

Navigating Harlem: Enhancing Mobility for Seniors Through Innovative Technology

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Meet Team 3A

The issue...

How can we use technology to improve the safety of travel for seniors in Harlem?

Methods of Research

Interviews

- Pros
 - ◆ Face to face data collection
 - ◆ Feelings and experiences provide more context
 - ◆ No need for technology
- Cons
 - ◆ Takes time
 - ◆ Labor intensive

Why did we choose this method?

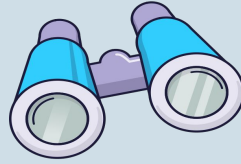
- ✓ Accessible
- ✓ Experience-based
- ✓ Interactive

“I feel like I have to watch for the bikes, mainly the electric bikes because they don't follow any of the rules on the street.”



Methods of Research

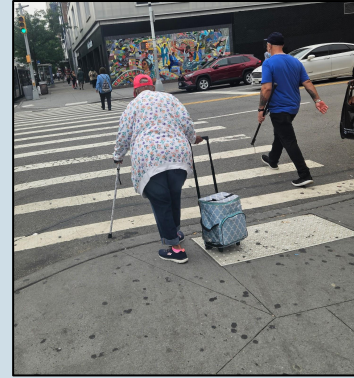
Ethnography



- Observing the area
 - ◆ Writing down notes
 - ◆ Using 5 senses
 - ◆ Crossing at intersections

Why did we choose this method?

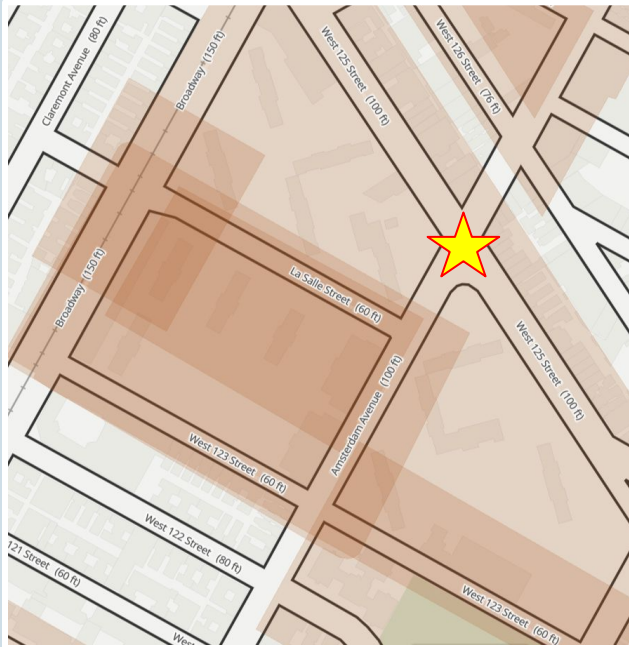
- ✓ No need for interview
- ✓ Honest data



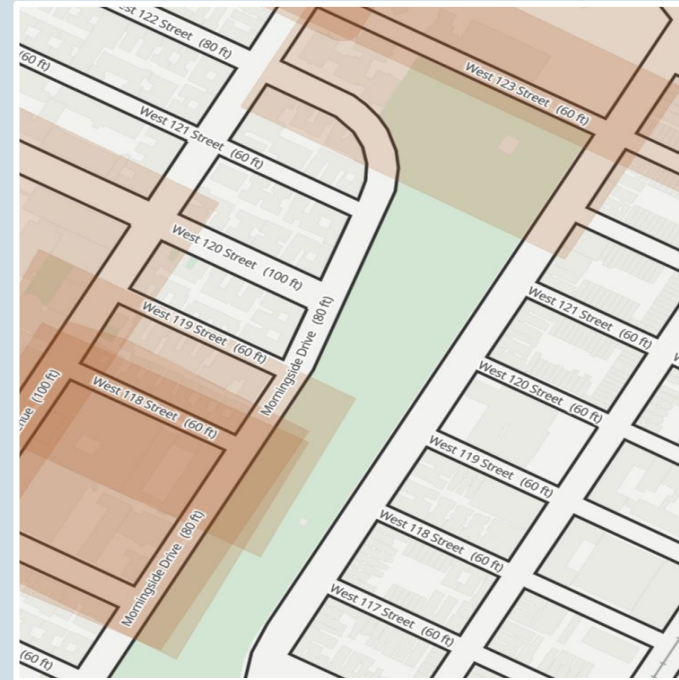
Locations for Data Collection

Amsterdam Avenue

Between La Salle and 124th



MorningSide Park



Visit to the A. Philip Randolph Senior Center



Findings: What problems do seniors face?



