



WELCOME TO GENERAL ASSEMBLY





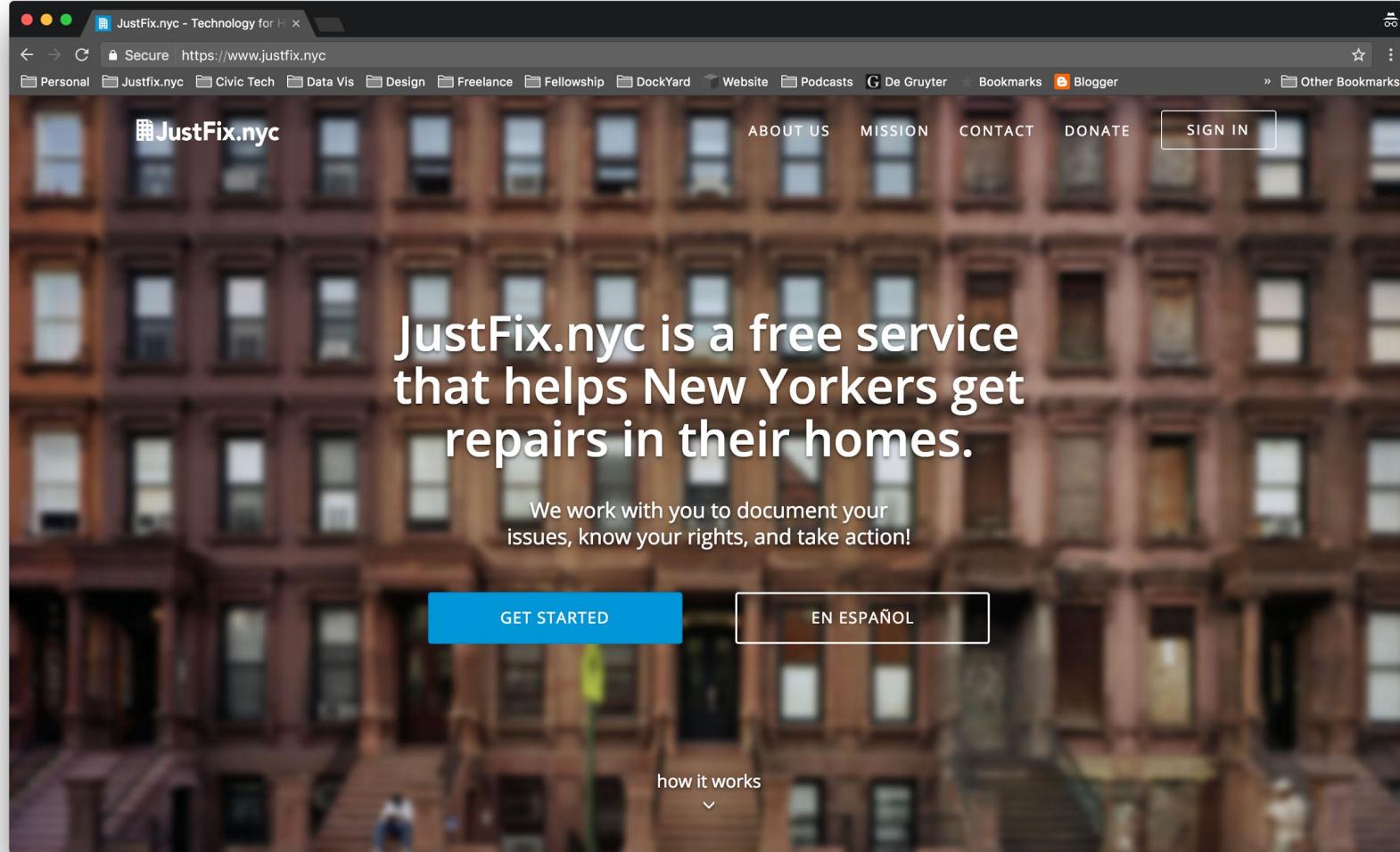
GENERAL
ASSEMBLY

USER EXPERIENCE DESIGN BOOTCAMP



GENERAL
ASSEMBLY

**Ashley Treni
Co-Founder and Design
Director of JustFix.nyc**



JustFix.nyc - Technology for H ×

Secure https://www.justfix.nyc

Personal JustFix.nyc Civic Tech Data Vis Design Freelance Fellowship DockYard Website Podcasts De Gruyter Bookmarks Blogger Other Bookmarks

JustFix.nyc

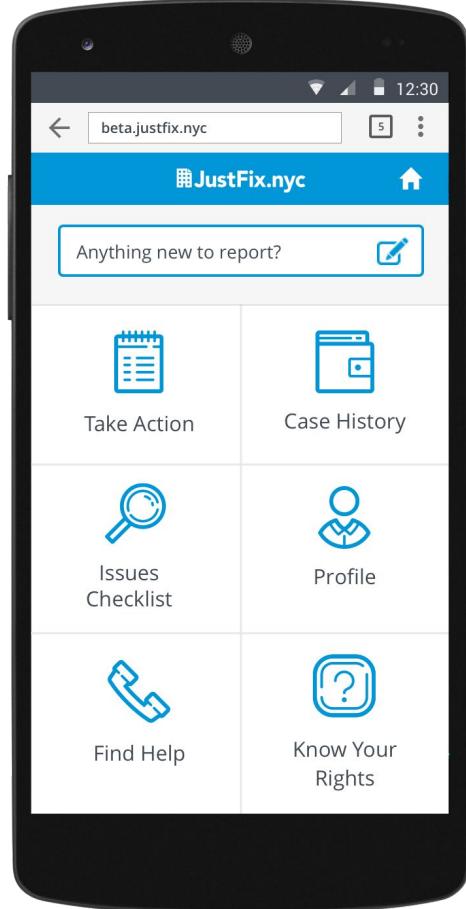
ABOUT US MISSION CONTACT DONATE SIGN IN

JustFix.nyc is a free service that helps New Yorkers get repairs in their homes.

We work with you to document your issues, know your rights, and take action!

GET STARTED EN ESPAÑOL

how it works



The desktop web interface for JustFix.nyc, showing the "Your Accounts" page. The URL in the browser is "https://beta.justfix.nyc/advocate". The page includes a header with the JustFix.nyc logo and a user profile for "Ashley". A sidebar on the left lists various categories: Apps, Personal, Justfix.nyc, Civic Tech, Data Vis, Design, Freelance, Fellowship, DockYard, Website, Podcasts, De Gruyter, Bookmarks, Blogger, and Other Bookmarks. The main content area displays a table of accounts:

Name	Last Updated	Address	RS?	THA	Phone Number	Share Link	Case
Jane Doe	3/15/17 6:43 PM	100 Fulton St	✓	✓	(987) 987-9877	🔗	View Case
John Doe	3/13/17 12:48 PM	654 Park Place	✓	✓	(624) 346-7878	🔗	View Case
Patricia Doe	3/4/17 9:05 PM	100 Fulton St	✓	✓	(324) 324-2343	🔗	Manage
Harold Doe	3/1/17 12:39 PM	654 Park Place	✓	✓	(534) 534-5345	🔗	View Case
Example Account	2/27/17 5:05 PM	260 Marcy Pl	✓	✓	(617) 344-4444	🔗	View Case
Jane Doe	2/23/17 4:07 PM	654 Park Place	✓	✓	(845) 494-6455	🔗	Not Shared
Greg Peter	2/22/17 3:11 PM	654 Park Place	✓	✓	(543) 346-6346	🔗	Manage



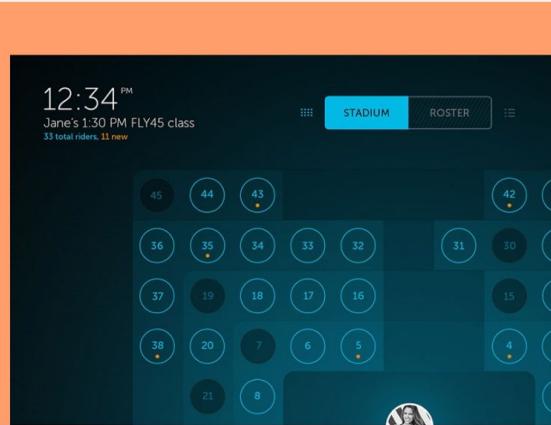
Believe in the power of the web

Reducing costs. Expediting development.
We empower companies with web based mobile solutions.

Let's build together

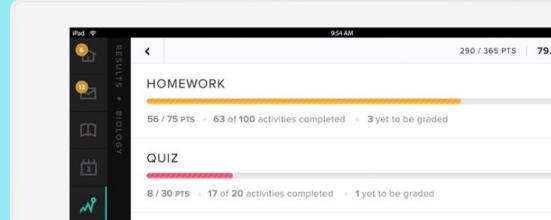
FLYWHEEL | CASE STUDY

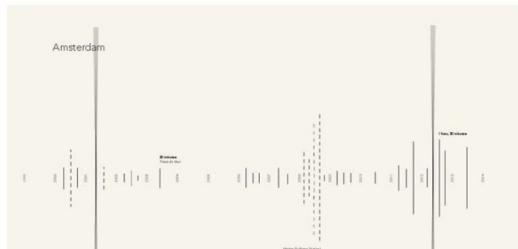
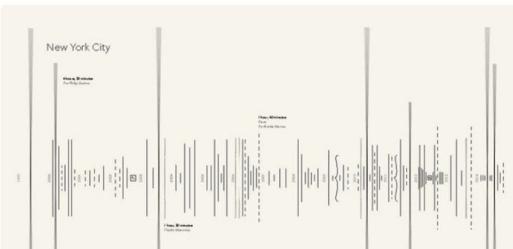
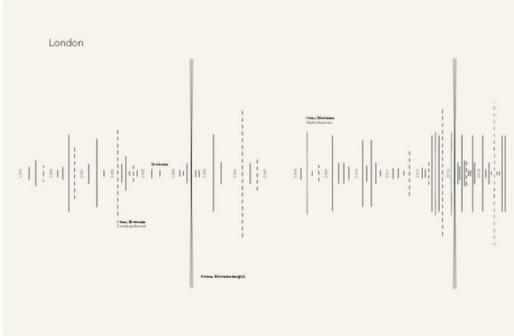
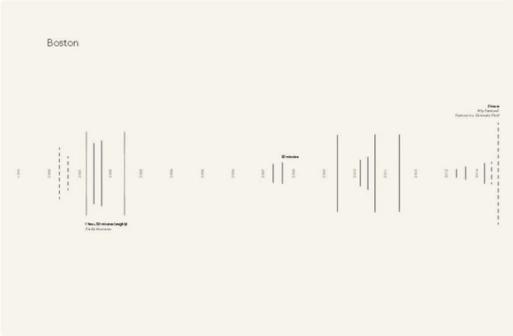
Helping instructors inspire riders through experience and service design.



MCGRAW-HILL EDUCATION | CASE STUDY

The best educational experiences are adaptive.





VISUAL RESONANCE

mapping the Music of Morton Feldman.

Information design studio 3, fall 2014

Professor: Isabel Meirelles

This collection of visualizations is inspired by the music of Morton Feldman. Each discrete city is a timeline view of every performance of Feldman's work, set relative to the duration of the work performed. The nuances of Feldman's compositional styles, notably his graphical scores and works that play with "extremes of duration," are pulled out to reveal the

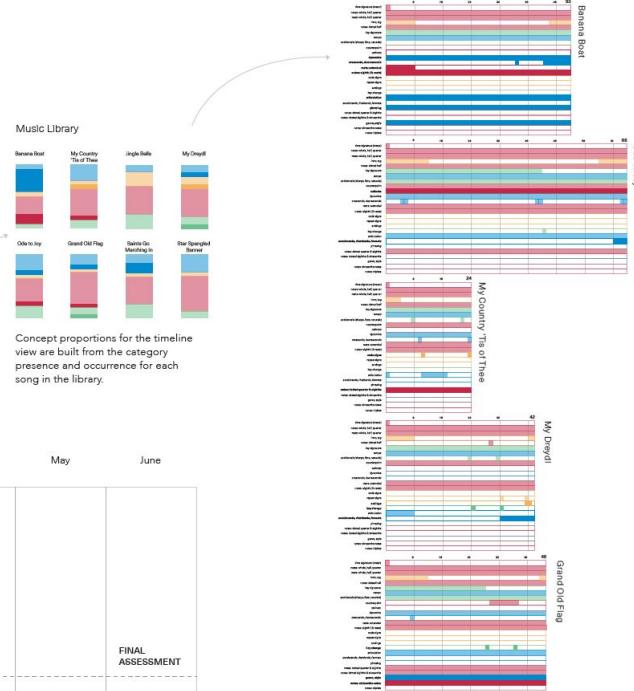
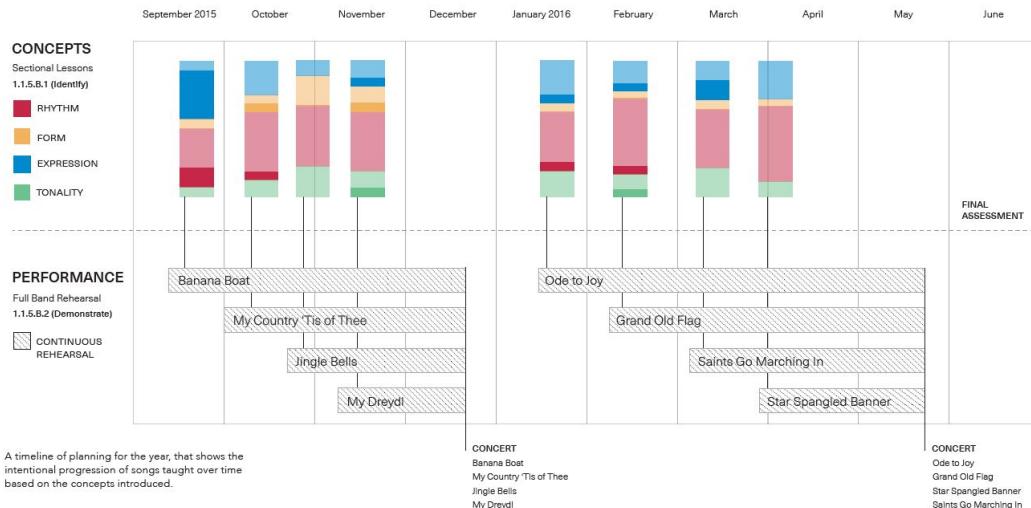
Standard Improvisations

VISUALIZING CORE COMPETENCIES IN MUSIC EDUCATION

OBJECTIVE	TARGET AUDIENCE	DISTRICT ADMINISTRATORS responsible for evaluating the planning documents submitted by music educators, which must identify and fulfill educational objectives as defined by government standards.
To assist music teachers in the planning and building of a concert repertoire, and to support the dialog between music teachers and administrators who are evaluating and checking against the Common Core standards and educational agendas.	Primary and secondary school MUSIC TEACHERS who are looking for methods to build a performance repertoire based on curriculum requirements, and developing documentation that concretely establishes the relationship.	

Planning Road Map for 5th Grade Concert Band

September 2015 - June 2016



A visual library of concert band music that diagrams concept introduction, presence, location, occurrence, and proportion. By making concepts visible, teachers can identify compositions that best fit their teaching objectives. It is my hope that these visualizations, which are modeled after existing planning mechanisms, will return the joy and creative authorship of planning a concert repertoire by reducing the time currently necessary to document these relationships for evaluation.

