

Jireh:

emergency response web design

december 2017

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05-651 c, interaction design studio i

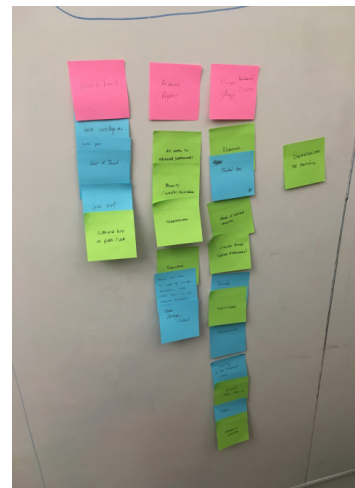
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screen maps, wire frames, final design

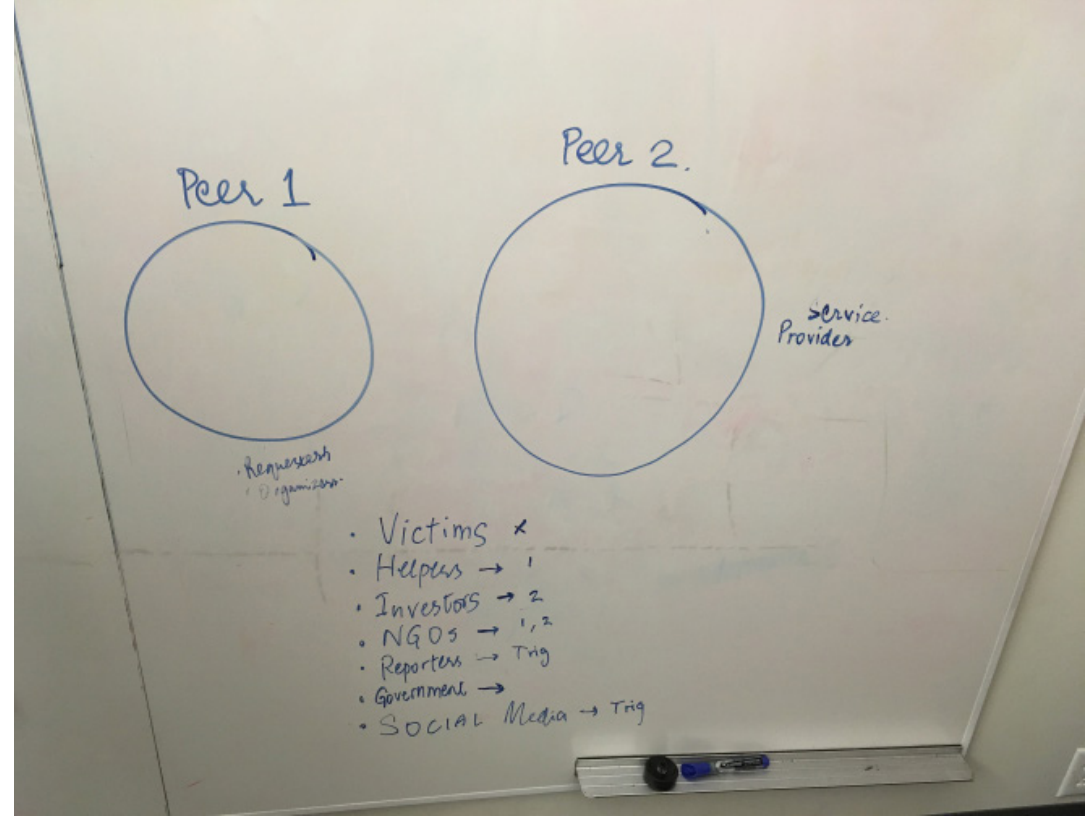
mobile site demo: invis.io/DAEV8FJ2Z
desktop site demo: invis.io/RWEV5W2KQ

research

The first thing we did was brainstorming over our direction under the three big domains: emergency response, furniture exchange, and criminal watch. Through affinity diagramming, we came up with many potential market needs, and ended up focusing on natural disaster relief.



After we decided to work on the natural disaster relief, we conducted Guerilla research, a process that involves walking up to random people and ask about their experiences. Specifically, we were curious about how people react to unexpected natural disasters, either as a bystander, or as a victim.



WIP base scenarios 👤

personas - task exchange 👤

Persona's Marvin 👤

Scenarios - Sharon 👤

W jiyuanl_persona.docx 👤

Persona 1 - Sharon Zachariah.png 👤

We came up with many different personas, and nailed them down into two: Amy, the donator, and Bob, the victim. We believe that these are the two most typical personas for our potential P2P economy that can maintain the service exchange balance.

persona 1 - Amy



Amy

29, female, bank clerk
Spring Branch East, Houston, TX.

