Zombie Triage

Update/Sync UX

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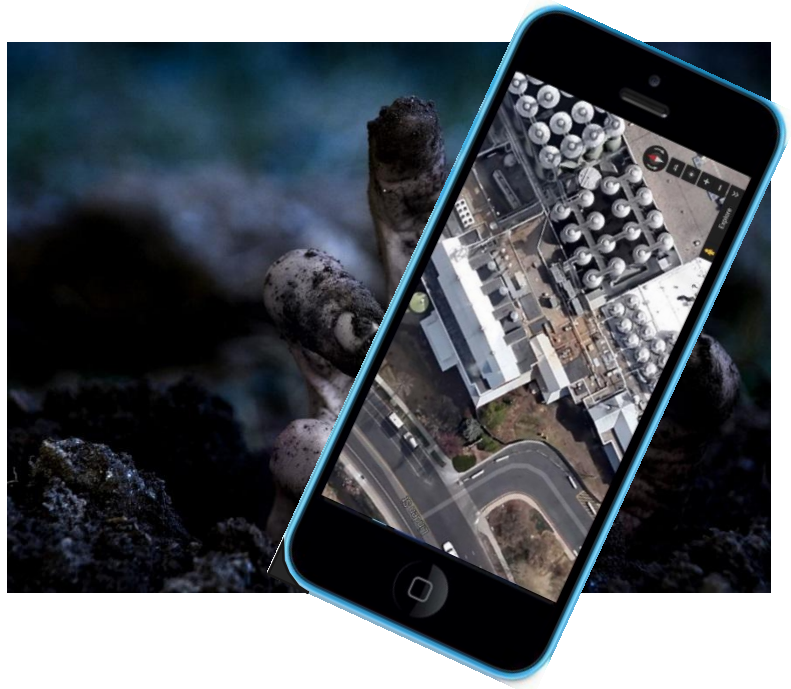
Current State of Affairs
(it's ugly!)

- Death by Zombie = Death to Data!
- If we can save the data, we can save the world!

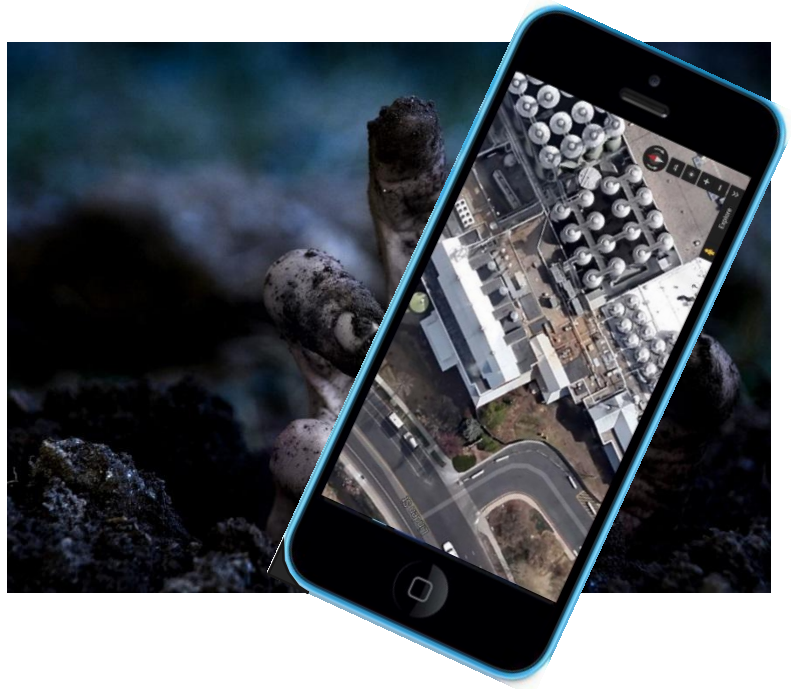
- Progress is slow
- The CDC must be utilized to further the cause!



