

Social Action Hack-a-thon 2022:  
Apps and Platforms

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# Improving Marta's UI/UX

**SEE & SAY**

**3.0**

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Team 7

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# Problem Statement

We want to address the underreporting of health and safety incidents on MARTA. Using data and articles from publicly accessible data, we plan on redesigning MARTA's incident reporting system (See and Say 2.0) so that reporting is easier and more accessible to the general public, thus increasing rider confidence and security.

Important Terms:

**User Interface (UI):** A user interface is the graphical display on a mobile device that allows the user to interact with the device's apps, features, content and functions.

**User Experience (UX):** How a user interacts with and experiences a product, system or service. It includes a person's perceptions of utility, ease of use, and efficiency

# What is our problem?

- Underreporting: How can we help encourage user participation within the app while ensuring the safety of riders?
- Incidents include:
  - Crime
  - Safety concerns
  - Health hazards

Part 1 Crime Rate in June was 2.06, which met the target of 4.15. There was a 23% decrease in Part One Crimes, from 13 in May to 10 in June.



# How do people feel about See & Say 2.0?

## Ratings & Reviews

[See All](#)

1.0

out of 5



5 Ratings

See and Say.. Do Nothing

Jun 13



henryhampton

Delete this app. It doesn't do anything. Went through all the options on the app. Report an incident. Chat with Marta police which they did but no response nonetheless. Not worth the time. Take care of yourself on the trains and be wary.. 8 people sleeping on the train when we pulled into the airport..

“Delete this app. It doesn’t do anything. Went through all the options on the app. Report an incident. Chat with Marta police which they did but no response nonetheless. Not worth the time. Take care of yourself on the trains and be wary. 8 people sleeping on the train when we are pulled into the airport”

# Why does this matter?

MARTA is the central transportation hub in the metropolitan Atlanta area, with people taking over 488,000 MARTA trips a day

On MARTA's database about crime rate reports for 2021, less than 16 in 100,000 riders reported incidents.

Despite transporting over 3.5 billion people, less than 600 people have downloaded the app on the Google Play Store.



# What can be done?

By re-designing the See and Say 2.0 app's user interface:

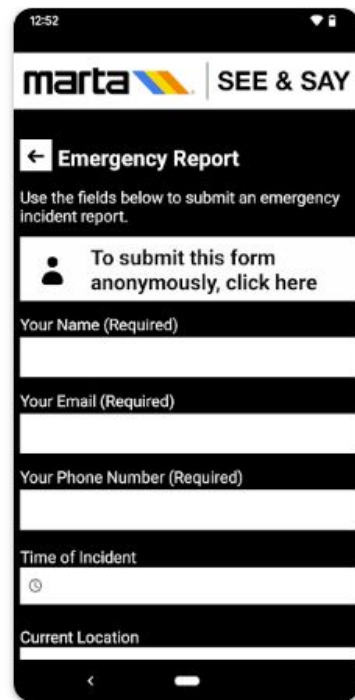
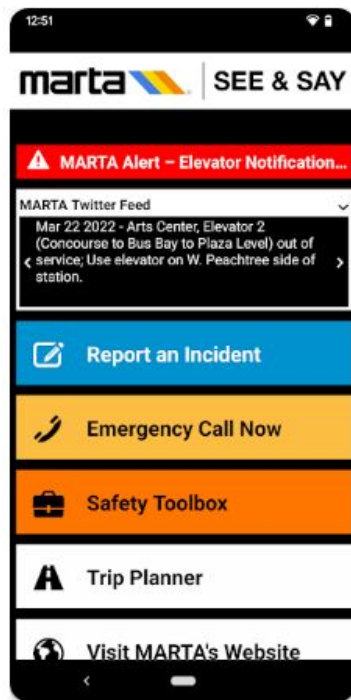
- App will be more accessible/useable for everyday riders
- Incident report data can be accessed by riders: providing critical health and safety insights



# See And Say 2.0

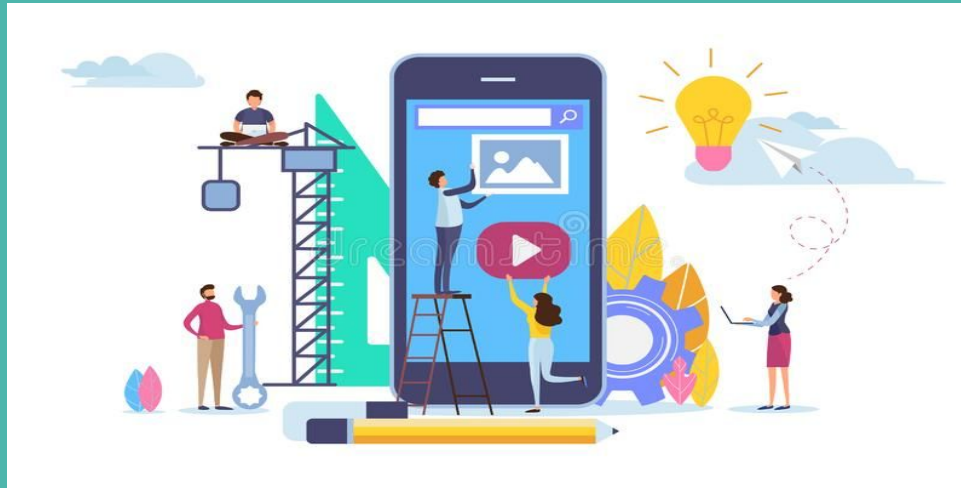
Problems to address:

