the brightness of a color in comparison to white. To apply Chroma, tweak the value from left to right when you are using the scale. For example, to give brightness, you will have to sit up and to the left.

Value: Value refers to how light to dark a color is. Lighter colors have a higher value. In order to do this, tweak values from top to bottom. For instance, if you were to go lighter, you would move upwards on the scale to get a lighter value.

Saturation. Saturation refers to how strong or weak a color is (high saturation being strong). When you want to apply saturation, what you would do is go from top right to bottom left. Low saturation stays on the left, while high saturation stays on the right.

Tones: Tones are created when gray is added to a hue. Generally, it is duller or softer than looking at pure hues. In order to apply tone, you could add gray to the color or move from right to left and vice versa.

Tints: Tints are color in its natural state. In order to apply tints, you will need to add white to the color or move up and to the left.

Shades: Shades are created when black is added to a hue, making it darker. It is often indirectly used to describe tint or tone, but technically, shade only applies to hues made darker by the addition of black. To apply shades, add colors in the bottom left to hue.

Color Psychology

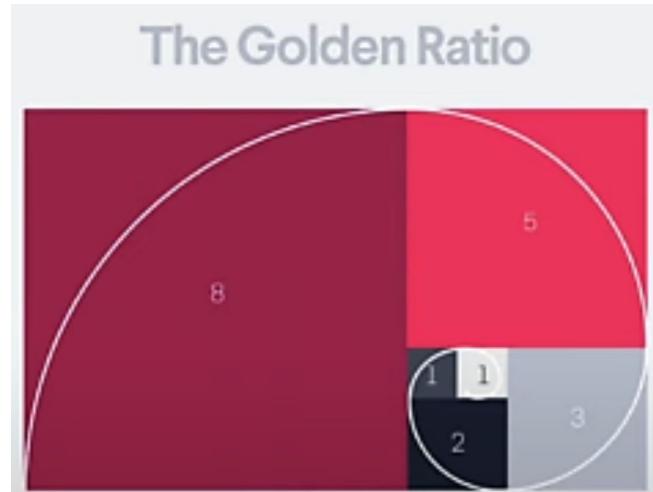
As an important piece of UI design, color psychology refers to how colors determine human emotions and behaviors. We react to colors based on a complex series of interactions between our personal tastes, our family upbringing, and our cultural background.

Each color evokes a distinct set of feelings. Color psychology may significantly improve user experience and promote desired behaviors (such as conversion rates). Testing designs with real users is such a vital part of creating a color palette in choosing colors for your designs. What this means is that you should not settle for the first color palette that you opt for. It is important that it is appropriate.

The Golden Ratio Rule

The Golden Ratio is the number used when two quantities are divided in a way that their ratio is the same as the ratio of their sum to the larger one of

the two quantities. That number is 1.618, also known as Phi. To apply this to your color rule, simply multiply an element's size by 1.618 to figure out the size of another element, or overlay the Golden Spiral to adjust their placement. You can use the Golden Ratio to guide you in your layouts, typography, imagery and more.



Typographical Hierarchy: To apply the golden ratio to typography hierarchy, decide the order of importance for the various typography elements within the design. For example, if you have three font elements that you are using (A, B & C). If C is set at a 10 point font, what you will do is multiply that by 1.68 to get a rough guide for the larger sized elements.

Images: For images, you will overlay the spiral on your images to see which elements sit where, and if they significantly create harmony. Using the Golden Spiral, you are ultimately working out where focal points need to be, how to centralize a headline for maximum impact, or which elements need to be shifted to give the design more energy.

Layout: When you are challenged with a bunch of different things in a single layout, it is always useful to use the Golden Spiral to guide your placement of each element. We are naturally drawn to the center of the spiral, so it is often to place your most important messages there.

Color Rules in UI Design

Branding Color: As a rule of color, it is important that you keep your core colors to one or two. This way people can associate your colors with your

product or service.

Functional: These refers to the colors that make up the architecture of your UI. For example, this may include your Nav bar, modals, text and links.

Feedback: Use colors to indicate the state of an action. For instance, you can use them as a success or failure banner. If you upload your image on your site, you would put up a success or failure banner, that way you give them feedback as to whether the task was completed.

Accent: These colors are used to highlight copy metrics or important information.