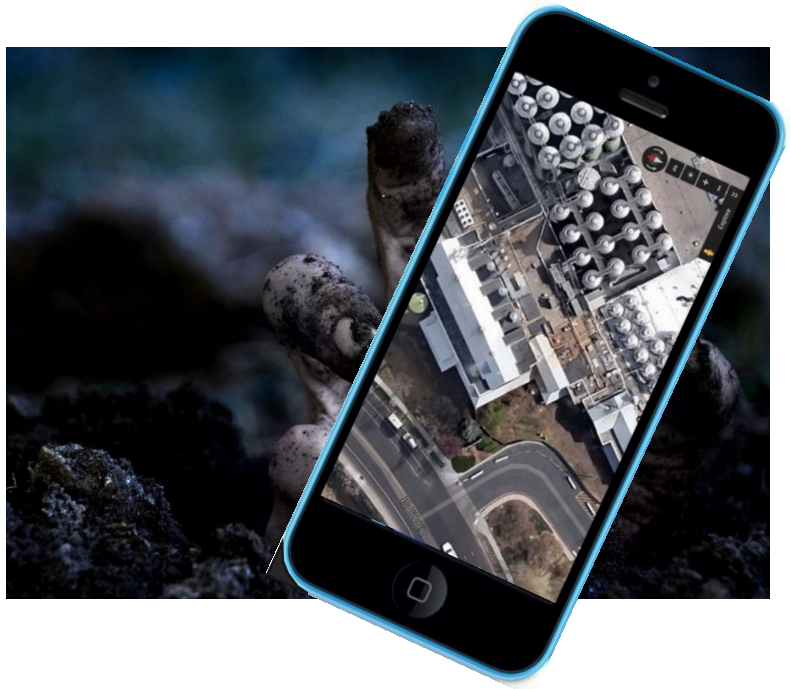
Goal: Eradicate the zombie virus by finding Patient Ø and new mutated strains of the zombie virus

Team SSK objectives:

- Update and Sync field data with the CDC.
- Maintain a fully functional and reliable data set
- Improve data communications to keep zombie hunters informed and safe



Research Methods



With 10 zombie hunters (ZH)

- 511 hours of field trips
- 43 written surveys
- 26 interviews

We observed many instances of civilian casualties, new virus strains, infected ZHs without adequate data flows

Research Results

Identified existing challenges and further needs

- Updates: signal outages cause problems with data access and management
- Error recovery: outages and lost data from ex-ZH death

Research Results

Identified existing challenges and further needs

- Need for alerts: new strains, fallen ZH – critical info updates
- Need for up-to-date maps: signal hotspots, zombie presence & density, ZH locations including self
- Historical data view: data cache for use when signal disappears

Prototyping Plan

- Updates
- Error recovery
- Push alerts
- Historical data view

Ease of use

- Low light situations – light display
- Speed - Minimize clicks and large buttons
- Automatic functions – updates and defaults
- Discretion - Haptic signals (vibration)

Prototyping Plan: Update

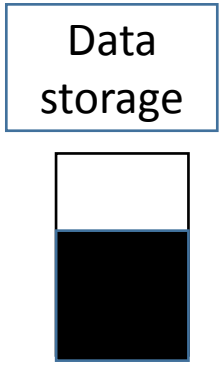
- Data collected must be uploaded to CDC DB and map layers with time/date/location stamp
  - signal hotspots, ZH, zombie population density, safe locations, human survivors
  - Tricorder detection of new strain encrypted and flagged for priority upload to CDC

- Option to select full upload/sync when ZH is in signal hotspot and safe
- Communicate data status to ZH through display
- Make signal status more obvious

Prototyping Plan: Error recovery

- Data sync'ed to ZHs/uploaded to CDC, recommend distributed mirrored servers for faster signal
- Data packaged in smaller units with start/stop bytes and time/date/location stamp
- If package update unfinished -> error: maintain in Black Box

- Store data for this field trip in Black Box that can be resent or recovered if phone is retrieved without ZH



Prototyping Plan: Push Alerts

Haptic Alert system (to inform the ZHs in the field)

- 1 long vibration: a new civilian casualty was found
- 2 short vibrations: a new strain of Zombie Virus detected
- 3 long vibrations indicate a ZH was infected by the virus
- 4 short vibes: new map alert - so the ZH would check maps
- 5 short vibes: emergency, return to base

Create alert display on UI, similar to upload

- Automatically sync the data from CDC
- Visual cues of data status to inform the ZH if data needs to be sync'ed
- Automatically store data in local black box storage

Prototyping plan: Historical Data View

Black Box on UI and as embedded storage

- 1 Terabyte of data
- Kevlar & Graphite = indestructible
- Beacon Signal that gives both visual and haptic signals to ZH within range
  - 3 short vibes indicate device from fallen ZH in range
  - Fallen ZH will be ID’d by virus infection or flat-lined heart rate/ body temperature through Tricorder
- All data has time/date/location stamp

