

IoT Escape Room Workshop

Chattanooga Public Library // March 8th & 9th, 2018 // CC-BY moz://a

Welcome to Day 1!

Thank you so much for joining us for this IoT Escape Room workshop!



Hi! We're Mozilla.

Hi. We're Mozilla, the proudly non-profit champions of the Internet, helping to keep it healthy, open and accessible to all.



Hi! We're Mozilla.

We connect and support leaders of the Internet health movement who work on these core issues:

- Open Innovation
- Digital Inclusion
- Decentralization
- Privacy & Security
- Web Literacy



What is the Gigabit Community Fund?

The Mozilla Gigabit Community Fund provides grant funding in select U.S. communities to support pilot tests of gigabit technologies such as virtual reality, 4K video, artificial intelligence, and their related curricula. In so doing, our goal is to increase participation in technology innovation in support of a healthy Internet where all people are empowered, safe, and independent online.

learning.mozilla.org/en-US/gigabit



Introductions

- What's your name?
- What do you do?
- What brings you here?
- For example: *Hi, I'm Chad. I work on open leadership resources for the Mozilla Foundation. I'm here to test out this workshop.*

Community Participation Guidelines

The Community Participation Guidelines help us create a friendly, safe space for our shared work. They include expected behaviors and unacceptable behaviors. They include all the spaces we might share during this event and all the dimensions of diversity we hold here together.

Expected behaviors

- Be respectful.
- Be direct, but professional.
- Appreciate and accommodate our similarities and differences.
- Lead by example.

Unacceptable behaviors

- Violence or threats of violence.
- Personal attacks.
- Unwelcome sexual attention or physical contact.
- Disruptive behavior.
- Derogatory language.
- Influencing unacceptable behavior.

Community Participation Guidelines

Katie Hendrix and Chad Sansing are the safety officers for this event.

You can also report incidents to inclusion@mozilla.com.

Link:

<https://www.mozilla.org/en-US/about/governance/policies/participation/>



Other safety notes & tools

- If you hear jargon, "womp womp."
- Work hard not to interrupt.
- Try the 1/nth rule: speak 1/nth of the time where n = the number of people in your group.
- Try to build up and add on to ideas with "yes and."
- Emergency exits are in the near and far corners.
- Please take breaks and grab refreshments as needed.
- Restrooms are on the 1st and 3rd floors.

Let's build up our shared background knowledge.



How does the Internet work?



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How does the Internet work?

Perform the Net

- Form groups of 4-5 people.
- Brainstorm different ways to show how the Internet works.
- Think about how to use your materials and space.
- Spread out and move around as much as you'd like.
- Share performances or models with the group.

How do Gigabit networks work?

“The Power of The Gig”

- ISP's and EPB
- Chattanooga's electric Smart Grid
- How do the fiber optics support Chattanooga's power infrastructure?
- What is LoLa and Internet2?



How do Gigabit networks work?

Sticky Note Art

- Group divided into two groups
- 30 post-its
- Create your masterpiece (5 min)
- Round 1: pass one post-it at a time
- Round 2: pass five post-its at a time

What do we believe about privacy & security?

Spectrogram

- Gather together by the number line.
- Listen to each statement.
- Decide where your response falls on the number line. (1 is disagree; 10 is agree).
- Share our perspectives.

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Break



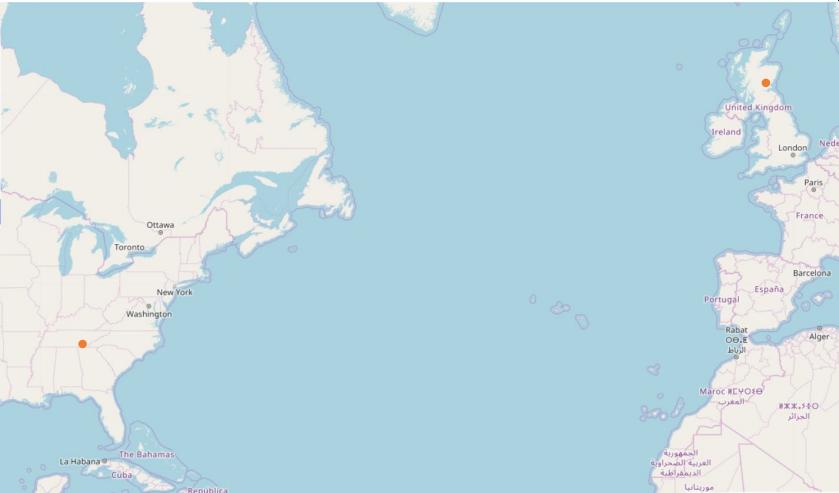
The Internet of Things....

