



**Brunel**  
University  
London



# Cybersecurity Programming with BBC micro: bit

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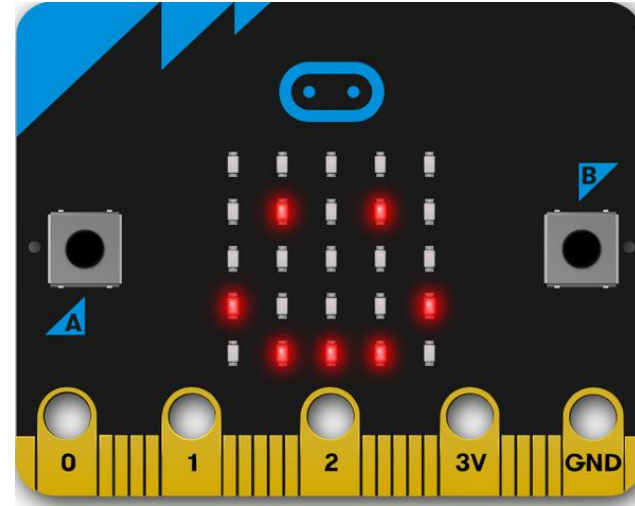
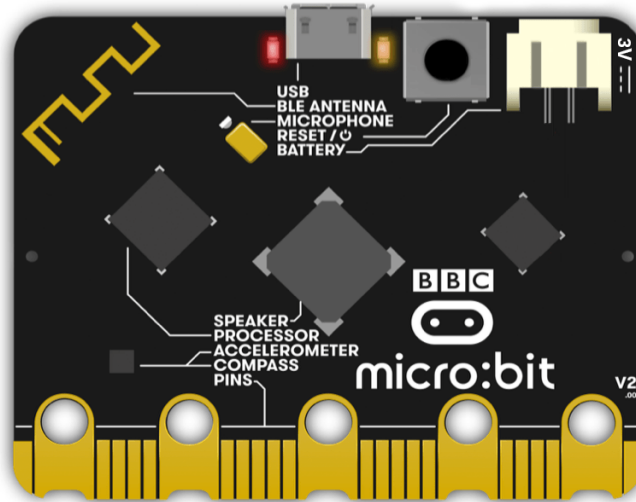
**Innovative  
Inclusive  
Diverse**

# **Beat the Hacker Workshop: Cybersecurity Programming with BBC micro: bit**

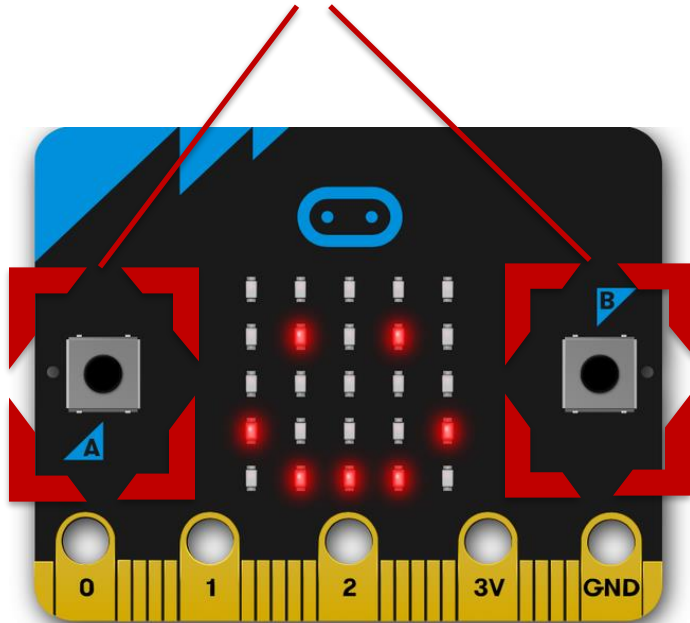
# Hardware Equipment

 micro:bit

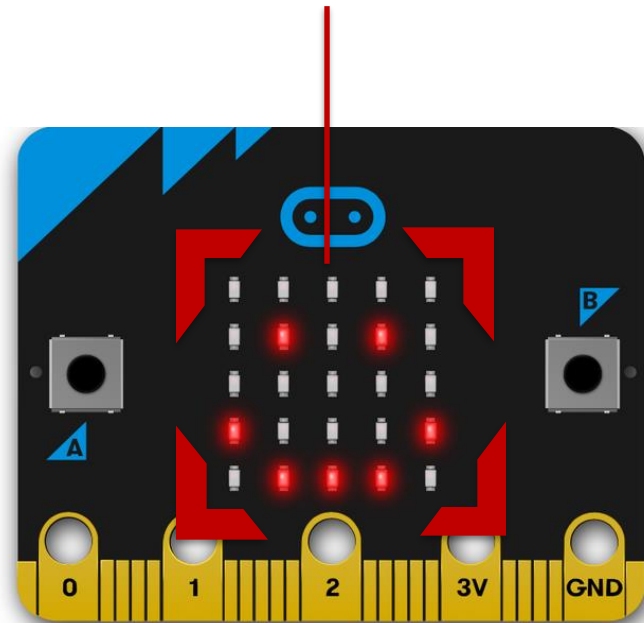
a pocket-sized  
computer that lets  
you be creative  
with digital  
technologies