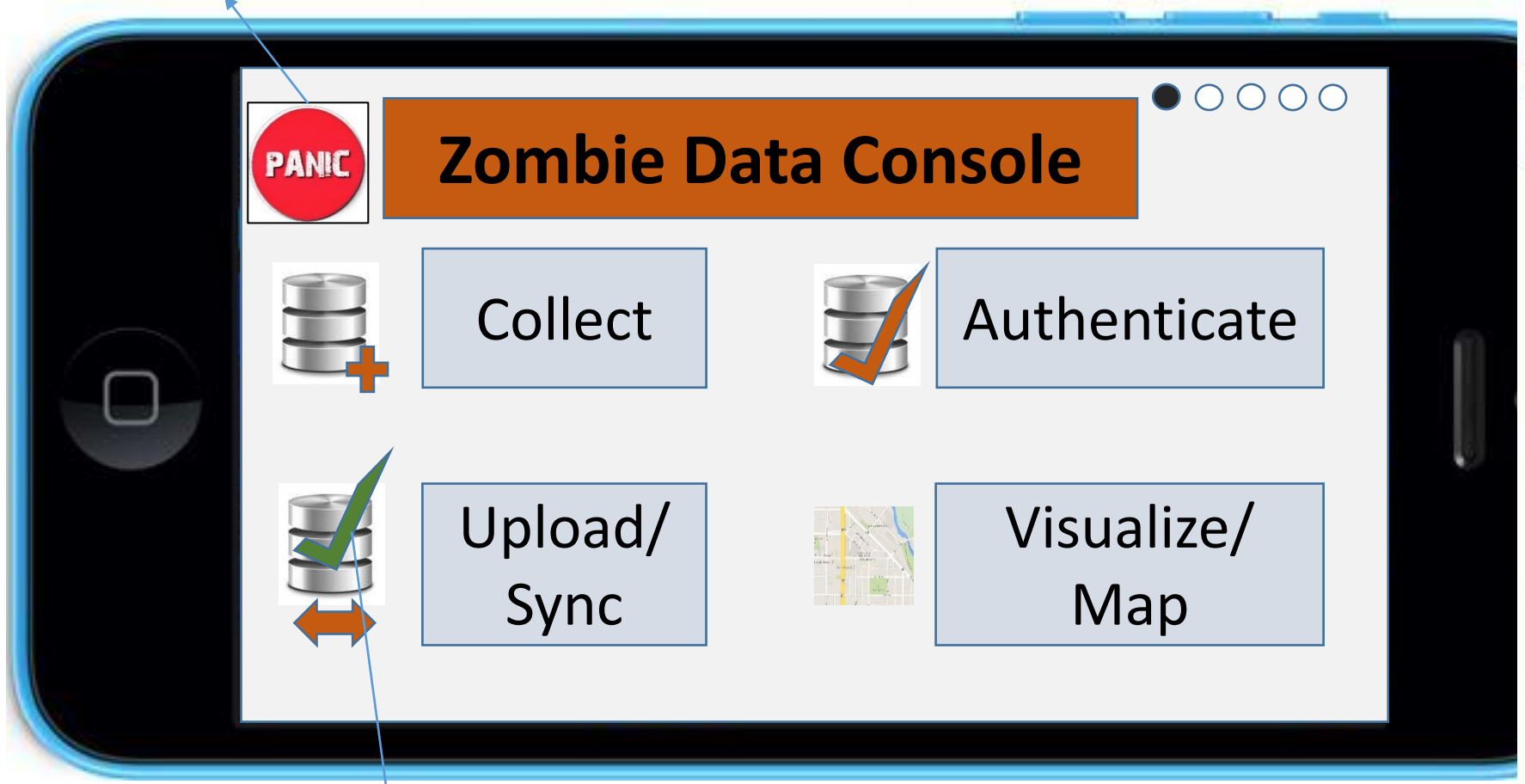
User Testing

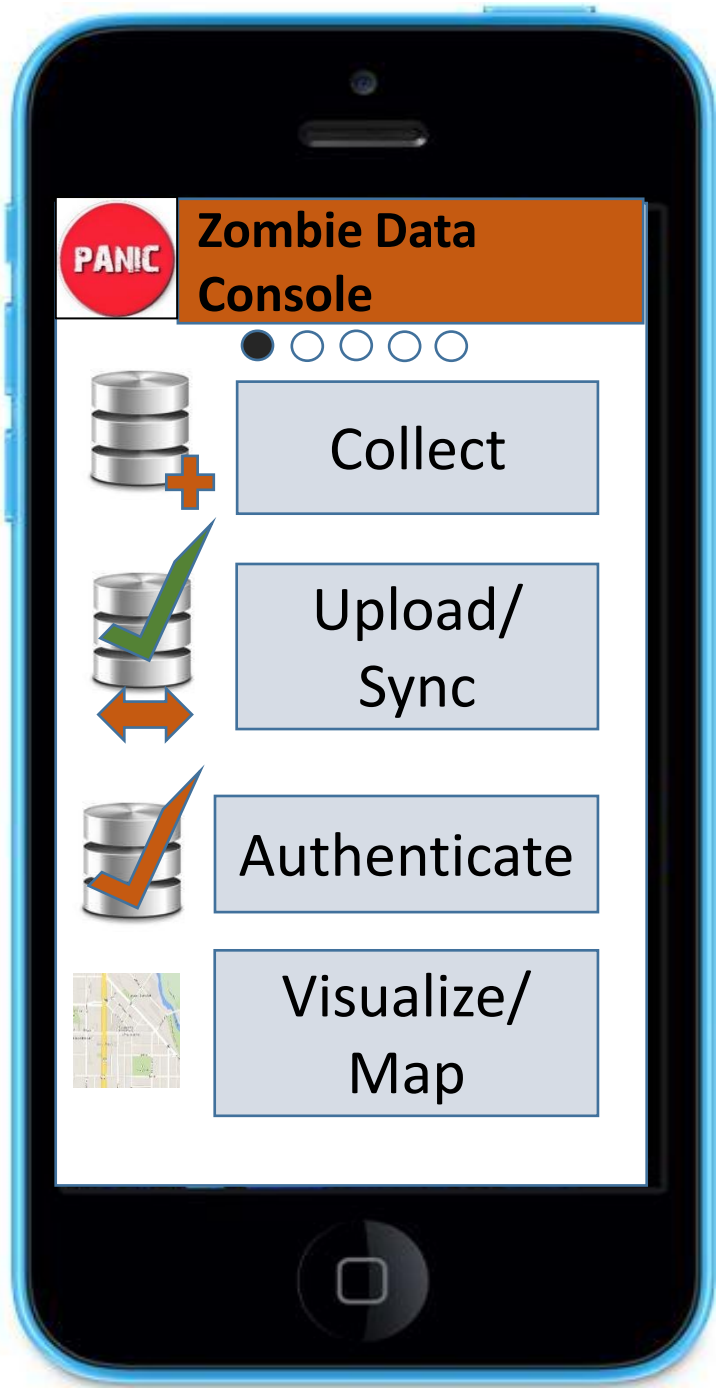
- Phase 1
  - Tested by 10 ZH
  - A/B Split testing the “infection queue.”
- Phase 2 Alterations
  - Positive results confirmed need for Black Box
  - Map 12 showed out dated information, leading some ZH’s to unsafe zones. A dynamically changing map overlay is required.
- Phase 3 Alterations
  - Dynamic Map saved 3 lives
  - Infection queue will not be included