Amy holds a B.A in Economics from Rice University. At Rice, her main involvement is Undergraduate Student Government as the Vice President of the Class of 2010. Upon graduation, she got an offer to work as a clerk at a local bank. She rents an one bedroom apartment on the top floor of a six-floor apartment building in Spring Branch East, Houston, TX. She has been paying constant attention to the news about Harvey and during the time Houston is struck by the hurricane, Amy leaves the city to live with her parents in Chicago for a while.

Motivation

Although Amy's apartment remains undamaged during the flash flood, she feels sad about her neighbors whose house got severely flooded. To help rebuild her community as quickly as possible, Amy looks forward to a platform to make her donation directly towards the affected population.

Features used

- Donation checklist
- About page of requester
- Map track for donations

persona 2 - Bob



Bob

Bob, 27, male, Actuary
River Oaks, Houston, TX.

Bob comes from New Jersey. After he got his B.A in mathematics from New York University, he moved to Houston to work as an actuary at the Houston office of an international company. He and two other room-mates share a House in River Oaks, Houston, TX. During the hurricane, he fled back home in Jersey and he was terrified by what he saw happened to Houston due to the water brought by Harvey. He knew his house would be in a mess.

Motivation

Bob's house was severely affected during the flood and he wasn't fully equipped for the post-flood clean-up. He didn't know where to start, what to pay attention to and the supplies he would need for different tasks. Bob looks forward to a resource where he can learn about the steps he has to follow during a post-flood recovery and ask for help with tools and tips.

Features used

- Supply Request Page
- About page of donor
- Map track for donations

stories

Based on our researches, we narrowed down the stage of the disaster relief to exactly the point when the water retreats, and people start to move back and clean the mud out -- and this is when problems rise.

People may not receive their help on time. Even if they do, in many situations the supplies is not what they are looking for. And this is where a peer economy can be helpful.

... bought me a box of noodles. But I had nowhere to cook the noodles. So I took them and I opened them, and I put that little sauce in them. And they ate dried noodles.

... I could take the diaper, scrape the diaper, and put it back on them, because I had no choice.

NEW ORLEANS MAYOR: SOS

"This is a desperate SOS. Right now we are out of resources at the Convention Center and don't anticipate enough buses. Currently the convention center is unsanitary and unsafe and we are..."

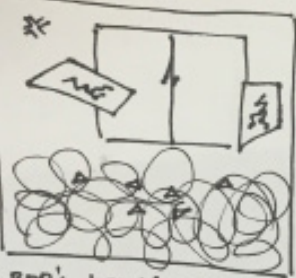
HURRICANE TRACKER

HURRICANE KATRINA: THE AFTERMATH

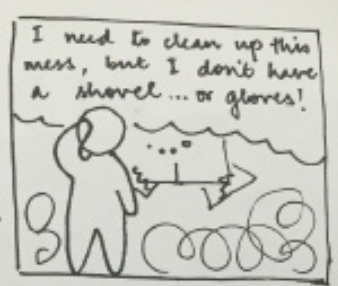
NEW ORLEANS MAYOR ISSUES
DESPERATE SOS TODAY

30 TRANS

NEW



BOB'S house was hit by a flood. There is mud all over and his windows all shattered.



I need to clean up this mess, but I don't have a shovel... or gloves!



I need a kit with a shovel and a pair of gloves!



AMY: I can give you my extra shovel + a pair of gloves! Contact me.



Hey Amy! I can be there in 20 min to pick it up. Thanks



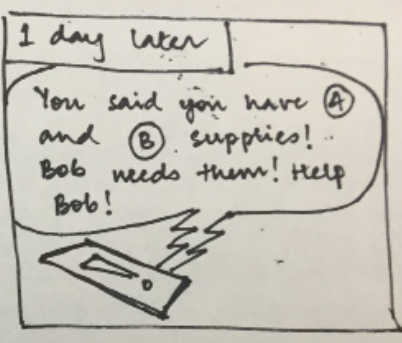
Thank you so much!



