

# San Diego ++ (Team 212)

- Nishant Billava
- Anish Bivalkar
- Kaivalya Deshpande
- Alpita Masurkar
- Deep Sanghvi
- Gowtham Balasubramanian
- Charles Weng

# Project Premise

- San Diego War Veterans population has increased from **222,348 in 2012 to 240,000 in 2016** (The San Diego Union Tribune) and it is estimated that it will surpass that of Los Angeles, CA making it **one of the largest war veteran communities** in the United States.

- Many of these veterans suffer from physical and mental health issues: **26.2% people report having a disability**  
**32.1% indicate that disability had interfered with them getting a job** which pushes them into poverty

- Some quotes that appeared in newspapers:

*“I feel like we are losing our friends left and right and no one is paying attention,”*

*“The system needs to be rebuilt from the ground up. It doesn’t work. It’s antiquated,”*

*“At the time I never knew of the benefits I was eligible for”*

*“He was in pain that he didn’t feel would ever stop. He made a decision in that moment that was a very bad decision.”*

- **Hard to obtain data** about them, reach out and help them.

- County and people of San Diego have resources to give back to the community and help the veterans but **how can we fill this gap, get this data and help them?**

## Version One of Project:

- Help war veterans pushed into homelessness.

- Where to get this information: We often see some of them on streets at traffic lights/intersections holding signs, asking for specific help.

- Build a platform where users can sign in and send a ping (location) with signboard information if they see a homeless veteran standing at an intersection.

- Build this data over time and hand it over to the county. The intent is to see if we can help these veterans and reduce the count of homeless veterans in the county of San Diego.

## Data Sets that will be created:

The data will be generated as a result of this project.

Technologies used:

- Android app as front end
- Rest Service hosted on EC2 that takes the data and pushes to RDS (MySQL) on AWS
- Java

Some of the current data fields used for information are:

**Position(lat/long):** can be reverse geocoded to zip codes

**Timestamp:** Time when this data was reported

**Payload:**(food,clothes,jobs, gender, camera others):

**county\_flag:** Check whether the county has pulled this data (will be used to reset our cache on the client side- some of this will be implemented in the future)

**veteran\_flag:** Whether veteran or not a veteran

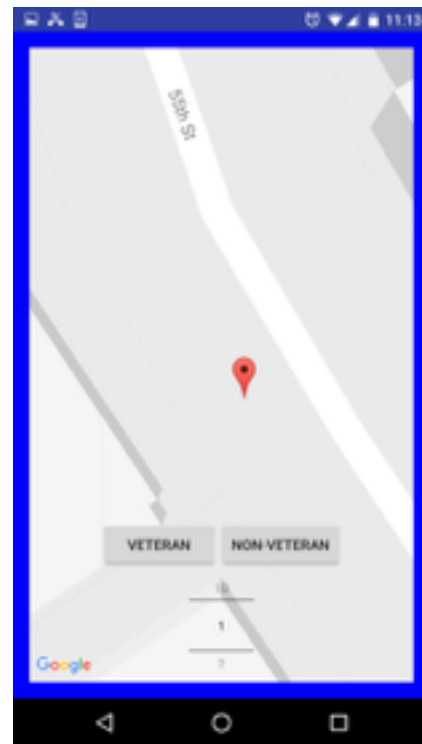
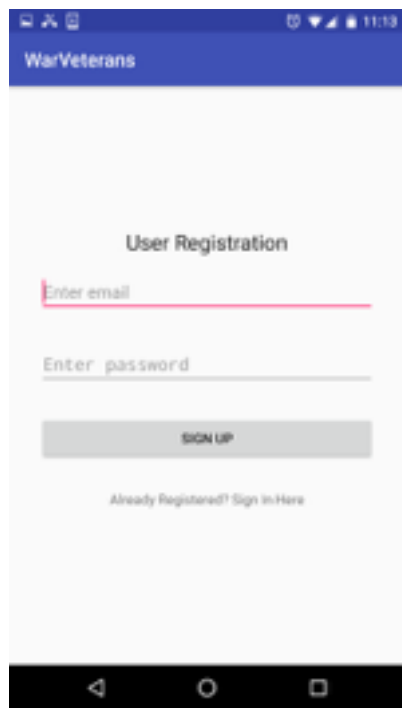
**soft\_delete\_flag:** If another user passes the same location, check whether the veteran has been reported in a recent time slice (to prevent duplicates)

**Log in information of users**

How can this information be used?

- Dataset generated will be used by the county and researchers/analysts to know the count and location of homeless veterans in San Diego (We can also give count of general homeless people).
- The user-based data will be generated over a period of time and can be used to analyze areas where they are most prevalent, what are their most important needs as identified by the signs that they hold and if a location is hit multiple times on consecutive days, it will also give us information like that amount of time a veteran has gone without adequate assistance and still waiting on the street seeking help.

# Prototype



# Next Steps

- Current techniques include getting volunteers who will manually go out on streets and different hours, fill out forms and then manually store this information.

## **THE NEXT STEPS NEEDED TO LAUNCH THE PROJECT:**

The idea is to not just help out homeless veterans but also other veterans who live in San Diego.

The next modules of this project will have:

- UI improvements, REST backend will be deployed on EC2, data transfer will be made Async. More security features will be added.
- Separate mode for all war veterans to access different kinds of facilities that might be available to them in San Diego
- Give the County of San Diego and researchers various options to download and use data
- See what other information the County of San Diego needs and get it to them
- Build a Donation Platform (Version 2 will have this): This will host a homeless veteran's profile (validated by the County of San Diego) and the help he/she seeks to bring them out of homelessness. It will allow users to donate as little as \$1 towards bettering the situation for the veterans
- Speech recognition library: In our research, we also observed that those veterans who come back from combat zones have hearing impairment. The speech recognition can be used by the veteran (or anyone else) to talk to the phone and get it converted to text. A use case will be going to a store and talking to a salesperson or cashier to purchase some item or asking for directions on the road.

# Contributors

## Team Contributions:

Project Idea: Alpita Masurkar

Design and Architecture: Anish Bivalkar, Alpita Masurkar with the help of the rest of the team

UI: Gowtham Balasubramaniam, Alpita Masurkar, Charles Weng

Database: Nishant Billava, Anish Bivalkar, Deep Sanghvi

Backend: Anish Bivalkar, Nishant Billava, Kaivalya Deshpande

Deployment, Support: Anish Bivalkar, Deep Sanghvi

Component Integration: Charles Weng

Presentations and Pitch: Alpita Masurkar

Spikes and learning Technologies that would be needed to build this entire project: Everyone on the team learnt and helped each other build the project. The above list is the names of major contributors to each of the segments but others helped them too.