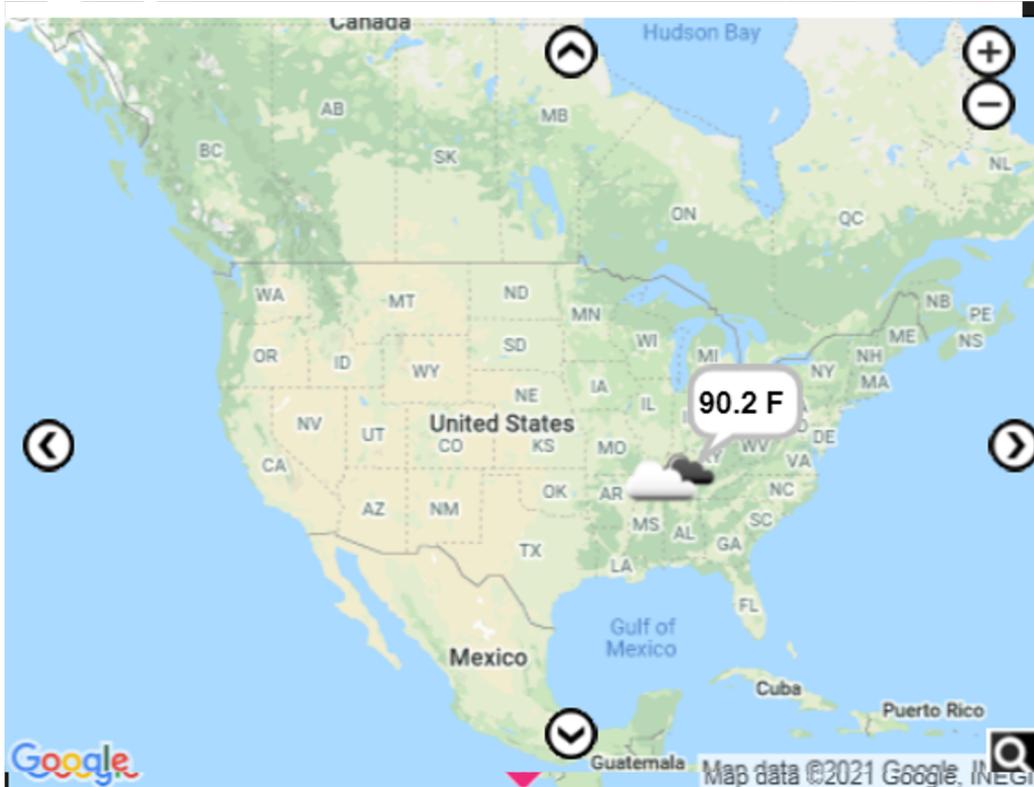# Phone as a Sensor:NetsBlo x

Akaash Seemakurty

What is NetsBlox?

- Visual programming environment that allows users to communicate with each other as well as the NetsBlox server
- Utilizes the internet for scientific and other data sources to create projects
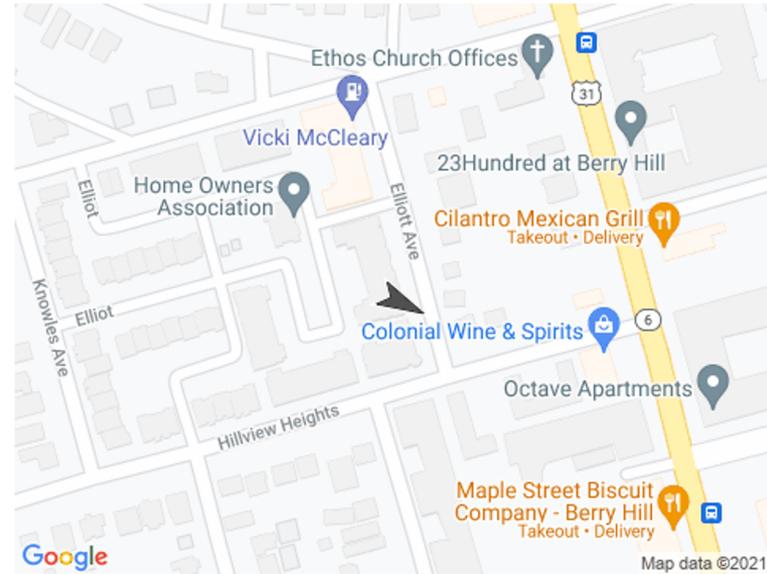
Student Applications