Zombie Data Application

- Click on Upload/Sync

Informs ZHs of emergency situation: sends ZH location to update alert map,

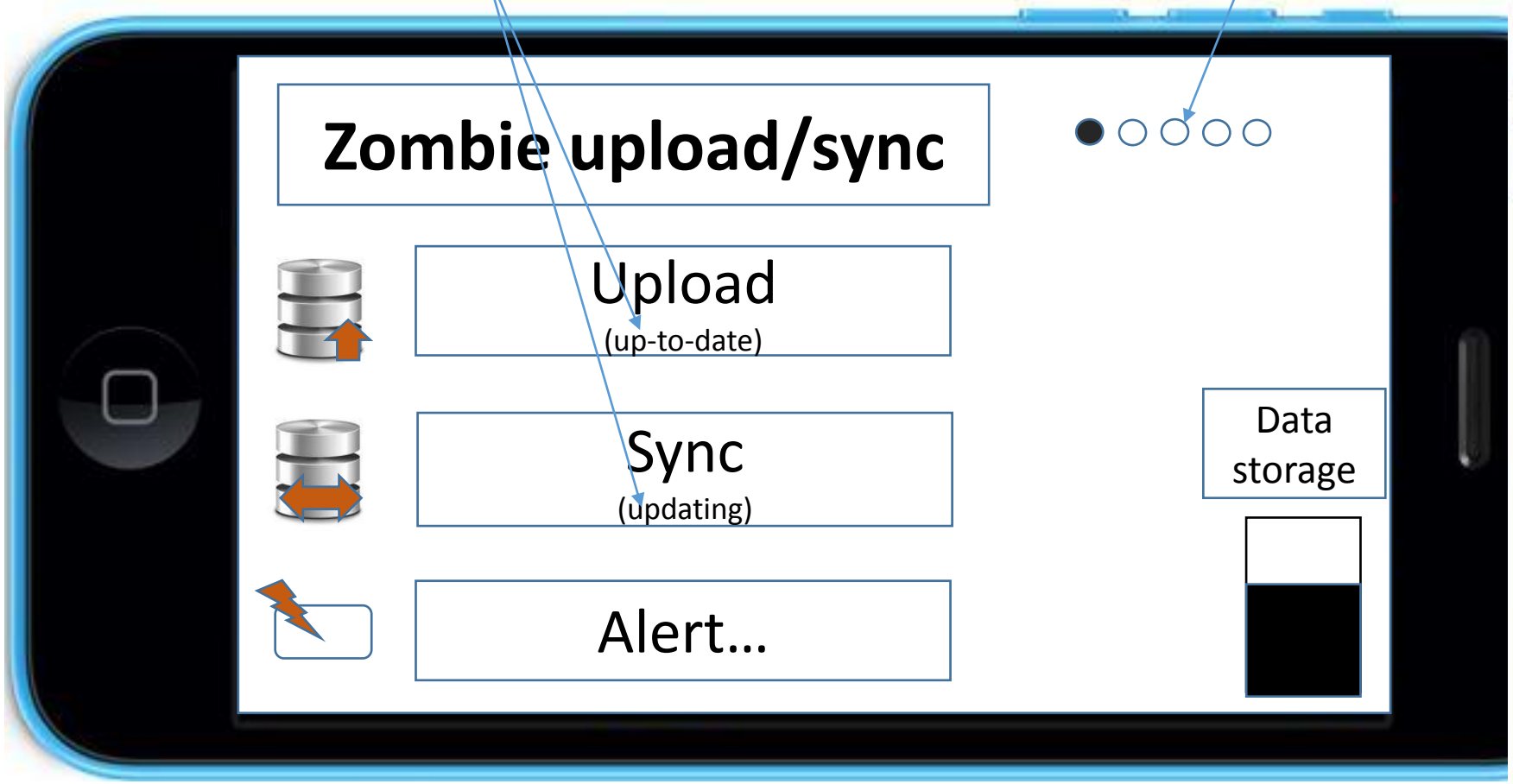


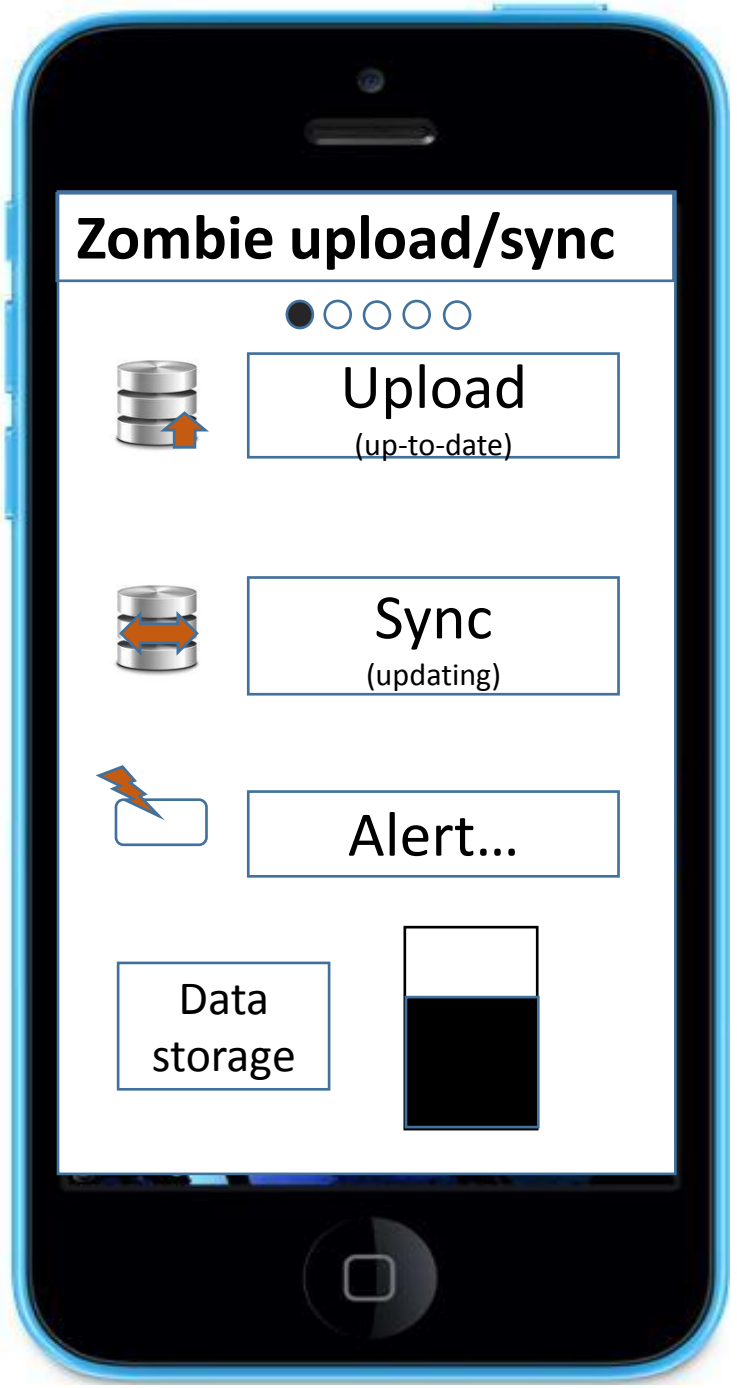


Green check signifies that iPhone is synced with CDC database

