Vigilant Exodus

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a Step towards Disaster Management

A worldwide deployable webapp yet one which can handle each location, credit to Microsoft Azure, specifically its highly scalable App Service and PostgreSQL servers and Maps.

Thank you for making the Docker images of Azure App Service (Linux) Open Source which helped us to install GDAL in the linux environment by understanding the code of how exactly a custom startup command works after 13 hours of hacking!



1. Who is this for?

- People caught in a disaster
 Find the nearest camps with current status
 & directions or mark your location for rescue...
- → Their friends and family

 Just fill the details of who you care and get their location as soon as he/she is found in a camp or sends a SOS signal.
- Rescue Volunteers & Camp Authorities

 SOS areas are clustered using ML to send
 mass transportation vehicles, coordinate
 attempts and distribute resources.

How to find which locations are compromised in the disaster?

Seismic detectors only show the magnitude of earthquake or Millimeters of Rainfall in a Typhoon

Crowdsourcing and Heatmaps.

(With a little help from your mobile device, but we

Work on authenticity a bit)

Pinpoint and live data about:

Collapsed buildings,

Barren electric wires

Submerged roads



Meet Alberto.

He recently moved from Spain to a small town in Northern Ireland.

Unfortunately an hurricane is soon going to grapple his town. He must evacuate to a safety camp.

How to reach nearest camp?

The viewport initialises at the current location of the user and displays nearest camps, areas to avoid and location of other people.

- → Inspect and Choose Check live resources available in each camp
- → Get (draggable) directions

 Routes are shown with precise
 navigation instructions. Drag the route
 away if it crosses a dangerous area.
- → Check-In: Let others know that you are safe.

Meet Marcos, Albertos's Dad.

He and family are unable to contact their son and are starting to worry.

They put a missing person request on Alberto and as soon as Alberto Checks-In, the family is notified.



Clustered locations of people increases efficiency of rescue missions by identifying strategic areas.

Milestones

Dashboard

Used Maps API to build an interactive dashboard.

Authenticity in Crowdsourcing

Using techniques like chained crowdsourcing.

Identify collapsed buildings etc from geotagged photos.

Initial Developement

What's next

Checkin

Use Django and PostgreSQL to persistently store data collected from map and implement person search and clustering.

Deploy

Azure App Service & PostgreSQL server.

Automation

Pull disaster related tweets and missing person reports from Twitter etc.