.... an interpretation from Mozilla Open IoT Studio



Who am I?

What is the **Open IoT Studio**?





**A collaboration between Mozilla Foundation & the University of Dundee ...
...which challenge the closed corporate ecosystem of IoT.**



What do we care about?

People & Society

Interactions
Relationships
How people feel

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What is the Internet of Things?



What are connected devices doing?

Sensing

Behaviours

- Patterns in the home
- Turning off/on heating
- Meal times
- Leaving & coming home

Us

- Speech
- Sounds
- Movements
- Faces
- eyes

Environments

- Temperature
- Sounds
- Lighting
- Pressure
- Location

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AT&T 19:41 19% opinion The networker 761

Do you want your shower to help Russian hackers? John Naughton

02:00 GMT+4 Sunday, 23 October 2016

business 13:19 100%

Google Home devices stop responding to Burger King's TV ad prompt

The commercial, which features a man using the phrase 'OK Google', had prompted the devices to wake up, much to users' frustration

Life with connected objects

CloudPets stuffed toys leak details of half a million users

Company's data compromised, leaking information including email addresses, passwords and voice recordings

Hackers can hijack Wi-Fi Hello Barbie to spy on your children

Security researcher warns hackers could steal personal information and turn the microphone of the doll into a surveillance device

Hello Barbie listens to children and uses cloud-based voice recognition technology to understand them and talk back. Photograph: Mattel

Payment shock: bank customers could get zapped for overspending

New technology can link wearable device to bank accounts and give electric shocks to help customers manage their spending

Vibrator maker ordered to pay out C\$4m for tracking users' sexual activity

Canadian manufacturer We-Vibe collected data about temperature and vibration intensity, revealing intimate information without customers' knowledge

The We-Vibe is marketed as a way to 'allow couples to keep their flame ignited - together or apart'. Photograph: Emily Berl for The Guardian

Is it time to ditch the Fitbit?

I have been pushing myself to hit 10,000 steps a day. But a new study shows I have probably been wasting my time

Roomba maker may share maps of users' homes with Google, Amazon or Apple

iRobot's chief executive says company could share or sell maps of robot vacuum users' homes to US tech firms as part of smart home and profit push

iRobot's Roomba robotic vacuum cleaners could soon be sharing the maps of users' homes they make as they clean with Amazon, Apple or Google, among others. Photograph: AP

Google's new Nest Cam is always watching, if you let it into your home

Live-streaming video camera stores up to 30 days of video with audio in the cloud and performs advanced analysis of it

The Nest Cam can livestream video of your home straight to YouTube or be used as a security camera, letting Google into your home. Photograph: Eric Risberg/AP

Does
connecting us actually mean
monitoring us?



