Right Turn Accidents Analysis

CMPE -272

Project Team 23
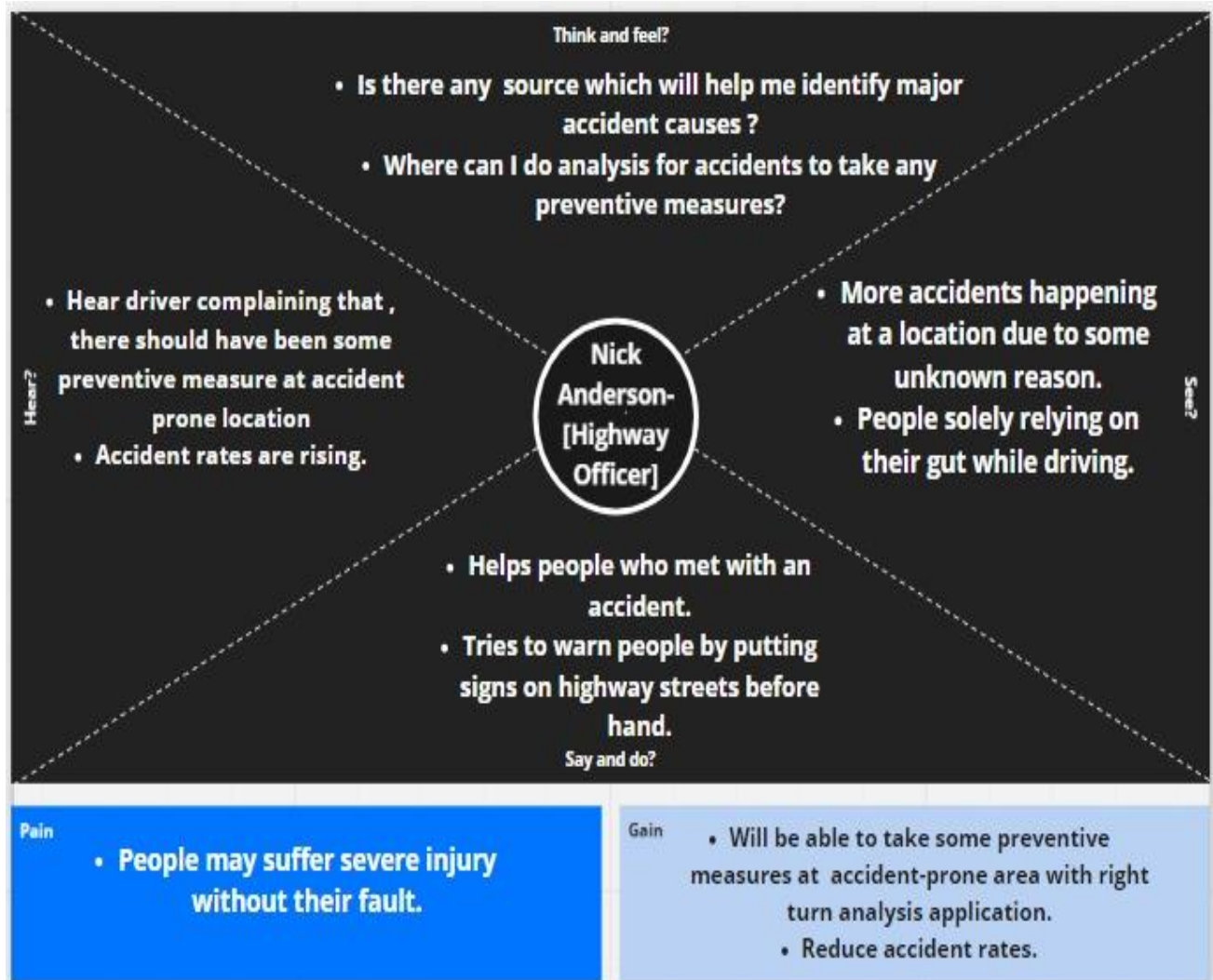
Team Members

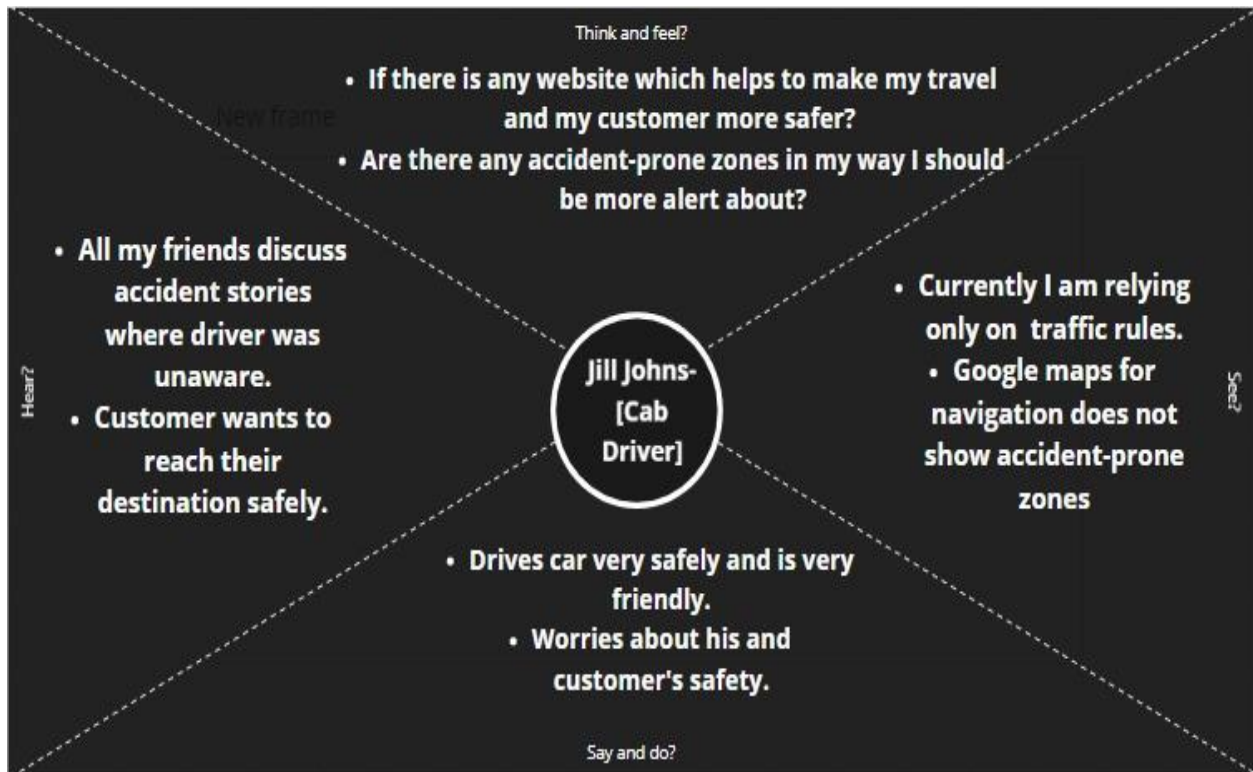**Akshay Anil Pagar**

Nikita Bairagi

Sneha Thomas

Vanadana Kudigrama Shenoy

Users of this web application can see details of right turn accidents of the counties in California state. They can view the major factors of these accidents. The app will show prediction of pedestrian/bicycle accidents on right turns.

User Empathy Map :

Think and feel?
- Is there any source which will help me identify major accident causes ?
- Where can I do analysis for accidents to take any preventive measures?

Hear?
- Hear driver complaining that, there should have been some preventive measure at accident prone location
- Accident rates are rising.

Nick Anderson- [Highway Officer]

See?
- More accidents happening at a location due to some unknown reason.
- People solely relying on their gut while driving.

Say and do?
- Helps people who met with an accident.
- Tries to warn people by putting signs on highway streets before hand.

Pain
- People may suffer severe injury without their fault.

Gain
- Will be able to take some preventive measures at accident-prone area with right turn analysis application.
- Reduce accident rates.

Think and feel?

- If there is any website which helps to make my travel and my customer more safer?
- Are there any accident-prone zones in my way I should be more alert about?

