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PORTFOLIO REVIEW

November 2018

About

Hello!

I will be graduating from Carnegie Mellon in December with a B.S. in Statistics and Machine Learning and Human-Computer Interaction.

I am passionate about data-driven UX design and research.

Agenda

BHCI Capstone Project: Visualizing Patient Generated Health Data

Uber RidePass: Case Study

Visualizing Patient Generated Health Data

BHCI CAPSTONE PROJECT

Patient generated health data includes both data collected automatically through the mobile phone and data entered by the patient.

The Problem

With post-operative care, patients often find themselves overwhelmed by their transition out of 24/7 care and become more susceptible to complications.

How can we increase the efficiency and efficacy of post-op visits through patient generated health data?

Goals

1. Visualize the data in an easily digestible way

2. Create a tool that would fit into the caregiver's workflow

3. Understand how we can improve the efficiency of post-op visits by providing an insight into patient lives post-discharge

My Role

UX Design Lead

To synthesize findings from user testing and research, create prototypes at all levels, and direct user testing

Process

Research

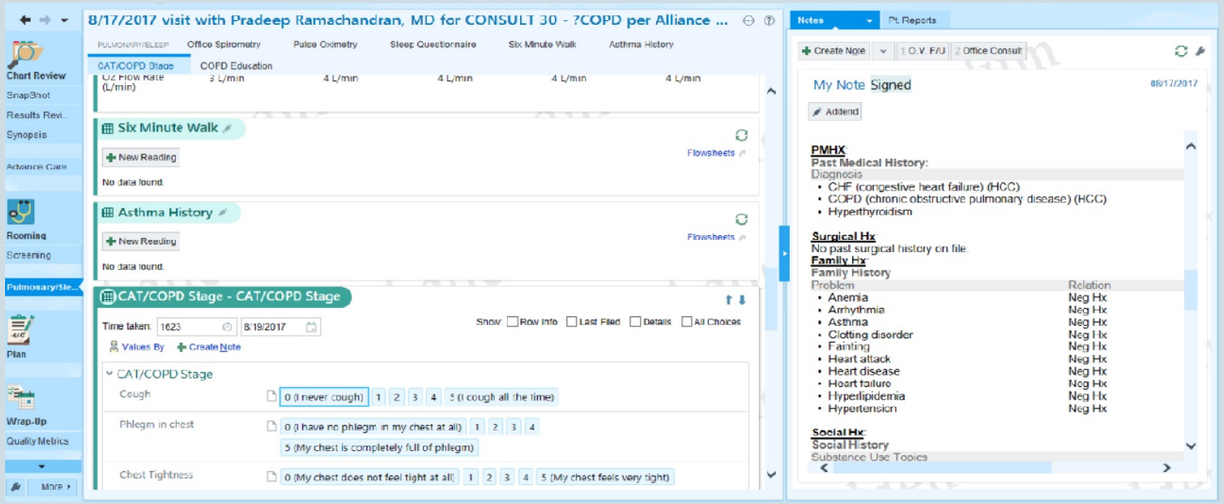
Evaluation

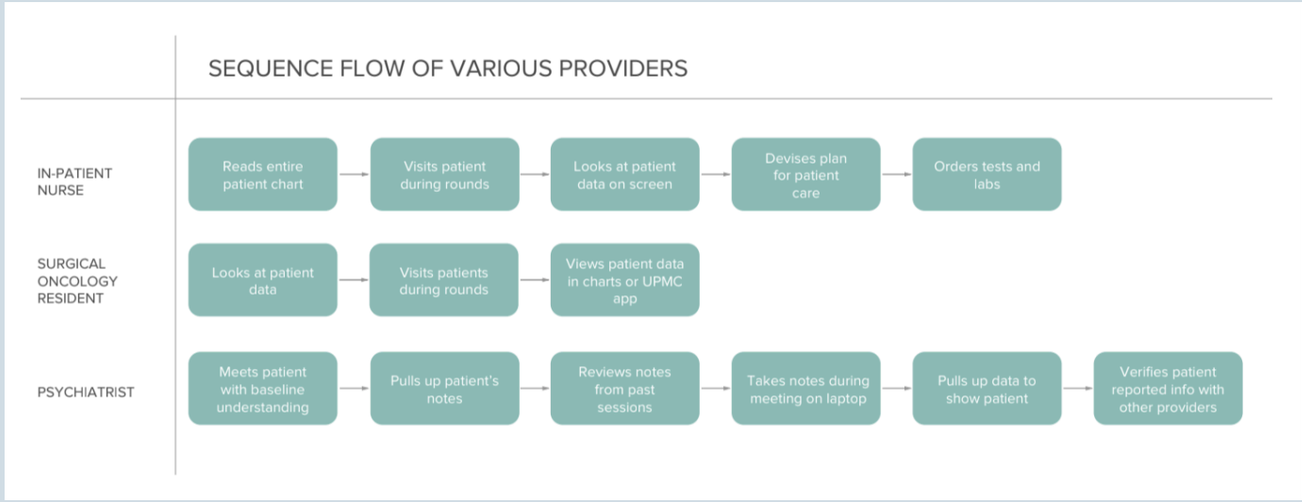
Prototyping and Refinement

Research

Literature Review

Interviews





	SLEEP	EATING	ACTIVITY	PAIN
DATA	**Self-reported** Quality of sleep Time to bed Time to wake up **Mobile data** Hours of sleep Sleep disturbances	Calories Macro Hydration Meals eaten	**Physical** Steps Calories burned Sedentary Geolocation **Social** Call (in/out) Text (in/out) # people in contact	Pain rating Max/min rating per day Pain location Notes
VIZ	Time series (line graph) Piechart (quality) Hover for outliers Change in disturbances	Numbers Piechart (macros) Trends for water Bar chart Line graph	Numbers Time series Radius for geolocation Polar or circular	Time series Location on body graphic Text summary of notes Bar chart

Ease of use

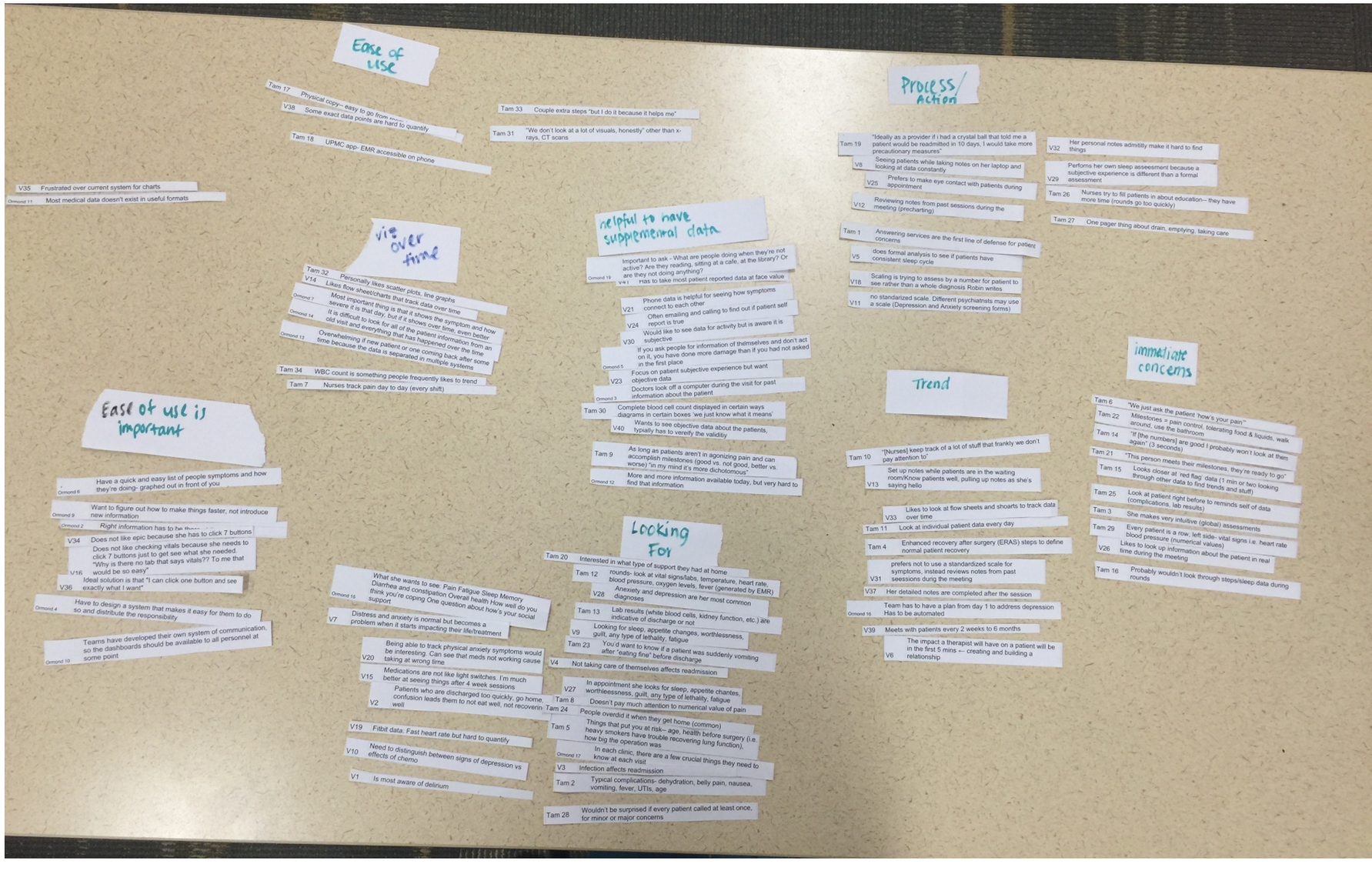
Viz over time/Trend

Looking for

Immediate concerns

Supplemental data

Process



Evaluation

1. Our target audience consists of nurses and physician’s assistants.

2. Patients are evaluated against themselves.

3. Data should be represented as time series visualizations

4. “The right information has to be there at the right time”