- Accessibility
 - Lack of elevators/stairs
 - Hills
 - Trash
 - Rain/flooding
- Privacy concerns
 - Cameras
- Traffic safety
 - E-bikes
 - Double parking

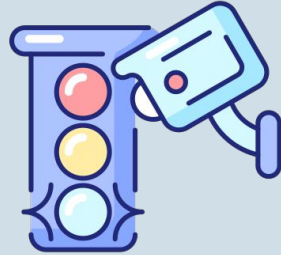
Key Takeaway #1

Electric bike traffic = The main safety concern

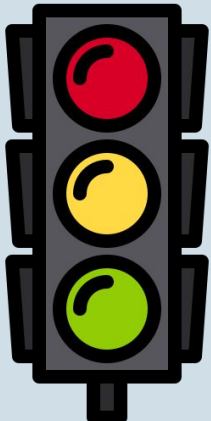


“...these electric bikes. Those delivery guys. They’re just zooming at a hundred miles an hour and I’m concerned about that.” - concerned Harlem resident

Key Takeaway #2



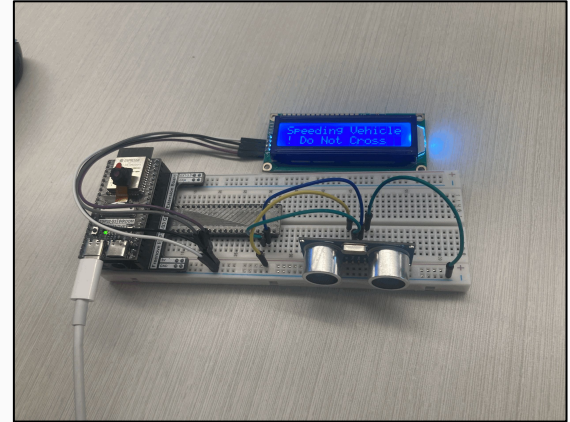
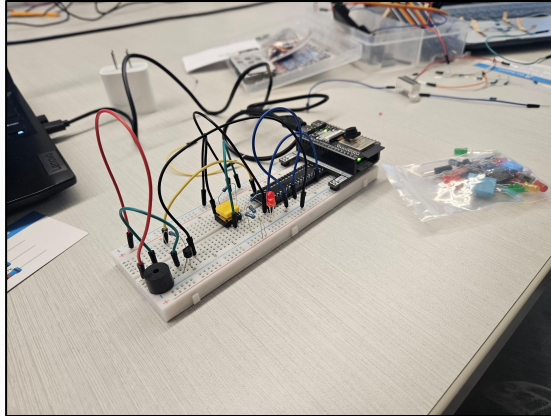
Adults over the age of 65 are open to technological advancements



Shift in trajectory (building kits):

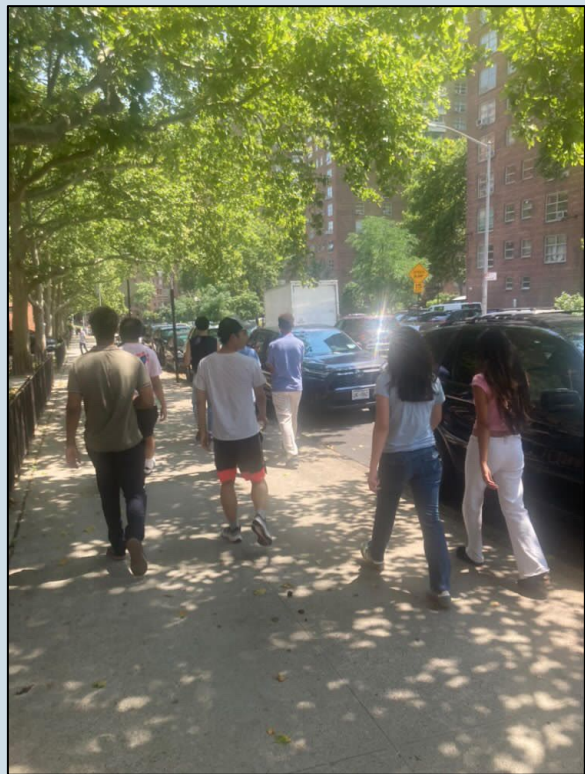
“I'm a little worried about over-surveillance. On the other hand, I think if it helps catch somebody who did something bad, it's probably a good thing. ”