Neutral: These are the bookends of your color palette. What you can do here is take one of the main colors of your color palette and give it a little bit of brightness or darkness that creates an additional neutral color for your color palette.

Interactions: These are the states of symbols or elements in your design system that have multiple colors. For example, buttons, hover, active, resting state.

Contrast: Contrast ensures that your colors, visuals and typography work hand in hand.

Colorblind: There are different types of colorblindness. Ensure that you follow accessibility guidelines when working with colors.

What to Consider when Choosing Colors

60-30-10 Rule: To bring balance into the composition, the colors should be combined in the proportion of 60%-30%-10%. This means that the biggest part should go to the dominant hue, then the third of the composition takes the secondary color, and the 10% will go to accent colors.

Strive to Color Harmony: The second thing to consider is to strive for color harmony. Color harmony is all about the arrangement of the colors and design in the most attractive and effective way for users' perception.

Consider the Psychology of Colors: Each color has its own influence on our mind and the knowledge of the possible reactions can help designers to

transfer the right message and call users to make the expected action.

Color Palettes

Color palettes refer to the combination of colors used by UI designers when designing an interface. When used correctly, color palettes form the visual foundation of your brand. In addition, they help to maintain consistency, and make your user interface aesthetically pleasing and enjoyable to use.

There are various types of color schemes that you can follow in order to initially create your color palette. Some examples include: monochromatic, analogous, complimentary, split-complementary, triadic, tetradiic.

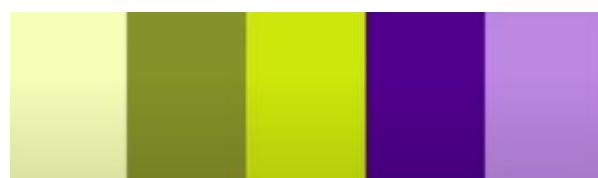
- **Monochromatic:** Monochromatic color schemes are made up of different tones, shades and tints within a specific hue.



- **Analogous:** Analogous uses three colors that are next to each other on the 12-spoke color wheel (which you can simply just search and you will be able to utilize). Traditionally, analogous colors schemes have the same chroma level, but by using tones, shades and tints, you add interest to the schemes and adapt them to your needs for designing websites or designing a user interface.



- **Complimentary:** Complimentary is created by combining colors from opposite sides of the color wheel. In their most basic form, these schemes consist of only two colors but can easily be expanded using tones, tints, and shades.



- **Split- Complementary:** In split-complementary, instead of using colors that are opposites, you use colors on either side of the hue or opposite your base hue.



- **Triadic:** Triadic schemes are made up of hues equally spaced around the 12-spoke color wheel.



- **Tetradic:** Tetradic is the richest of all the schemes because it uses four colors arranged into complementary color pairs. It is probably the most complex one to create but you can do more research to find some good examples.



Studying the Color Wheel

In UI design, it is important to know all the different ways to come up with color combinations, using the basic color wheel. Know how the color schemes and combinations go together, and then start building cohesive color palettes to use inside of your projects.

Once you have created a color palette based off the color wheel and you want to make all the colors synonymous, pick a color and lay over your palette. Set one of the blending modes so that you can see through it and then change transparency to bring a consistent look and feel to all of your colors in your palette.

Additionally, you must know your target audience and their demography. It is vital to understand whom the interface you are designing is built for. Ensure that you are applying colors that make sense for your target demographic or audience. For example, when you look at applications or interfaces that are made for children, they are usually much more colorful – they have more than two colors. There are explosions of colors in websites or applications made for children because kids are an explosion of excitement, energy, and imagination.

Contrast is Crucial

To create a topnotch UI design that is astute in colors, ensure that your contrast is on point. This means that your body copy on the background must have a good contrast in order for it to be legible, readable and understandable. Your typography should not only stand out but must have the correct weight, color and size applied, so that you can look appealing on your interface.

