

<https://developer.ibm.com/callforcode/geneva/>

<https://speakerdeck.com/pmmistry/ideas-from-concept-to-creation>

**Team:** Lisa Lu, Lea Boyadjian, Christina Ng, Carmen Tang

**Problem Space:**

[Challenge 3: Humanitarian Protection in Times of Disaster](#)

**Ideas:**

- Reporting progress on areas that have been damaged to keep local government accountable/let aid agencies know where help is needed
  - People who need meds can get their meds
  - Based on images of disaster, let outside parties bring supplies
  - Chatbot that lets people learn about their rights or available services post-disaster
  - <https://citizen.com/>

Example Diagram



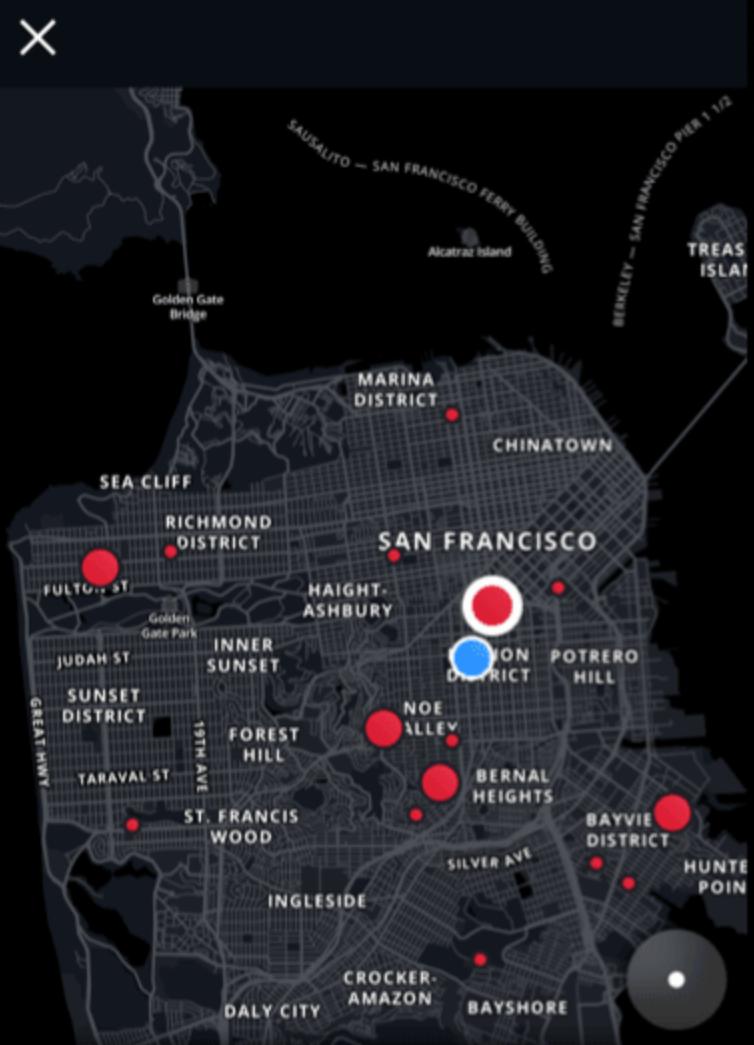
**Solution Design:**

- User can choose between civilian volunteer or evacuee
- Civilian-facing
  - Evacuee:
    - Conversational chatbot or menu to say what your problems are.
      - Watson Assistant for chatbot
      - Text to speech/speech to text to make our platform more accessible to people who can't see or language translator
      - Tone analyzer
    - Upload problems, maybe with photos: electricity/heating/AC not working, apartment or area flooded, road not safe for driving on

- Watson Visual recognition
- App analyzes pics and comes up with list of solutions/things needed to help
- Choose who to share your info with; share my location feature
  - Clustering “issues” by geographic radius and type of issue - Watson Natural Understanding
- Volunteer:
  - List your skills. Get shown a map of problem areas (“hotspots”), maybe a point of contact.
  - Hot spots are based on skills
  - Clicking on a spot will lead to a results page with photos.
  - Subscribe to a certain issue to receive alerts when issue arises
- Government/NGO-facing:
  - Push notifications to send updates to people who created/subscribed to issue
  - Figure out what the biggest problems are from the uploaded user data so they can bring in the appropriate number of volunteers/specialists in a certain area.
    - Watson tone analysis to sort urgency
  - Display data geographically to help them figure out where to deploy help.
  - Have a section for what is needed as a list, per area

Watson discovery searches based on what you input (like google, but can be integrated into chatbot)

Tone analysis to analyze and sort urgency



## HOTEL EVACUATED, CARBON MONOXIDE EMERGENCY

Market Street & Van Ness Ave      2 mins ago

Firefighters on scene have evacuated 110 guests.