The message in parentheses has 3 options: updating, need to update, up-to-date. Vibration signals tell the user that connections are established (long short) and device synced (short long).

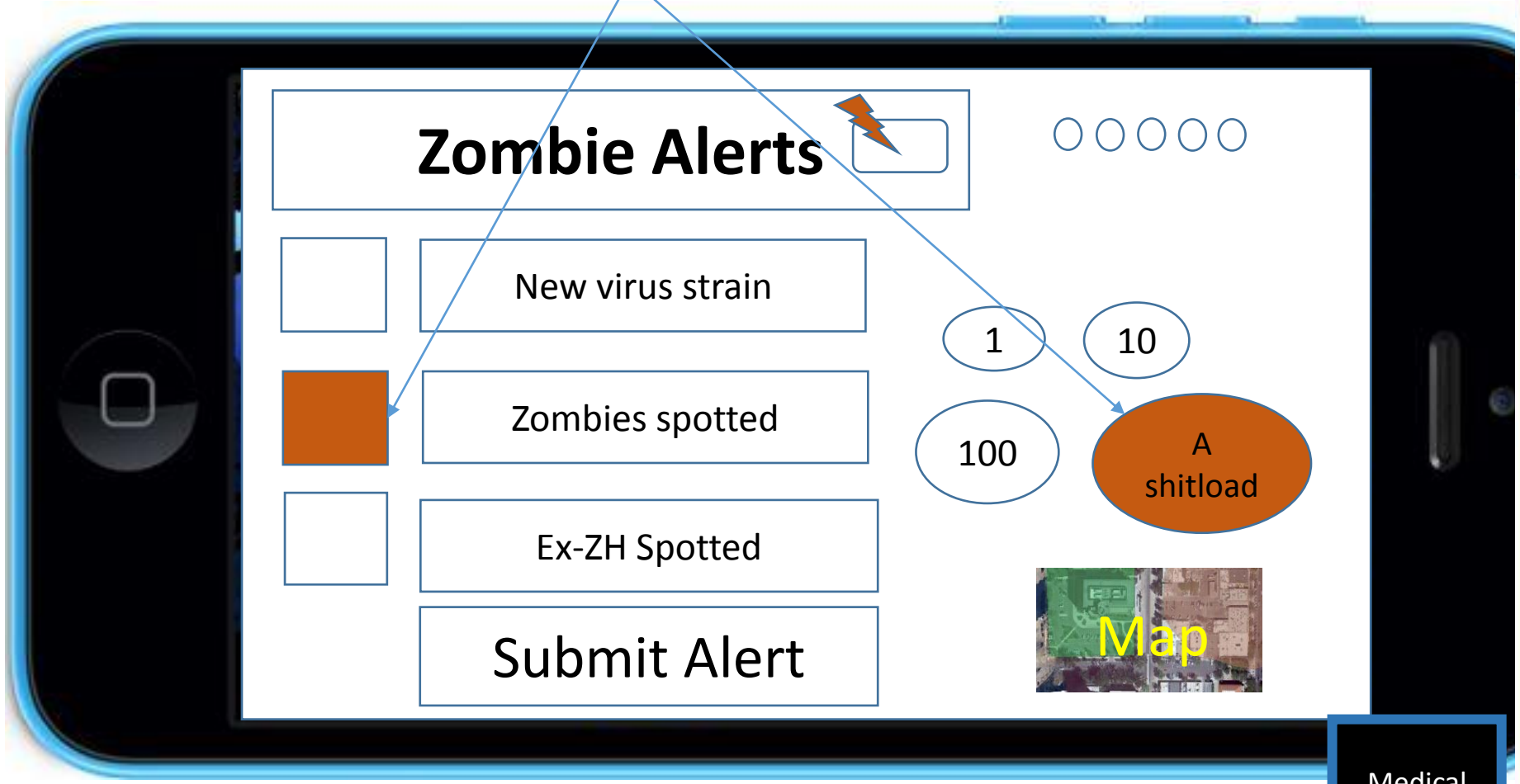
Dots, larger than the typical iPhone interface, show signal strength

