

USER INTERFACE DESIGN & the UI PROCESS

COMP 126: Practical Web Design &
Development for Everyone

know your users

- consider, observe, talk, listen, interview
- who is your target audience?
- consider what your users *believe* (not know) about a system
- users plan their actions in a system based on their predictions of what will happen
- those predictions (and thus, actions) are based on their mental models
- mental models are formed from the users' prior experience of your system *and other systems like it*

stuff users may not understand

- the difference between browser buttons/commands and app-specific buttons/commands
- the difference between a browser window and a window in your interface
- the difference between a web app and a program running on your computer
- the difference between their webmail and the Internet (e.g., the belief that Yahoo *is* the Internet)

stuff you (the designer) need to know

- Who your users are likely to be (though you should find out)
- How experienced your users are
- How your users are accessing your site or app
- Whether your users have any technological, neurological, and/or physical needs and/or limitations
- What your users' prior experiences on the Internet have been like
- What your users expect

what is UI design?

the point of human-computer interaction

what does UI consider?

UI elements

- inputs
- navigation
- informational components
- containers

UI design patterns

Useful aesthetics

THE UI PROCESS

Note: the following process stages aren't always included in every design process or always followed in this sequence, and the level of formality and attention paid to each can vary widely between projects. Not all these steps are required to complete A5 in this class.

the UI process

user research & user persona/s



Sasha
30, Graphic Designer
Single
Brooklyn, NY

Energetic **Curious** **Artistic**

Bio
Sasha is a multimedia artist who now works in graphic design and an enthusiastic and experienced home chef. She loves to travel and has visited cities from Barcelona to Seoul, learning all she can about the local cuisines along the way. At home in Brooklyn, she is part of a diverse group of artists and other creative people, and she cooks for her friends whenever her busy schedule allows.

Likes Cooking, Travel, Music, Art, Design
Dislikes Wasted time, Traffic, Pollution, Email

Quote
“I understand the world through its visual and culinary arts.”

Cooking
Beginner — Advanced
“I’ve taken cooking classes all over the world, but I feel like there’s so much more to learn.”

Technology
Beginner — Advanced
• Uses advanced digital design tools at work
• Is never without her iPhone
• Active on Instagram, especially when she’s traveling or cooking

Goals
• To learn more about the world and its culinary arts
• To develop as an Instagram influencer
• To feed her loved ones and enjoy life!

Frustrations
• Overly Euro-centric cooking apps
• Her professional life keeps her so busy that she doesn’t always have as much time to spend on travel and cooking as she’d like



Mariska
40, Acupuncturist
Married
Chapel Hill, NC

Nurturing **Warm** **Motivated**

Bio
Mariska has a Master’s Degree in Chinese acupuncture and medicine and owns a thriving acupuncture practice in a college town. She describes herself as a “locavore” and cooks mostly gluten free at home because her partner has Celiac disease. She’s always looking for healthy recipes and techniques, both to cook at home and to pass on to her clients.

Likes Acupuncture, Hiking, Yoga, Dogs, Asian food
Dislikes Factory farming, Lying, Unclear communication

Quote
“To me, good food is a celebration of life. It’s also good medicine.”

Cooking
Beginner — Advanced
“I can make a few things well, but I tend to make them over and over again. I need new ideas!”

Technology
Beginner — Advanced
• Uses a smartphone and laptop for communication, organization, and business
• Maintains active Instagram and Facebook for her acupuncture clinic

Goals
• To help care for her partner’s Celiac by learning to cook GF really well
• To educate her clients on healthy eating
• To maintain her own good health

Frustrations
• It can be hard to figure out nutritional information from recipes online
• It’s too hard to figure out which apps will meet her specific needs and preferences



Bennett
33, Web Developer
Engaged
Somerville, MA

Creative **Caring** **Intelligent**

Bio
Bennett says he’s finally “adulting”. He was recently promoted to Senior Front-End Web Developer at work, and he just moved into a new, nicer apartment with his fiancée, a nurse. Since his job is mostly remote and his partner’s isn’t, he’s started making dinner for the two of them every night. He’s enjoying it very much and is looking forward to hosting their first dinner party in their new home.