## Pitch Components

1. Problem
  - a. Natural disasters hurt everyone, but it's poor and minority communities who suffer to a far greater degree in the time that follows.
  - b. For example, after Hurricane Harvey, people in impoverished and heavily minority areas didn't receive much attention from authorities, outsiders, and the media. They lack a lot of financial, information, and social resources that lets them access assistance.
  - c. Low-income residents don't know about their rights or available services.
  - d. Poorer people might also not speak up, due to language barriers or fear of immigration authorities.
  - e. Meanwhile, city planners, governments, and NGOs could deploy their resources more efficiently and see what areas need help more urgently/what sorts of issues are plaguing certain areas.
2. Our proposed solution: A platform that lets civilians share incidents in real time to officials and volunteers and opens up disaster-time communication. It analyzes and visualizes data for city officials and partnering organizations so they know where and who to deploy help. Civilian volunteers can also help those who are open to it and are matched with incidents based on the type of incident and their skills.
  - a. How it solves the problem
    - i. The platform is open to anyone, but it opens up communication and requests for assistance to people in minority and poor communities and makes it totally transparent to users. The dashboard will let city officials/nonprofits strategize how they deploy their resources and potentially let city planners in the future use the data to figure out how to mitigate problems (for example, an area having a lot of power outages might signal that one area needs greater renovation and reinforcement).
  - b. UI/UX flow
  - c. Technical specifications
3. Launch Strategy
  - a. User/Customer
    - i. User: Civilians who are seeking help (emphasis on poor/minority communities)
    - ii. Customer: Government/NGOS
  - b. Promoting Solution: Run pilot in states that have more natural disasters (Texas, California, Oklahoma)
  - c. Distribution/Implementation: Reaching out to non profits in these states, and government officials in these states asking them to use the app. Through these streams, they will promote the app to their constituents/civilians living in these areas. EX: Tropical Cyclone Idai Relief, Southern California Wildfire Relief, Communities Foundation of Texas
  - d. Current Solutions/Alternatives -- How are you different/better

- i. **Citizen:** Focused on cities in the US, designed to open 911 and emergency response systems of cities. Provides crime/safety alerts, incident updates, and user-generated streams. Used to protect and keep people safe from crime.
- ii. **Ready NYC:** Only based in NYC, and helps users create an emergency plan before disaster strikes. They store info about emergency contacts, meeting places, health information, and supply lists. Tips/tricks about what to do during an emergency and alert feeds from Notify NYC.
- iii. **SD Emergency:** Focus is San Diego: helps create emergency plan, build emergency supplies kit. When disaster strikes, sends info w/ emergency updates, interactive emergency apps, shelter locations.
- iv. **FEMA:** Alerts from National Weather Service for 5 locations nationwide, Emergency Safety Tips, locate emergency shelters in the area and find disaster recovery centers
- v. These apps are focused on how to prepare for a disaster, and offer support to find shelters during/after a disaster. Our app gives real time support in which volunteers, NGOS, and government can offer support. Our Chat Bot provides resources the user can look for until support comes. Citizens keep people safe/protected but does not offer natural disaster relief.

## PITCHING

1. Set it Up
  1. start with a hook or problem statement
  2. articulate problem statement
    1. eg: compelling statement
    3. who are you solving for
2. The Big Idea
  1. what's the big idea, why is it exciting/compelling
3. How it Works
  1. how would you execute your solution and implementation plan
4. Why Does it Matter
5. What's your call to action

# CIVILIAN

Christina, Lisa, Lea and Carmen

# The Issue at Hand

Low-income communities are severely affected by natural disasters and are not aware of their rights or available services



Alejandra Castillo takes a break from carrying water-soaked items out of her family's home after flood waters receded in Houston.  
(Charlie Riedel/AP)

# The Gap

City planners, government, and NGOs can deploy their resources to see which areas need more help, and the issues plaguing them.