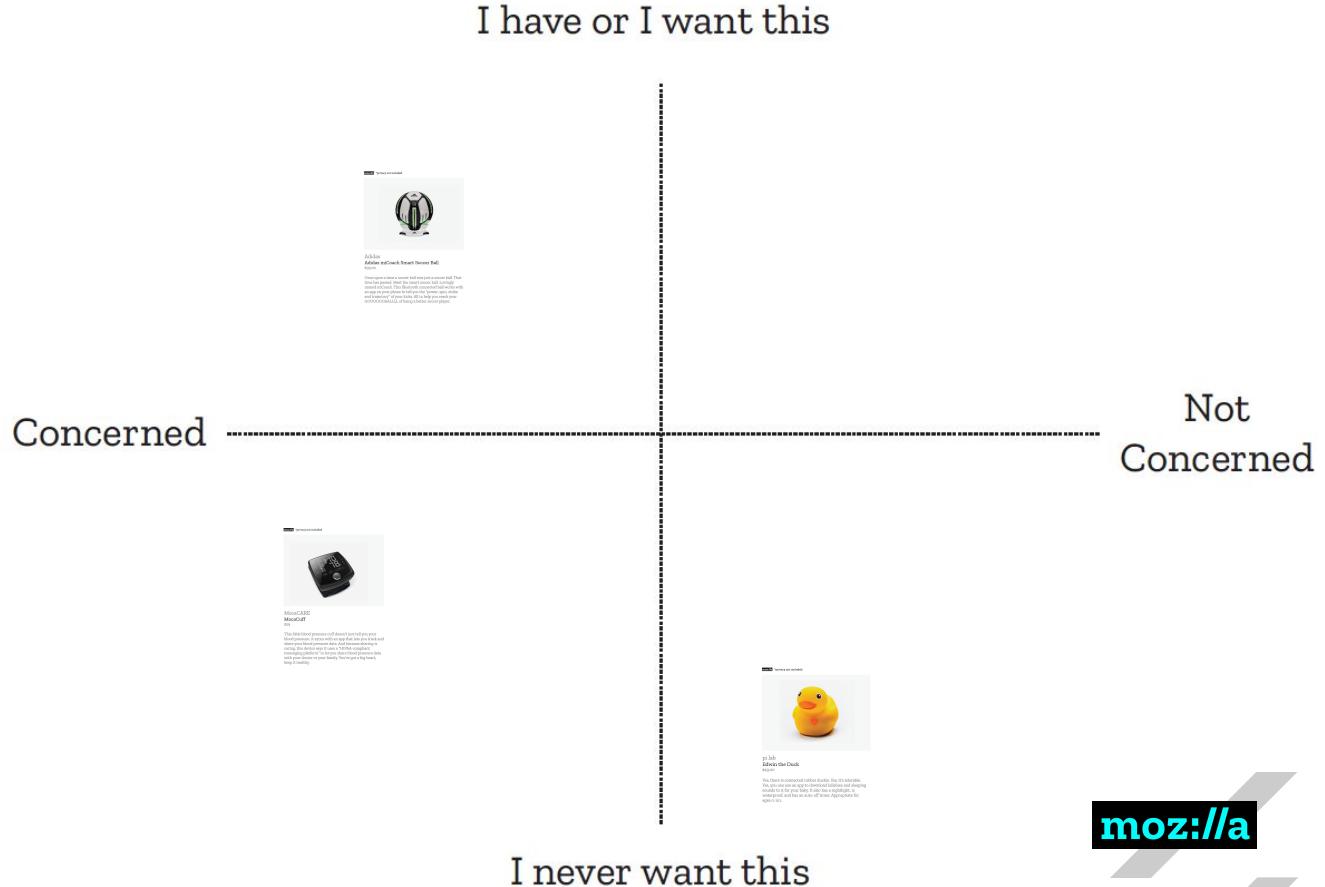
A Guide to Make Shopping for Connected Gifts
Safer, Easier, and Way More Fun

Toys, duckies, dolls & more

BROWSE TOYS



Mapping how you feel about different connected devices?