Likes Technology, Film, Good food, Good wine, Good design, Friends & family
Dislikes Web ads, Cluttered design, COVID-19, Bad TV, Mean people

Quote
“I’ve recently discovered that I love taking care of people through food.”

Cooking
Beginner — Advanced
“I’m enthusiastic, but I don’t really know what I’m doing yet.”

Technology
Beginner — Advanced
• Front-end web developer
• iOS user in his personal life
• Has Facebook, Instagram, and Twitter profiles but doesn’t post very often

Goals
• To host dinner parties at his new home
• To learn to make the food he loves to eat
• To support his fiancée by taking on much of the cooking during COVID and beyond

Frustrations
• Unclear, overly elaborate instructions
• Distracting web ads and narratives
• Too much detailed video content in recipes

the UI process

user stories

"As a [type of user/stakeholder], I want to [task/functionality], so that I can [result/benefit]."

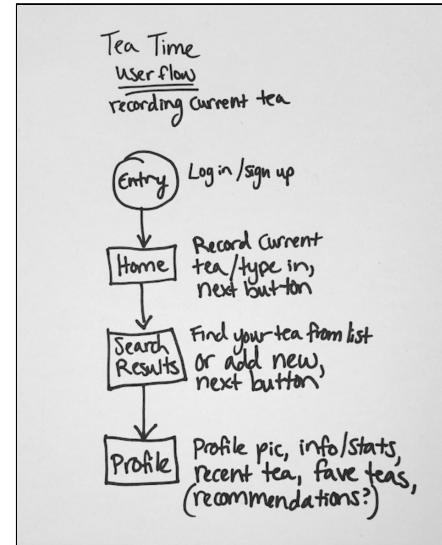
"As a customer, I want to quickly save items to a shopping cart, so that I can return to consider purchasing them later."

"As a hiring manager, I want to easily access a list of the candidate's skills, so that I can quickly assess whether they might be a good fit."

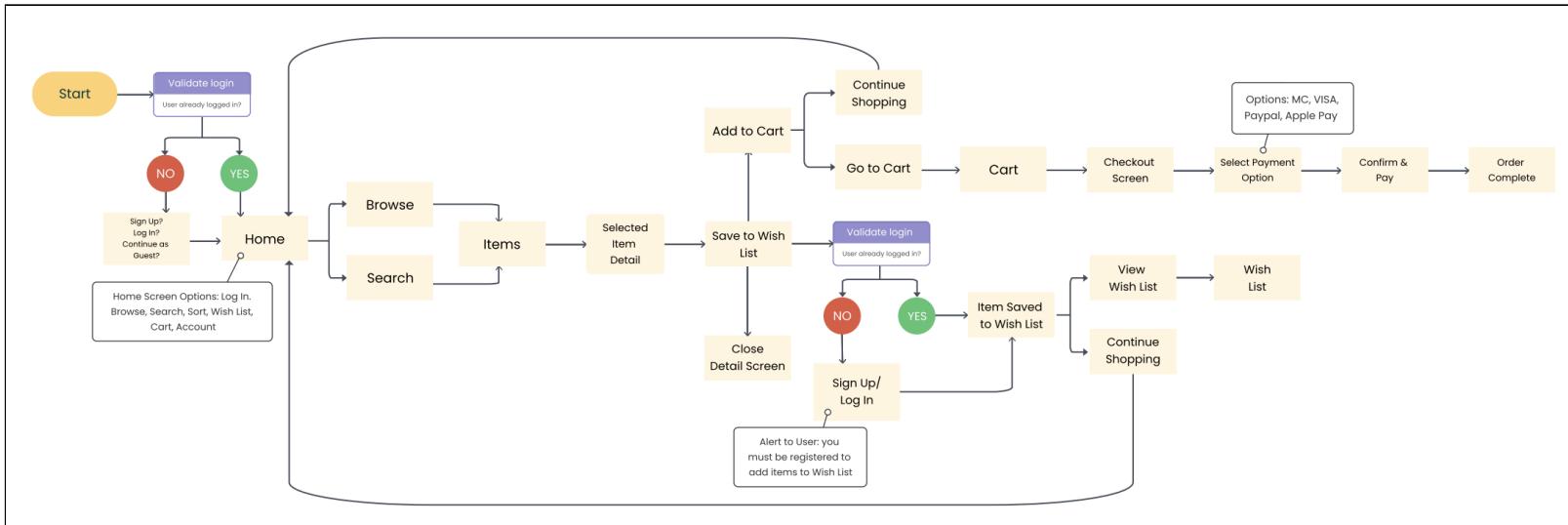
"As a potential client, I want to read prior clients' reviews, so that I can decide whether to make an appointment."