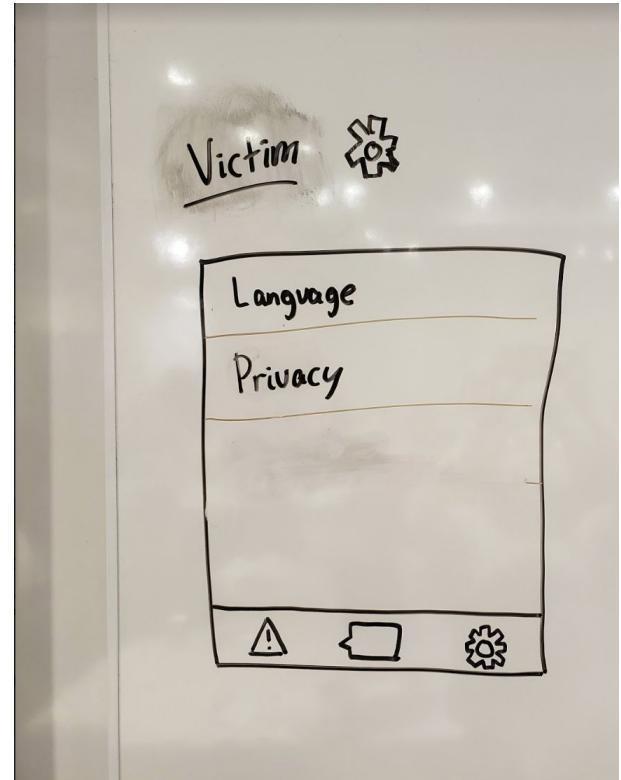
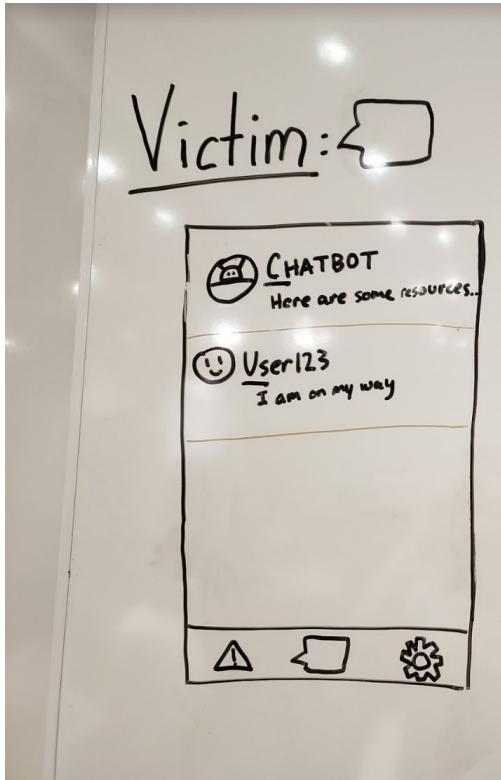
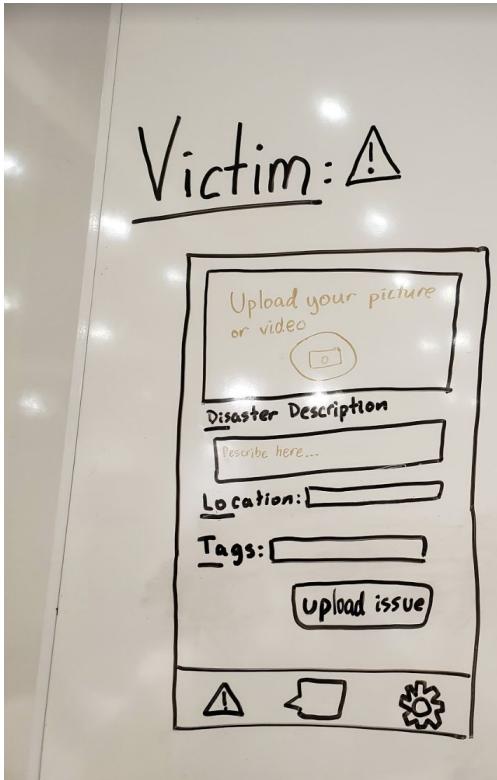
# Our Proposed Solution: CIVILIAN

A platform that allows civilians to share incidents in real time to officials and volunteers thus, developing a disaster time communication.