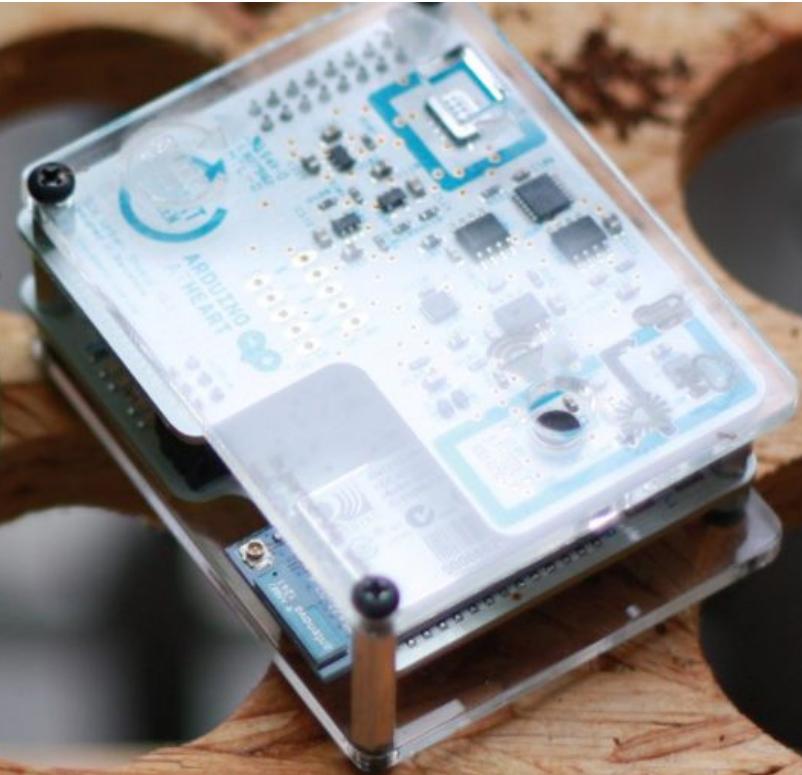


Smart Citizen Kit

Urban monitoring

ENVIRONMENTAL DATA

GET YOUR SMART CITIZEN KIT

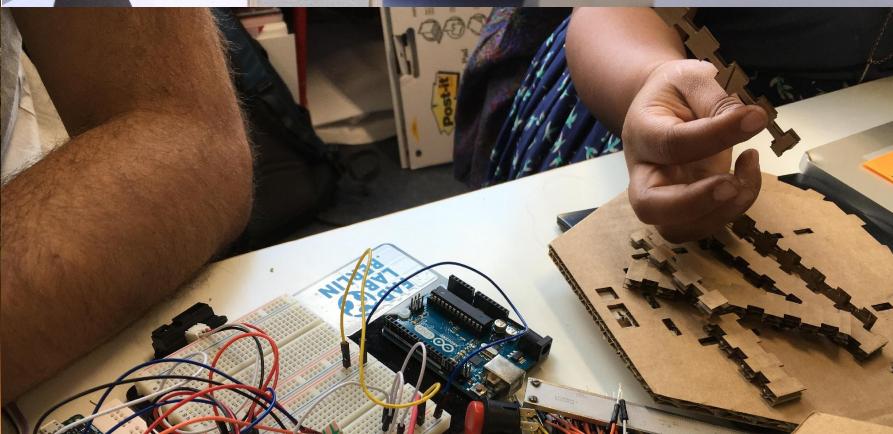
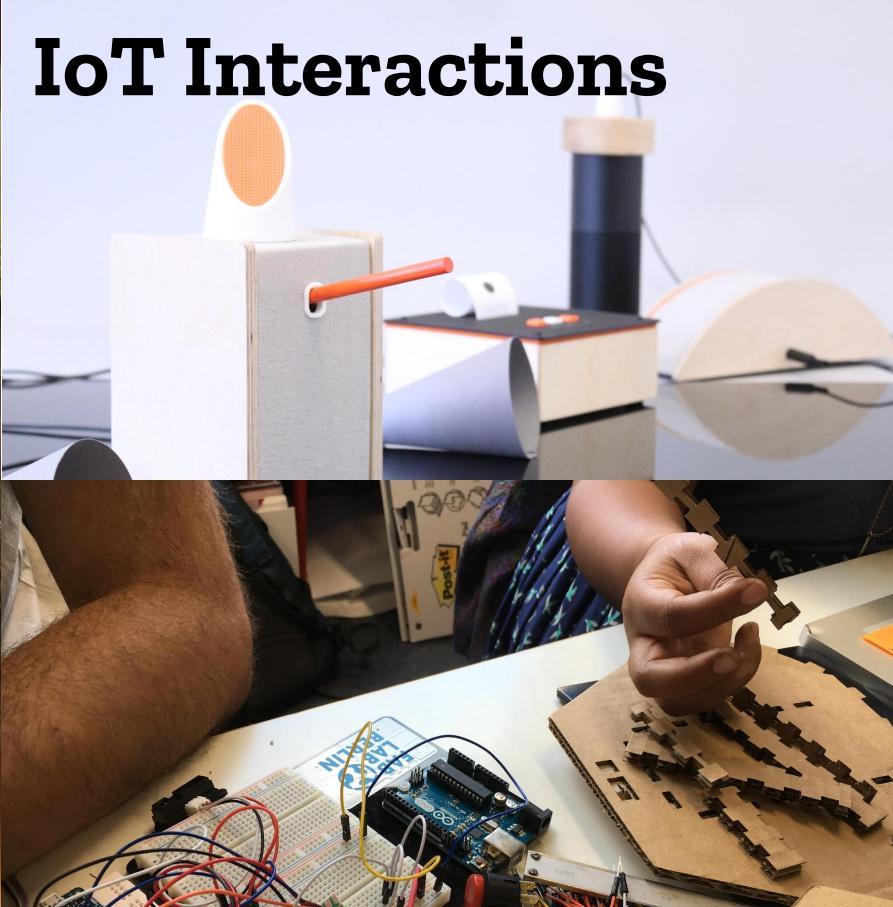