INTRODUCTIONS!

Name

What you do

Why you are taking this course

Fun Fact

AGENDA

- What is UX Design?
- The Design Process
- User Research + Ideation
- User Flows + Sketching
- UI design & Prototypes
- Product Demos
- Wrap-up & Questions

WHAT IS UX DESIGN?

Definitions

User Experience Design is a
user centered process aimed
to develop products and
services that directly support
the **user's goals.**

UX Design's scope of concern
covers **all aspects** of a
person's interaction with an
organization and its services
or products.

UX Design should be:

- Highly collaborative
- Iterative
- User centered

UX Design is a Process, Not Art



Not limited to web design.

Product design

Industrial design

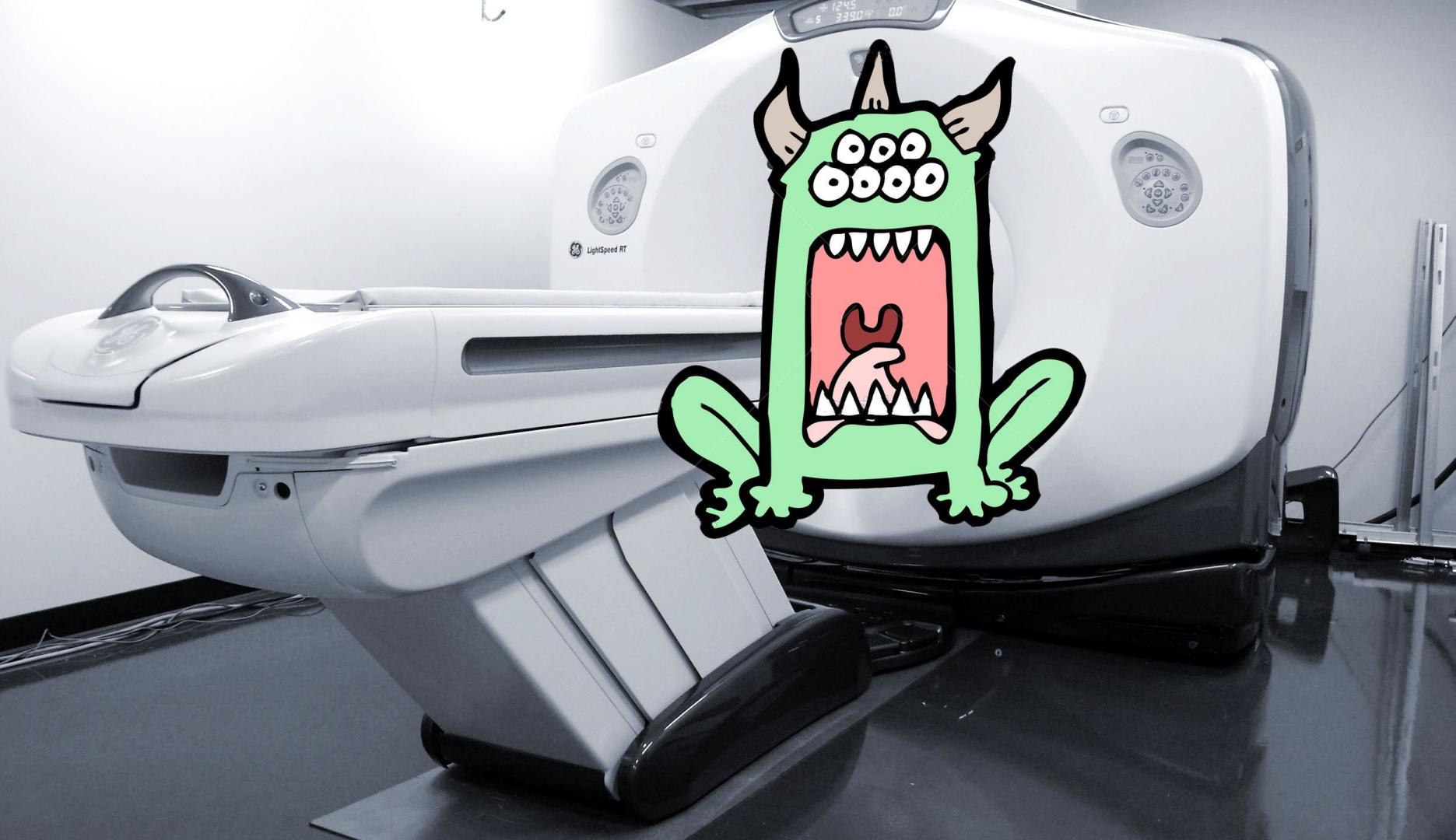
Service design

Architecture

Others?

EXAMPLES OF GOOD UX DESIGN?







Duolingo: Learn Spanish, French

Secure https://www.duolingo.com

Personal Justfix.nyc Civic Tech Data Vis Design Freelance Fellowship DockYard Website Podcasts De Gruyter Bookmarks Blogger Other Bookmarks

duolingo Site language: English Login



Learn a language for free. Forever.

Get started

Spanish French German Italian Portuguese Dutch Irish

< >

Vacation Rentals, Homes, Experiences

Airbnb, Inc. [US] https://www.airbnb.com

Personal Justfix.nyc Civic Tech Data Vis Design Freelance Fellowship DockYard Website Podcasts De Gruyter Bookmarks Blogger Other Bookmarks

No time to host? Become a Host Help Sign Up Log In

Airbnb Book unique homes and experience a city like a local.

Where: Anywhere When: Anytime Guests: 1 guest ▾

Search

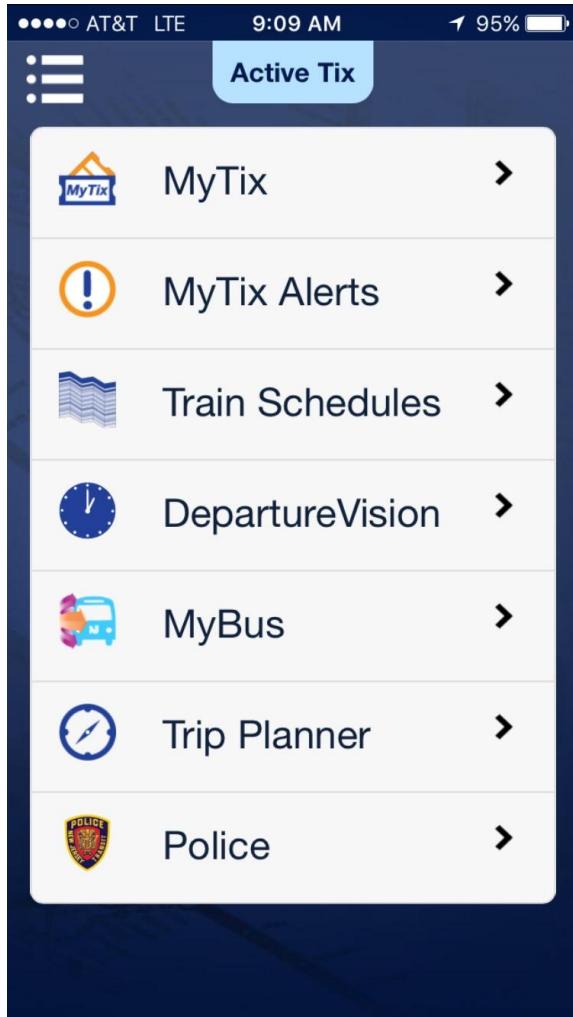
FOR YOU HOMES EXPERIENCES PLACES

Just booked

ARIEL

VALERIA PORTRAITS WITH

HUNT



AT&T LTE 9:08 AM 95%

Train Schedu...

Plan Trip Favorites

- New York Penn Station >
- Denville >

Travel Date 05/05/2017

Get Schedules

NJ TRANSIT warmly welcomes

AT&T LTE 9:08 AM 95%

Trip Results

Back

- New York Penn Station
- Denville

Travel Date: May 5, 2017

★

05:32 PM	NEW YORK PENN	Transfers : 1
07:09 PM	DENVILLE	>
05:41 PM	NEW YORK PENN	>
06:54 PM	DENVILLE	
05:50 PM	NEW YORK PENN	

Buy

NJ TRANSIT warmly welcomes

AGENDA

What is UX Design?

The Design Process

User Research + Ideation

User Flows + Sketching

UI design & Prototypes

Product Demos

Wrap-up & Questions

A UX DESIGNER DOES...

Visual Design **Interface Design** Interaction Design

Strategy & Planning Prototyping **User Research**

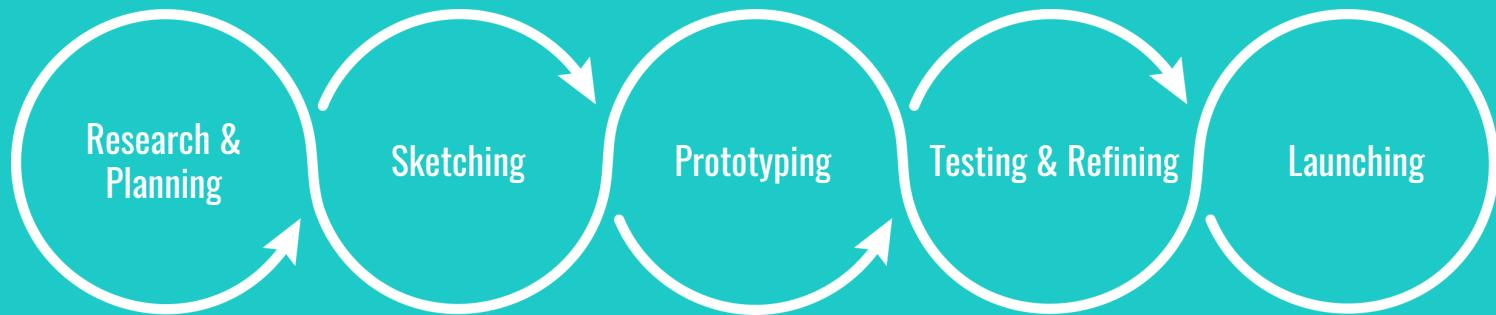
Customer Journey Mapping **Motion Design** Graphic

Design **Accessibility** Product Design **Information**

Architecture Content Strategy **Usability Testing**

Persona Creation **Copywriting** Sound Design

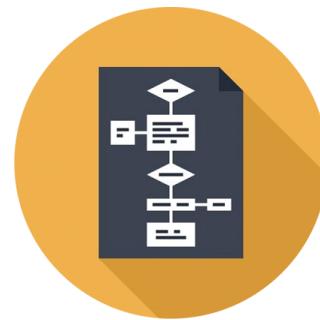
Sketch Sessions Stakeholder Management...



Facets of UX Design for Digital Products



User Research
(UXR)



Interaction Design
(IxD)



Visual Design
(VsD)

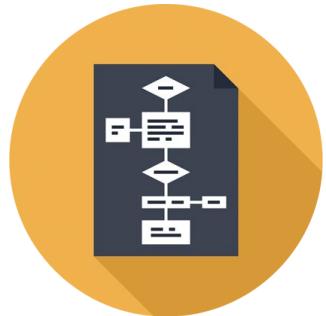
User Research & Planning



User Research
(UXR)

- Understanding our customers and problems
- Create a solid structural base for the project
- Ensure we build the right thing
- Interviews, user testing and validation
- Building personas

Interaction Design



- Add function to the structure base
- Create user flows & navigation
- Organize screen real estate
- Wireframing & Prototyping

Interaction Design
(IxD)

Visual & Interface Design



Visual Design
(VsD)

- Create personality and brand
- Ensure product feels right to use
- Use animation to add life
- Typography, layout, colour and graphics
- Create all UI elements
- Mockups & Prototyping
- Branding and style

AGENDA

- What is UX Design?
- The Design Process
- User Research + Ideation
- User Flows + Sketching
- UI design & Prototypes
- Product Demos
- Wrap-up & Questions

TODAY'S PROJECT

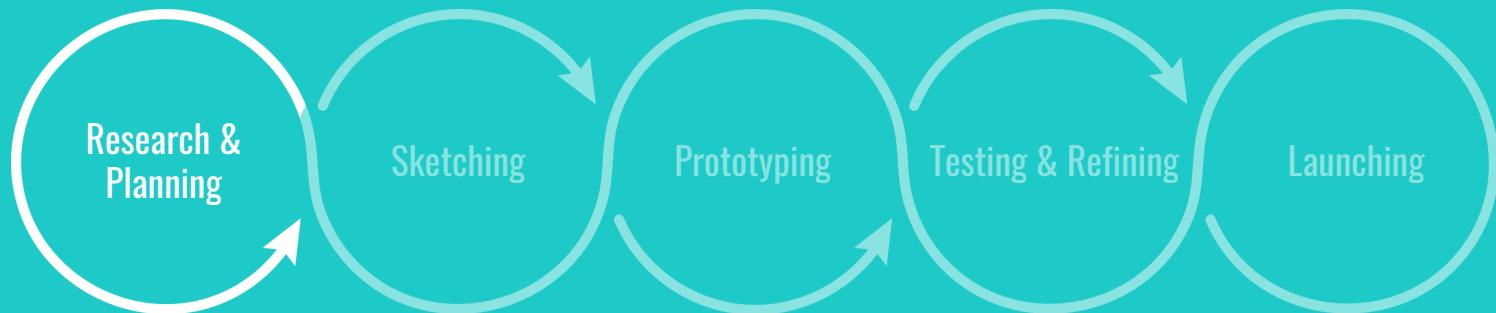


DESIGN PROBLEM

Restaurants must track
the beverage inventory
they buy and sell.

WHAT WE'LL COVER:

- User research
 - Interviews, User Persona, Journey Map
- Sketching
 - User Flows, Wireframes
- Product design
 - Interface Design, Prototypes
- User Testing



USER RESEARCH



Steps & Deliverables.

- Research Plan + Learning Objectives
- Develop interview Questions
- User Interviews
- Personas
- Journey Maps

USER RESEARCH

WHY NOT JUST ASK PEOPLE WHAT THEY WANT?

- People are experts in their own problems, not in the solutions.
- People have no idea what they want. It's up to you to interpret what they say. Get them to tell you as much as they can about why.
- It's your responsibility to hear about problems of many people, and find a solution that addresses a potentially diverse set of problems.

5 minutes

RESEARCH PLAN

1. What do you want to learn from the interviews?
2. Develop a few research questions and learning objectives to help you write interview questions

YOUR RESEARCH PLAN

SAMPLE RESEARCH PLAN

XYZ Phone Data-Entry Usability Test

Stakeholders: Wanda Verdi (PM), Sam Crouch (Tech Lead)

Background

Since the XYZ Phone was introduced to the world, journalists, bloggers, industry experts, other stakeholders and customers have privately and publicly expressed negative opinions about the XYZ Phone's keyboard. These views suggest that the keyboard is hard to use and that it imposes a poor experience on customers. Over the years, several improvements have been made to data entry (such as using horizontal keyboards for most features), to no avail.

Goals

Identify the strengths and weaknesses of data entry on the XYZ Phone, and provide opportunities for improvement.

Research Questions

- How do people enter data on the XYZ Phone?
- What is the learning curve of new XYZ Phone users when they enter data?
- What are the most common errors users make when entering data?