the UI process

the user flow diagram
(diagrams of your user story/stories)



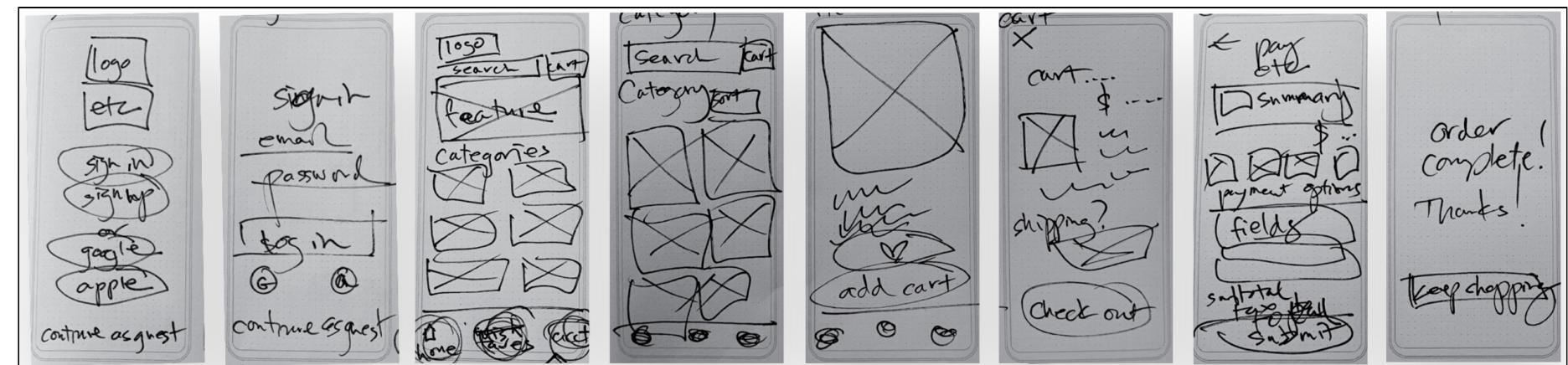
single-user flow



multi-user flow

the UI process

lo-fi wireframes



the UI process

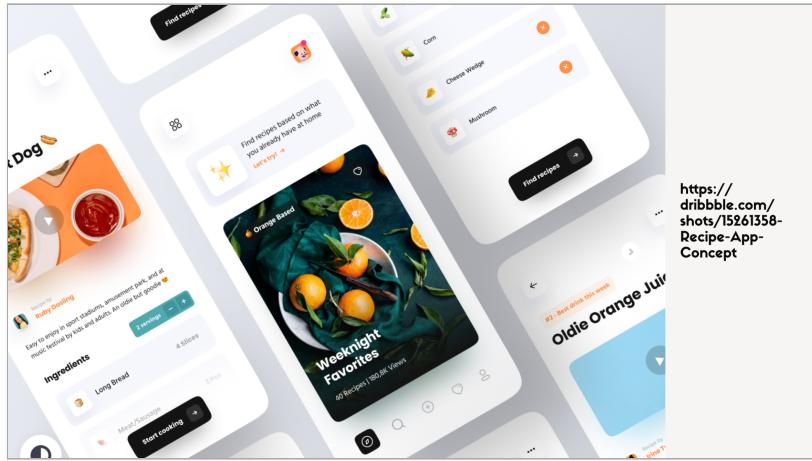
mid-fi wireframes

The image displays a grid of ten wireframes illustrating the user interface process for a shopping platform. The wireframes are arranged in two rows of five.