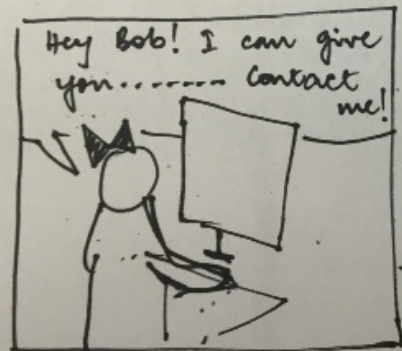
I feel so bad for the flood victims
Yes! Last week's flood was bad! You can help them though! Log on to my num to see how



I have (A) (B) (C) supplies that are visted as needs. I can help with that!



1 day later
You said you have (A) and (B) supplies! Bob needs them! Help Bob!



Hey Bob! I can give you..... Contact me!



Hey! Sure! Sounds good! See you soon!



Hope this helps Bob! Have a nice day!

storyboard

Based on the personas, we came up with a scenario, and generate two storyboards telling the same story, but from different perspectives.

Bob's home is severely damaged by a flash flood, and when the water retreats, he looks up *Jireh.com* on his phone. *Jireh.com* has a list of tools specially needed for mud cleaning (and many other tasks to recover from flash flood), and Bob notices that he still needs a shovel and a pair of gloves for his cleaning work. Amy, who lives in an unaffected area, has already signed up for this emergency response system right after she learned about the disaster to provide shovels and gloves, and as soon as Bob requests for the tools, she gets a pushed notification instantly through her desktop / phone. They make contact with each other, and Bob picked up tools from her 20 minutes later.

feedback received

We “speed dated” our storyboard with different people, and finalized our design details.

Many think it would be cumbersome to request items and pick it up later, leaving the house unguarded. So we introduced the driver unit to transport the donations. The driver unit can deliver for multiple families on their routes.

People doubt if the donations would be returned on time, undamaged, so instead of the borrowing system, we switched to a donation system.

We also finalized other details: the stage of the flood in which the story of Amy and Bob starts, the broadcasting radius, the checklist interface, and the delivery system.

SCREENS

- M (1) D: Matches
 - show supplies + req
 - motivation to accept req
- (2) S: Needs + CTA
 - view requests
 - next steps
 - option to self drive or request driver.
- M (3) R: Send request
 - state of process
 - view RELATED suggest^{P,S}
 - not to be afraid to ask for anything
 - share location.
- (4) P,S: Trophy case
- (5) Wait times?

Checklist:

- Explain
- Donation
- List suggestions + C
- Show radius of ne
- USP → why not Str
- Serious gamify optimal routes
- Request good qua
- Thank you / Acknowled to DRIVERS + Suppli "gamify"
- Start with request
- Social pressure
- Wait times? for req → depends Drive for driver → choos

Other notes:

- Now Select 6-8 screens
- MK, SZ Wireframe
- MK Mobile
- SZ Desktop
- J Presentation/Pitch
- H Process book.

Diagrams:

- Top right: A grid of six rounded rectangles, with the bottom-right one containing a plus sign.
- Middle right: A diagram with a circle at the top, an arrow pointing down to an 'X', and another arrow pointing from 'X' to a '1'.
- Bottom right: A vertical line with various letters (D, S, R, S, S, P,R) next to it, possibly representing a flow or sequence.

design

After “speed dating” with the other people for feedback, we started moving towards the actual web design.

We started with screen maps, then move on to the wire-frames and the final high fidelity design.

screen map

General landing page explaining the purpose. Should also be used to foster trust and credibility. Include endorsements?

Single account type during sign up? Or select supplier / affected type right here?

Explain general process and set expectations; when people make supplies available, other people can show up and pick it up

An overview of active disaster's or supply recruiting happening in the user's geo-location range

Imagining a dashboard-like overview of the disaster, people affected, heat map to see what is going on where, and where supplies are needed

Landing page

Registration / sign up

Introduction tutorial or walkthrough

Active disasters / open fund recruiting

Disaster overview description + heatmap

Suggest items that are typical in the given disaster. Prevent people from donating items that are not needed

Confirmation to make sure users have the right expectations after committing their supplies

Making it easier for affected people to know what kind of items they can request by providing a disaster-typical checklist

Personal connection; view more information about the people that request supplies / have accepted your supplies