Methodology

A usability study will be held in our lab with 20 participants. Each participant session will last 60 minutes and will include a short briefing, an interview, a task performance with an XYZ Phone and a debriefing.

Target Audience

Business user, age 22 to 55, never used an XYZ Phone, expressed interest in learning more about or purchasing an XYZ Phone, uses the web at least 10 hours a week.

INTERVIEWS

- 1. Develop a couple interview questions.
 - *Tell me about a typical shift at work.*
 - *What do you enjoy most about working at your restaurant?*
- 2. Your team should interview each other: one person can play the role of the restaurant employee. One ask questions.
 - *Observe User Needs, Frustrations & Opportunities*

INTRO TO DESIGN THINKING

HOW TO INTERVIEW

- Don't: Ask people what they want.
 - People are experts in their own problems, not in the solutions.
- Do: Ask about a specific past experience.
 - e.g. the best time, the worst time, the most recent time
 - We're better equipped to design for others when we understand their behaviors, needs and motivations. Walking a mile in other people's' shoes is the best way to understand how they're feeling and what they're trying to do. This creates empathy.

INTRO TO DESIGN THINKING

USE ACTIVE LISTENING TECHNIQUES

- Ask open-ended questions to uncover stories & feelings. Don't ask yes/no questions.
- Ask people to summarize their thoughts and focus on the most important points.
- Ask "Why?" to get to the heart of the matter.
- Listen, don't push for something specific. You don't know why they're answering that way.
- Use silence as a way to get people to continue on. People are compelled to fill in awkward silences; you may wind up with an unexpected discovery.

Can you help me summarize that in a sentence?

So I'm hearing you say ___, is that right?
Did I miss anything?

Can you tell me more about that?

INTERVIEW PREP

TIPS FOR MODERATING AN INTERVIEW

- Guide the conversation, don't control it. Use active listening techniques to refocus their thoughts without leading the conversation
- Ask open-ended questions Uncover feelings, beliefs, and personal stories. Never settle for “yes” or “no” answers.
- Be prepared to improvise. You never know what people will tell you. If your interview turns into a more organic conversation you may want to roll with it — think of it as a checklist of topics you want to cover.

INTERVIEW PREP

TAKE OBSERVATIONAL NOTES

- You can't possibly write down every single thing, so don't try.
- Notes should not consist of solutions!
- Focus on observations, quotes, and inferences.



USER PERSONA

What is it and why is it important?

- Sets of characteristics that form a specific person
- Represents a significant portion of users
- Enables designer to focus on manageable and important cast of users
- Empathy for the user allowing for deeper understanding of needs
- Provides point of reference for success/failure

KELSIE MATSEN

Age

28

Occupation

Stay-at-home mom
previously an admin assistant

Status

Married with a 3 year old



Motivations

VALUES

CONNECTIONS

PERSONALIZATION

EFFICIENCY

Goals

I want to spend time with my family.
I want to budget my money wisely,
so I can provide a future for my child.

Frustrations

I am really busy.
I don't like repeating tasks.
I don't like waiting.

Bio

Kelsie is 28 years old. She married her best friend Geoff in college. They have a 3 year old son named Ethan. She gave up her job as an administration assistant to be a stay at home mom. Kelsie values a good deal and spending time with her awesome toddler. She loves taking him to explore the city.

Personality - ISFJ

"The Defender"

Outgoing Introverted

Intuitive Observant

Thinking Feeling

Judging Prospecting

Brands



Desiree Johnson



Goals

- Convenient way to see exactly how much water she/family uses.
- Educate her family on actual water usage.
- Money saved from reduction in water usage.
- Feeling that she and her family are helping the environment.

Frustrations

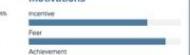
- Overcomplicated hard to navigate app.
- Water meter not commonly available to public
- Info on usage from water bill is hard to understand & relevance

Bio

Desiree is a loving mother of 2. She considers herself fairly aware about water usage. But now with the California drought in the news everyday she is realizing that she isn't much aware about water usage. She is looking for a product that tells her in real-time exactly how much water is being used in her home, and when.

She hopes to educate her children on the importance of water conservation now by living about change in their behavior. She hopes they will not have to experience a drought like this again in their lifetime.

Motivations



Brands



Preferred Channels

Traditional TV Ads

Online & Social Media

Referral

Clark Andrews



Motivations



Goals

- To cut down on unhealthy eating and drinking habits
- To measure multiple aspects of life more scientifically
- To set goals and see end-to-end positive impacts on his life

Frustrations

- Unfamiliar with wearable technology
- Saturated tracking market
- Constant tracking is too time consuming

Bio

As an IT systems software developer, a "data junkie" and for the past couple years, has been very interested in tracking aspects of his health and personal life. Clark Andrews wants to track his happiness, fitness, nutrition, and how all of these factors affect his overall well-being. Although he tries to exercise with friends on the weekend, he would like to cut down on strenuous intake.

Personality



Technology

IT & Internet

Software

Mobile Apps

Social Networks

Brands



Jack Rowland



Motivations



Goals

- To reduce churn
- To help educate advertisers
- To transition toward email / automated customer service

Frustrations

- Confusing UX for advertisers leading to increased tickets
- Logging the calls manually
- Multiple steps to completing a ticket

Brands

AMAZON



Personality



Technology

IT & Internet

Software

Mobile Apps

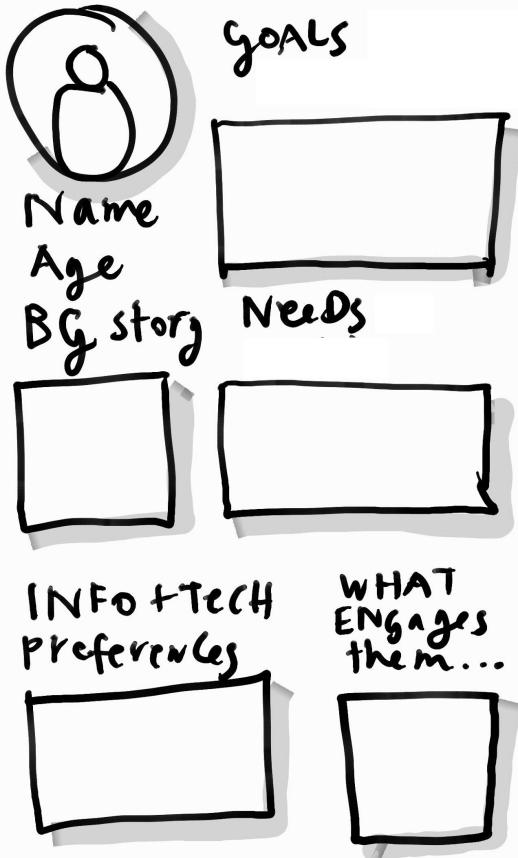
Social Networks

Agreeable

Dependable

USER PERSONA

15 minutes



SARA
age 30

Family: daughter;
single

Education: college; has
Professional job

Language: bilingual (Sp + Eng)

NEEDS

- to get her Dad's divorce forms filed
- needs things filed correctly

BEHAVIORS

- Not afraid to talk to professionals + complain when necessary
- Able to navigate confusing places

PREFERENCES

- wants to get in + out quickly (she has a job + can't take too much time off of work)
- Wants Dad to do some of work, but doesn't want anything done wrong

GOALS

- wants divorce to go smoothly + for parents to be happy
- wants forms filed + get going w/ life

JOURNEY MAP

Journey mapping is a process to help you understand a holistic view of the customer experience by uncovering moments of both frustration and delight throughout a series of interactions.

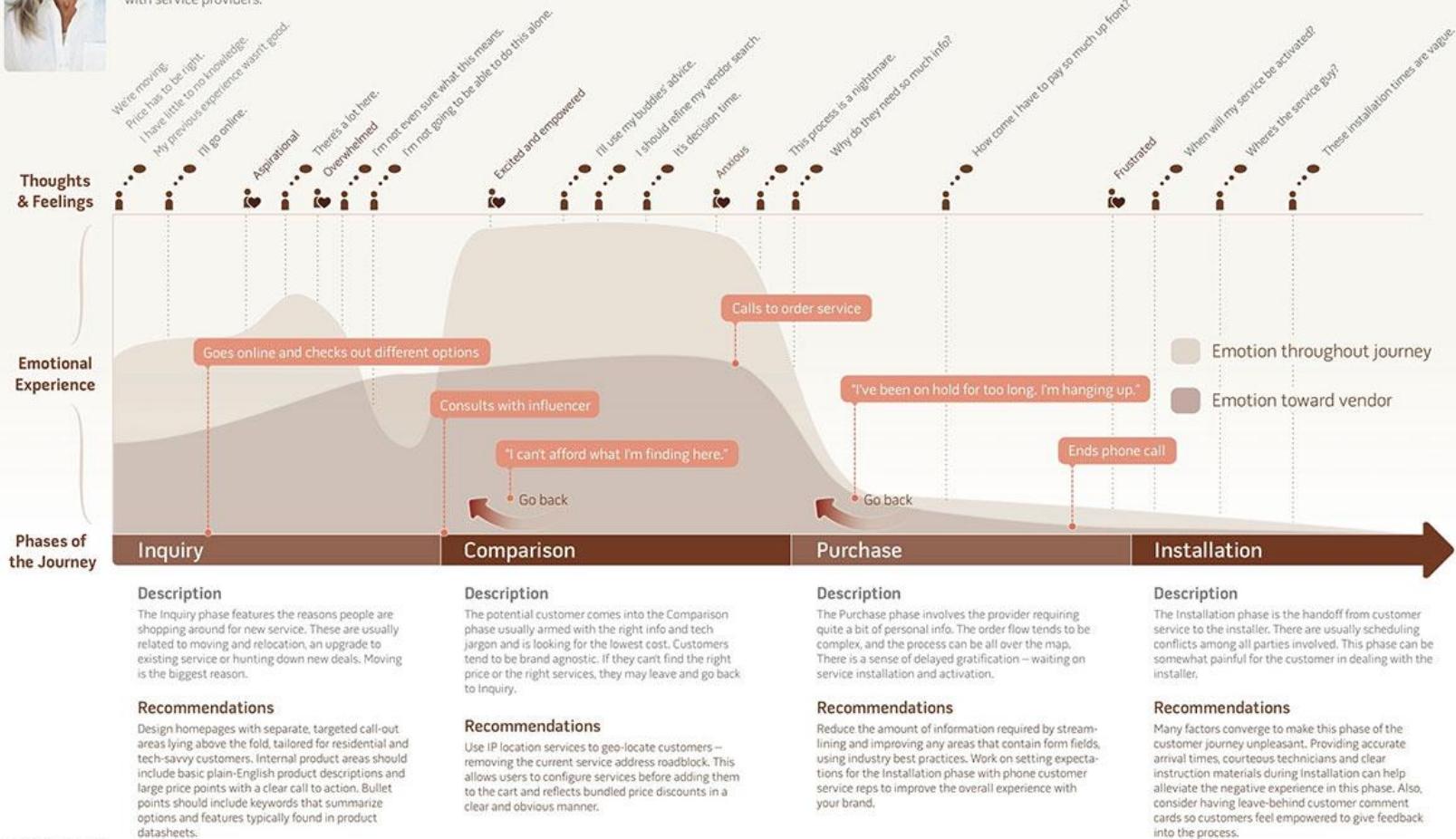
- *Neilson Norman Group*



Sarah's Broadband Provider Journey

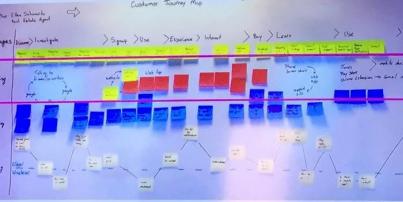
effective^{ui}

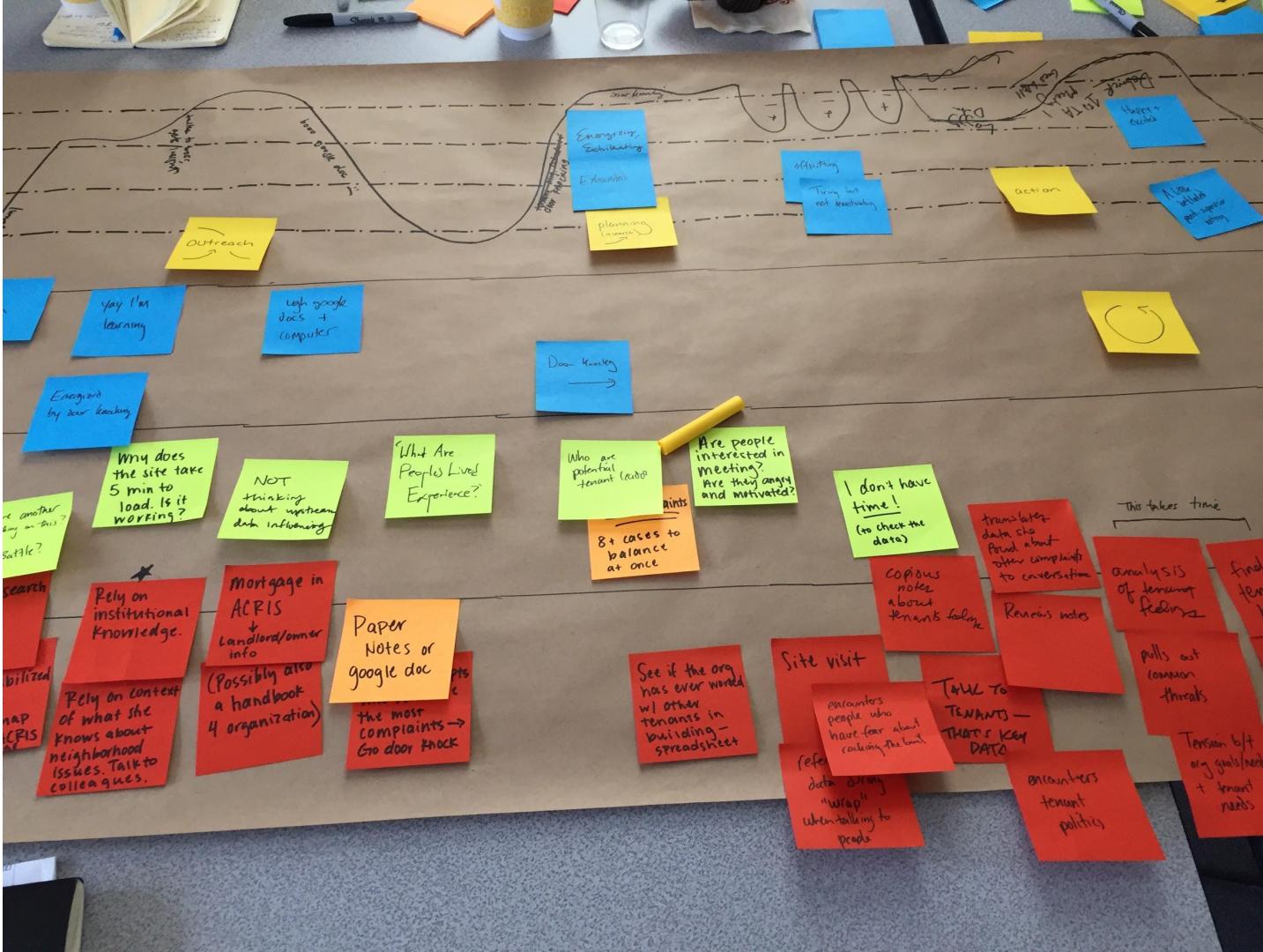
Sarah is moving her family of three. She knows she's going to need phone and Internet service. The effective and contextual factors that will affect Sarah's choice in broadband vendors are price, and her existing knowledge of and previous experience with service providers.