Prototyping

1. Designing data visualizations

2. Designing the layout of the dashboard

CO-DESIGN SESSIONS

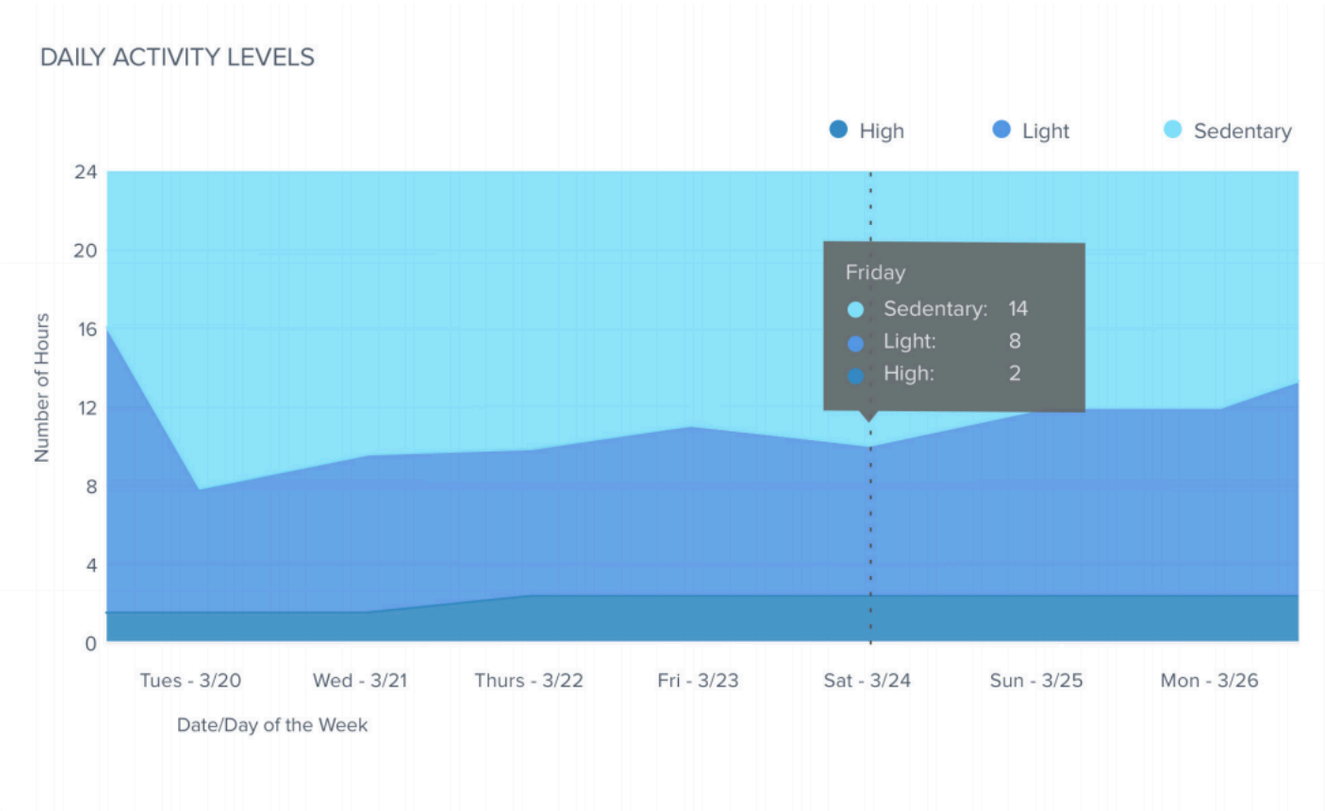
EXAMPLE OF A PERSONA

Patient 1 - Good
50 year old male
Married
Lives with wife and 3 children

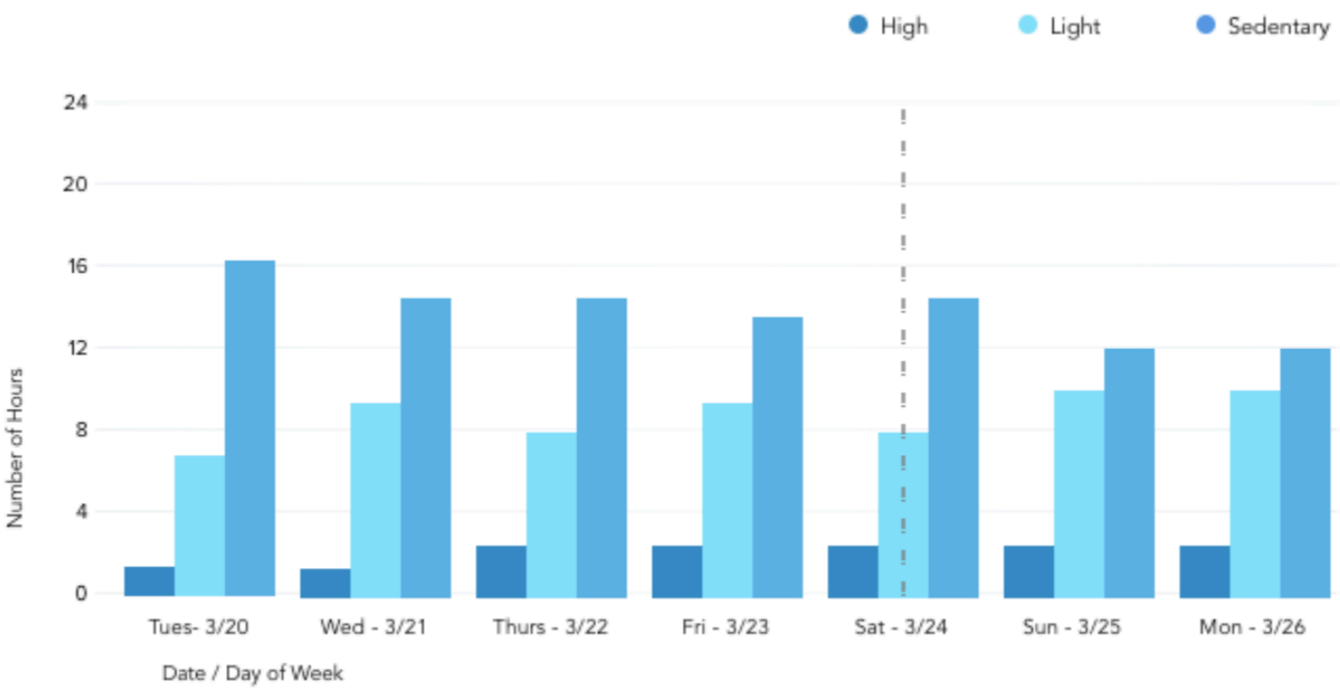
All stats start low but increase over the two weeks ever so slightly
Days with higher activity have higher pain

Spike in pain and decrease in sleep for three days
Barely eats during these days
Readmitted to hospital (shows in notes?) for blood clot
Start antibiotics after hospital stay for 5 days

STACKED AREA CHART



SIDE-BY-SIDE BAR CHART