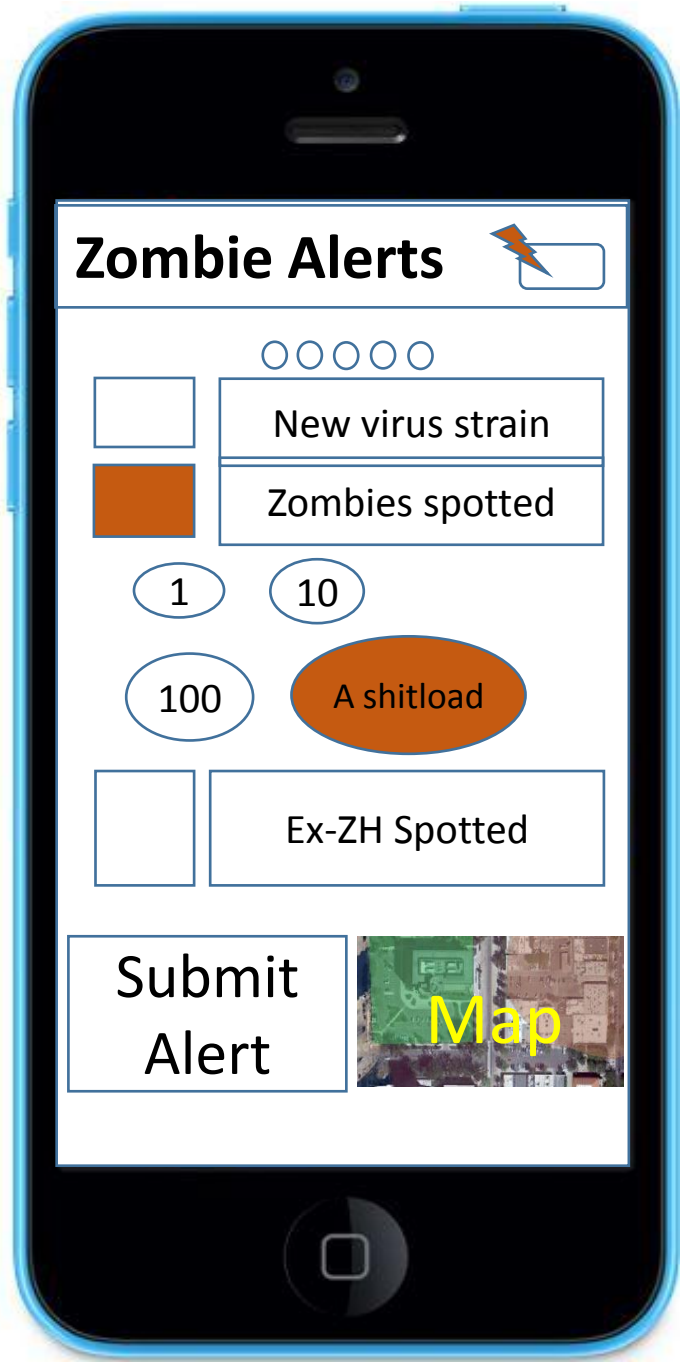




Default values are selected in orange.
The hunter can select the color box or text box make a selection.