ARDUINO
ATHEART



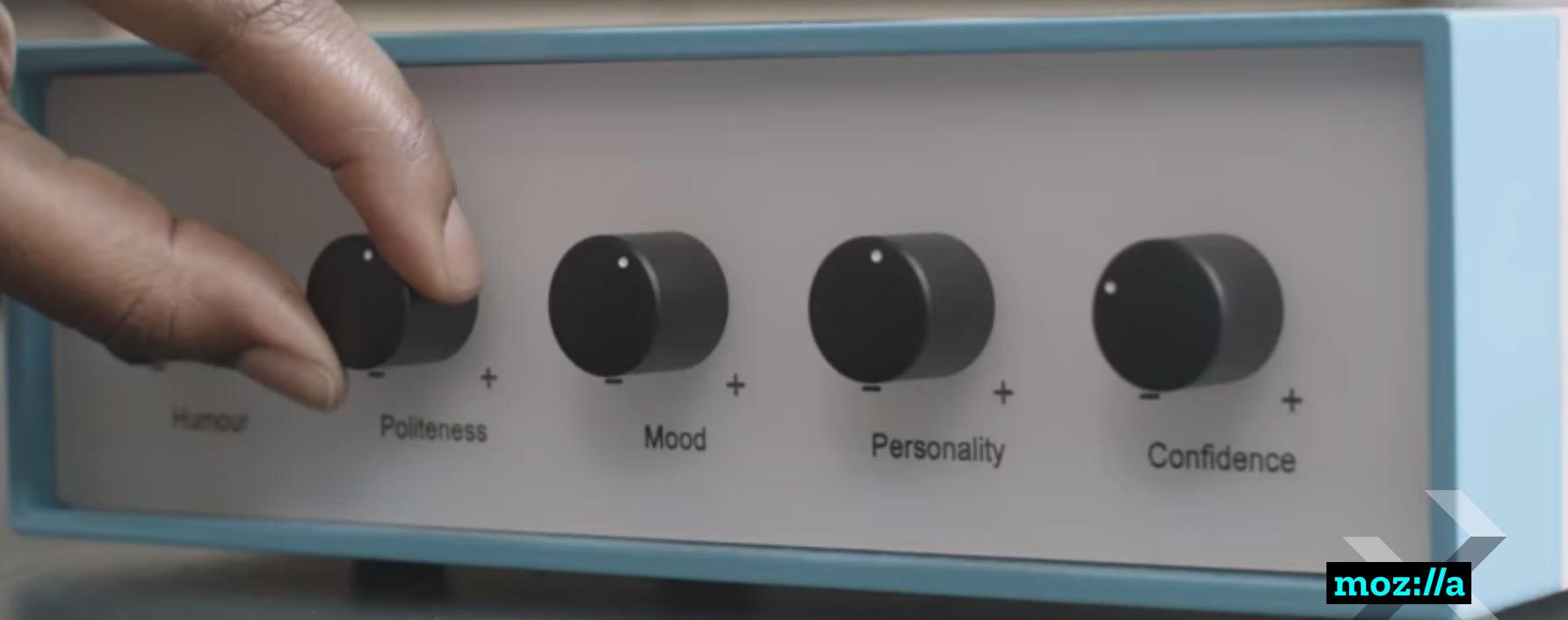
Prototyping

IoT Interactions

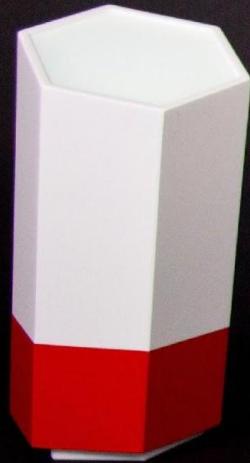


... exploring possible interactions

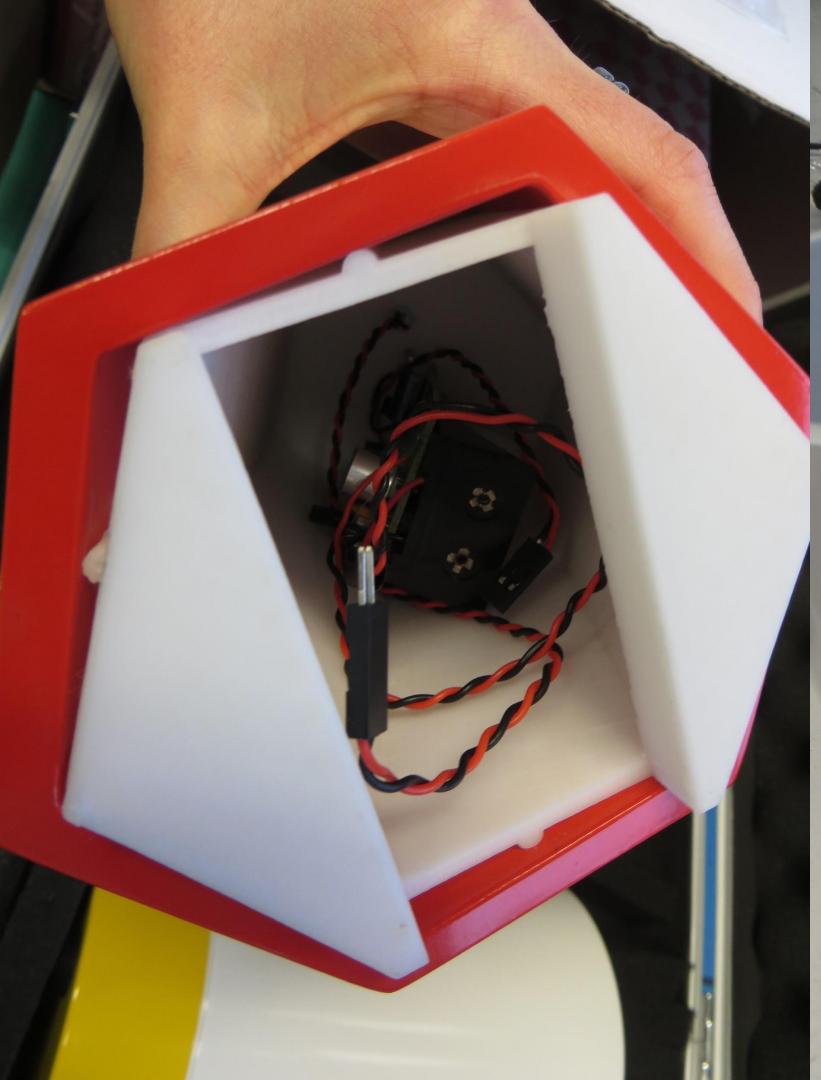
Our Friends Electric



Simple Tech can be used to tell powerful stories



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**Simple Tech can be used to tell
powerful stories**



Tactics to disrupt Tech



First (given) name:

Middle initial:

Last name (surname):

Sex: Female Male

Date of birth: Month Day Year

Email address:

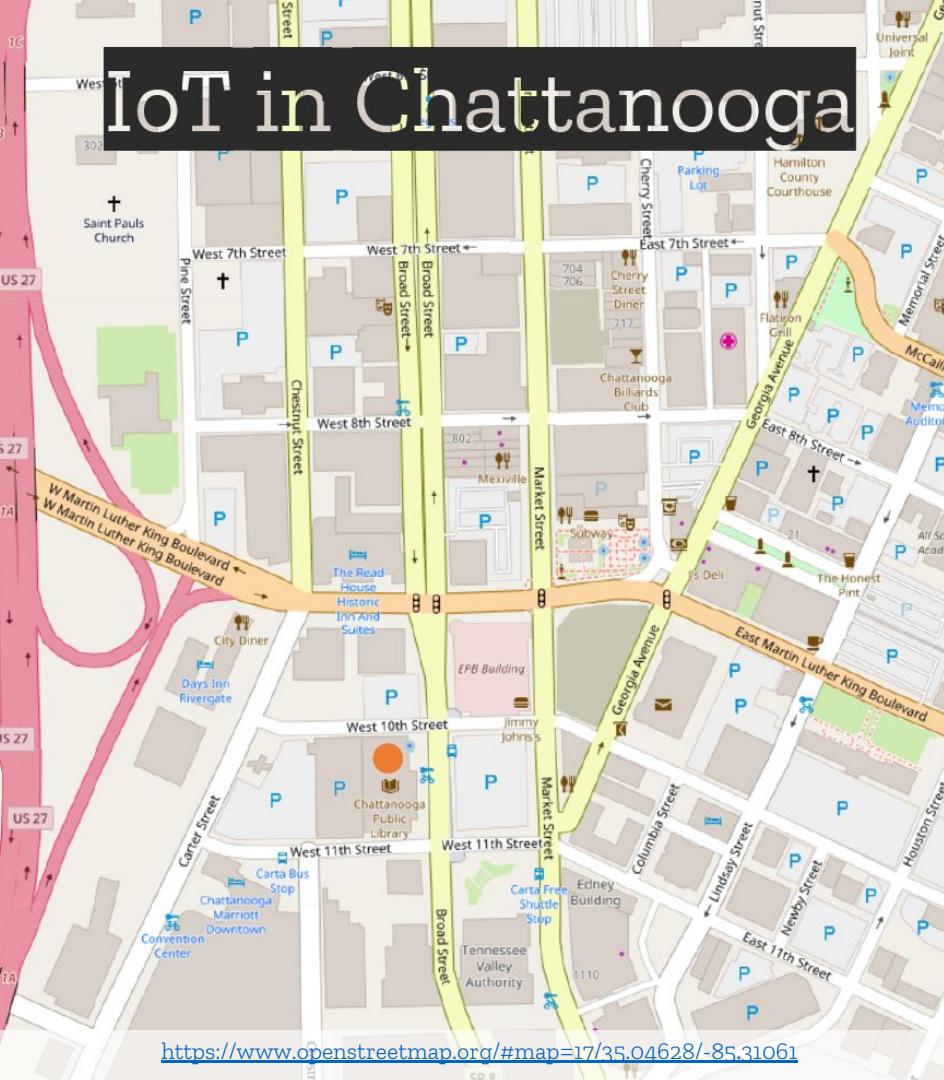
Confirm email address:

ZIP/Postal code:
 Outside the U.S.

<https://cvdazzle.com>

/

IoT in Chattanooga



On the walk consider

What is connected?

What could be connected?

Where do you escape in the city?

What makes you feel connected?

Where would you share your feelings?

Do you ever feel that a machine is watching you? If you do, is it watching over you or spying on you?

Have you ever felt that a machine is listening in to a conversation?

Or do you feel free to talk everywhere? Are there any places where machines might make you act differently?

If you needed a pee... would you feel safe doing that!
Or wonder whether it would appear on youtube a few days later...

Lunch



What is design and how does it work?

Design is a process of researching users' needs and iteratively testing solutions to address them.

We'll practice with a design deck and canvas that will help us propose specific IoT solutions to specific user need

This will help us prepare for our challenge later!

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The design deck & canvas

Each deck will help us combine a problem, a technology, and a user (or persona) into a design challenge.

Each canvas will help us document our ideas about how to help our users, or personas.

Let's see an example.



The design deck & canvas

We'll take about 20 minutes to practice and share our design work and questions about it.

- Form groups of 3-4 people.
- Pick a scenario, technology, and persona.
- Combine those cards into a solution.
- Share and discuss your favorite scenarios and solutions with the group.