Creating a Journey Map: Step

What is the first thing you do when accessing inform





JOURNEY MAP

Stages (last)

Doing (1st)

Thinking (2nd)

Feeling (3rd)

Emotional Scale



SHARE!



**GENERAL
ASSEMBLY**

LUNCH!

OBJECTIVE

Design a product based on one of
the opportunities you identified
during design research.

IDENTIFY OPPORTUNITIES

Brainstorm ideas!

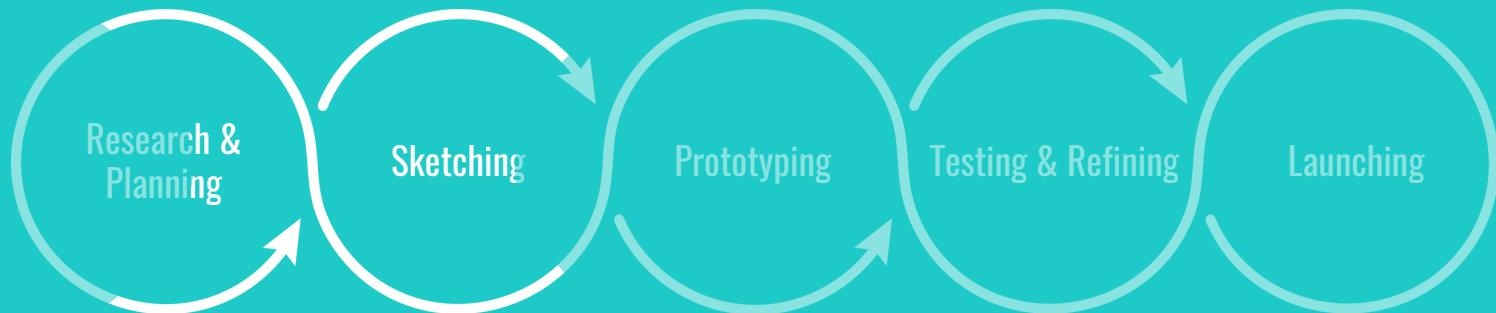


AGENDA

- What is UX Design?
- The Design Process
- User Research + Ideation
- User Flows + Sketching
- UI design & Prototypes
- Product Demos
- Wrap-up & Questions

Steps & Deliverables.

- User Flows
- Wireframes
- Design Comps
- Prototype





SKETCHING

1. See available hotels

- Stressed
- Family chaos
- Untrusting

→ 2. View hotel details

- Comparing
- in a rush

I want to
book this.

4. Review booking

- Is this right?
- Correct credit card?

3. Account sign in/
creation

- Ugh.
- Familiar

5. Booking confirmation

- Relief
- Screenshot?

Gather
Evidence

File
Complaints

Find
Help

Issue
Checklist

Add details
per
Area

Talk about
the
Past

Get rental
History

Notify
Landlord

Send Letter
of
Complaint

reach out to
DHCR

Check
311
Status

Check HPD
site
status of HPD
complaint/violation

CALL
311

Schedule
an
Inspection

KYR

Learn
about your
Rights

Call
Metacouncil/
HC.A

Find local
resources
(CBOs)

Go to HC
pro se
offices

Anti-
harassment
Hotline
(zipcode
based)