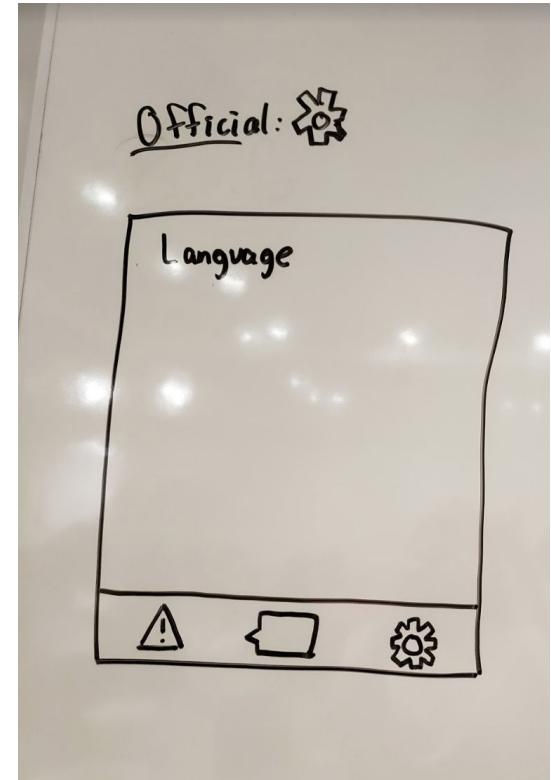
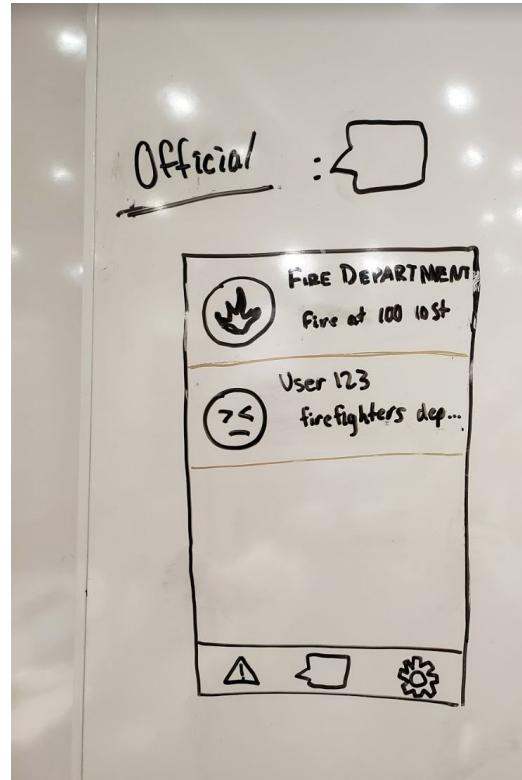
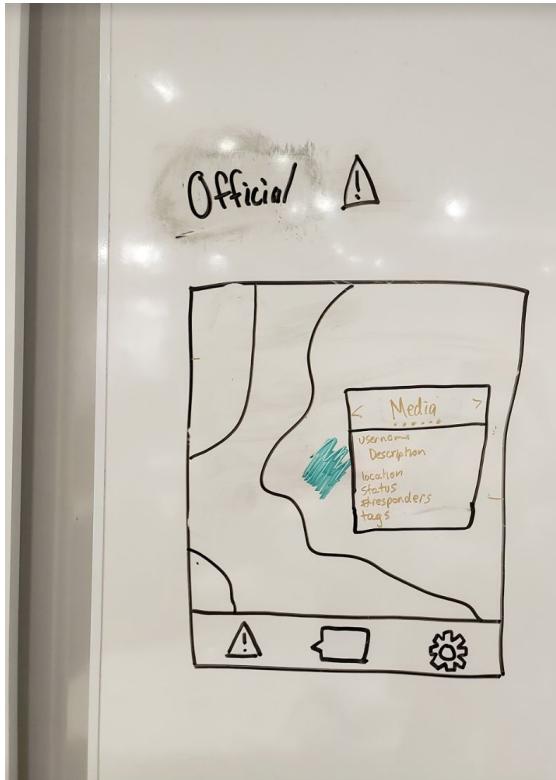
- It analyzes and visualizes data for city officials and partnering organizations so they are informed where to deploy help and to whom.
- Civilian volunteers can also help those who are willing for extra assistance and are compatible with the incidents based on their skills (i.e plumbing, electrician, and experience in dealing with anxiety).