- Row 1:**
 - Sky Parlor Logo:** A placeholder screen with the text "Sky Parlor Logo".
 - Log In:** A login screen with fields for email ("john Doe@mail.com") and password ("*****"), and buttons for "LOG IN", "CREATE ACCOUNT", "Or", "Log in with Google", and "Log in with Apple". It also includes a "Continue as guest" link.
 - Welcome:** A welcome screen titled "Welcome" showing a "Featured item or artist" section with categories: Wall Art, Sculpture, Housewares, Wearable Art, Body, and Edible Art. It includes a search bar and sort options.
 - Sculpture:** A product listing screen for "Sculpture" featuring a grid of items. One item is highlighted: "Flowering, 2021" by Hannah Bruin (b. 1971), Polymer & organics, with a price of \$120.00 and an "ADD TO CART" button.
 - Chosen Sculpture:** A detailed view of the selected sculpture, "Flowering, 2021" by Hannah Bruin, with a large image, artist information, and a "CONTINUE" button.
- Row 2:**
 - Shopping Bag:** A shopping bag summary for "Flowering, 2021" by Hannah Bruin, showing a quantity of 1 and a "REMOVE" link.
 - Shipping:** A shipping method selection screen showing options: USPS Ground (7-10 business days) [FREE], USPS Priority (2-3 business days) [\$5.99], UPS Ground (3-5 business days) [\$4.29], and FedEx Overnight [\$12.99]. It includes a "+ Add New" link.
 - Choose payment:** A payment method selection screen showing options: VISA card ending in 4440 (Exp. 4/23) [edit ⚙️], "Add a new card" link, PayPal, Apple Pay, and a bank card icon.
 - Review & pay:** An order review screen titled "Order summary" for "Flowering" by Hannah Bruin (\$120.00). It shows delivery details, payment method (VISA card ending in 4440, Exp. 4/23), and a breakdown of Subtotal (\$120.00), Taxes (\$12.00), Shipping (USPS Priority) (\$5.99), and Total (\$137.99). It includes a "CONFIRM AND PAY" button.
 - Your order is complete:** A confirmation screen stating "Your order is complete." and thanking the user for visiting. It includes a "CONTINUE SHOPPING" button.

the UI process

inspiration



The Foodie landing page features a large image of a seafood dish. The text "Your one source of all foodie goodness at your fingertips" is prominently displayed. Below it, a smaller text reads: "Enjoy your favourite meals, restaurants, deals and recipes all in one place. The only place to satiate all your foodie cravings." A "Get Started" button is at the bottom left. The URL <https://dribbble.com/shots/15328666-Foodie-Landing-Page> is shown.



Three screenshots of a mobile application for cooking. The first screen shows a menu with the message "Hello, Amelia! What do you want to cook today? You Can Cook Everything!" and a "Swipe To More" button. The second screen shows a dish of French toast with the text "Classic French Toast 15 Min. 220kcal". The third screen shows a steak with the text "How To Cook Steak Step 4 of 6 Season the steaks Just before cooking, liberally coat the steaks with the salt." The URL <https://dribbble.com/shots/14612371-Recipes-App-Concept> is shown.

the UI process

moodboards

"ONE CANNOT
THINK WELL, LOVE
WELL, SLEEP WELL, IF
ONE HAS NOT DINED
WELL."

—Virginia Woolf



"TO EAT IS A NECESSITY, BUT TO
EAT INTELLIGENTLY IS AN ART."

—François de la Rochefoucauld



Classic
Crafty
Lush
Textural
Organic



"YOU DON'T NEED A SILVER FORK TO EAT GOOD FOOD."

—Paul Prudhomme

CLEAN MODERN BRIGHT CRISP STREAM-LINED

FRESH FESTIVE MELTIN' BOMB

the UI process

the style guide

COLOR PALETTE

●	CANDY APPLE	#f89e1c
●	CRIMSON	#c92830
●	COOL BLUE	#074f67
●	DEEP LAKE	#143548
●	GRAVEL	#565656
●	WET CEMENT	#77848e
●	CLOUDY	#f0f5f7
●	SNOW	#f0f0f0

TYPOGRAPHY

Header 1
Font: Montserrat Bold / Color #f89e1c

HEADER 2
Font: Montserrat Bold / Color #c92830

HEADER 3
Font: Montserrat Bold / Color #074f67

HEADER 4
Font: Montserrat Bold / Color #143548

Header 5
Font: Montserrat Bold / Color #565656

This is Body copy. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Praesent eu semper ligula, nec fermentum odio. Aenean non blandit neque, ac accumsan nibh. Morbi elementum neque id sodales blandit. Morbi eget turpis in urna sodales pharetra. Aenean quis pulvinar lacus, sed lacinia sem.