Find pro bono
legal
service

Contact your
local
representative

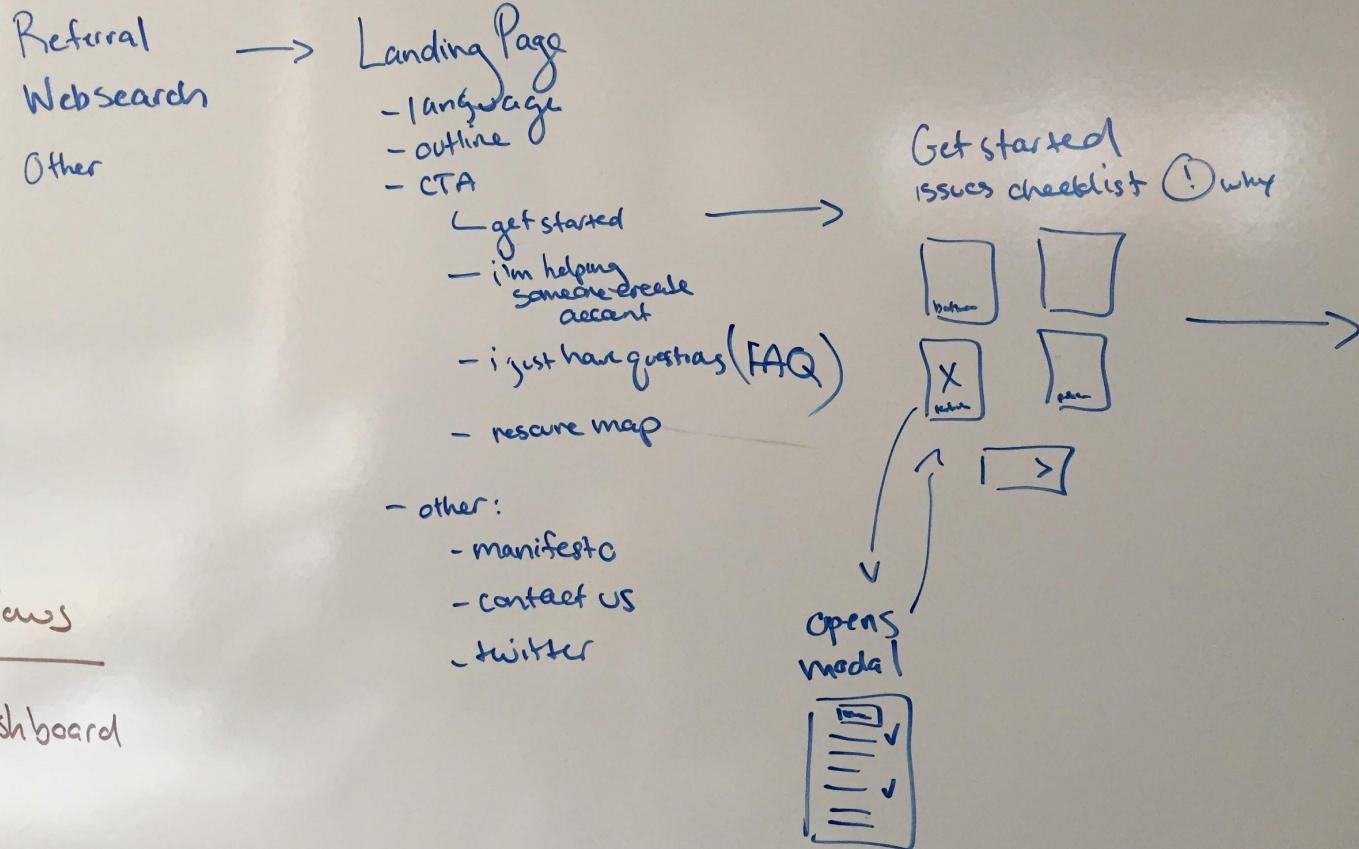
Legal
Actions

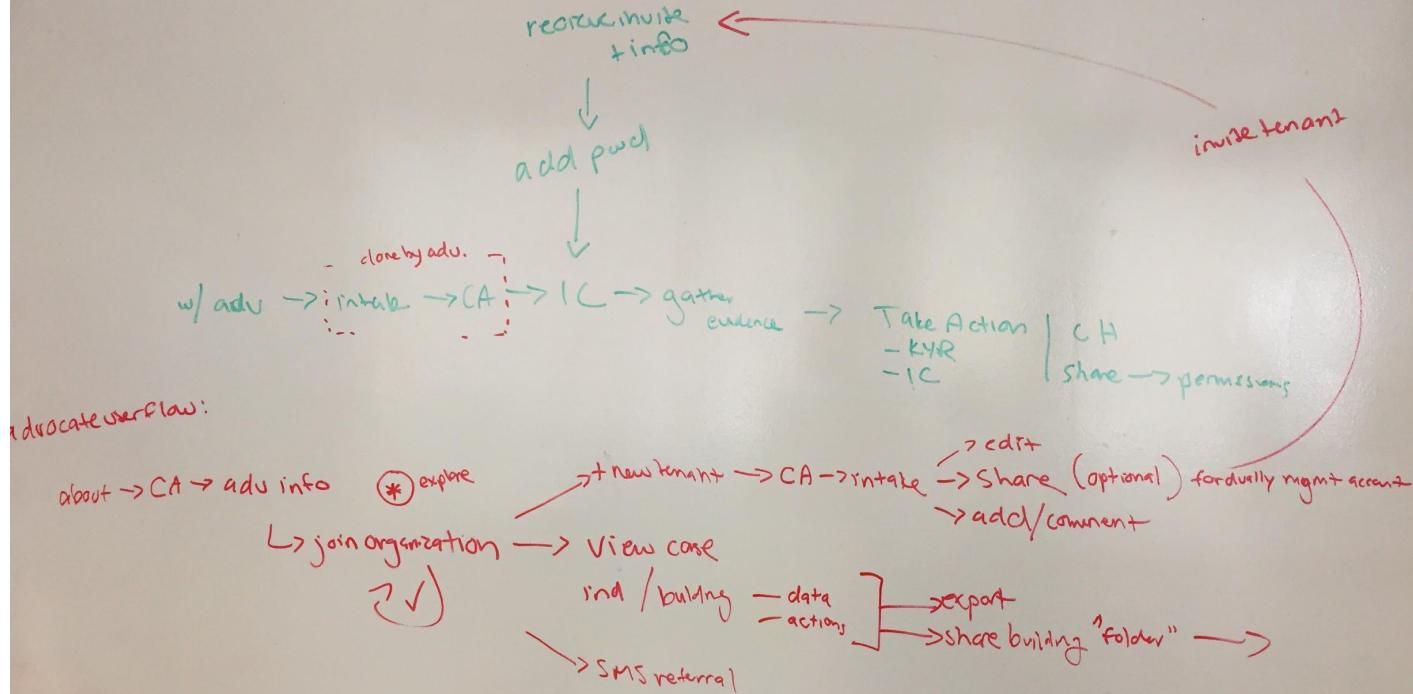
Withhold
RENT

HP Action

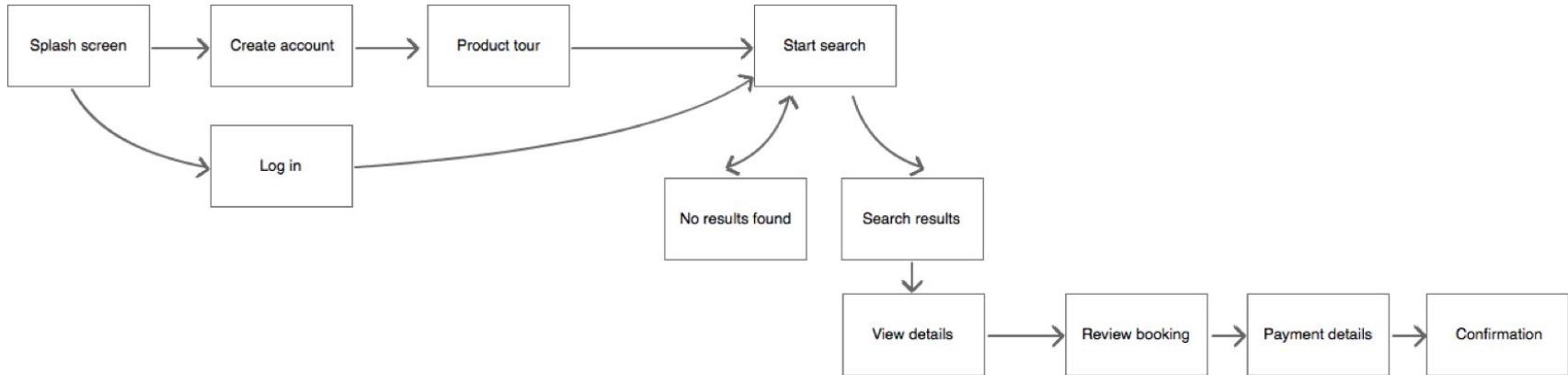
TA

Send photos
to
organizers

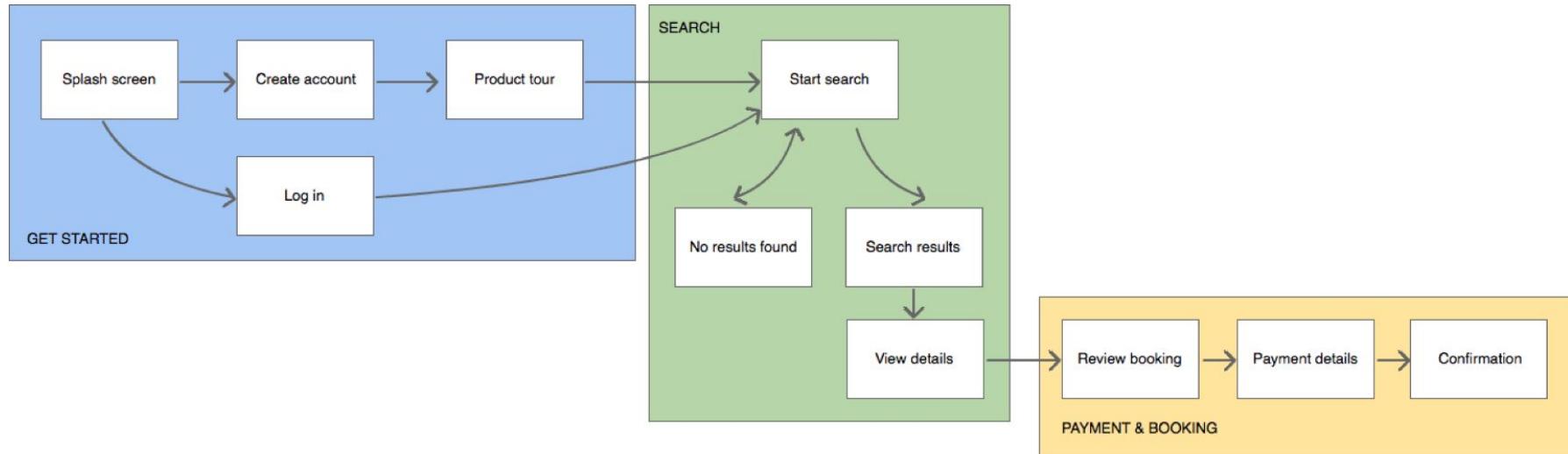


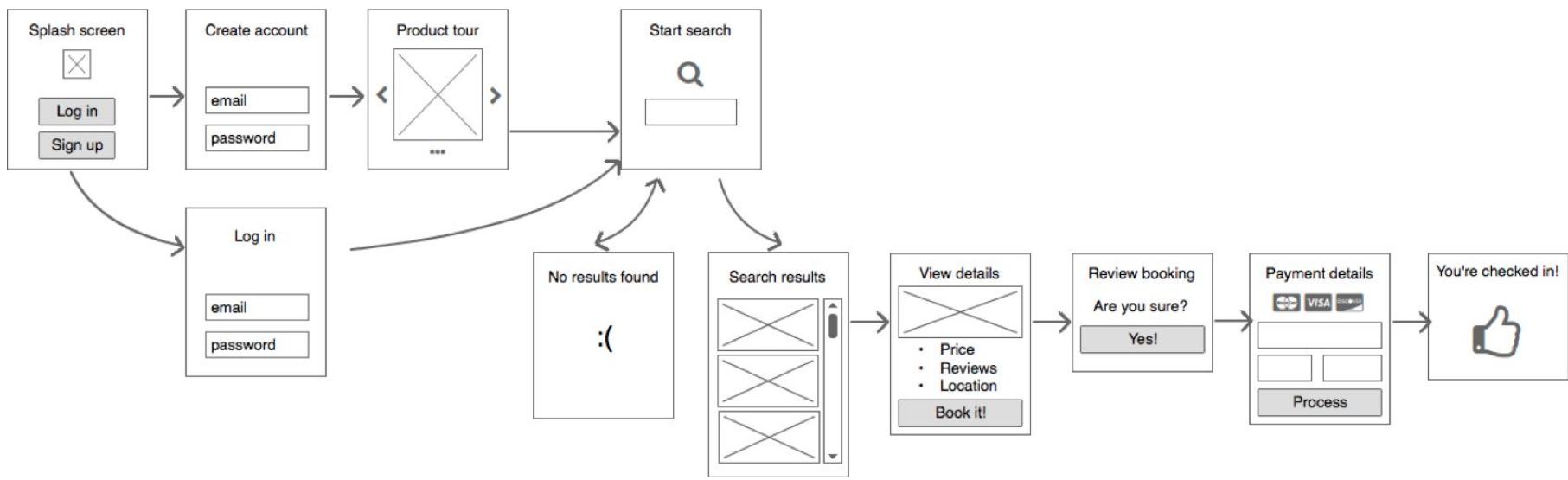


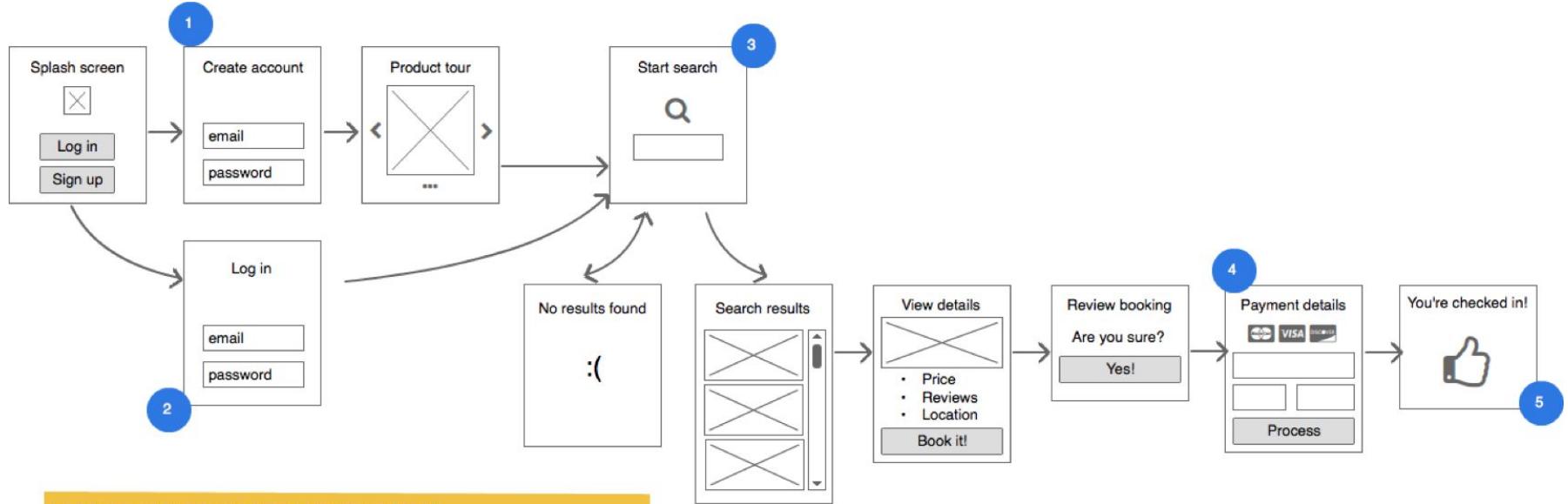
USER-FLOW DIAGRAM



USER-FLOW DIAGRAM

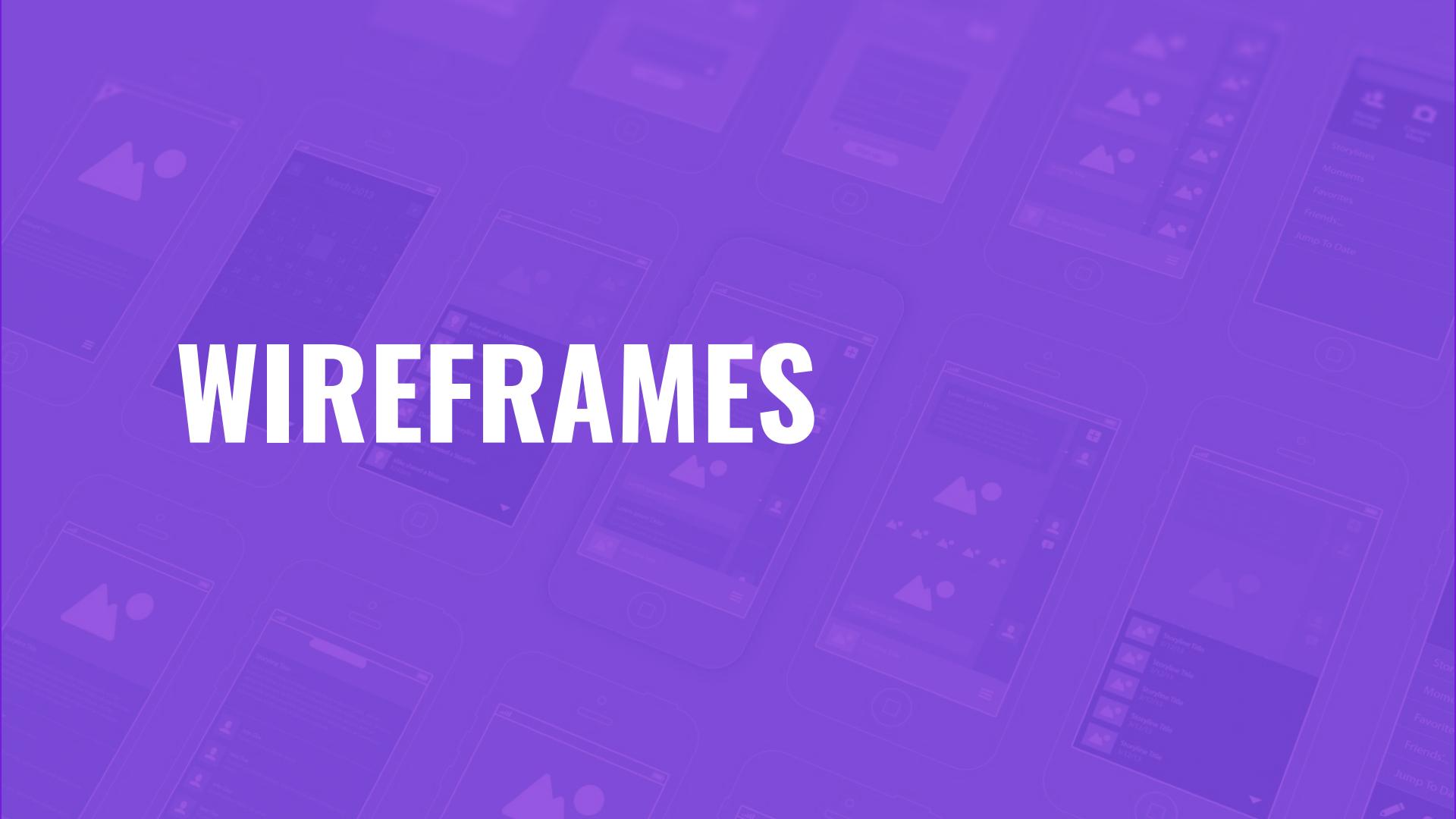






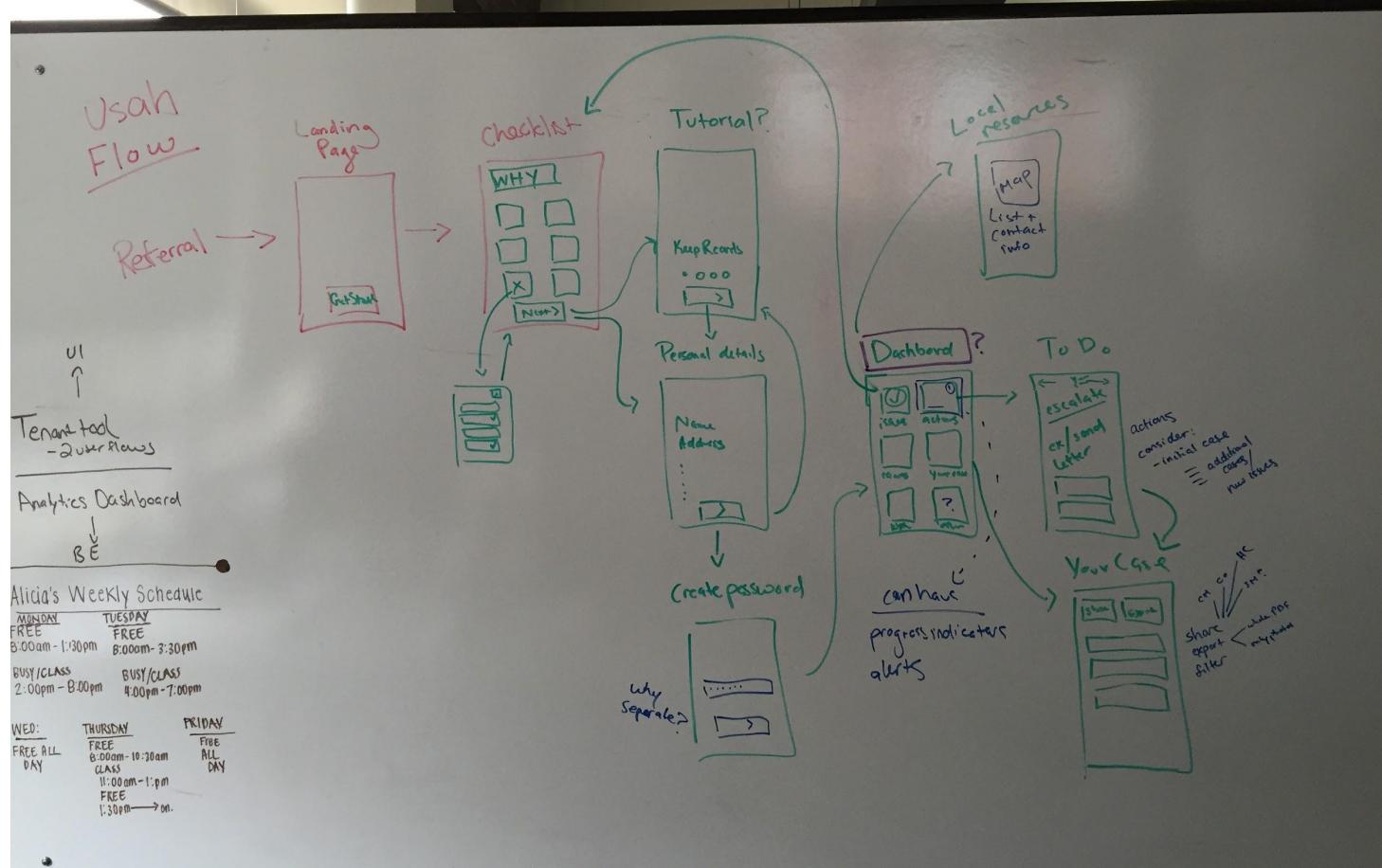
1. Do we really need login/registration up front?
2. Add in "Forgot your password" flow
3. What does the user search for? Is this just geo located?
4. Can the hotel be in this "reserved but not paid for" state?
5. How do we handle payment denied? What happens to the booking?
6. What does the user do after confirmation?

WIREFRAMES



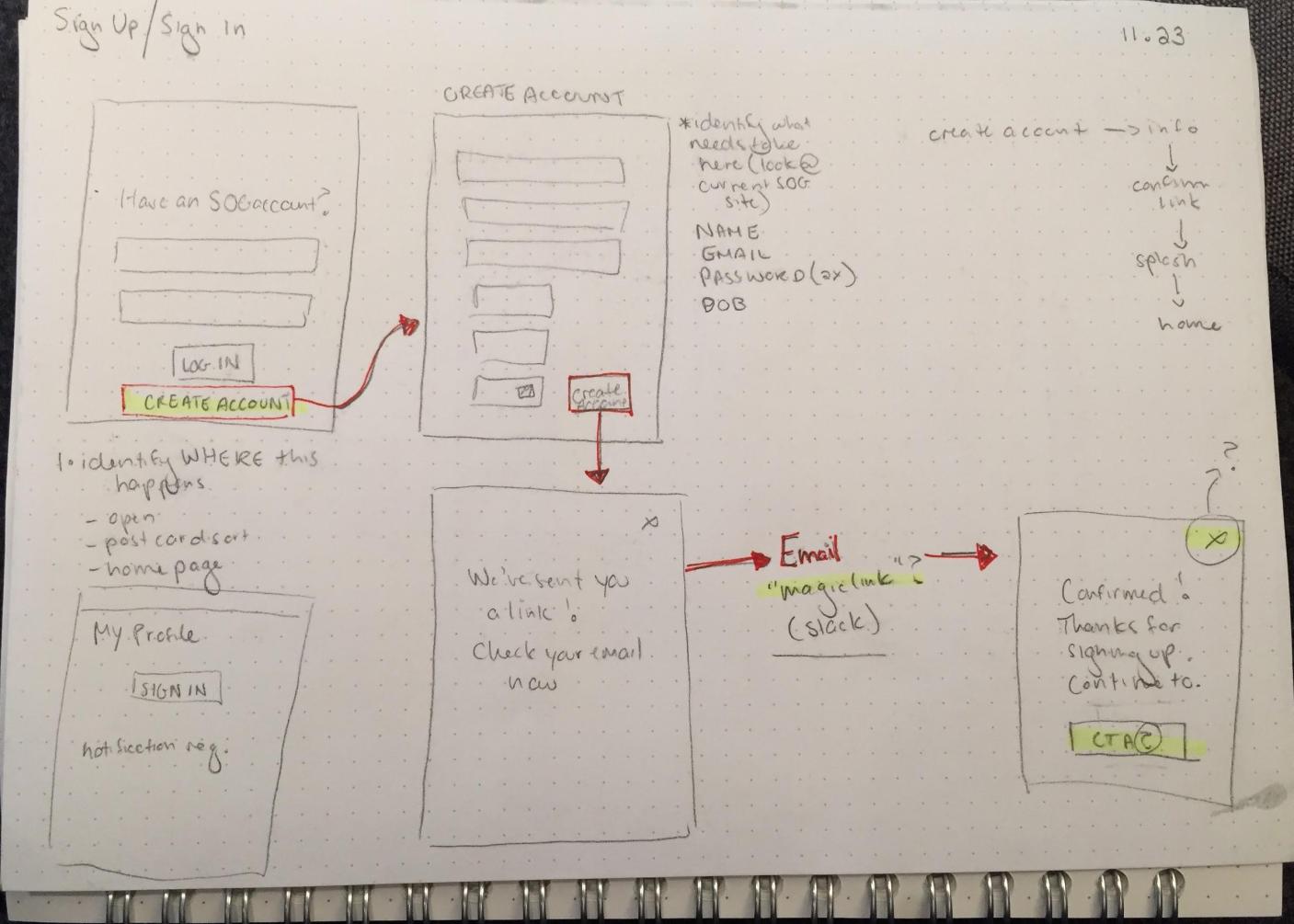
WireFrames Best Practice

- Use common UX patterns
- Focus on the task at hand
- Delay the hard parts
- Help Users Make Decision



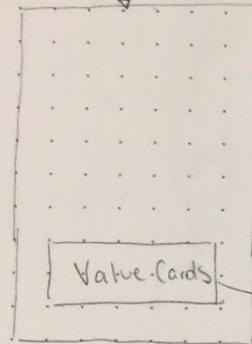
Sign Up / Sign In

11.23



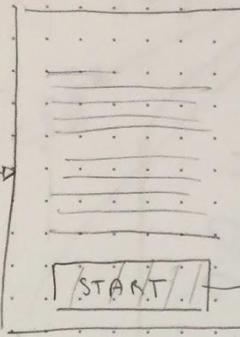
Card Sort - Sketch

download

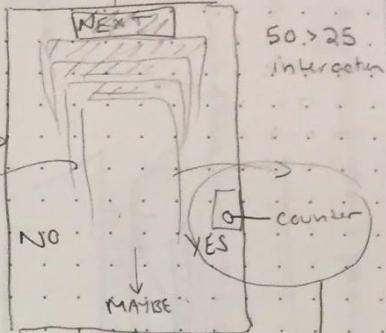


(first time user)

About
Start.
SOC website
Login?
small link



Instructions
Start.