Required supplies checklist

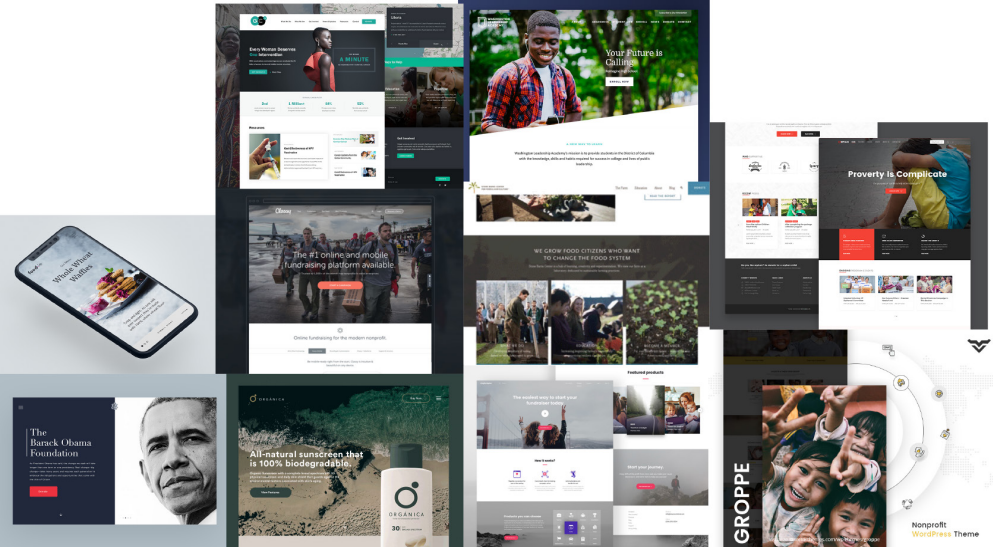
Confirm supply availability / open to pick up

Request item from checklist

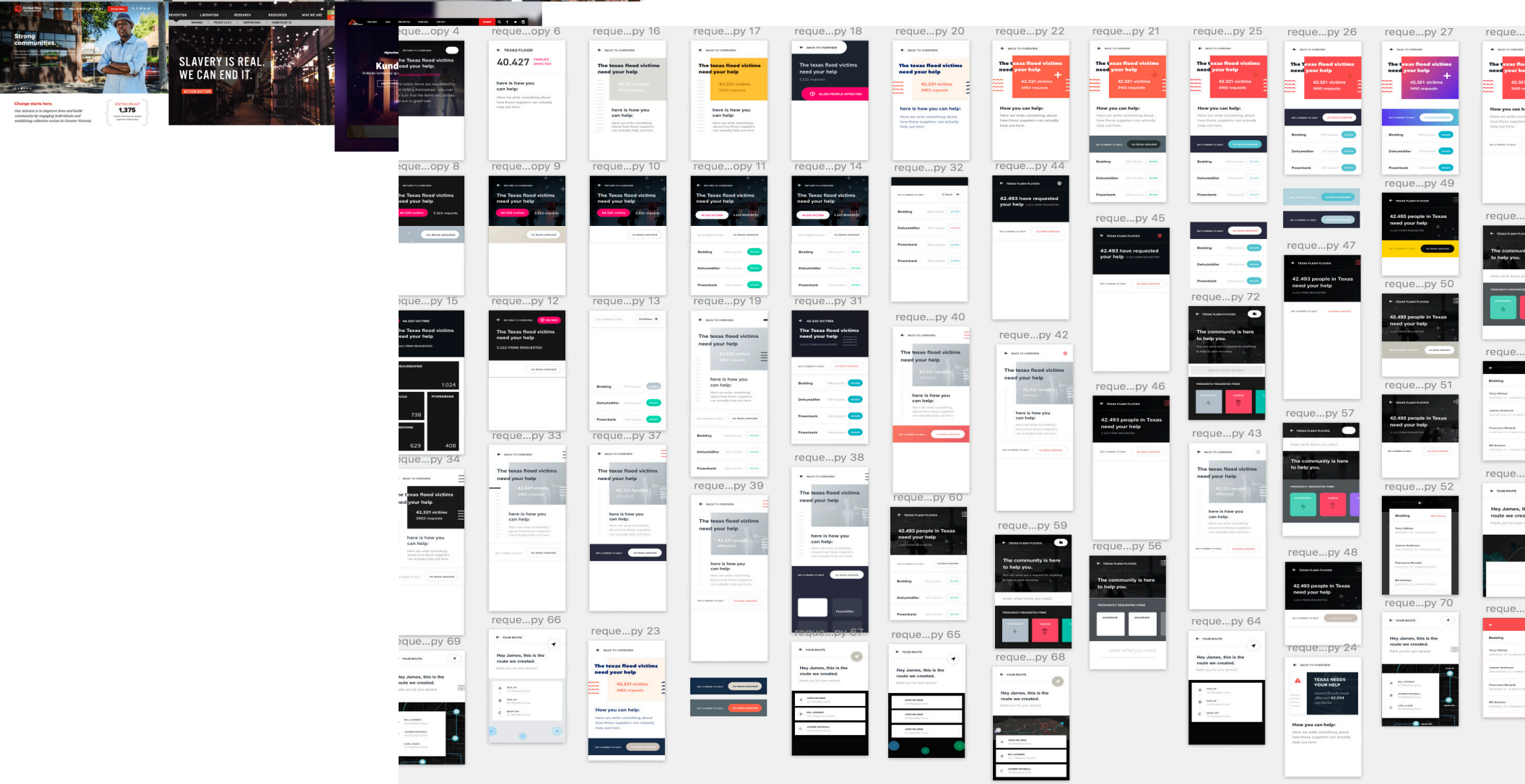
About [person Y] (supply requester)

