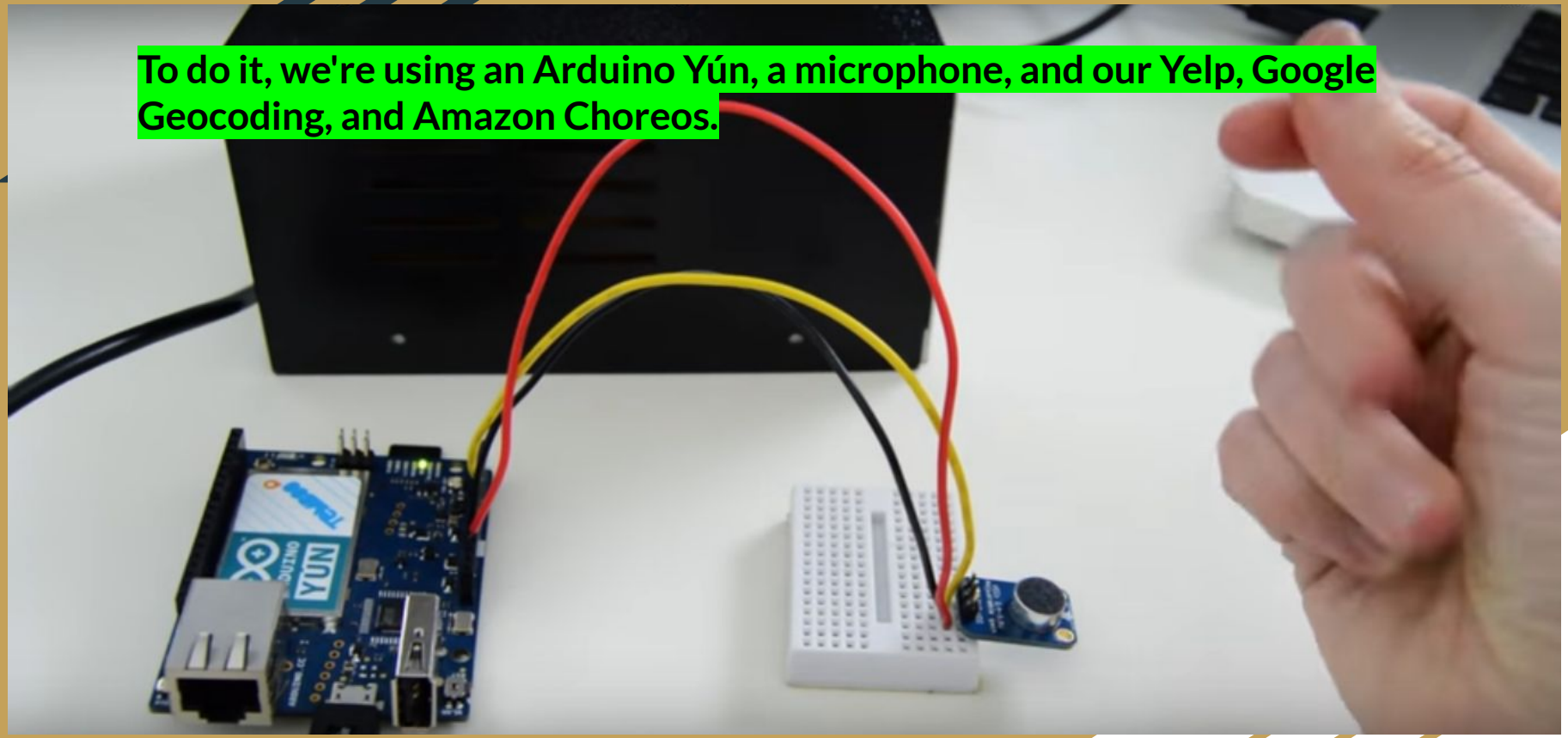
Urban Noise Monitoring and the Internet of Things

Noise pollution is just the sort of problem that smart city networks, like those being created in Chicago, Barcelona, and Amsterdam, are designed to help solve—sensor data gathered at a **city-wide scale** can help urban planners to understand how public spaces are being used and to make informed decisions about how to improve them. We've built a simple noise sensor using an Arduino Yún and an accompanying web app using our Yelp, Amazon, and Google Geocoding Choreos to do the job. Once the sensors are distributed throughout a city, you can click on a map in the app to get the noise level reading from the nearest sensor, and also see how noise compares to the number of **restaurants and bars** in the area.