11.10.15

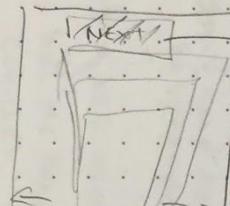
PROMPTS
you still need..."

50 > 25
interaction

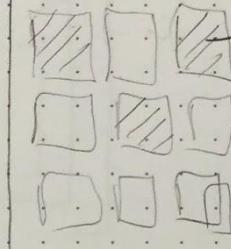
automatic transition? or

Confirmation to
continue w/
restrictions

Now do 10
NEXT

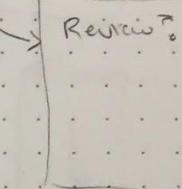


NEXT



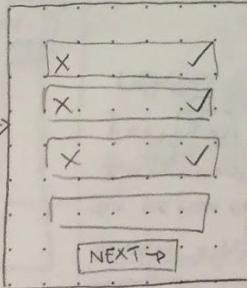
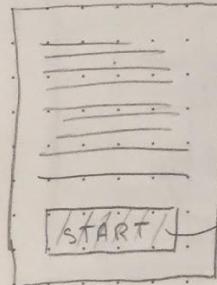
tap to
select
(so you can
always see
them?)

drag up

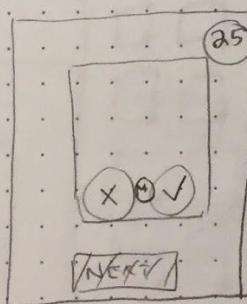


Card sort - sketch 2

Instructions



or



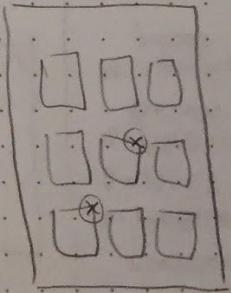
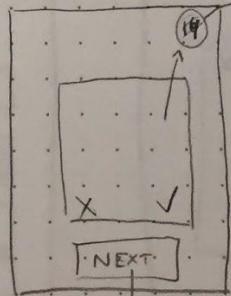
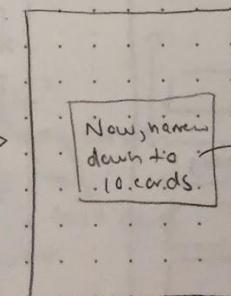
1. counter

2. review (maybe or
too many yes)

3. next

↳ confirm and
move to next

Now, move
down to
10 cards.



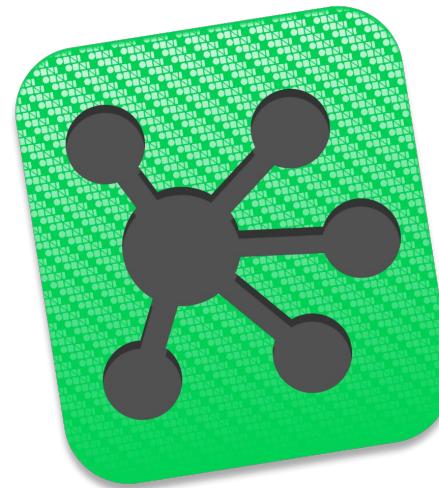
not clickable
until 10 cards in
counter

Demo: 10 minutes



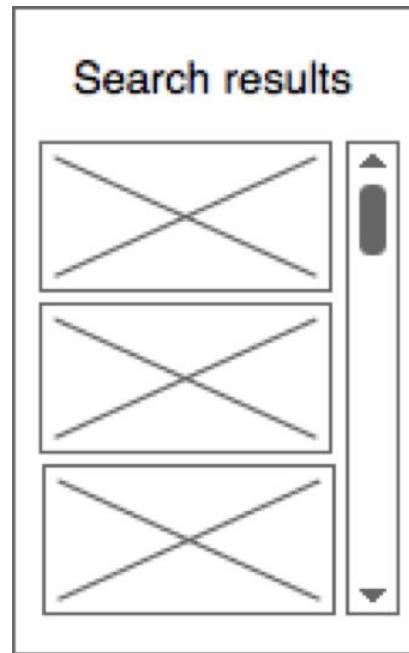
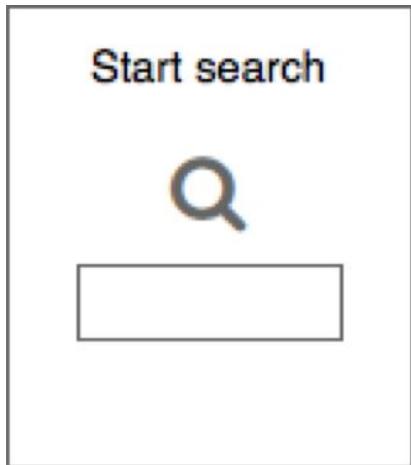
Balsamiq

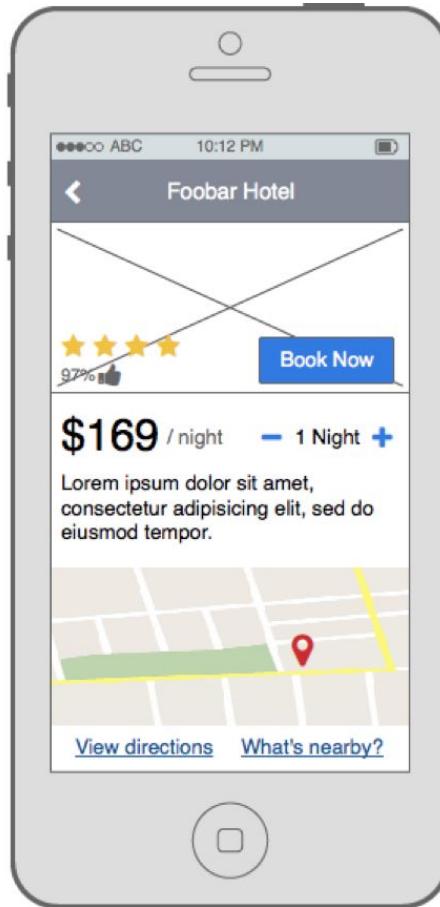
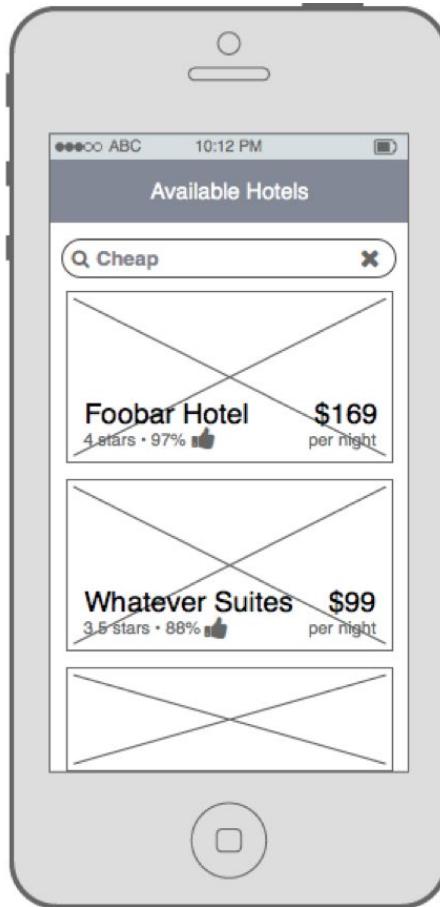
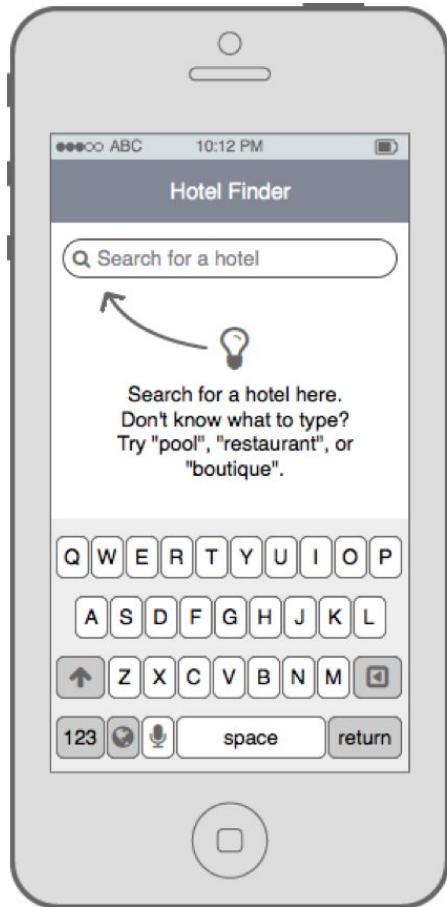
balsamiq.com