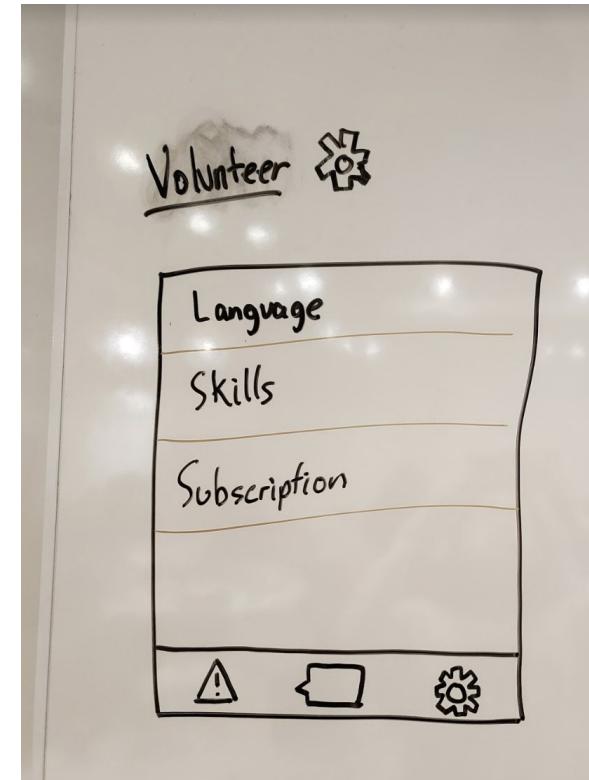
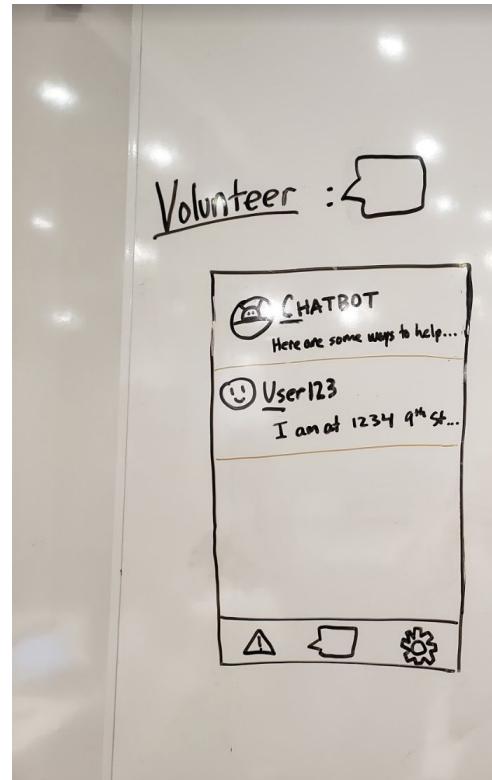
# User Experience - Disaster Victim