DOE, JANE

AGE: 62

BMI: 22.3

DAYS SINCE SURGERY:
6 Days

MARITAL STATUS:
Married

MEDICAL CONDITIONS:
Diabetes
Arthritis

Notes (-)

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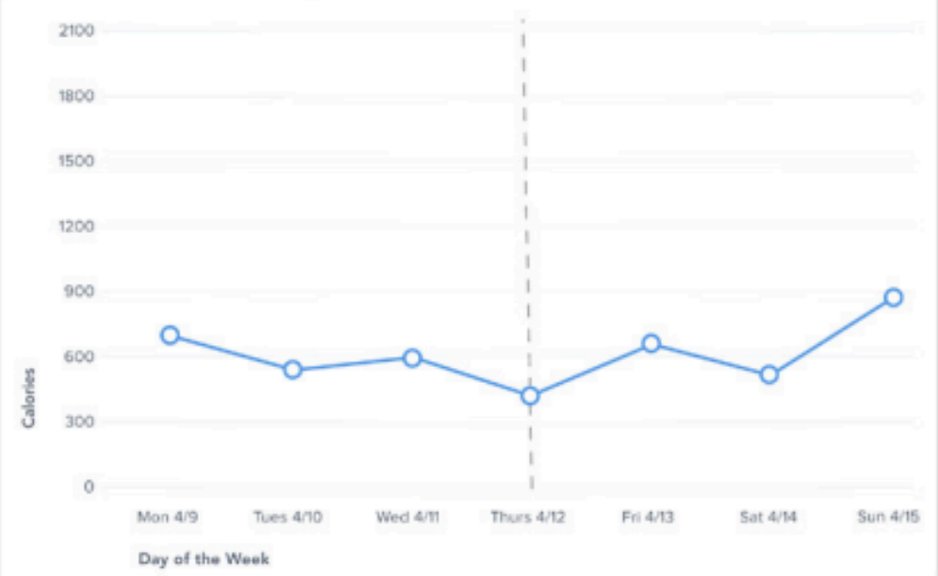
TIME FRAME: 1 WEEK

ACTIVITY

CALORIES



PAIN

SLEEP

Conclusion

Final prototype

Further steps

Uber RidePass

CASE STUDY

The Problem

Riders care about price, convenience, and a good experience. With the rise of other ride-sharing applications, how do we ensure user loyalty to Uber?

Understanding

What factors make you choose Uber over public transportation?

Do you prefer Uber or Lyft?