New frame

Hear?

- All my friends discuss accident stories where driver was unaware.
- Customer wants to reach their destination safely.

Jill Johns- [Cab Driver]

See?

- Currently I am relying only on traffic rules.
- Google maps for navigation does not show accident-prone zones

Say and do?

- Drives car very safely and is very friendly.
- Worries about his and customer's safety.

Pain

- Might get into an accident with no fault of his own.
- Might hurt customer due to accident

Gain

- Will be more prepared for the accident-prone area with right turn analysis website.
- Make his and customer's travel safer.

User Persona

Nick Anderson

Bio
Nick is a highway officer in the California Department of Transportation who is very passionate about his work and is looking forward to improving the transportation system and reduce accident rates to enhance California's economy and livability.

"I'm looking for a site that helps me to reduce the accident rates in California"

AGE: 40
WORK: Highway Officer
FAMILY: Married, 2 Children
LOCATION: Alameda, California

Organized   Practical
Hardworking

Personality
Introvert ———————————— Extrovert
Analytical ———————————— Creative
Loyal ———————————— Fickle
Passive ———————————— Active
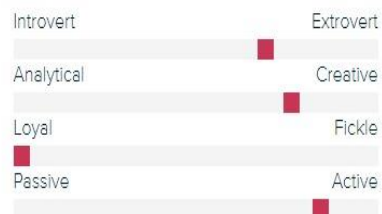
Goals
- To identify major accident causes and how these factors can be avoided.
- To take proactive actions on likely crash prone weather and traffic conditions and reduce accident rates.