- Extremely difficult to file an incident report
- Too many required fields
- Very complex design
- Does not provide users with safety information



How do we still record the same amount of data with less user prompts?

# Redesigning See & Say 3.0





# Proposed Features

- Easy to use.
- Application that works with users and provides valuable insights from data.
- Use techniques like Machine Learning and Data Science to derive insights and enhance user experience.



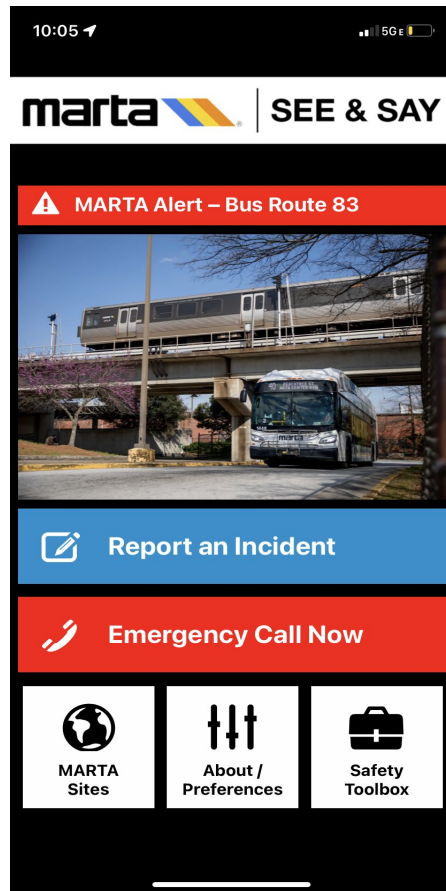
# Setting up the App



# Landing Page

Changes from 2.0 to 3.0:

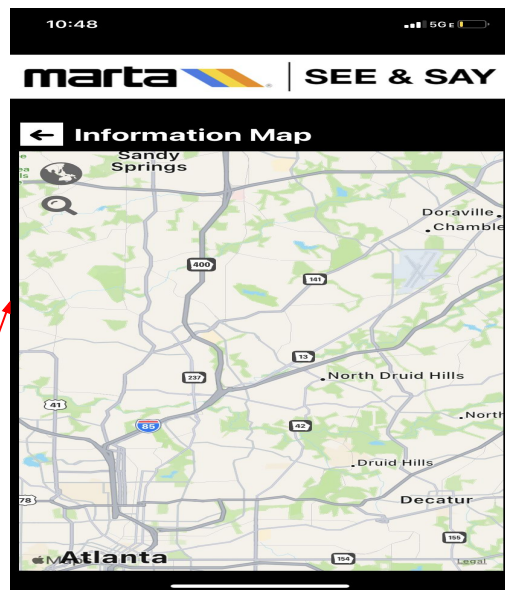
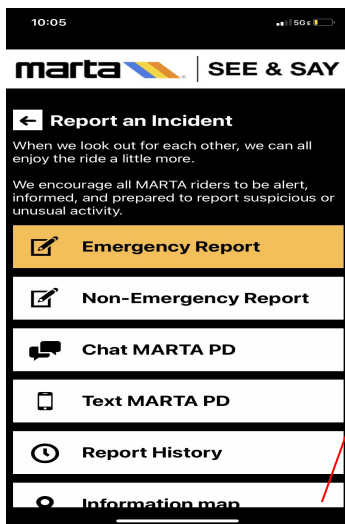
- Better use of optical focal point
- Improved mapping functionality
  - Increased transparency about incident data/trends
- Modern, Streamline Design
- Maintained functionality