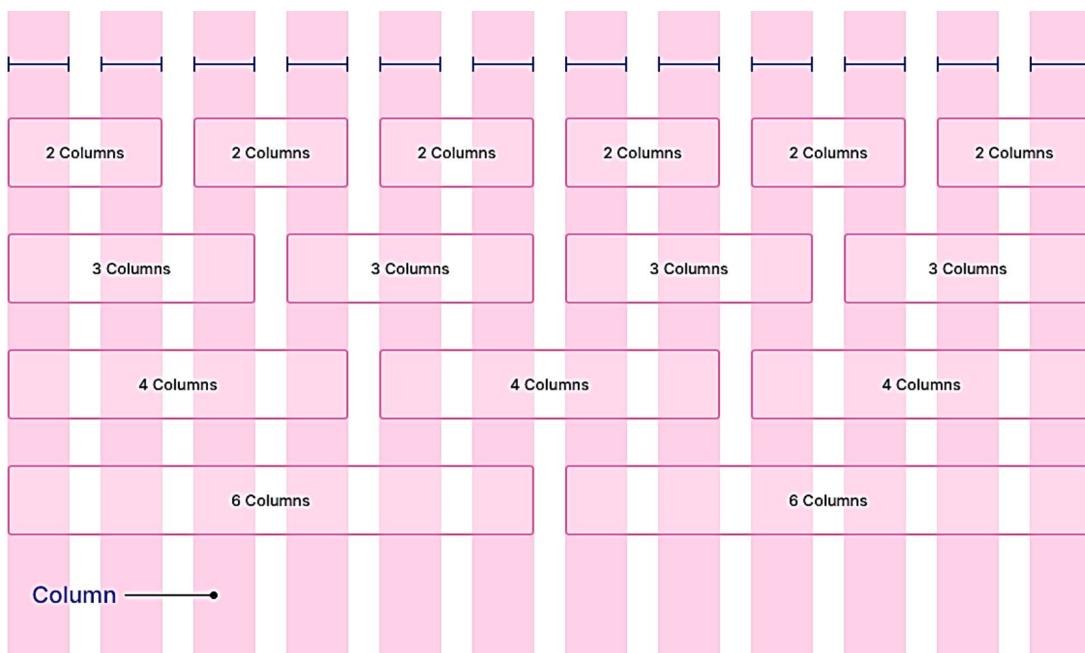
To check your contrast, desaturate your entire project and turn everything to grayscale to see if the different elements stand out from each other. This is very apt for accessibility and your general interface.

OceanofPDF.com

CHAPTER SIX

Grid System in UI Designs

A grid system is a structure of invisible lines and columns that allow you to line up your design neatly and in an organized way, keeping everything space in a manner that helps the user. Grid systems are structural foundations for design projects as they allow you to make your project look and feel better by creating consistent rhythm and spacing. In addition, they allow you to play with layouts but still keep that organized rhythm to enhance professionalism.



Grids are fantastic because they create predictability in structure. They allow new and returning users to quickly get their bearing and easily find what they are looking for. Grids provide a consistent reference point, making readability and scannability easier. People scan more than they read and that enables them to quickly find information they are looking for.

Grids also establish a structure, which enables designers to quickly organize information, making the site cleaner and more professional as a result. They can also help establish break points when they make device-independent designs. In a nutshell, they are a great way to create structure.

Grid systems are made out of a series of columns. These columns stretch from top to bottom – vertical elements in each of the columns in your grid system should be the exact same size. In addition, you have the gutters, which are the spaces in between the columns. With gutters, you can dictate what their sizes should be depending on your project or the layout that you want.

On the other hand, margins in UI designs are the empty area on the left and right hand side of your grid system that consists of the columns and gutter. It is the space that allows you to place them exactly where you need to in the center of your project – whether it is a website or an interface. It is unprofessional for the grids to extend all the way out of the edges of your project. The importance of margins is that they help you create a containing element where everything in your project will fit inside (outside of that are the margins).

12 Column Grid

The 12 Column Grid is the industry standard for grid systems. It is the most common type of grid system that you will use in your projects, especially for web design projects. 12 is identified as a great number for the grid system because the columns can be evenly spaced and can be divisible by other numbers.

For instance, if you want to create a two-column layout, they will each take up six of those 12 columns. Consequently, as you move down to smaller screen sizes, you will decrease the amount of columns in your grid.