Font: Libre Baskerville / Color #f0f5f7

This is an inline link
Font: Libre Baskerville / Color #f89e1c / Underline: dotted

BUTTONS

Button

Button

Button

Button

Button

Button

COLOR PALETTE

	PRIMARY COLOR		PRIMARY COLOR		SECONDARY COLOR		SURFACE COLOR		BACKGROUND COLOR		TEXT COLOR
	HEX: #f89e1c		HEX: #c92830		HEX: #074f67		HEX: #143548		HEX: #f0f5f7		HEX: #f0f0f0
	RGB: 248, 158, 28		RGB: 144, 179, 1		RGB: 54, 60, 69		RGB: 246, 245, 244		RGB: 255, 255, 255		RGB: 13, 9, 10
	HSL: 35, 94%, 54%		HSL: 72, 99%, 35%		HSL: 216, 12%, 24%		HSL: 30, 10%, 96%		HSL: 0, 0%, 100%		HSL: 345, 18%, 4%

TYPOGRAPHY

HEADER 1: SIFONN BOLD, 34PX

Header 2: Sifonn Bold, 24px

HEADER 3: SIFONN BOLD, 22PX

Header 4: Sifonn Bold, 20px

BODY TEXT
Montserrat Regular, 16px

Mr. Collins was not a sensible man, and the deficiency of nature had been but little assisted by education or society; the greatest part of his life having been spent under the guidance of an illiterate and miserly father; and though he belonged to one of the universities, he had merely kept the necessary terms, without forming at it any useful acquaintance.

BUTTONS

PRIMARY >

ACTIVE >

SECONDARY >

ACTIVE >

TERTIARY BUTTON

ACTIVE

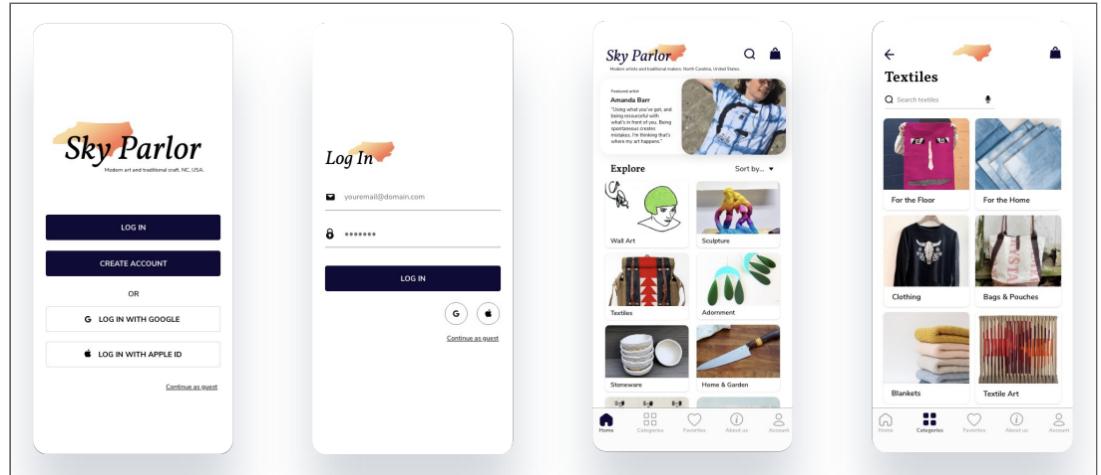
OTHER INPUT CONTROLS

OPTIONS ▾

Select

Selected

Search



the UI process

hi-fi wireframes

Bags & Pouches

Proud Satchel
Beautiful cross-body satchel. Recycled leather with brass and ribbon detailing.