The IoT Escape Room challenge

Our task: Create a fun, social, collaborative way to teach our local community members about connected devices and the Internet of Things with the kinds of puzzles, stories, and discoveries they might find in an escape room.

What is an escape room?

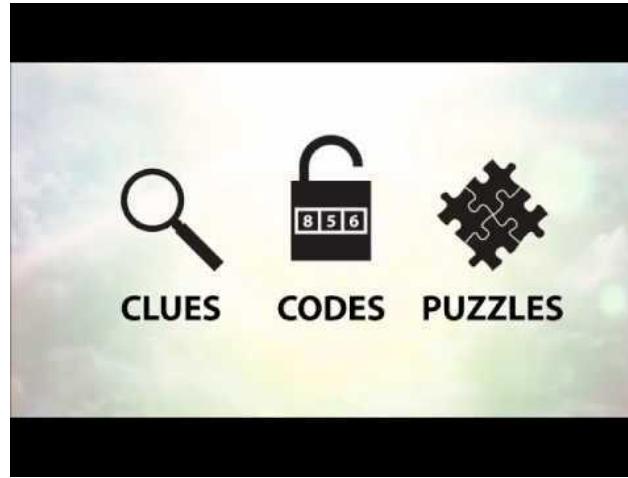
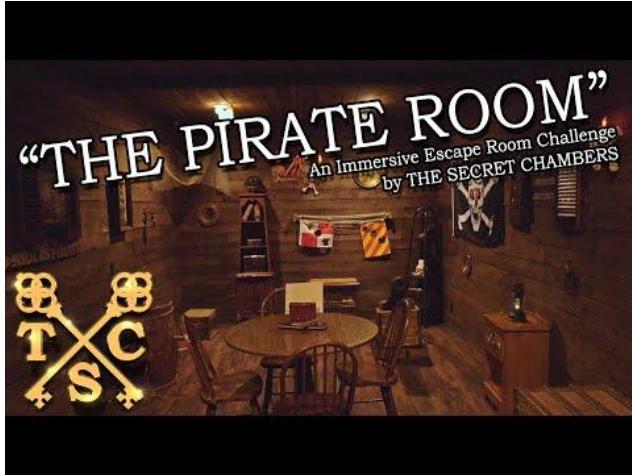
- A social, collaborative game.
- A room full of related puzzles and clues.
- A time based challenge.



What makes for a good escape room?

- A great story.
- A consistent theme.
- Logical puzzles.
- Lots of small achievements.
- A manageable group size.
- A 45- to 60-minute experience.
- A high win percentage (60-70%).

Let's consider an example or two.



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Let's decide on a theme or setting.

We'll use a collaborative process to set up some boundaries to help us prototype our escape room.

- Silent brainstorming on sticky notes.
- Grouping ideas.
- Dot voting for a theme or setting.

Let's get to work in comfortable ways.

We'll set up table or stations for different kinds of work on our escape room. You can pick one or move between them today and tomorrow.

- Documentation
- Storytelling
- Paper prototyping
- Device prototyping



Table time



Q&A



Logistics & closing

- Doors open at 9:00 tomorrow.
- We'll begin again at 9:30.
- We'll work in table groups through lunch.
- After lunch, we'll assemble our escape room as a set, gallery walk, or other kind of exhibit.
- We'll open our room to the public at 4:00 PM.
- Optional social hour tonight. Self-care first!

Welcome to Day 2!



Welcome back Q&A



Table time



Lunch



Assembling our IoT escape room



Closing, thanks, & ways to stay involved

- GitHub, <https://github.com/chadsansing/iot-escape-room-workshop>
- Global Sprint, <https://mozilla.github.io/global-sprint/>
- Open Leaders program, <https://mozilla.github.io/leadership-training/>
- Open Leadership Map, <https://mozilla.github.io/olm-whitepaper/>
- Gig/Chattanooga, [https://twitter.com/Hive CHA](https://twitter.com/Hive_CHA)
- Open IoT Studio, [https://wiki.mozilla.org/Open IoT](https://wiki.mozilla.org/Open_IoT)

Doors open to the public!

