

Technology



IoT Escape Room
2018

Lock

A mechanism for keeping a door, window, lid, or container fastened, typically operated by a key.



Passcode

A numerical password, typically 4 or 6 digits for gaining access to an electronic device.

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Fingerprint Scanner

*An electronic sensor that senses
fingerprint patterns, typically controls
access to electronic or physical location.*



Retina Scanner

*A sensor that can verify an individuals
identity by comparing a close up
image of blood vessels with one
held on a database.*



Facial Recognition

A method of processing data from a camera that can recognise faces and identify individuals from facial features.



Two-Factor Authentication

A method of identifying a user with a physical possession as well as a digital password, e.g. texting a unique code to a phone.



Encryption

A process of encoding information so that it doesn't make sense unless an authorised person uses a known code to decode the message.



Voice Control

The process of interacting with computers or digital services with verbal commands.



Speaker Recognition

The process of a computer identifying a specific individual from their voice.



Light Emitting Diode

A light emitting diode (LED) is a silicon chip that emits light when electricity passes through it - like a digital bulb.



Motor

Components that convert electric signals into kinetic energy.



Biometrics

Metrics related to human characteristics; form of identification or access.



Switch

A component for making or breaking a circuit to switch on or off.



RFID Reader

Radio Frequency Identification (RFID) reader; radio waves capture information stored on a tag of an object.



Chatbots

Computers programmes created to have conversations through text or verbal outputs.



Text Recognition

A method of processing data from written or typed information so that a computer can identify words and meaning.



Baby Monitor

A device with a microphone, transmitter paired with a receiver and speaker to allow a parent to listen to a baby from another location.



GPS sensor

A sensor that communicates with satellites in space to work out if it's moving and where it is on the earth.



Touch Screen

A screen that responds to human touch, for example a phone screen.



Light Sensor

A digital sensor that can convert light levels to a voltage through the process of photoconductivity.



Temperature Sensor

A digital sensor that's resistance changes when the temperature changes.



Connected Microphone

*A device that has a microphone capable
of recording speech and is connected
to the internet.*



Active Listening Microphone

*A device that is actively streaming
audio recording to the Internet, e.g.
Amazon Alexa after the wake word '
Alexa' has been spoken*



Camera

A device capable of taking and saving digital images.



Heart Rate Monitor

A digital sensor that measures and records heart rate by shining light into the skin and the change in reflectance when blood is flowing in between heart beats.



Magnetic Strip Reader

A device that can read the information stored on the magnetic strip of a credit, identification or transport card.



Arduino etc

*Easily programmable circuit boards
that can be used to prototype
interactions and product ideas by
enthusiasts, makers and hackers.*



Raspberry Pi

*A credit card sized computer that can
be easily integrated into ideas and
prototypes.*



Smartphone

A mobile phone that can perform functions of a computer typically with a touchscreen, Internet access and an operating system capable of downloading applications.



Smartwatch

A wristwatch that can perform functions of a computer typically with a touchscreen, Internet access and an operating system capable of downloading applications.



Fitness Tracker

A wearable band or clip usually paired to a phone application via bluetooth which can track and record fitness data e.g. steps, heartbeat and activity levels.



Smart Appliance

A product for your home that connects to the Internet, they can typically be controlled with a smartphone app, for example a washing machine.



Cookie

A tool used by websites to tailor content to specific visitors. A text file is saved to your computer with information so that the next time you visit you can be identified.



Gyroscope

A device used for maintaining orientation & angular velocity.



Accelerometer

A device used for maintaining orientation & angular velocity.



Infrared Communication

A way of sending data from one thing to another with light that can't be detected by the human eye. Most TV remote controls use infrared to send button press signals.



Smart Medical Devices

Medical devices that can perform the functions of a computer, for example a wearable heart rate monitor.



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Scenarios



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You have the last batch of tasty cupcakes from the best baker in town, but you live in a city full of surveillance cameras and other environmental sensors.