The alert dialog defaults to a boatload of zombie sightings, allowing the hunter to click Submit instantly in a potentially sensitive situation

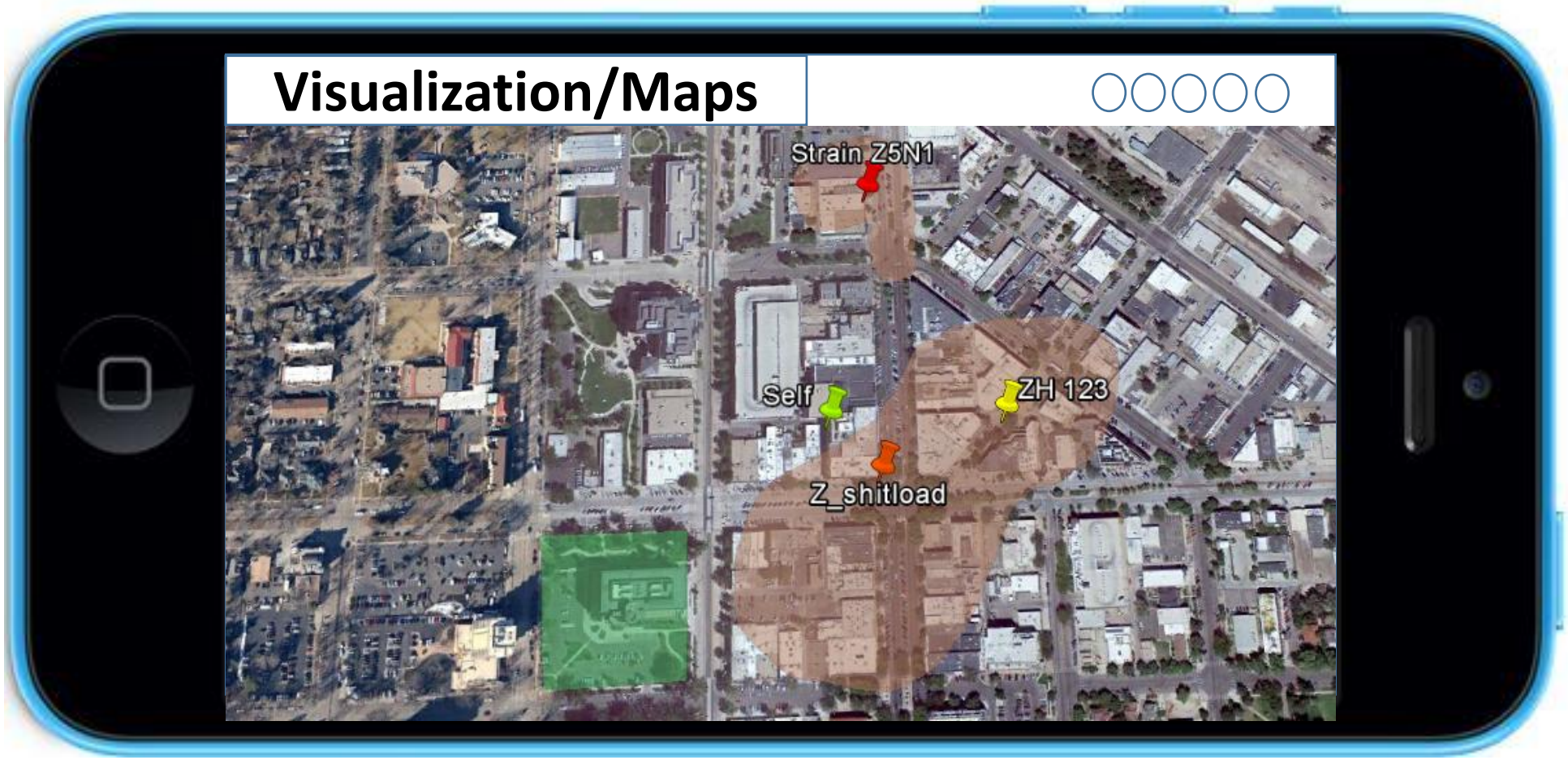




Medical Tricorder determines virus status in subject. Result uploaded to CDC.

Medical Tricorder peripheral

Type of geographic data that our plan would upload/sync with CDC database



- Self (green marker)
- Other ZH (yellow marker)
- New strain found (red marker)
- Zombie density (orange polygons)
- Signal hotspot (green polygon)

- By solving the problem of data communication and recovery, deliverance from Zombies is within reach.
- Coupled with good engineering, the Update/Sync UX/UI solves these problems, and gives us hope for the future.

Questions?