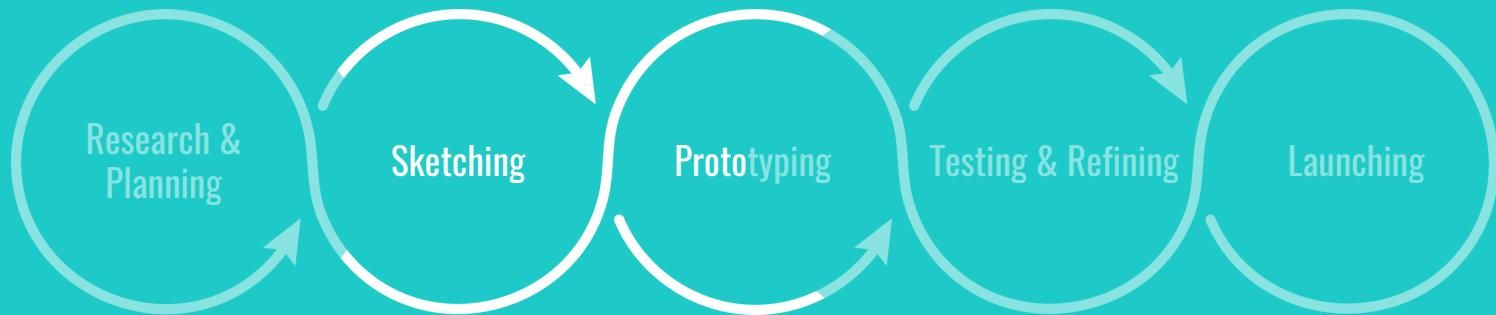


Omnigraffle

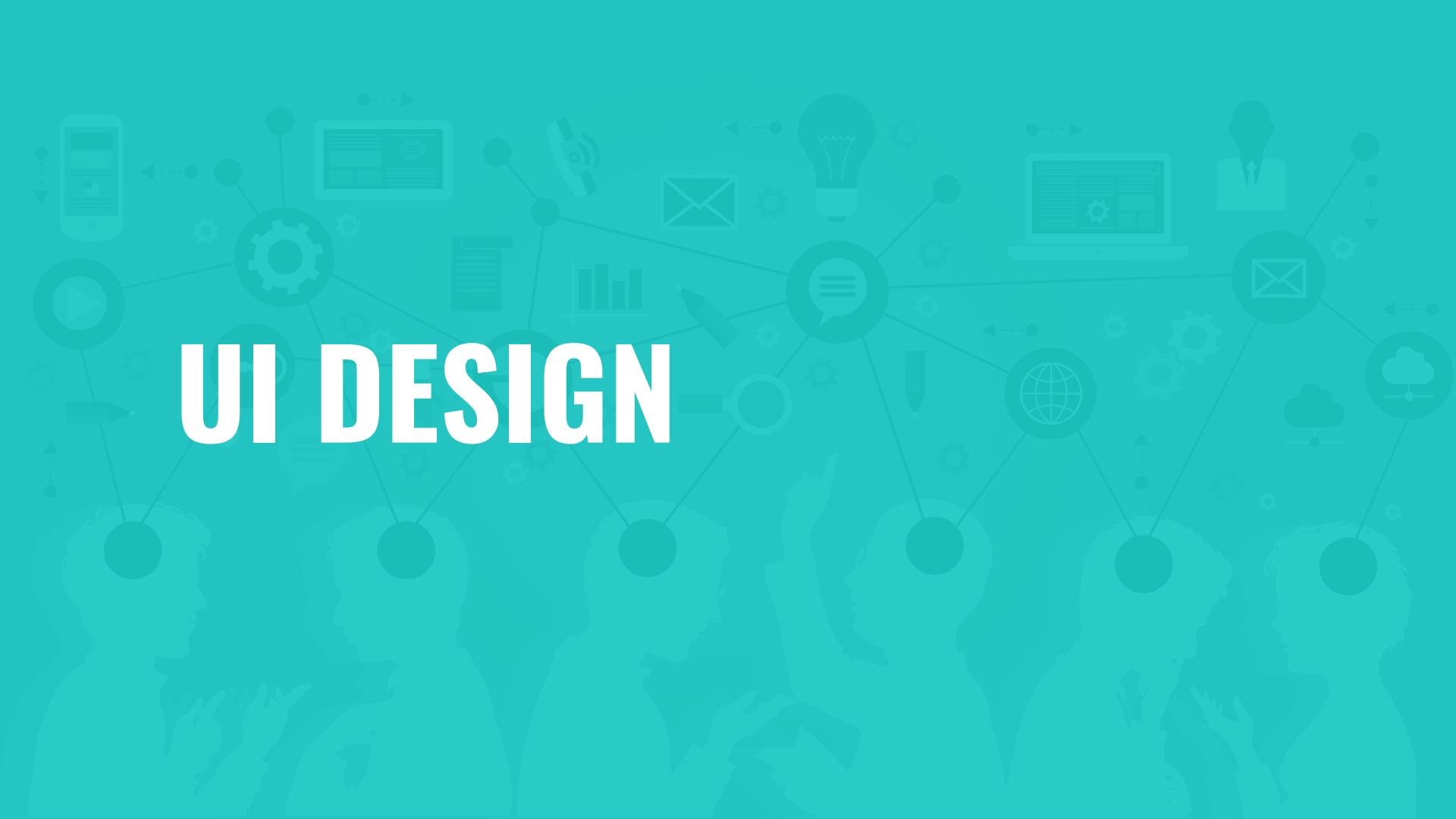
omnigroup.com/omnigraffle





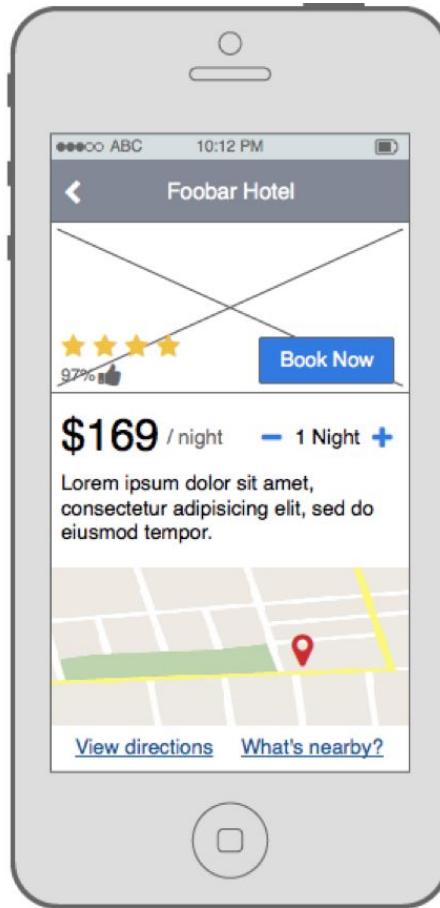
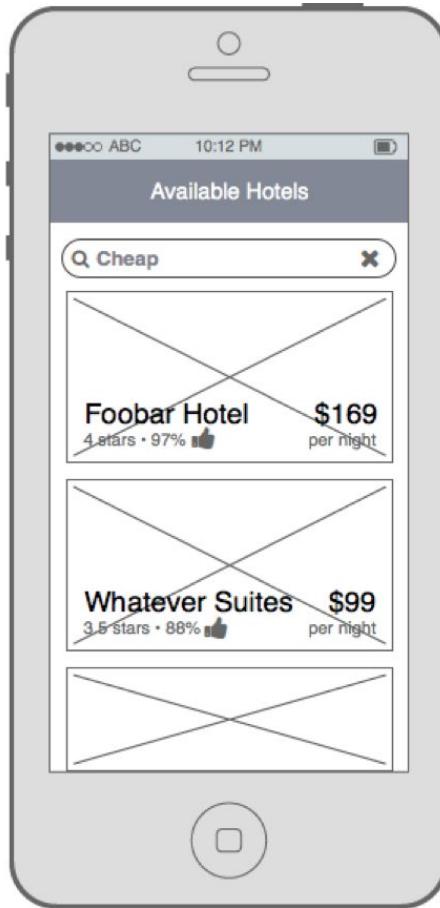
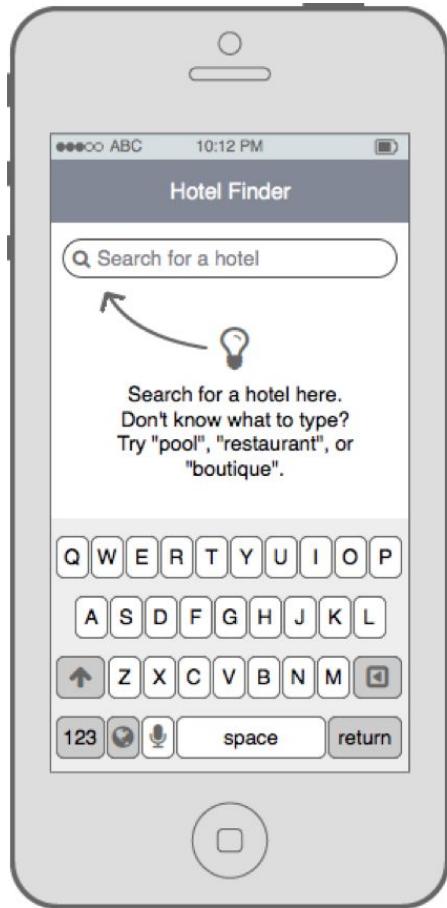


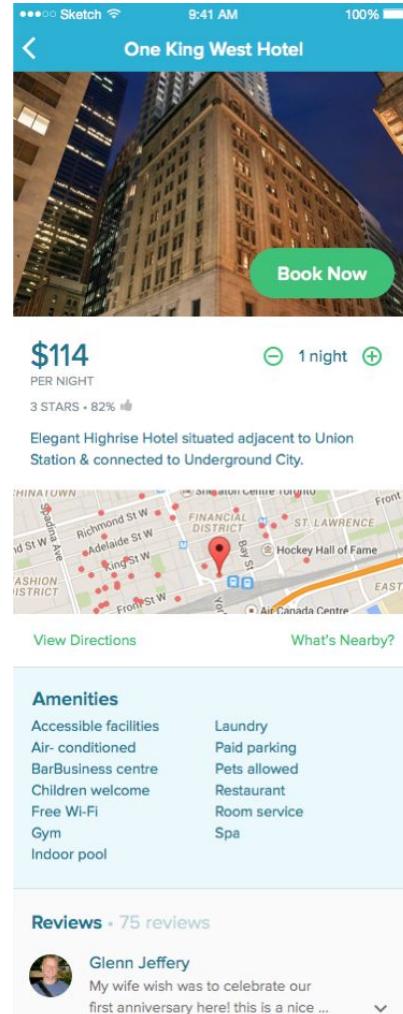
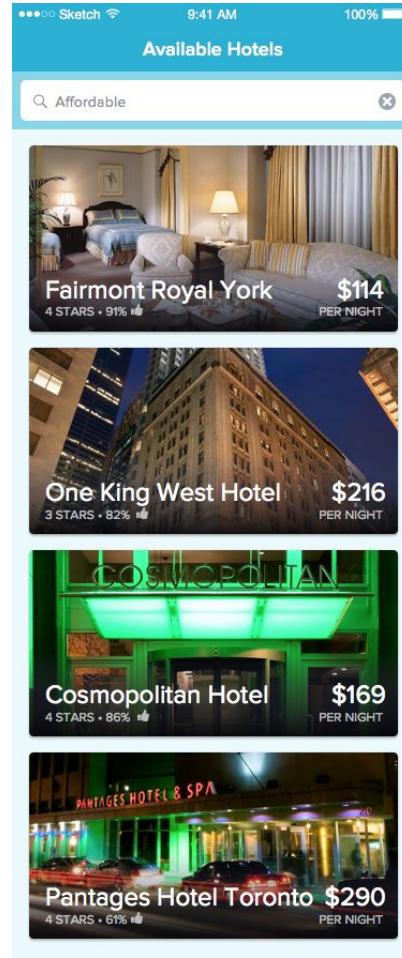
UI DESIGN

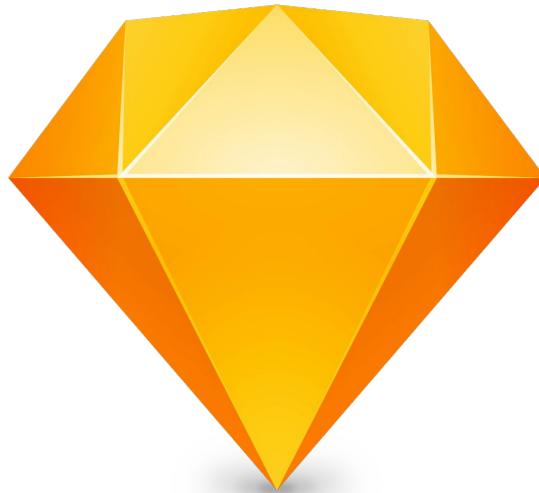


Visual Design Best Practices

- Be Tasteful & exercise restraint
- Product Consistency
- Speak Directly
- Clear Navigation



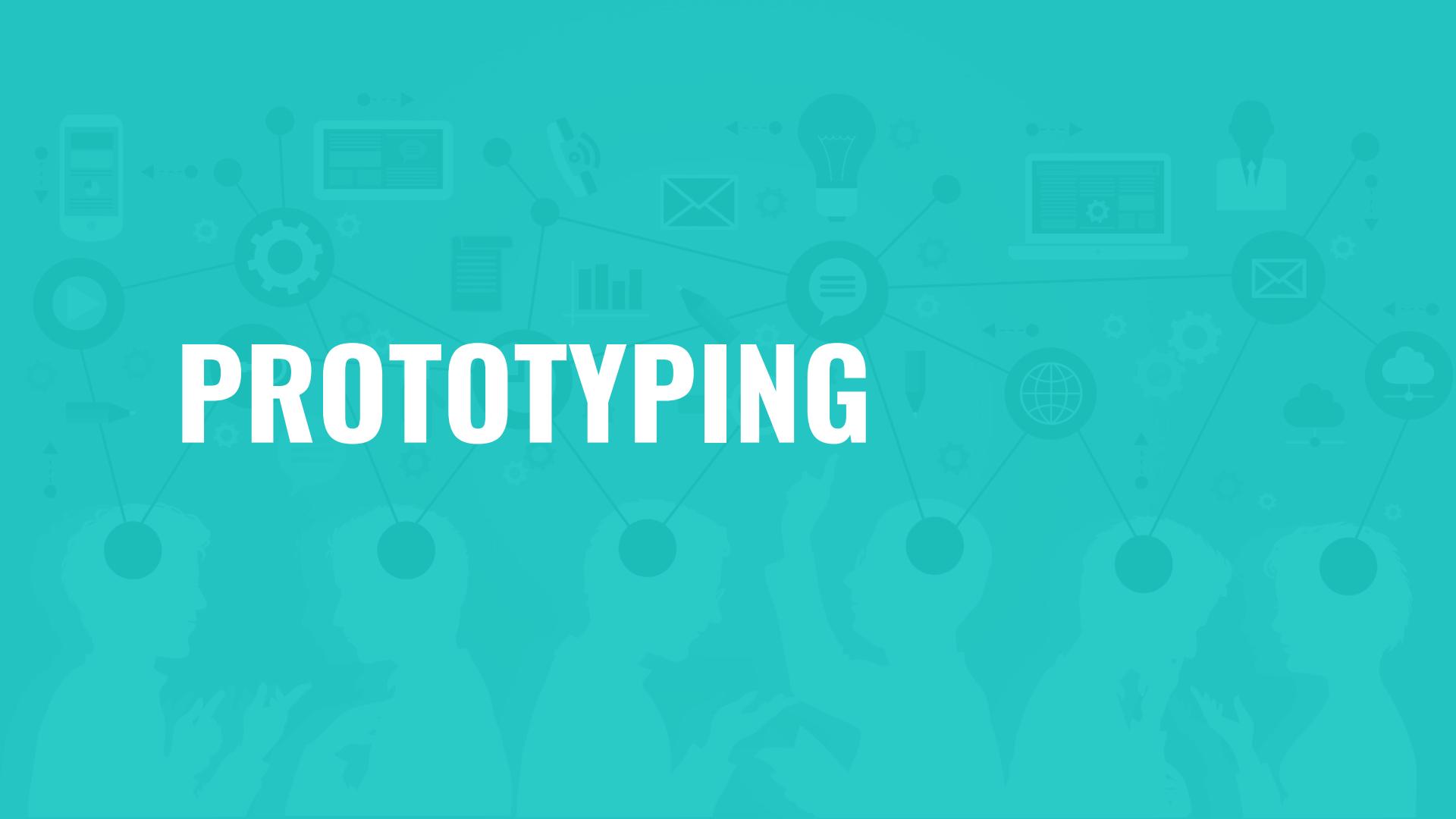




Sketch

sketchapp.com

PROTOTYPING



A Prototype is:

- A simulation of the final product
- Used as a tool for conversation among stakeholders to gain buy-in
- To validate the final product or to learn how it can be improved
- Created for usability testing
 - Make your initial ideas better, more grounded in users' context
 - Bail early from bad ideas
 - Flesh out interfaces & system requirements