Someone wants to use that technology to find you and steal the cupcakes.

How will you escape?



You are a reporter who needs to meet with a protected source. How might you hide their identity in a city full of cameras and other sensors?

How will you keep them safe?



Your school principal is an alien and you have bad grades. How might you break into your school, which is full of cameras and sensors, to find proof about your principal and change your grades?

How will you find proof?



You are about to play in the championship game, but someone on the other team is hacking the city's cameras, sensors, and traffic lights to keep your team bus from arriving.

How might you save your team and arrive on time?



*You have built your own
DIY smart home, but your
neighbor's smart refrigerator
is trying to take over your
house.*

How might you defeat it?



Your tablet, phone, and smart watches are all trying to limit where you go and what you buy because an advertiser paid them to.

How might you convince the devices that you are someone else?



*You are out of town and get a
call from your neighbor.*

*Your smart house is going
bonkers. Lights and music are
turning on and off.*

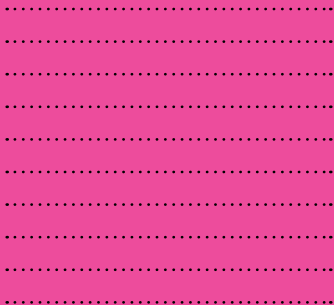
**What other devices might
you have to find out what's
happening and stop it?**

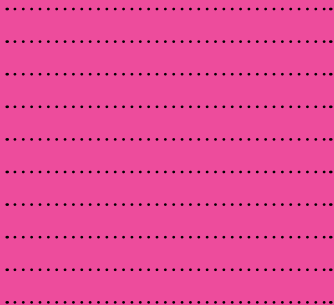


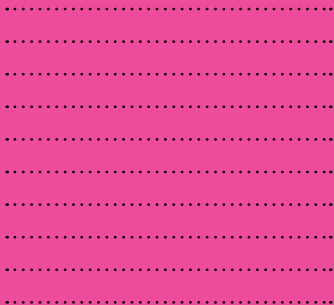
**Your automated vacuum cleaner
is terrorising your pet when
your out of the house, despite
being set to only vacuum when
your home. You suspect another
device in your home is secretly
sending it instructions.**

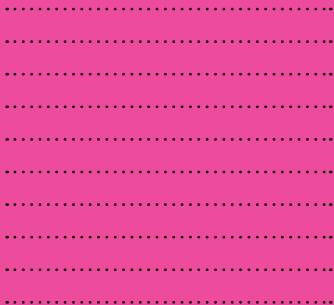
**How might you intervene to
save your pets sanity?**

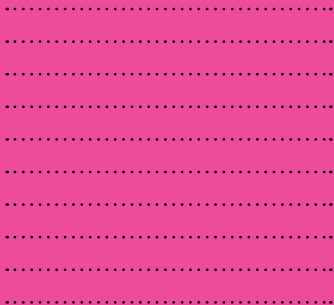


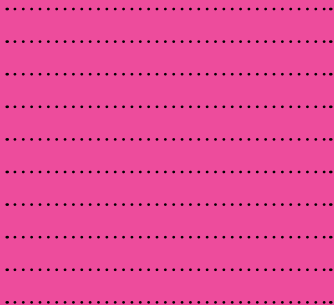












Personas



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Detective



Alien visitor



Train/bus driver



Robot



Intelligent Puppy



Teacher



Activist / Protestor



Politician



Doctor



Blogger / Writer



Celebrity



Journalist



Scrappy adventure kid



Scientist



Computer genius



Computer hater



Veterinarian



Farmer



Soccer Coach



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Thank You



<https://thenounproject.com/>



Yurr



Arthur Shlain



Laura Pozzi



Carin Marzaro



Gregor Cresnar



Iconcraft

*Created by the above designers
from the noun project*



Romzicon



Michele Zamparo



Chance Smith



David Lamm



Arthur Shlain



Arthur Shlain



Becris



Davivongsa Pathrpol

*Created by the above designers
from the noun project*