# ZOMBIE TRIAGE

DATA COLLECTION for the C.D.C. FieldAgent<sup>™</sup> App







Deanne, Audrey, Dawn Feb. 2016 Weblab

### **OVERVIEW**





Problem: Zombie Virus Outbreak Reported in the USA less than 1 hour ago

**Goal:** To Locate the First Virus Carrier (Patient 0) by testing Zombie Blood-Dead or Reanimated

## Overview: Actions 2



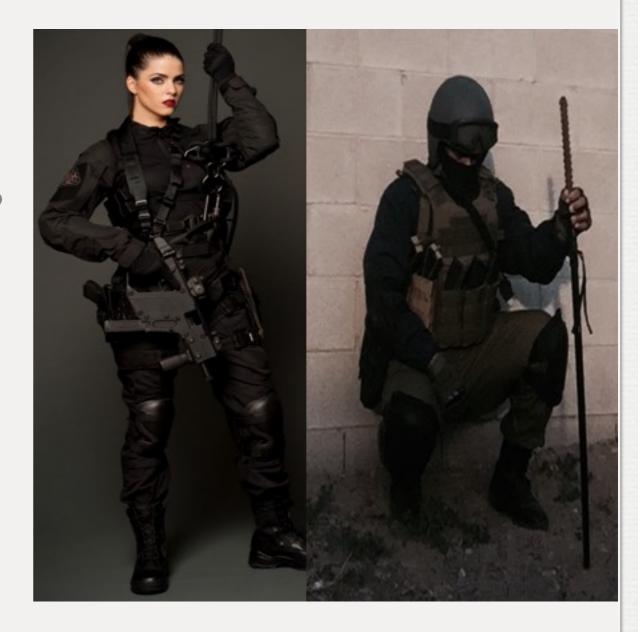


**Task:** Develop App Called FieldAgent(TM) For Zombie Hunter Teams / Data Collectors

# RESEARCH: The Team



- Who are the Zombie
   Hunters/ Data Collectors?
- What do they do?
- Where do they work?
- Why do they do it?



## Life in the Field



- Developers followed a data collection team around for three days to observe their daily activities.
- Their working environment
- Daily activities
- Data collection
- Risks
- Necessary precautions
- Equipment



### EMPATHY MAP



#### **THINK & FEEL**

Find Patient "0"
Minimize kills in case we find a cure
Don't get myself or team infected



#### SEE

Everyone is turning into Zombies
Infrastructure is falling apart
Humans in need
Zombies can be hiding anywhere

#### **HEAR**

We can find a cure
My Loved one had been infected
Be careful out there
The virus is mutating

#### **PAIN**

To prevent infection don't got too close Don't have too much time to complete download Hard to maneuver wearing

#### SAY & DO

Do what ever it takes
Travel where necessary
Get as many blood samples as possible
Take necessary precautions

#### **GAIN**

Sampling from a distance is safer Find patient "0" = cure Get as many blood samples as possible Location patterns gets us closer to target

### PROTOTYPE: Darts



- Dart gun: Tool to get the dart to target
- Darts: sensors to analyze blood, with a break off tip that has a locator chip inside (to track migration for future analysis). Bluetooth 30 feet. Need to pair phone and each dart.
   Download info to phone then upload later.
- Pocket in uniform to securely hold phone
- Analyze blood to determine: gender, blood type, strain or new mutation
- Use GPS locator for tagging.



## HARDWARE TEST



- Test distance of Bluetooth darts and Bluetooth on phones to make sure they work within 30 feet.
- Make sure phone headsets work so data collection team can communicate with each other.



- Test microchip that transmits location via GPS.
- Test battery life and solar charging units.
- Test Dart guns to make sure they are in working order.

### SOFTWARE TEST



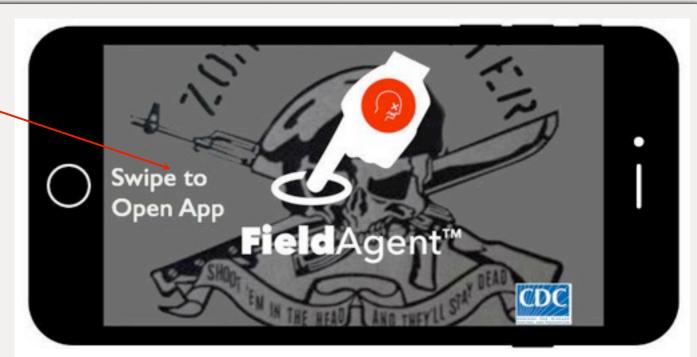
- Make sure phones are able to store data and upload to CDC at the end of the day.
- Test the maximum distance to receive data transmission from dart.
- Test that blood analysis returns correct blood type, gender and strain or new mutation.
- Test upload to main database.
- Test the time it takes to pair dart and phone, # of darts.
- Test Data Collection Criteria in each type of environment.
- Test 911/Emergency and location indicators including GPS on phone.



# FieldAgent<sup>TM</sup> App



- Default Screen Swipe to Open
- Retrieve Sample from Dart Sensor
- Analyze Blood Sample:
  - 1. Blood Type
  - 2. Infection Strain
  - 3. Gender
- · Zombie Status: Alive/ Dead
- Encode GPS Location
- Sync with CDC
- Progress Buttons: Grey to Green= Done
- Phone Button to directly speak with One Team Member with Bluetooth Headset
- 911 Emergency
- Show Safe-house Location GPS
- Bluetooth Stats with Darts & Headsets
- Satellite Wifi Status Indicator
- Military Flux Auto Screen Enhancement/ Night Visability Red Screen





### GPS SYNC



- GPS Connection Through Satellite Wifi
- GPS SYNC with CDC to Determine Untested Regions
- Active= Not Tested
- Complete= Tested
- Safehouse= Military Triage & Supply Centers
- GPS SYNC after Region Compete to Upload Data



# Questions?