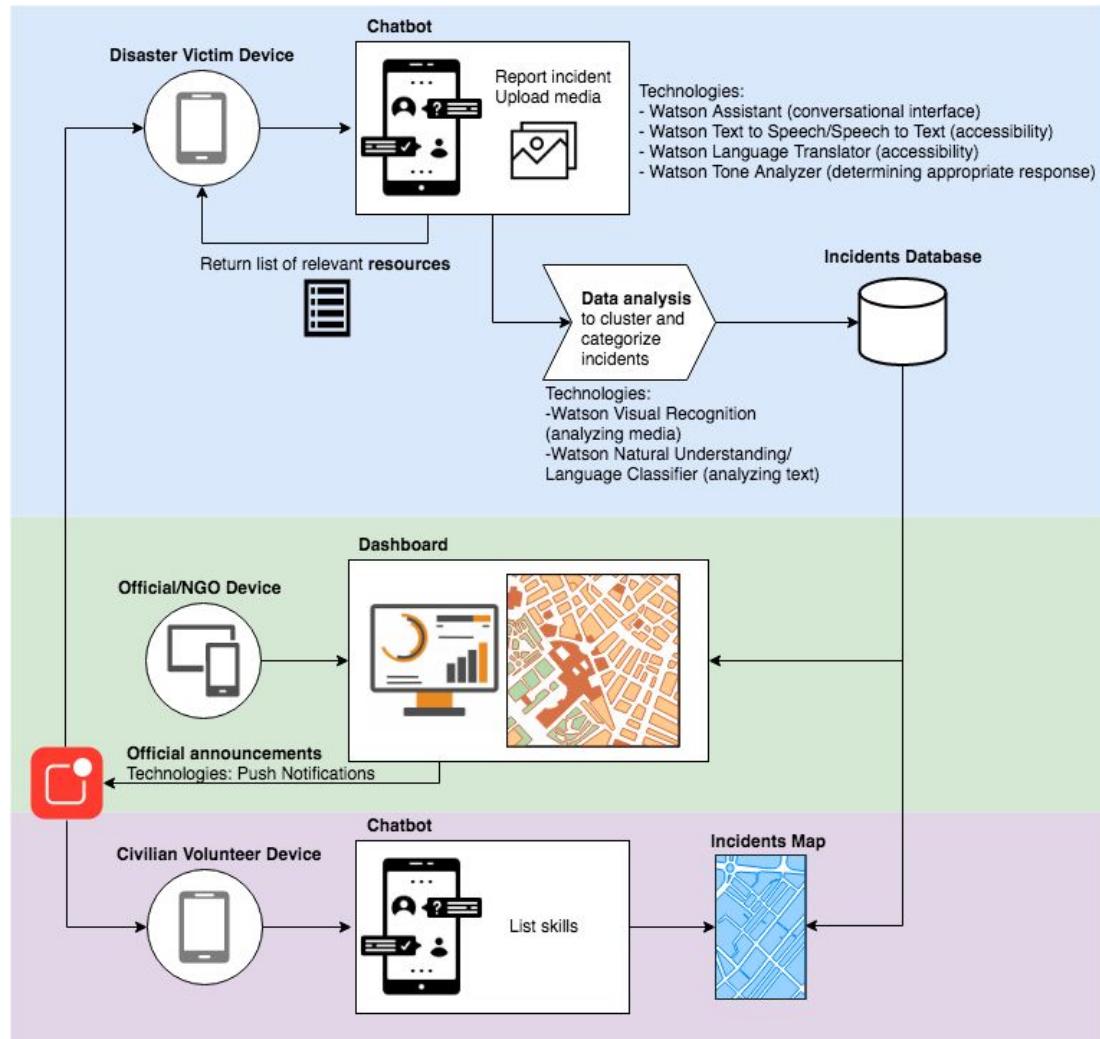
# User Experience - Official



# User Experience - Volunteer



# Technical Design



# Launch Strategy

## **User/Customer**

User: Civilians who are seeking help

Customer:  
Government/NGOs

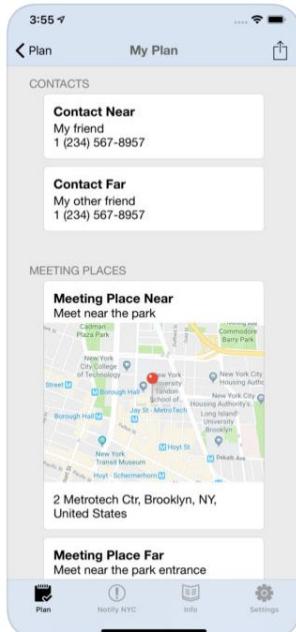
## **Promoting Solution**

Run pilot in states that have more natural disasters (Texas, California, Oklahoma)

## **Distribution/Implementation**

Reach out to Government/NGOs in disaster prone states and encourage to use the app as well as promote it to their constituents/civilians living in these areas.

# Why CIVILIAN



Ready NYC

FEMA



SD Emergency



Citizen