Allows for tracking (know when to expect goods to arrive), and serves as confirmation that the supplies were dropped off with the correct person

Track requested / donated items



We explored many different responsive web design, and ideated different interfaces.



wireframes

trophy case

Your donations

100

Bedding 4

donated to William Jones 1
DELIVERED BY TIM FARAH

donated to Sophia Hartford 1
DELIVERED BY BILL ACKMAN

donated to Thierry Anderson 1
DELIVERED BY TIM FARAH

donated to Vivianne Woodall 1
DELIVERED BY TIM FARAH

Shovel 2

donated to Frank Hillman 1
DELIVERED BY TIM FARAH

donated to Lloyd Blankfein 1
DELIVERED BY CARLICAM

match requests

Texas floods

23,122 requests

1023 **Bedding** donate

854 **Dehumidifier** donate

601 **Bucket** donate

522 **Shovel** donate

244 **Food (non-ex...** donate

108 **Powerbanks** donate

recruit a friend No items selected

matching requests selected

Texas floods

23,122 requests

1023 **Bedding** remove

854 **Dehumidifier** donate

601 **Bucket** remove

522 **Shovel** remove

244 **Food (non-ex...** donate

108 **Powerbanks** donate

recruit a friend 3 items

request detail view

Bedding

Requested by 1023 people

Bedding is susceptible to mold. Here we put an explanation for the detail view of this object. Let's the supplier know why it is needed

William Jones Houston, TX
has been waiting for 4 days

Sarah Anderson San Antonio, TX
has been waiting for 22 hours

Tiffany Hill Houston, TX
has been waiting for 7 hours

donation confirmation

Your donation

8 items

Bedding - 1 +

Bucket - 5 +

Shovel - 2 +

I will bring this myself
(we will let you know where)

Have it picked up by drivers
(we will assign a volunteer driver)