Marvel



atomic



POP

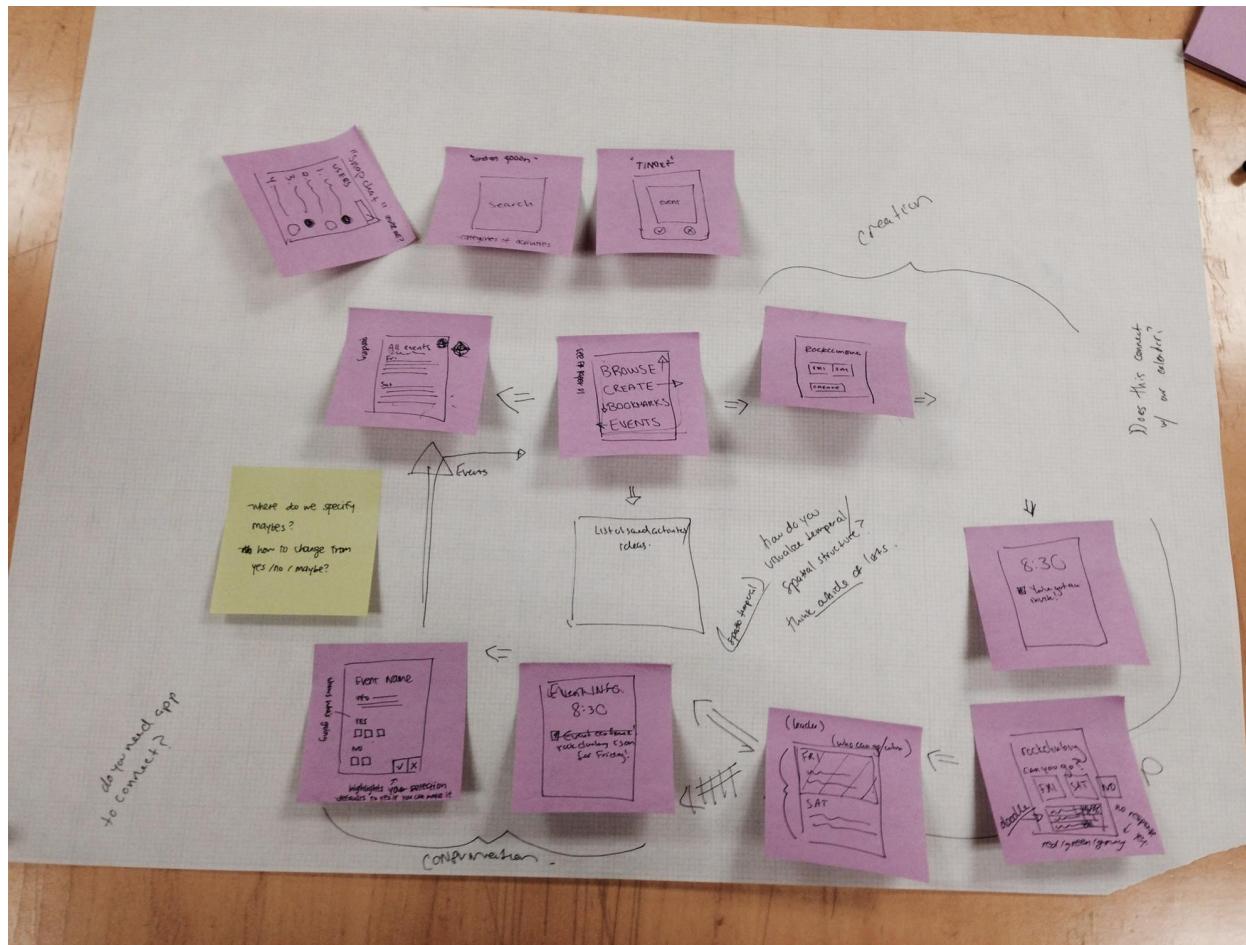


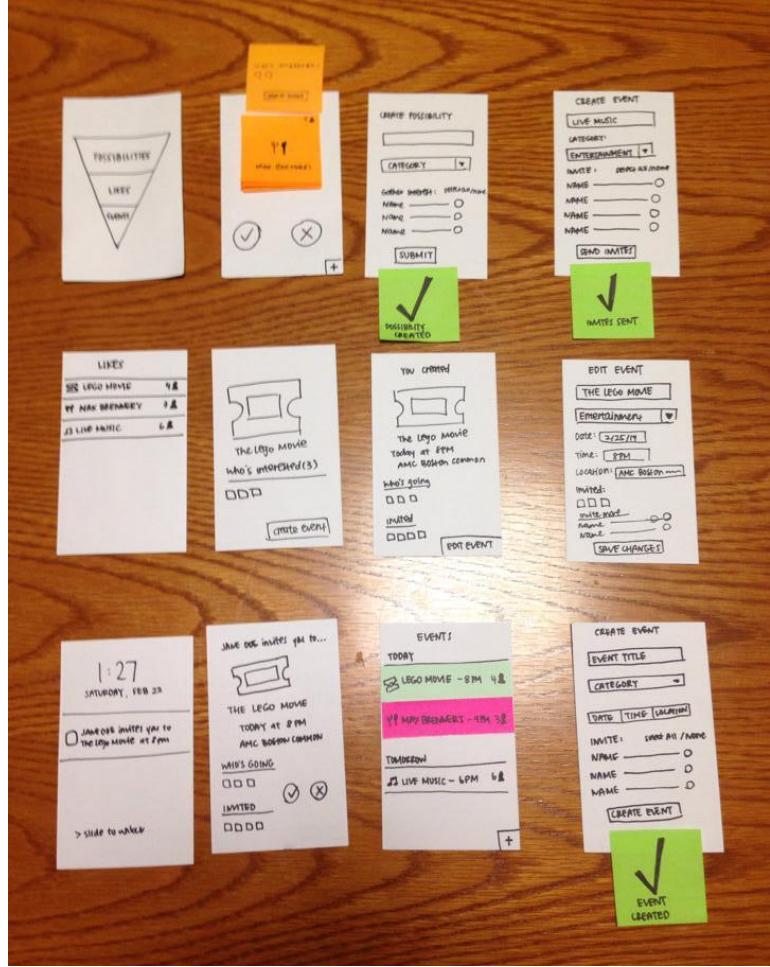
Welcome to Grapevine

We've created a catalog of
children's educational
resources in the Brownsville
community!

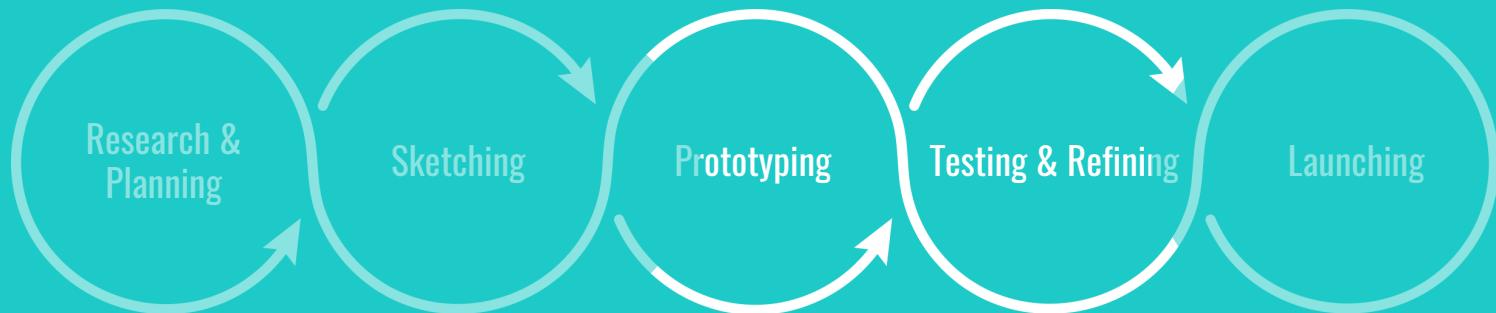
[ENTER THE MAP!](#)







<http://ashleytreni.squarespace.com/#/gatherapp/>



USER TESTING



USER TESTING

Usability testing is a technique used in **user-centered** interaction design to evaluate a product by **testing** it on users.

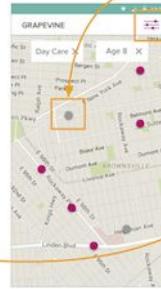
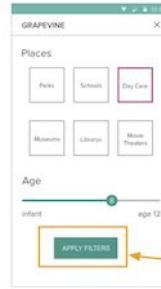
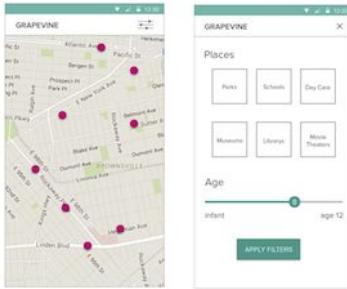
- Guide the user through a pathway by asking open ended questions
- Never lead them to the solution
- Ask them to speak out loud about what they are thinking



Grapevine Iteration 1

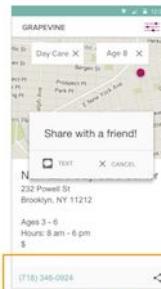
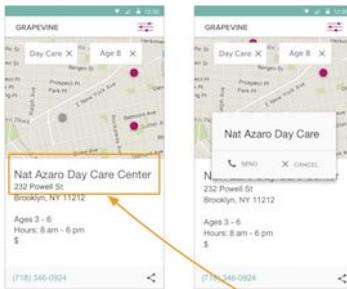
User Testing at Nat Azaro Day Care Center
Brownsville, NY on 7.31.15 & 8.3.15

Wires/prototype



Insights

- "greyed" out options was not intuitive
- Filter icon is hard to find; term "filter" is not intuitive
- People continued to hit X at top, instead of the apply filters button
- Add a "churches" and "playground" filter; lessons/activities/health&fitness?



Next steps

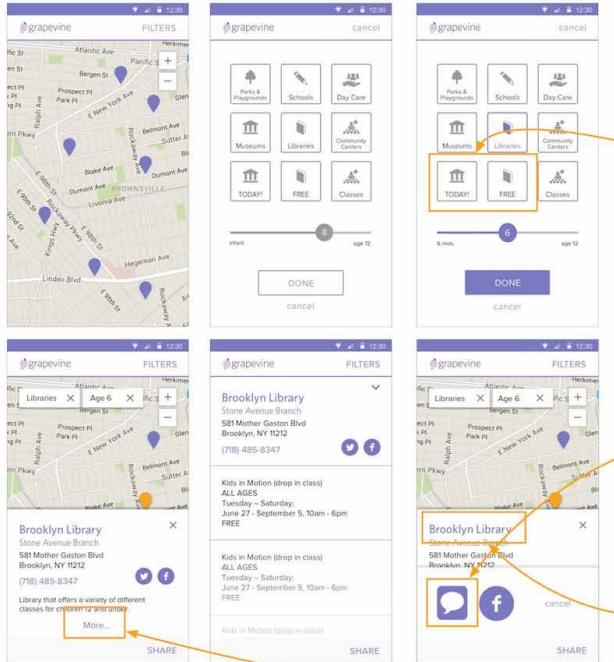
1. Map marker types
2. Determine filter categories
3. Best way to show price?

- Add website link to place
- Add social media links for places
- Add "X" to information card?
- Share to facebook
- Separate call and share actions; confused that text sends a text to the place
- Move phone # closer to place

Grapevine Iteration 2

User Testing at Nat Azarow Day Care Center
Brownsville, NY on 8.6.15

Wires/prototype



Insights

- FILTER still very hard to find.

Create a filter prompt?

What are you looking for?

- Excited about TODAY and FREE filters
Move them to the top

- Pools filter: account for more outdoor types

- Change name of community center filter to centers

- Change ^ to X for expanded detail view

- How to turn age filter off?

- Text icon was unclear
(is there a better android SMS icon?)

- Remove twitter button

- Collapsed multiple view should have general hours

- Link to website was unclear

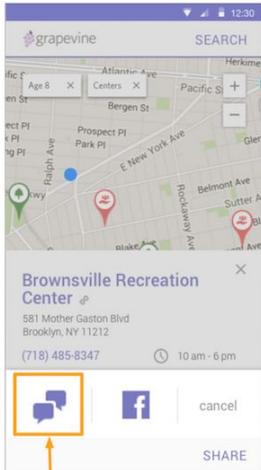
- More button was unclear

Grapevine Iteration 3

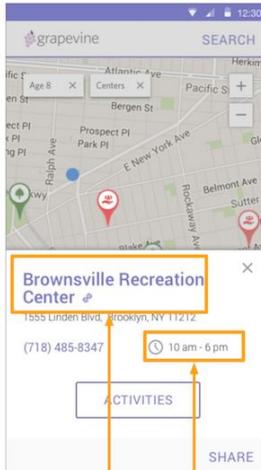
User Testing at Nat Azaro Day Care Center

Brownsville, NY on 8.12.15

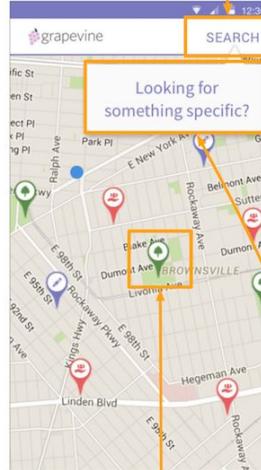
Wires/prototype & Insights



Change icon to single bubble
(android text icon) this one implies
chat conversation

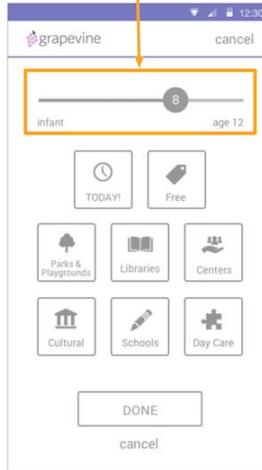


"Visit website"
Hours is too
small & light



Make map icons larger

Bigger Search CTA



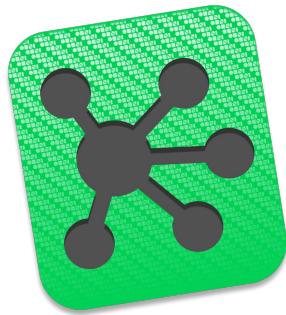
Age slider needs to account
for age GROUPS.

Work on a splash page
animation to transition
into this "tutorial" for search

AGENDA

- What is UX Design?
- The Design Process
- User Research + Ideation
- User Flows + Sketching
- UI design & Prototypes
- Product Demos
- Wrap-up & Questions

Demo of design tools



Omnigraffle

User flows + Wireframes



Sketch

Visual Design



InVision

Prototyping



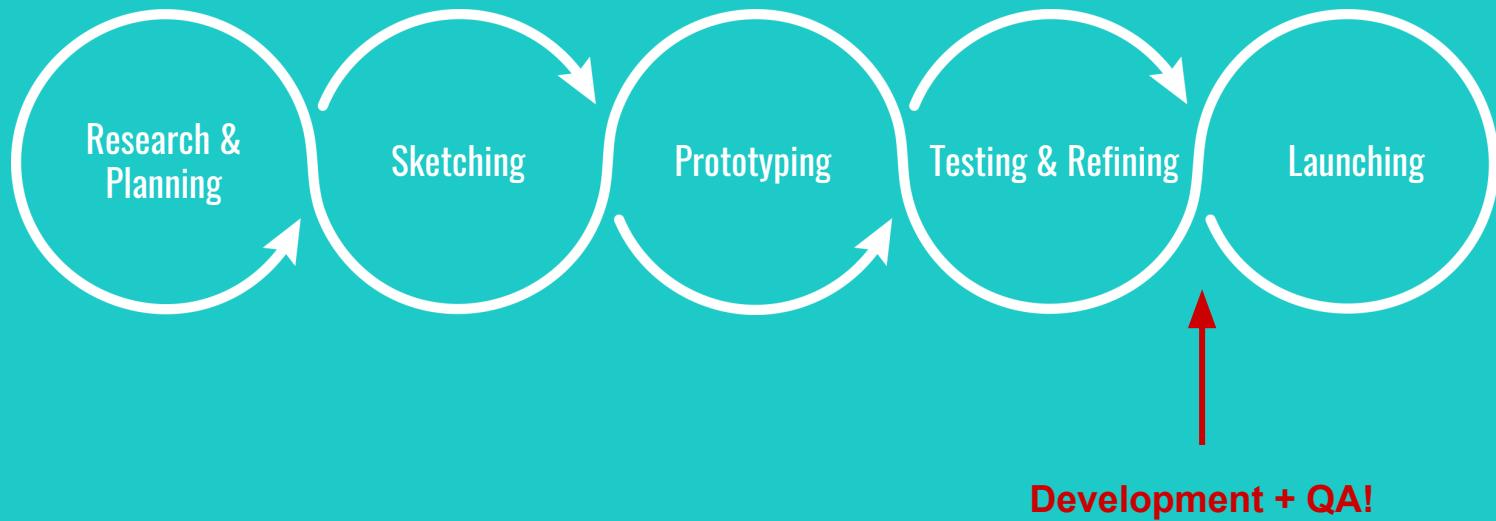
Please share your feedback:

**Check your inbox for a
survey**

Accessible via mobile or laptop

RECAP:

- User research
 - Interviews, User Persona, Journey Map
- Sketching
 - User Flows, Wireframes
- Product design
 - Interface Design, Prototypes
- User Testing



WHAT'S NEXT:

- Attend UX design Meetups
- Do “UX Audits” to build your portfolio
- Read job descriptions
- Read blogs and look at portfolios



GENERAL
ASSEMBLY

**UX DESIGN CHANGES LIVES,
THANK YOU.**