Arduino Yun

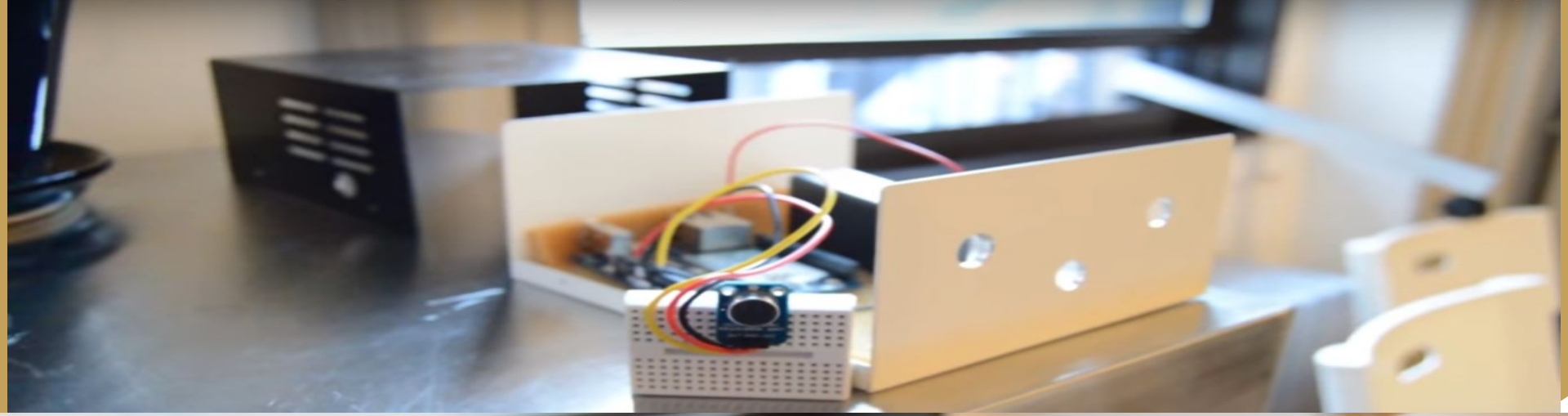
a sensor_One Mic Amp

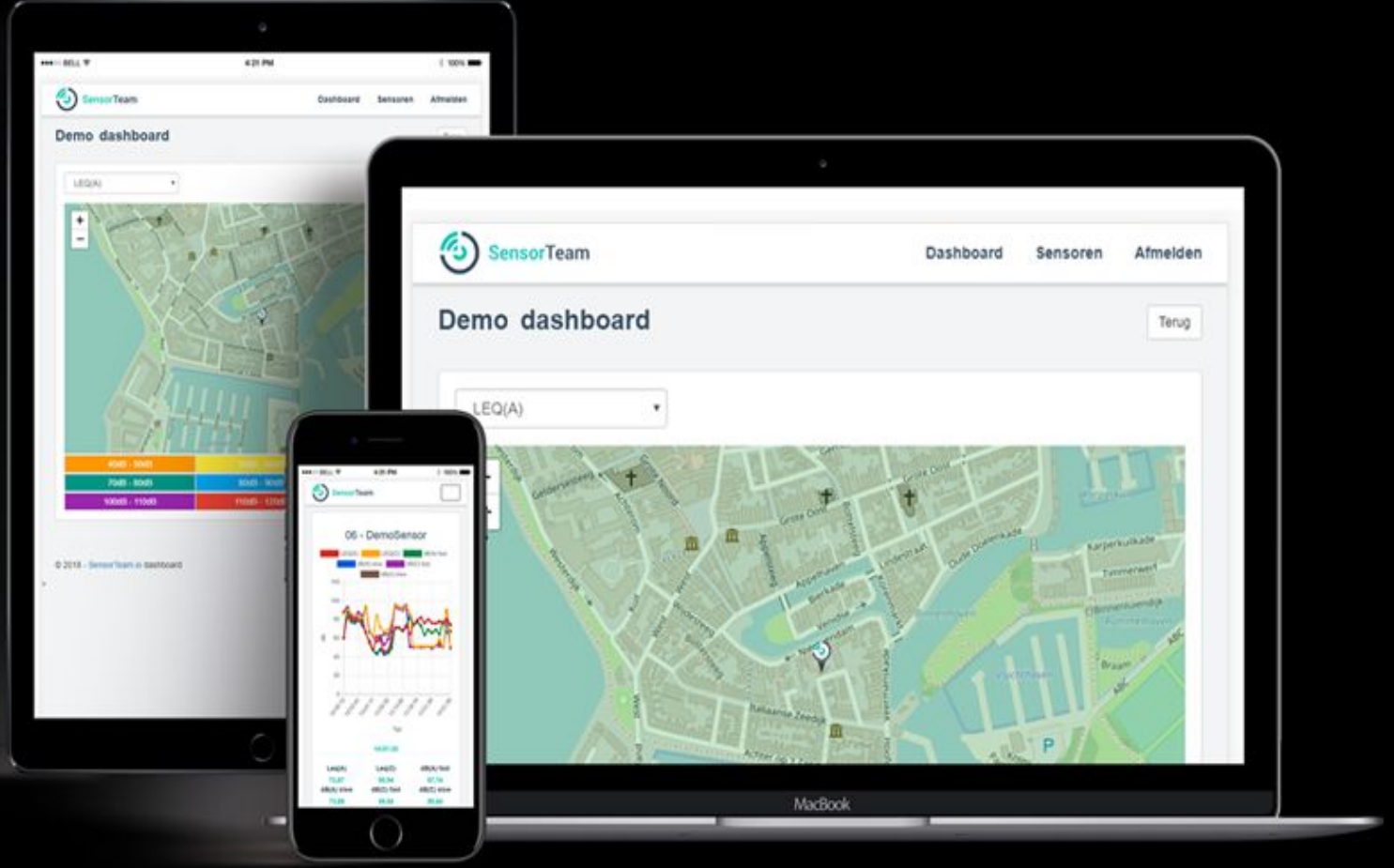
First, we're building a web app that allows users to click on a map to find the closest sensor to the point clicked. We've done this using our Google Geocoding GeocodeByCoordinates Choreo; you can generate code for it here: https://temboo.com/library/Library/Google/Geocoding/GeocodeByCoordinates/