request view

Request supplies

Commonly requested in your area

Cleaning supplies 4 items request

Food and water 6 items request

What would you like to request?
enter anything here

601 **Bucket** donate

522 **Shovel** donate

244 **Food (non-ex...** donate

108 **Powerbanks** donate

request matching 2

Texas floods

23,122 requests

recruit a friend No items selected

1023 **Bedding** donate

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request matching 3

Texas floods

23,122 requests

recruit a friend 3 items

1023 **Bedding** remove

854 **Dehumidifier** donate

601 **Bucket** remove

522 **Shovel** remove

244 **Food (non-ex...** donate

108 **Powerbanks** donate

donation confirmation copy 2

Plan your trip

view trip

total trip time 00:44m
4 STOPS

01x Humidifier +0:10m
for Johanna, donated by Charles

02x Buckets +0:22m
for Johanna, donated by Charles

01x Powerbank +0:05m
for Johanna, donated by Charles

03x Bedding +0:10m

driver trip plan

Plan your trip

10 ITEMS, 4 STOPS 00:44m

01x Humidifier +0:10m
for Johanna, donated by Charles

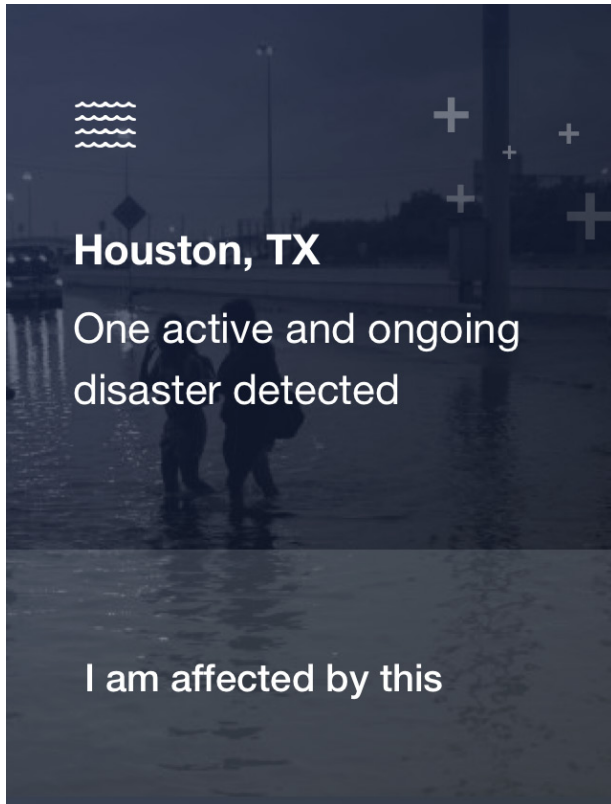
02x Buckets +0:22m
for Johanna, donated by Charles

01x Powerbank +0:05m
for Johanna, donated by Charles

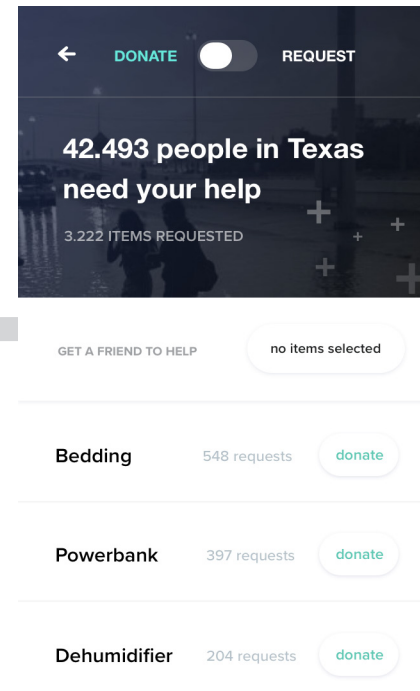
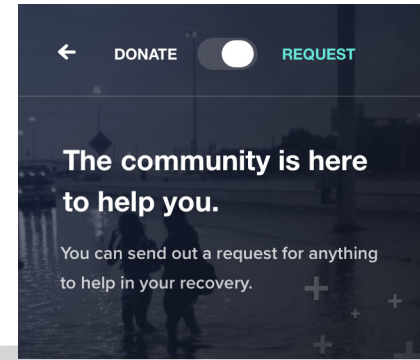
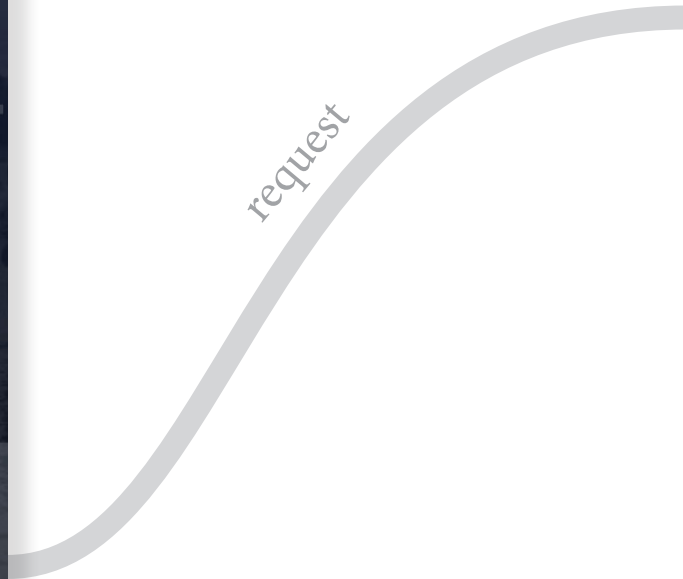
03x Bedding +0:10m
for Johanna, donated by Charles