Social Networks
facebook   WhatsApp   twitter

Preferred Channels
Mobile
Email

Jill Johns

Bio
Jill is a Cab driver who is very passionate about driving and making new friends. He spends most of his time traveling and is worried when he gets into an accident which is not due to his fault.

"I'm looking for a site that helps to make my travel more safer and comfortable."

AGE: 35
WORK: Cab Driver
FAMILY: Married, 1 Child
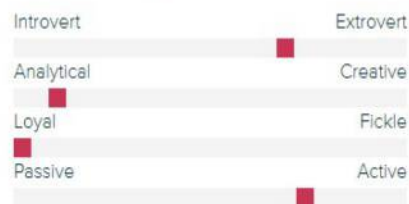LOCATION: San Jose, California

Organized   Practical
Protective   Hardworking

Personality
Introvert ———————————— Extrovert
Analytical ———————————— Creative
Loyal ———————————— Fickle
Passive ———————————— Active

Goals
- To have a safer travel.
- To know in advance high accident risk areas

Social Networks
facebook   WhatsApp

Preferred Channels
Mobile
Email

Design Mockups

Making a right turn on a street, road, or intersection is an everyday occurrence for anyone who drives, but it must still be done with caution and the driver's full attention.

Right Turn Analysis has been developed to provide the analysis of the California's Right Turn Accidents and help identify the causes of these accidents.

Map shows the counties with high number of right turn accidents. User can click on the map to view detials of accidents in that countyl
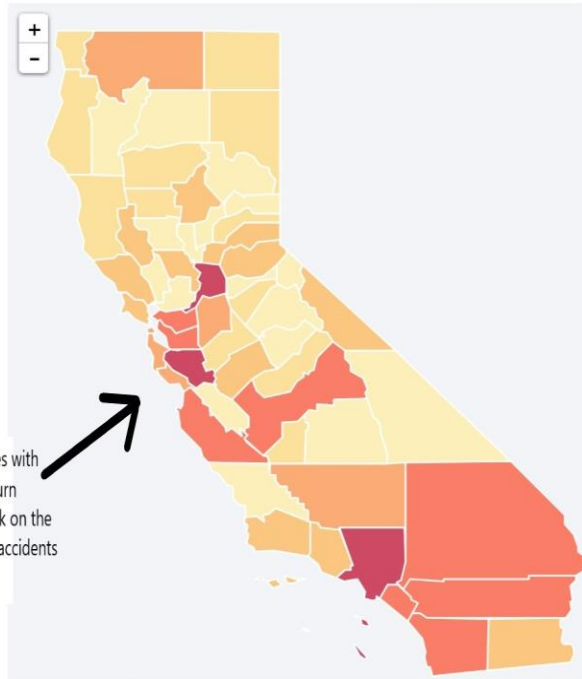
Right Turn Analysis

Analysis of the Right Turn Accidents in California

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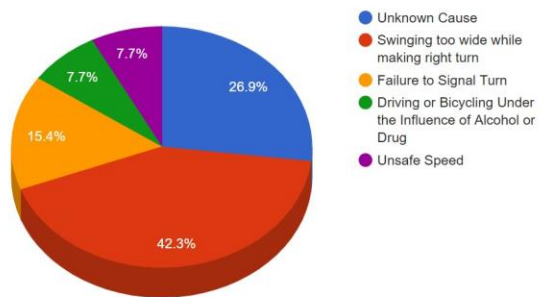
Login

Select County: [Alameda ▾]

Select county to view the number right turn accidents and their primary causes in that county

Data   Map

Collision Factor	Number of Collisions	Percentage
Unknown Cause	7	26.9
Swinging too wide while making right turn	11	42.3
Failure to Signal Turn	4	15.4
Driving or Bicycling Under the Influence of Alcohol or Drug	2	7.7
Unsafe Speed	2	7.7

Collision Percentage by Primary Collision Factor

- Unknown Cause
- Swinging too wide while making right turn
- Failure to Signal Turn
- Driving or Bicycling Under the Influence of Alcohol or Drug
- Unsafe Speed

Select County: Alameda ▾

Data   Map

Berkeley High
1980 Allston Way | Berkeley | Alameda County | CDS: 1611430131177   Print   Download

Collision Factors

Lighting

- Street Light not functioning
- No street lights
- Daylight
- Dark - Street Lights

Road Conditions

- Construction Zone
- Reduced Roadway Width

Pedestrian Action

- Crossing not in Crosswalk
- Crossing in crosswalk not in intersection
- Crossing in crosswalk at intersection
- In road including shoulder

Number of Accidents vs Year - based on collision factors