- Examples of student projects that can be created

My Role

- Utilizing the phone sensors to
  - Count steps
  - Calculate the distance between two locations
  - Getting the number of stories in a building
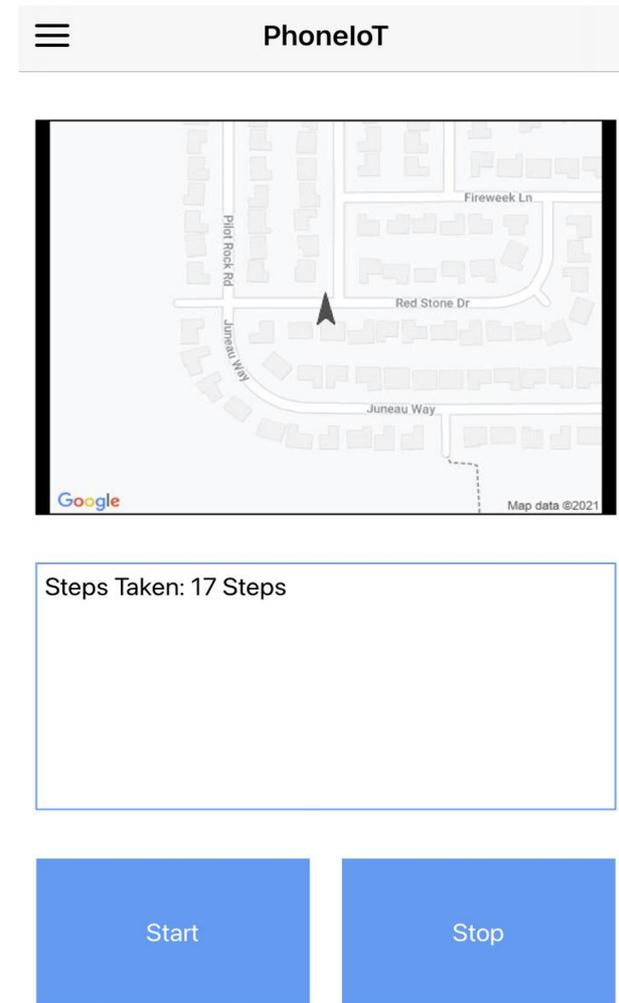- Combining all above to create a fitness app

Fitness Application

- Application can return the number of steps taken
- The user can start and stop your walk from a given

location.

- Very user-friendly

Project 2: FBI Crime Data

- FBI Crime database contains a variety of "real-life" data that can be used by students.

FBI Crime Data Display

- Call block can display the results into a table of data
- User-friendly:
  - Dropdown arrows are given to show options
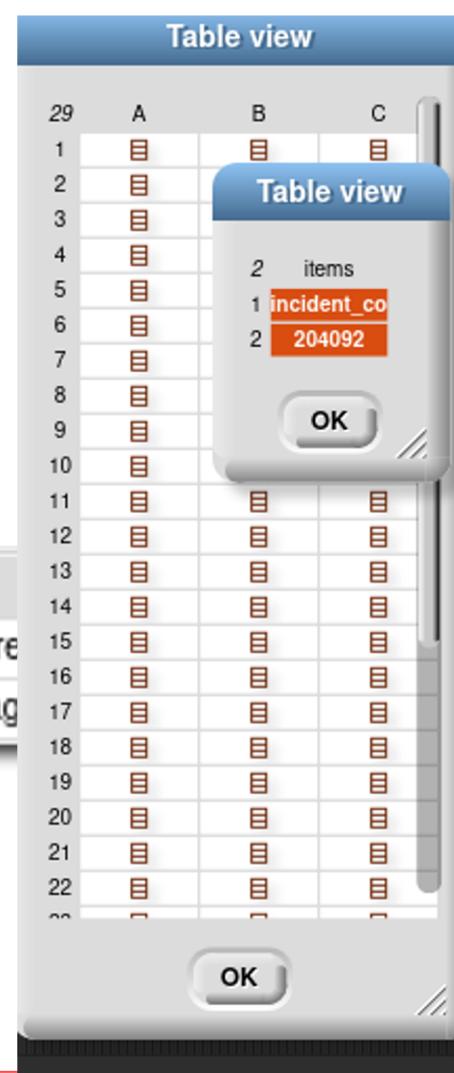
Error Messages

- User-Friendly:
  - Students may at times write incorrect information, so personalized error messages have been programmed.

"startYear" is not valid. Number must be between 1985 and 2019

Possible Student Projects?

- Create charts to show relationships between data
- Graph creation for each state to display information

Outdated data?

- The RPC utilizes the FBI database API to get updated data

Future Possible Applications to FBI Crime Database

- FBI Crime Database
  - Access to other collection databases: police employment data, offender data, and more statistics

Conclusion

What went well:

- Gaining skills in Javascript & backend development
- Learned applications in developing an educational software and progression of the fitness application
- Managing time well

Challenges:

- Methods of NetsBlox

Lessons Learned:

- Don't be afraid to ask for help

Special Thanks!

- **Professor Akos**
  - For introducing me to this project, and giving me helpful advice and tips
- **Devin Jean**
  - For responding to me for the countless amount of times I have asked for help.
  - Directing me in completing these projects.