Breaking the Grid

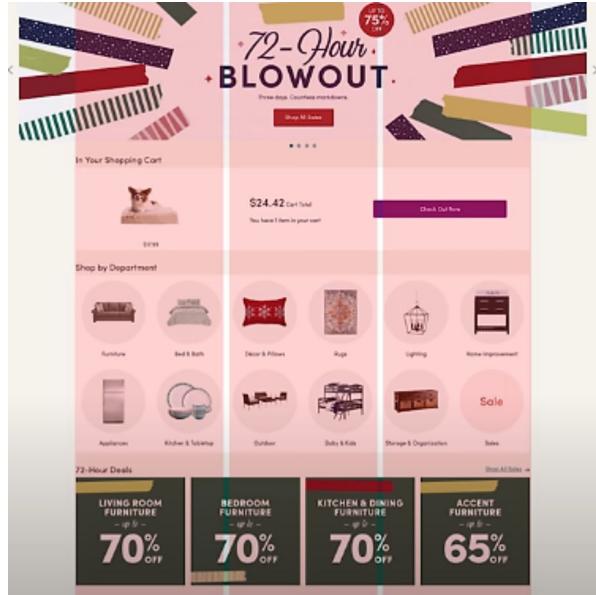
You can strategically break the grid in order to emphasize important content. However, it has to be done sparingly, so that the site structure stays intact. There is a time and place to break the grid, but first and foremost you must ensure that the majority of your project abides by the rules of the grid. Therefore, when you break it, it looks intentional and professional.

Large feature images or hero images are great examples of breaking the grid. They can expand outside the constraints of the grid system, and they can also be the full width of the browser. This allows them to be massive

and exciting, while still having the rest of the content constrained inside of the grid system.

In addition to hero images, you create asymmetrical elements that lead off the side of the page and dip into your grid system. You can also do value propositions and image elements that barely break outside of the grid system.

Let's review this example from a website:



This website uses a three-column grid system. However, the grid is broken at five specific moments in order to draw attention towards certain things. For example, the hero image is very large, falling outside the grid area. The CTA is also slightly outside the grid, drawing the user's eye.



The other section, as shown above, has its own grid: a five-column structure; which breaks the three-column grid, but in a way that emphasizes the contents of that section.

A grid system can seem authoritative and right at first glance, but it does provide a set of boundaries and rules that allows users to quickly find information. It also enables designers to quickly organize information. Good designers know when to follow the rules, while great designers know exactly when and why to break them. True creativity lies in the ability to see constraints as opportunities.

UI Modes and Modals

Modes are pervasive in interfaces around us. For instance, if you press the volume up button in a locked phone, no action will occur. However, if the same phone is unlocked, pressing the same button will raise the volume. The same action – pushing the volume button – has different effects, depending on the current state of the phone.

Another classic example of a mode is the use of the Caps Lock key on a typical keyboard. With the Caps Lock key off, pressing the key for the letter A in a text editor will display a lowercase A. With Caps Lock on, the simple action will result in an uppercase A. Thus, the Caps Lock key is a mode switcher.

The use of modes becomes necessary in UI design, because certain input actions fit well with multiple functionalities. For example, if you want to sign a PDF document, moving the finger on the screen is the most natural action for drawing your signature. However, traditionally, using the finger is used for scrolling. Therefore, to allow for that gesture to have different results, a special edit mode will have to be defined.

Modes are often a source of user error. This is usually because of the hidden state problem – people hardly realize which state the system is in and they expect that their actions will have a different result. As a result, UX researchers often ignore modes.

A special type of mode is a modal. A modal is a type of popup window. What is special about a modal is that users cannot interact with the background content until they dismiss the window. Thus, modals put the system into a new mode. When the modal is on, clicking on any of the background visible links does not do anything anymore. Although, it is important to note that not every popup is a modal. Some allow you to interact with the background. These are called non-modal dialogs.

Modes are a way of dealing with interface complexity. Often, the designer may have a limited input vocabulary and a lot of possible functions that an interface needs to support. As a result, they will end up reusing some of that input vocabulary for two different commands.

In some cases, modes often lead to user errors, because users do not realize they are in the wrong mode or do not know how to get to a mode or out of a mode. However, in certain solutions like drawing on a touchscreen, modes may be the only reasonable solution to a design problem.

About The Author



Carl Jones is the founder of Afterswitch Design, a leading behavior research and UX design consultancy specializing in using behavior economics and decision design to drive consumer decision making. He is a behavior design instructor working with over 50 companies to solve their most important behavior challenges.

Carl holds a Bachelors and Master's Degree in Creative Art from Florida International University (FIU), Miami, Florida. He also holds several certifications in Web Development and Programming.

OceanofPDF.com