# Mapping Functionality

## Mapping in 2.0

- Hidden behind many pages
- EXTREMELY limited functionality

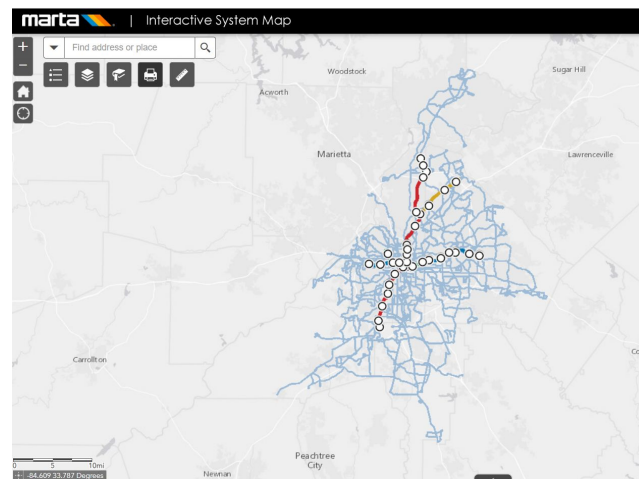


Scan code for access to map application:



## Mapping in 3.0

- Utilizing pre-existing online interactive map application in 3.0
- Users able to click on points (stations, bus stops, etc.) and read desensitized data contributed to the points



# Incident Reporting in 2.0



**marta**  | SEE & SAY

## ← Report an Incident

When we look out for each other, we can all enjoy the ride a little more.

We encourage all MARTA riders to be alert, informed, and prepared to report suspicious or unusual activity.



**Emergency Report**



**Non-Emergency Report**



**Chat MARTA PD**



**Text MARTA PD**



**Report History**



**Information map**



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## ← Non-Emergency Report

Use the fields below to submit a non-emergency incident report.



**To submit this form  
anonymously, click here**


Your Name (Required)

Your Email (Required)

Your Phone Number (Required)

Time of Incident (Required)

Current Location

 Tap to add your current location

Incident Type (Required)



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## ← Non-Emergency Report

Location of Incident (Required)

Bus Number

Rail Car/Streetcar Number

Bus Stop Number

Incident Details (Required)

Please attach any relevant images, videos, or files to your message

 Tap to attach photo or video

**Please Note:**

A team member will review and process your

# Incident Reporting

Changes from 2.0 to 3.0:

- Less clicking and decision making
- 50% reduction of fields users must fill out (12 to 6 fields)
- No required fields
  - Contact checkbox: if checked additional boxes will populate for user to input contact information
- Addition of Safety Banner
  - Allows for riders to better navigate developing situations

How do we still record the same amount of data with less user prompts?

10:20 50%

**marta** | **SEE & SAY**

← **Non-Emergency Report**

Use the fields below to submit a non-emergency incident report.

**To submit this form anonymously, click here**

Your Name (Required)

Your Email (Required)

Your Phone Number (Required)

Time of Incident (Required)

Current Location

Tap to add your current location

Incident Type (Required)

TEXT MARTA PD CALL MARTA PD VIEW REPORT HISTORY

**REPORT NOW**

Please describe incident:

Upload Media

Incident Type

Location Time:

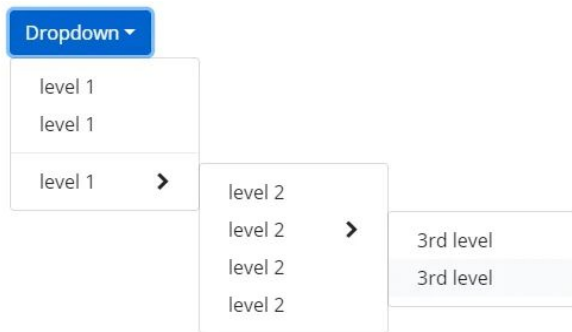
Bus Route/Rail Car/Street Car

Would you like to be contacted about your report? ☒

**SUMBIT**

12

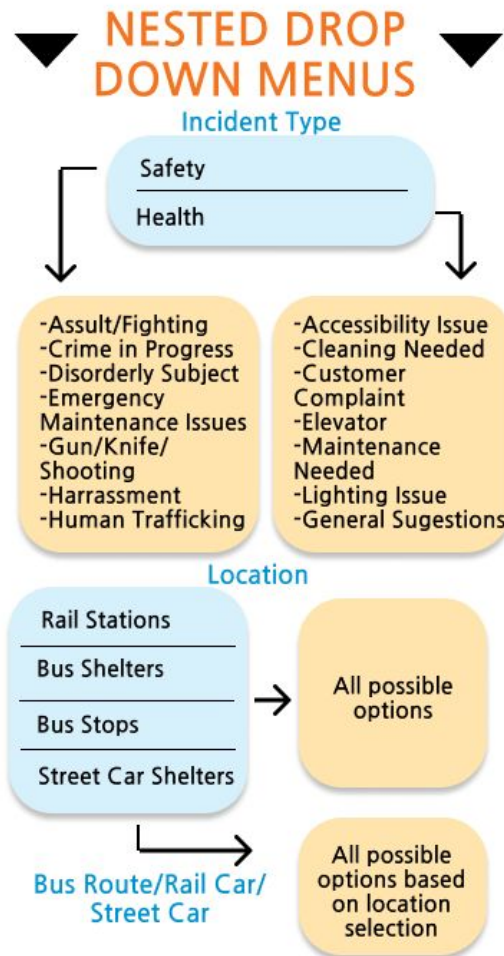
# Nested Drop Downs!