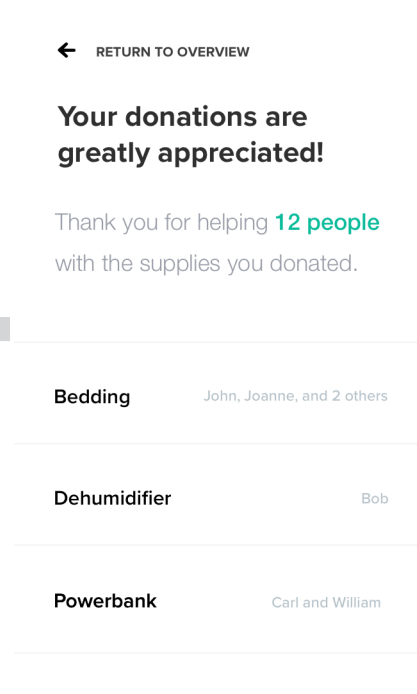
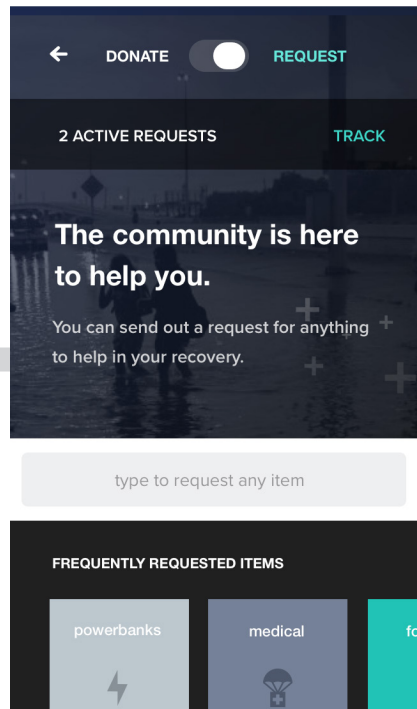
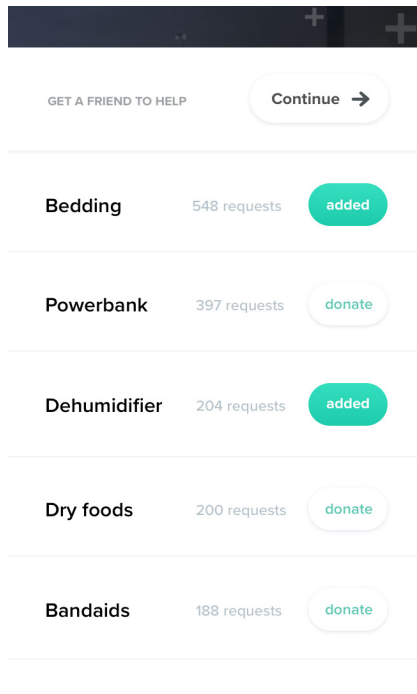
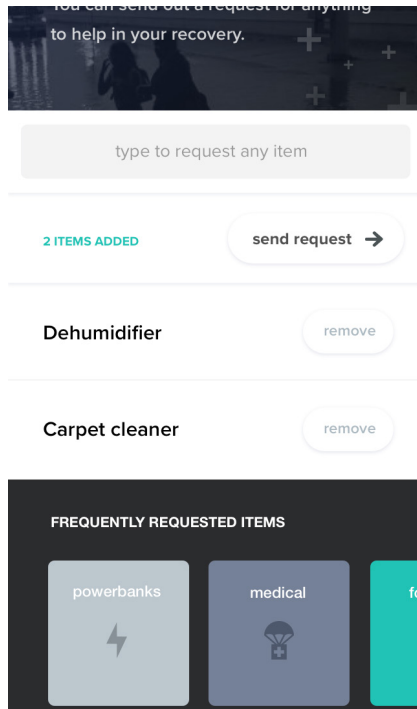
driver plan 2