- Anonymous Harlem resident

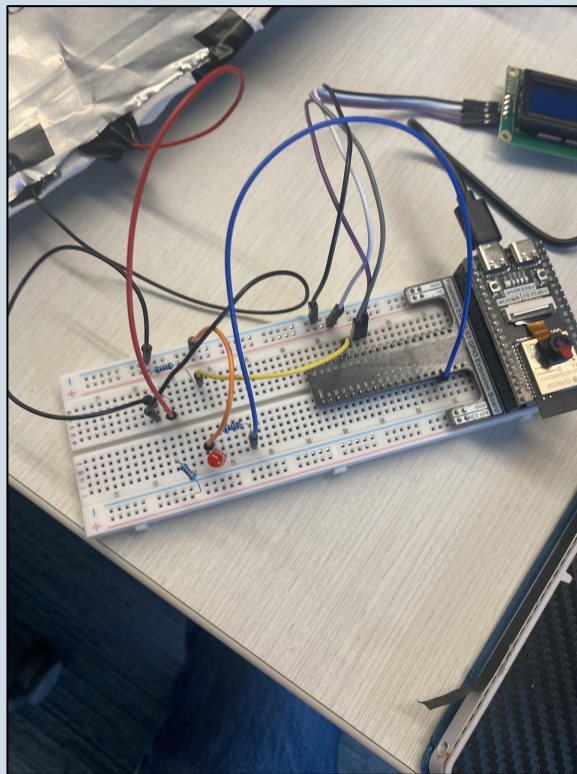


Some technologies considered:

- Ultrasonic distance sensor - detect distance from intersection and walking speed
- LCD screen and LED lights - visual signal
- Buzzer - audible signal
- Pedestrian-operated button



Social Science



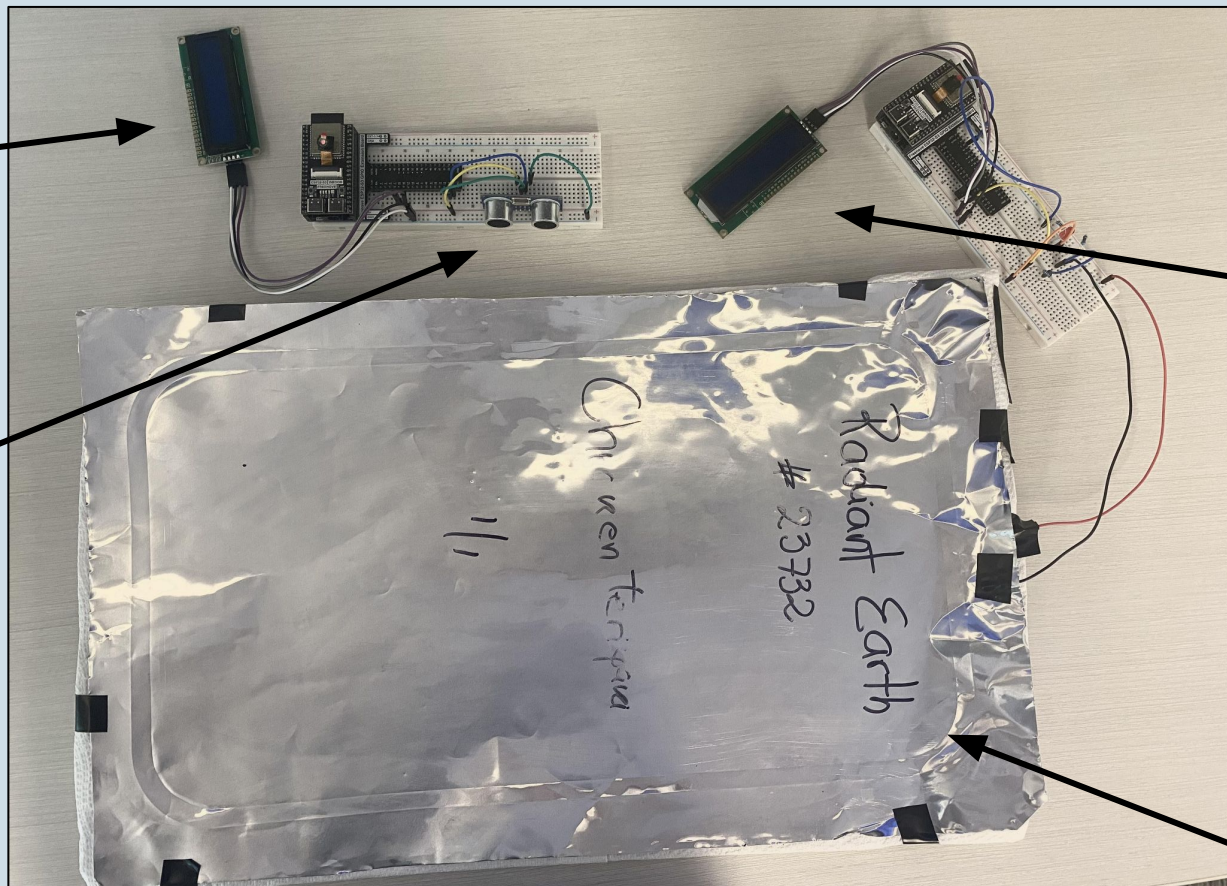
Engineering



Technology
tailored
to
community
needs

Display Screen:
displays a
warning to
pedestrian

**Motion
Sensor:**
Detects
E-biker and
calculates
their speed



Display Screen:
Alerts E-biker of
pedestrian

Weight Sensor:
Detects
Pedestrian



Thanks to all our
mentors



Thank you! Any questions?



Thanks to all
our mentors