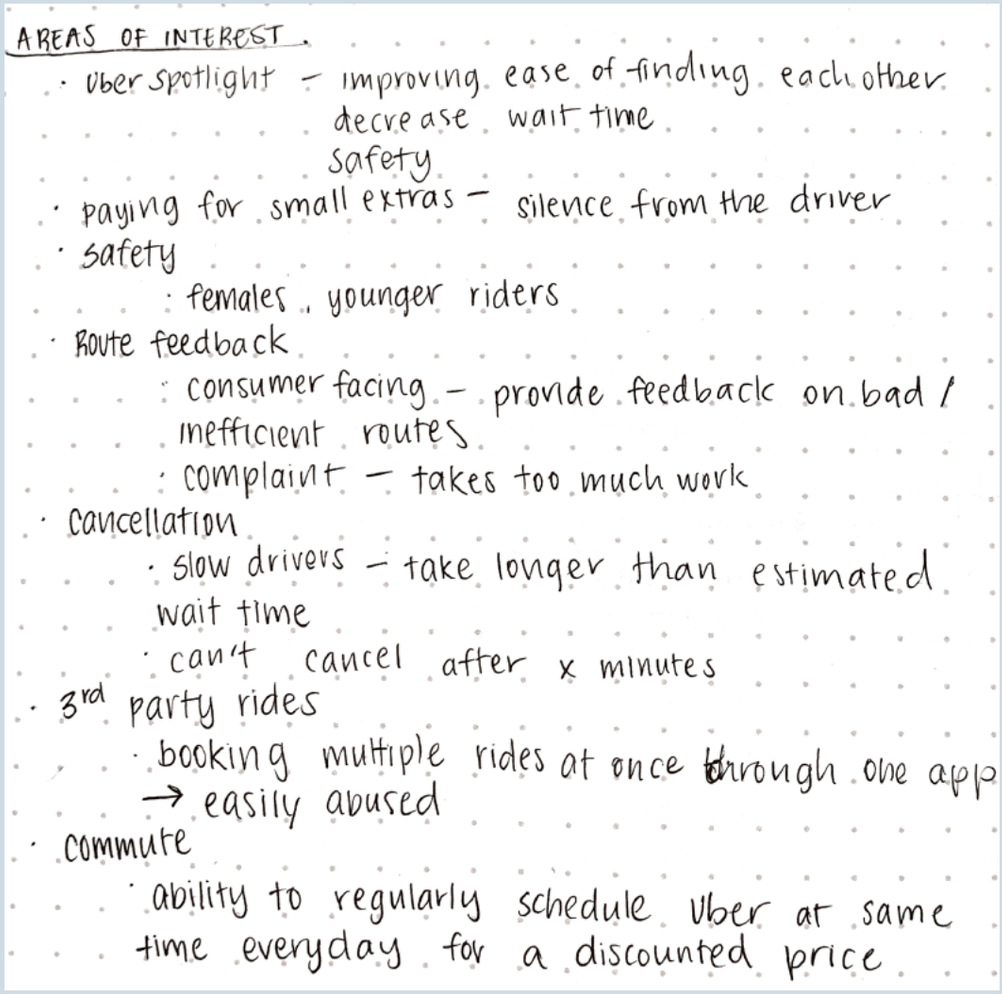
USER NEEDS

Distance, convenience, time, and price

NARROWING IT DOWN

By targeting on *commuters*, we can focus on a group of users than consistently use public transportation and/or ridesharing applications.

Brainstorm


AREAS OF INTEREST
· Uber Spotlight – improving ease of finding each other
decrease wait time
safety
· paying for small extras – silence from the driver
· safety
: females, younger riders
· Route feedback
: consumer facing – provide feedback on bad / inefficient routes
· complaint – takes too much work
· cancellation
· slow drivers – take longer than estimated wait time
· can't cancel after x minutes
· 3rd party rides
· booking multiple rides at once through one app
→ easily abused
· commute
· ability to regularly schedule Uber at same time everyday for a discounted price

Goals

1. Create a unique feature that would incentivize users to prioritize using Uber
2. Maintain consistency with Uber’s existing functions and design
3. ~~Align user expectancies on value with company goals~~

