

Leveraging Technology to Assist People with Hearing Loss Navigate the City

Queens, New York City, Grover Cleveland High School

12th Grade Digital App Class, NAF Academy of Information and Technology



ISSUE

Despite innovative advances in technology, people with hearing loss experience challenges with every day issues such as health, communication, and safety when it comes to navigating the city. Students at Grover Cleveland High School partnered with the Center for Hearing and Communication and engaged in an intensive workshop on hearing loss to lay the foundation for the creation of innovative open-source apps “to generate real life solutions to some very every day issues that people with hearing loss have in navigating New York City and life in general.” Students mapped the city, conducted interviews and community research, and created a range of innovative open source Android Apps designed to improve the quality of life for New Yorkers with hearing loss.



QUESTION

How can technology be used to assist New Yorkers with hearing loss navigate the city?

COMMUNITY OF PRACTICE: OUR Y-PLAN TEAM

Y-PLAN Instructor: Andrew Woodbridge

Students: 12th grade digital app class, NAF Academy of Information and Technology

Client: Center for Hearing + Communication

Civic Partner: Assemblywoman Cathy Nolan

YOUTH DRIVEN DATA AND INSIGHTS

- School-based technology classes offer an unrecognized asset to New York City Residents with special needs
- Hearing impaired residents of New York City need greater resources and technology to navigate their surroundings and the City

“Let’s put it this way – it’s pretty much all about communication skills. When you have partnerships and projects, and you need it done in a certain deadline, you need to talk more to get it done. We really had to cooperate with each other, in partners. We actually took time out of school, at lunch, and we talked on the phone trying to figure it out. It takes a lot of time, and it’s a long process, but at the end you’re helping somebody so you good about yourself.”
– Y-PLAN Student, Grover Cleveland

RECOMMENDATIONS

Six Android apps were developed to address a variety of needs that people who are deaf and hard of hearing face on a daily basis.

- A resource that instantly identifies where an individual can find audiology services in their local area, including hearing testing and hearing aid fitting and repair
- Monitoring device that signals to a parent who is deaf or hard of hearing when children in the back of the car get too loud
- A device with multiple stop watches and alert features to help people with hearing loss better function in a multitasking world
- A virtual leash alerting a parent with hearing loss that their child is about to stray too far
- A library of spoken phrases that can be played in different situations to communicate commonly used statements or questions
- An alert that is sent to a caregiver to let them know that an older person has fallen

“This is just a beginning. It’s really a pleasure to see the engagement and the interest. I’ve seen so much growth around what students know and understand about hearing loss and helping people with disabilities. A lot of the perception, for older people – is that young people are apathetic, and not interested, and this is the opposite. This experience really disproves that point and it’s not true. It’s just a pleasure to watch.”

– Client, Center for Hearing + Communication

NEXT STEPS: FOLLOW-UP + FOLLOW-THROUGH

Students made presentations to an audience of CHC healthcare professionals, and a panel of consumers. After presentations, students worked to incorporate feedback from CHC and the panel. Once refined, they will be made available for free to the public at Google Play.



For more information on Y-PLAN, contact Jessie Stewart, Y-PLAN National Coordinator: jessie.stewart@berkeley.edu