## Benefits:

- Reduces visual clutter
- Smart/Efficient Selection (Bus/Rail/Street Car)

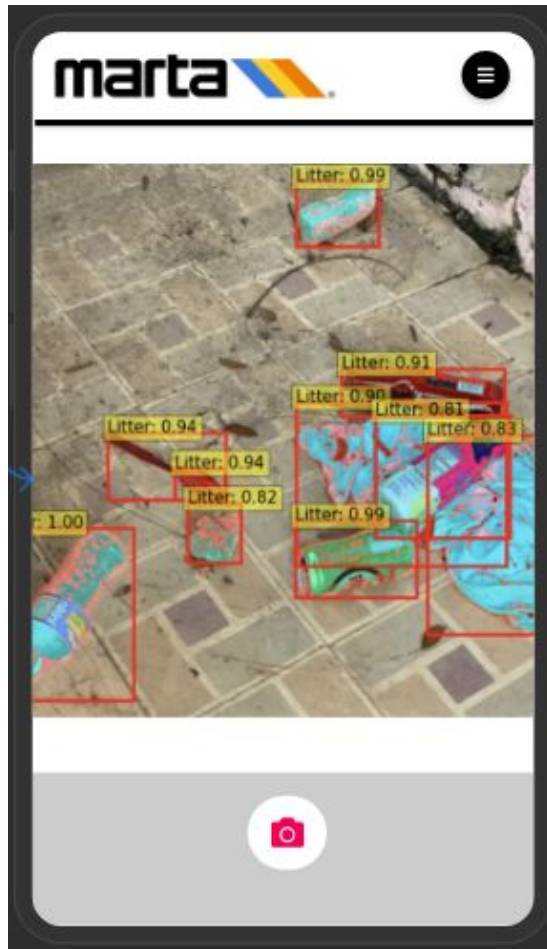
A screenshot of a mobile application interface for reporting an incident. The top navigation bar is blue and contains three icons: a speech bubble for "TEXT MARTA PD", a phone for "CALL MARTA PD", and a clock for "VIEW REPORT HISTORY". Below the navigation bar is a large orange button labeled "REPORT NOW". Underneath this button is a text input field labeled "Please describe incident:". Below the text field is a white button labeled "Upload Media" with camera and video icons. Below that is a white dropdown menu labeled "Incident Type". Below the "Incident Type" dropdown are two white input fields: "Location" with a dropdown arrow and "Time:". Below these is another white dropdown menu labeled "Bus Route/Rail Car/Street Car". At the bottom, there is a checkbox labeled "Would you like to be contacted about your report?" which is checked, and a large orange "SUMBIT" button.





# Machine Learning To The Rescue!

- Creating a deep-learning model to recognize different types of shapes
- Suggest broad categories of issues like Sanitation, Hygiene, etc.
- Data can be obtained from many sources online
- Provides a better UX for people





# Limitations and Future Scopes

- General issues with crowd-sourced data (Nextdoor App)
  - Who's doing it better? Citizen App
- Privacy Concerns
- Equity Concerns: How are we hearing from all riders? (access to technology, etc.)



Article on the Nextdoor App



Citizen App

- Provide more incident reports so that further analysis can be carried out and address important questions:
  - What type of incidents are most common at X station or bus stop?
  - What are the temporal trends of incident occurrence? (Daily, seasonal)
- Increasing app engagement
  - Offering discounted rides for a promotion
  - Combining all three apps

# Citations

Alexandra M. Nguyen Portfolio: UX researcher: MARTA project. Alexandra M. Nguyen. (n.d.). Retrieved September 24, 2022, from

<https://www.alexandramnguyen.com/make-marta-great-again>

ItsMarta Interactive Prod. MartaGIS. Retrieved September 24, 2022, from

<https://martaonline.maps.arcgis.com/apps/webappviewer/index.html?id=0ce5941618fe4cfe827155225d9640cc>

Plink, Katheryn. Can Nextdoor solve their racism problem? NPR. Retrieved September 24, 2025. <https://the1a.org/segments/nextdoor-karen-problem/>

Link to the Citizen App: <https://citizen.com/>

A special thanks to PropEI, ATLytiCS, and the MARTA Team for giving us great advice on how to develop our solution!

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**Thank you for listening!**

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