Process

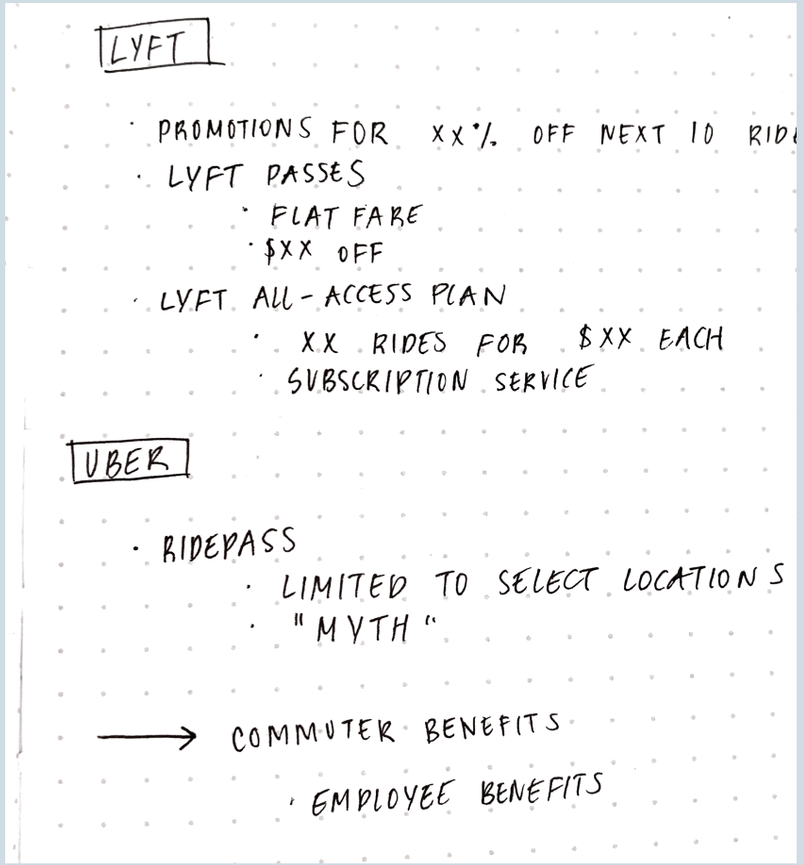
Research

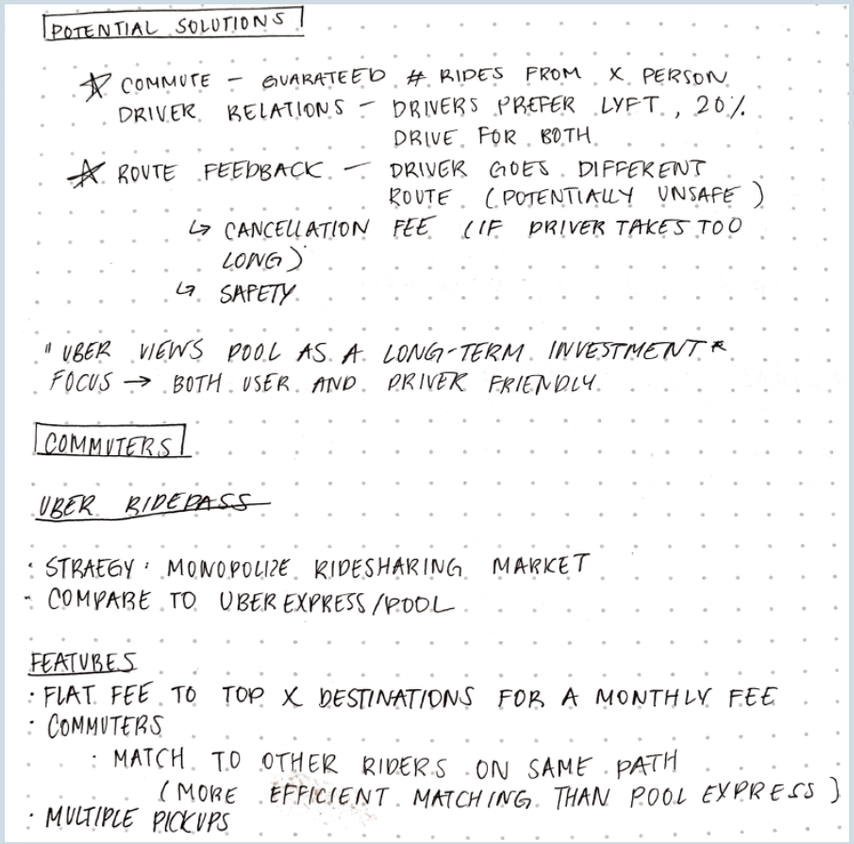
Sketching

Research

Competitive Analysis

Use cases

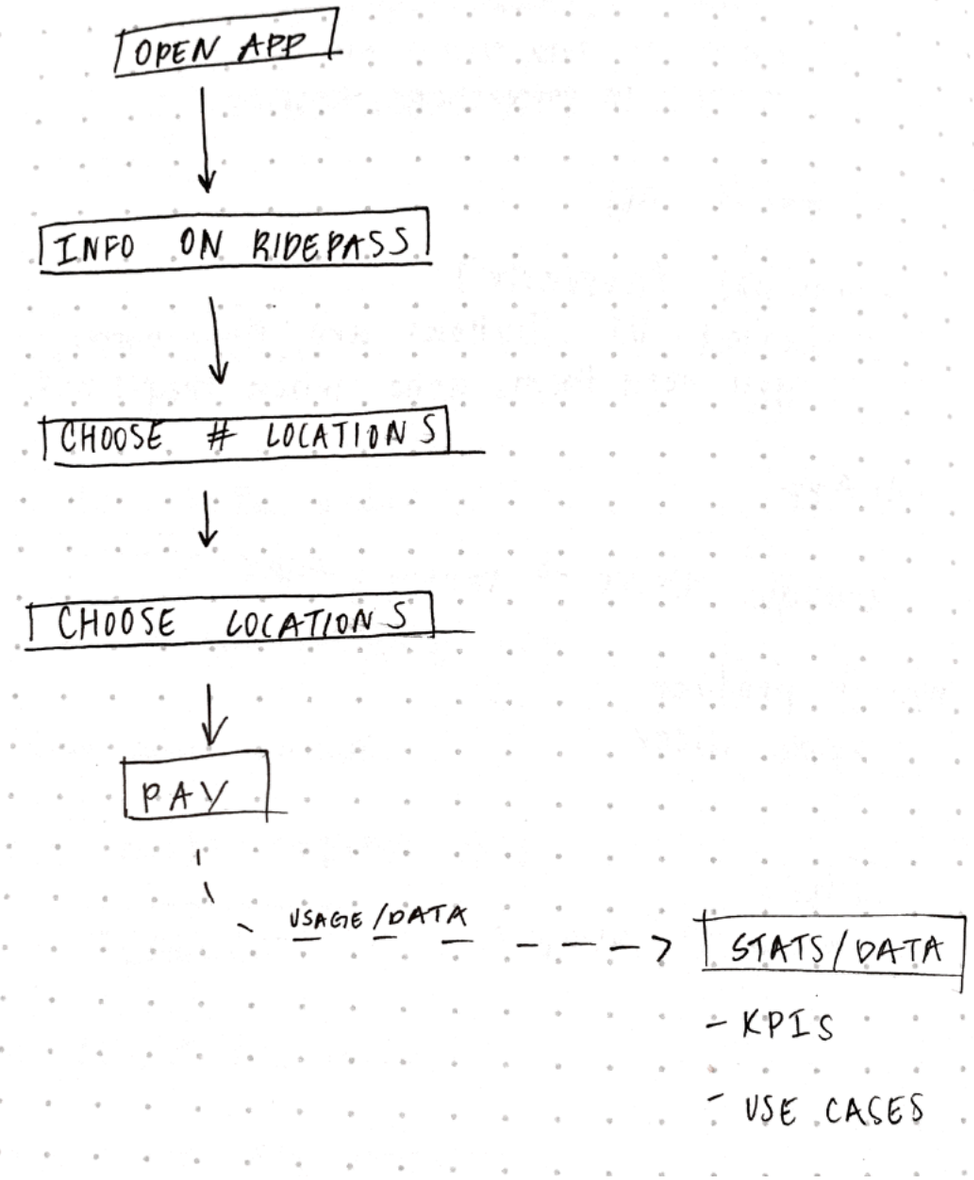