final design



I want to help



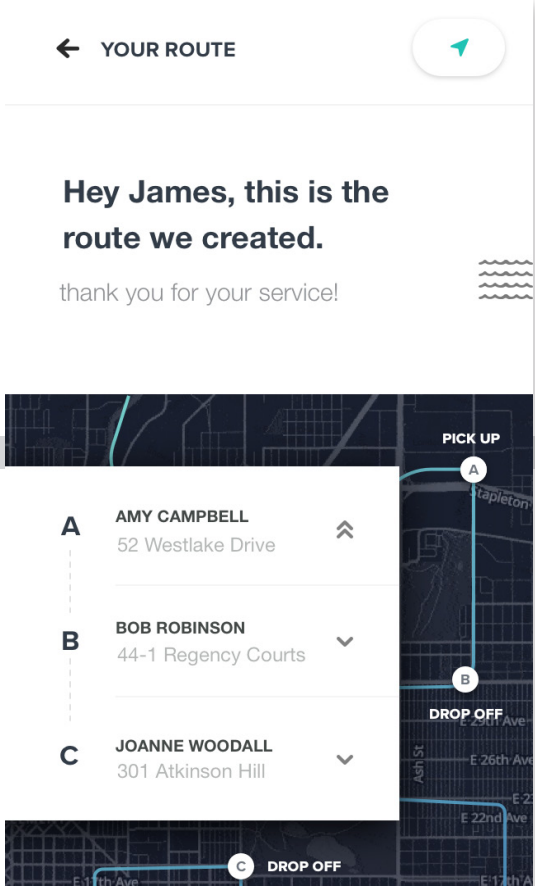


select items

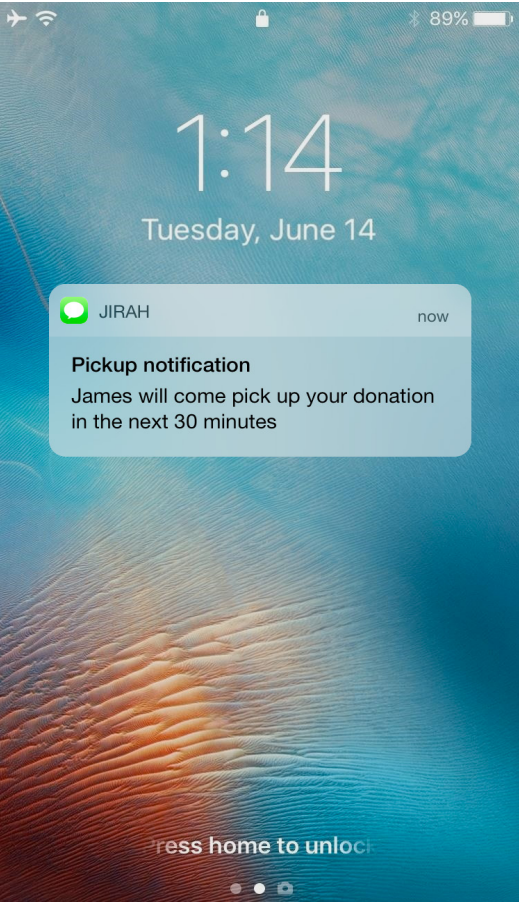
select items


drivers collect items and deliver

drivers collect items and deliver



donor receives a pickup notification.



 40.427 families were affected by the flood.

The people of Texas need your help.

The below items are requested by the victims themselves.
You can be sure that the items you donate are put to good use.




Home / Donate / Texas floods / **Bedding**

Requested items

Bedding	1023 requests
Buckets	601 requests
Shovel	588 requests
Rubber boots	523 requests
Powerbank	520 requests
Gloves	489 requests
Dehumidifier	457 requests
Bottled water	433 requests
Rake	401 requests
Dog food	390 requests
Mop	316 requests
Mugs	300 requests
Flashlight	289 requests
AA batteries	237 requests
Nail cutter	221 requests
Garbage bags	109 requests
Pliers	10 requests
Diapers	3 requests
Kettle	2 requests

BEDDING

Bedding is susceptible to mold. Since the water was contaminated, their bedding was soiled and needed to be thrown away.

Get a friend to help with this donation   

Quantity

Donate

People also donated these items:

Buckets
Bottled water
Flashlight
Garbage bags

Although our target platform is mobile devices, the donators may have full desktop access to the internet, and they may make donations on the computer.

PEER GROUPS

Requesters
Donors
Drivers

ABOUT US

Mission
Vision
How Jireh works
Our team

YOUR ACCOUNT

Account settings
Your activity
Privacy
Personal information

CONTACT

300S Craig St.
Pittsburgh, PA 15213
Email: help@jireh.org

Requested items

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Nail cutter	221 requests
Garbage bags	109 requests
Pliers	10 requests
Diapers	3 requests
Kettle	2 requests

BEDDING

Bedding is susceptible to mold. contaminated, their bedding was thrown away.

Get a friend to help with this donation

Quantity

Donate

People also donated these items

- Buckets
- Bottled water
- Flashlight
- Garbage bags

Your Donations

Bedding to Bob Robinson	Quantity: 1	X
Buckets to Anyone	Quantity: 2	X
Dehumidifier to Bob Robinson	Quantity: 1	X

Deliver the items to the families yourself

Request a driver

Proceed >

Requested items

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Rubber boots	523 requests
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- Bottled water
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Your Donations

Bedding to Bob Robinson	Quantity: 1	X
Buckets to Anyone	Quantity: 2	X
Dehumidifier to Bob Robinson	Quantity: 1	X

< Add more items

Continue >

Since we are doing a mobile-first design, the desktop version displays the same information, but with multiple stages (checklist, checkout) integrated together, which gives you an overview of the entire donation process. Henceforth the desktop view allows for more elaborate planning: users would be able to sit down and match available inventory and requested items.