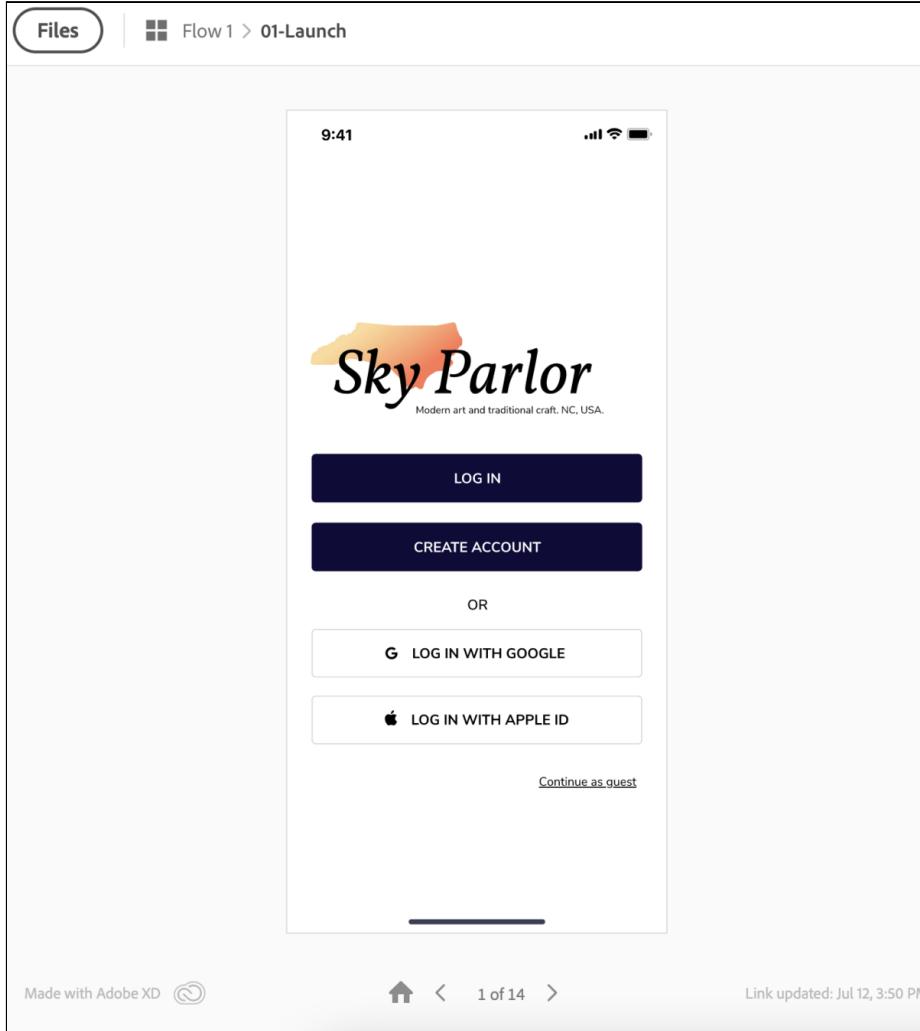
Choose payment

Review & pay

Well, I'll be.
Your order is complete.
We appreciate you so much!