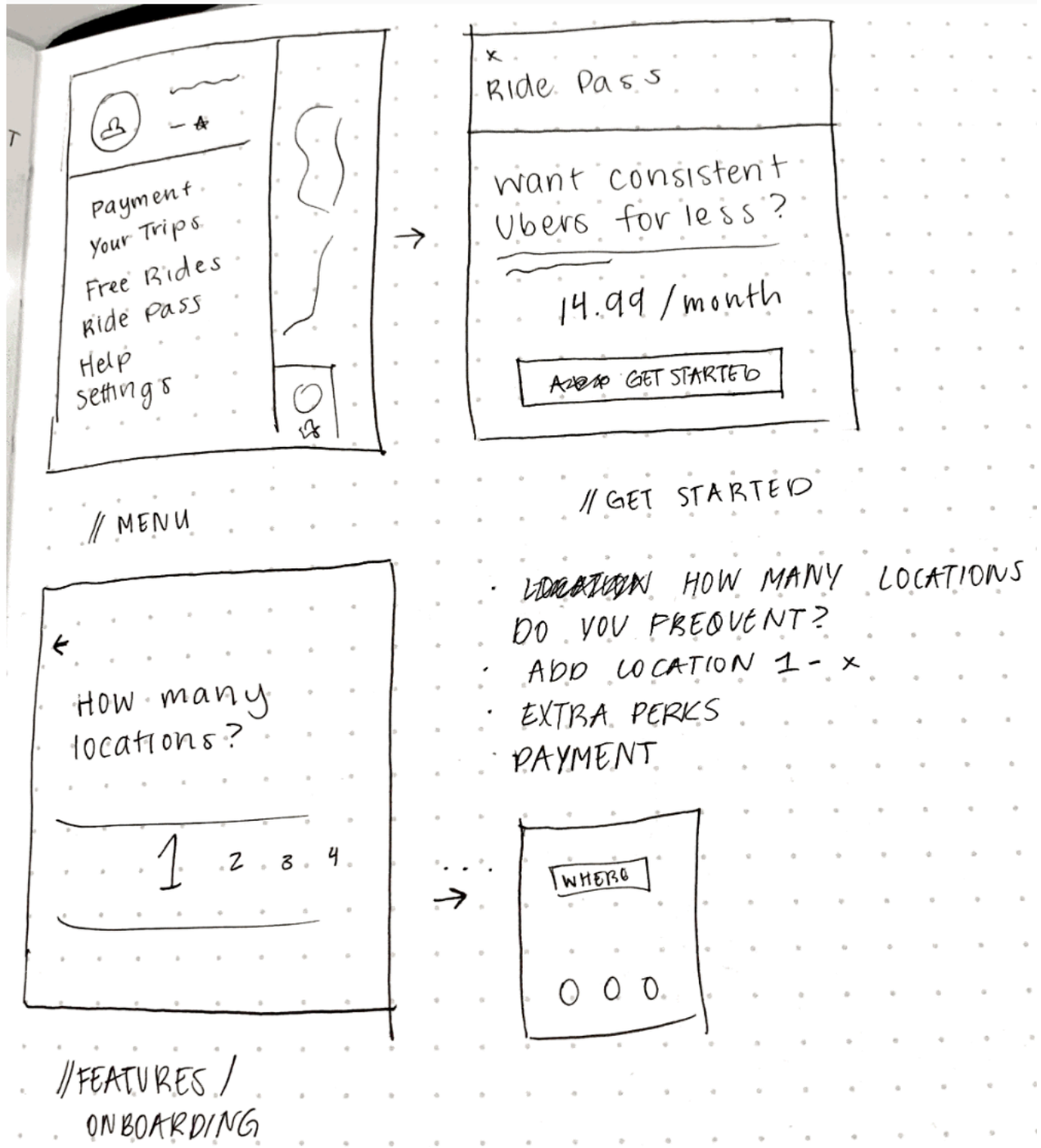
OPPORTUNITY

Research

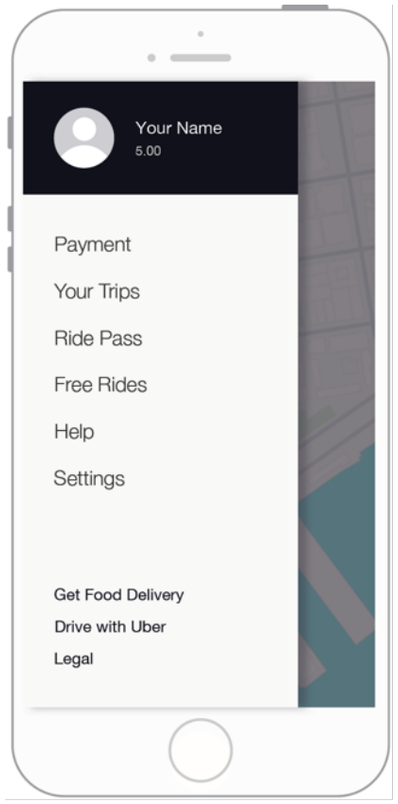
Sketching

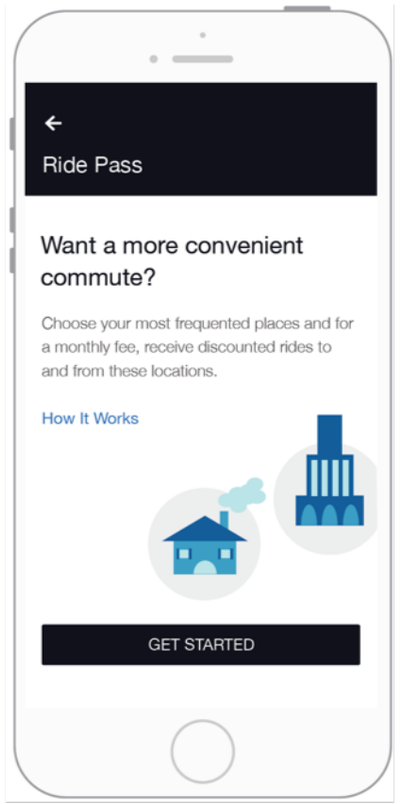


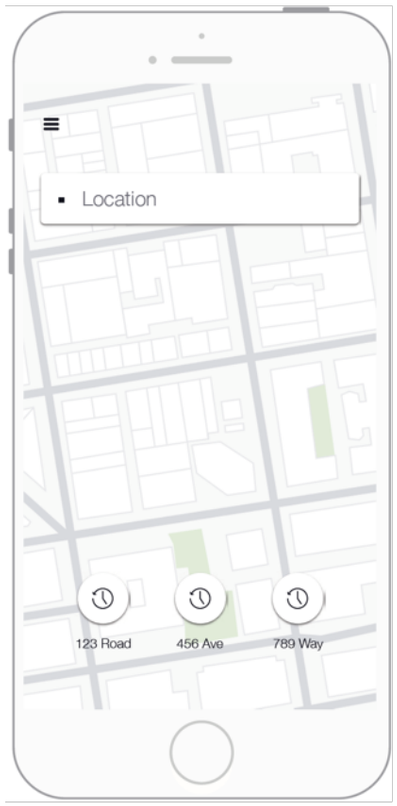
FLOW

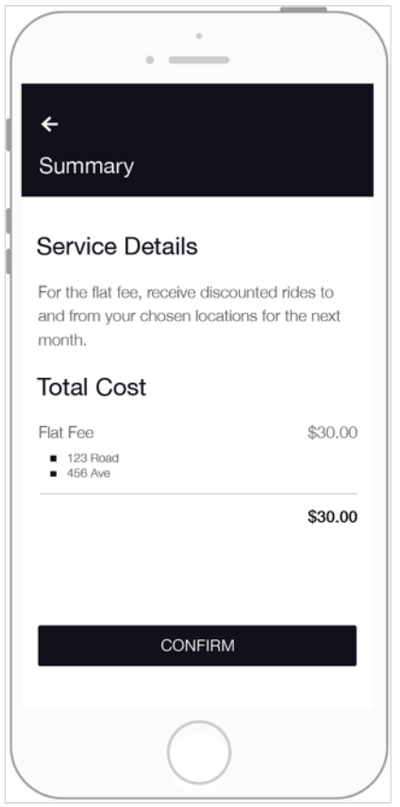


SKETCHES









FINAL FRAMES

Conclusion

Ride Pass’s primary value lies in its ability to attract and retain users.

Next steps

Scale