Noise levels from the Yún are collected and stored in an Amazon SQS queue, from which they are passed to the app when requested. The code for our Amazon SQS SendMessage Choreo can be generated here: https://temboo.com/library/Library/Am…

And the code for our Amazon SQS ReceiveMessage Choreo can be generated here: https://temboo.com/library/Library/Am...

The app will then search Yelp with our Yelp SearchByAddress Choreo to find out how many restaurants and bars are in a specified radius of the point that is clicked. Code for that Choreo can be generated here: https://temboo.com/library/Library/Ye...




SensorTeam
Dashboard
Sensoren
Afmelden
Demo dashboard
Terug
LEQ(A)
06 - DemoSensor
MacBook

CitySounds

Modules API About Contact

11211
74 Havemeyer St.
Brooklyn, New York

Current Level:

65 db

Commercial Venues:
200 meter radius

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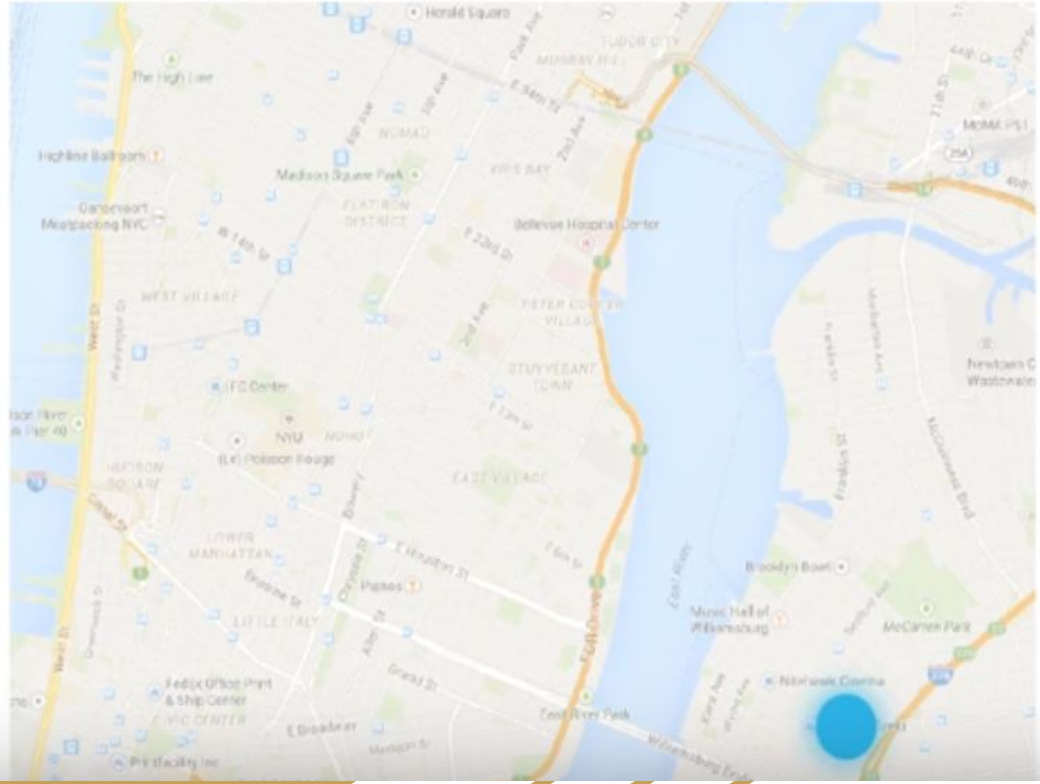

Web Aplication::

Video tutorials and IoT interviews from Temboo

https://temboo.com/videos#deconstructing-iot