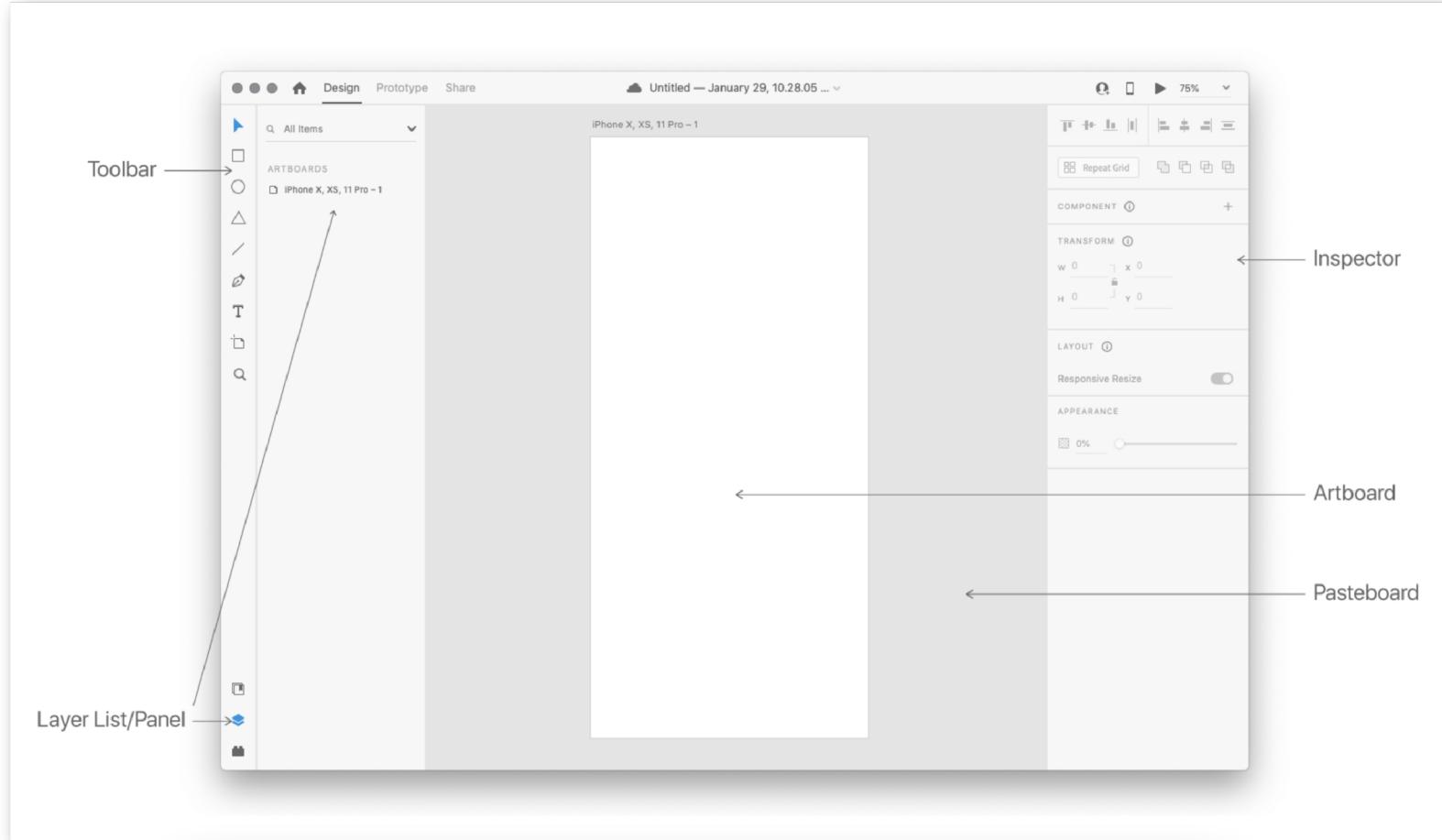
the UI process

the interactive prototype



The image shows a digital prototype of a mobile application's login screen. At the top, there is a navigation bar with the word "Files" and a folder icon, followed by "Flow 1 > 01-Launch". The main content area features a smartphone mockup. The phone's status bar shows the time as 9:41 and signal strength. The screen itself displays the "Sky Parlor" logo with a yellow-to-orange gradient shape above it, followed by the text "Modern art and traditional craft. NC, USA.". Below the logo are three dark blue rectangular buttons with white text: "LOG IN", "CREATE ACCOUNT", and "OR". Underneath "OR" are two light blue rectangular buttons with white text: "LOG IN WITH GOOGLE" and "LOG IN WITH APPLE ID". At the bottom of the screen, there is a small link labeled "Continue as guest". The bottom of the phone mockup has a thin black horizontal bar. At the very bottom of the entire interface, there is a footer bar with icons for home, back, and forward, the text "1 of 14", and a timestamp "Link updated: Jul 12, 3:50 PM".

Getting started with Adobe XD



(Again, for the record: if you're already familiar with a different wireframing/prototyping tool such as Figma or Sketch, you're welcome to use that in this class instead of XD if you wish.)