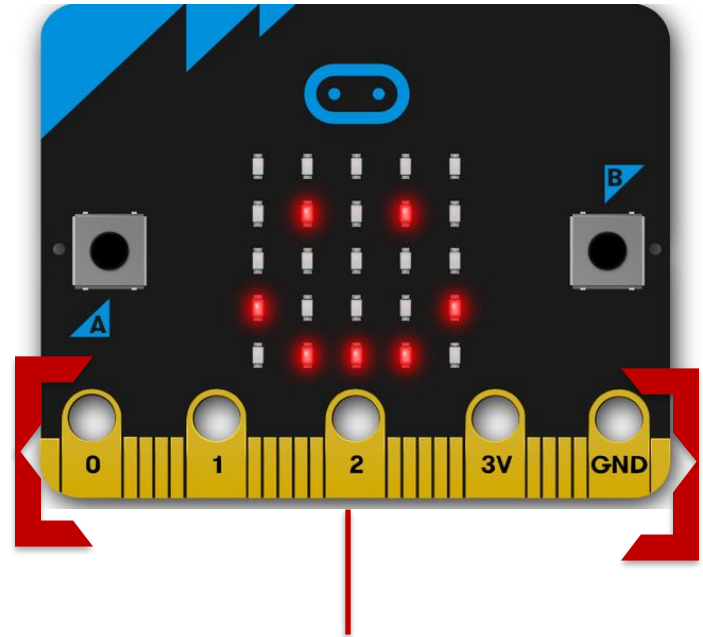
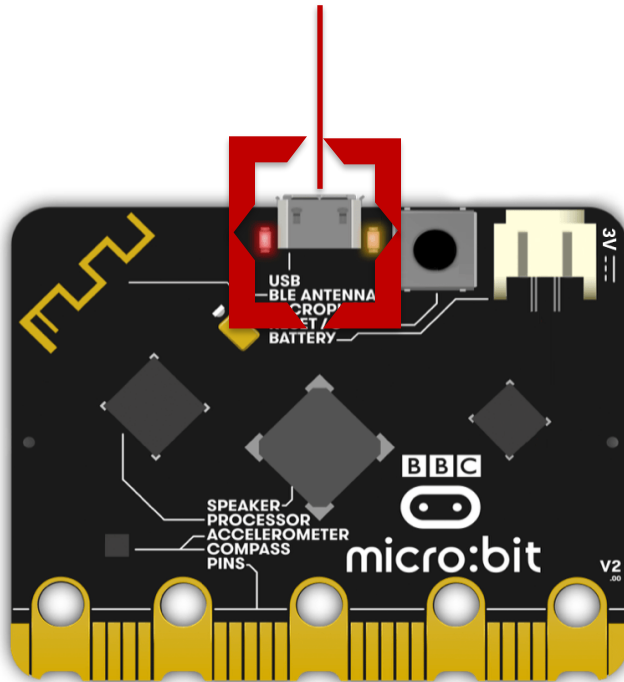
2 programmable buttons



25 LEDs

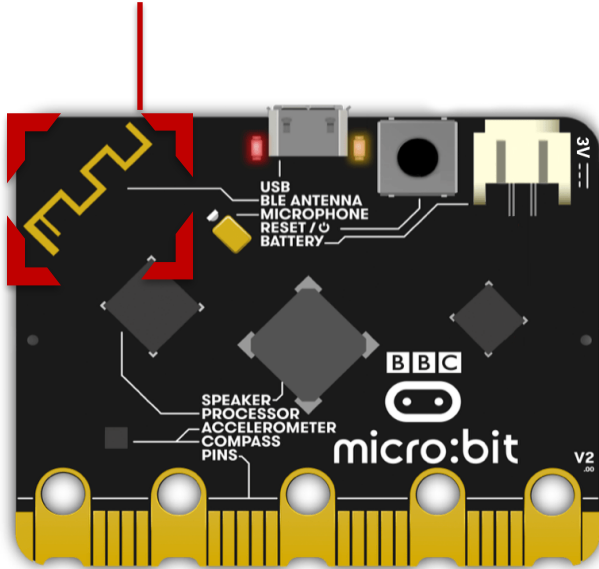


## USB connector

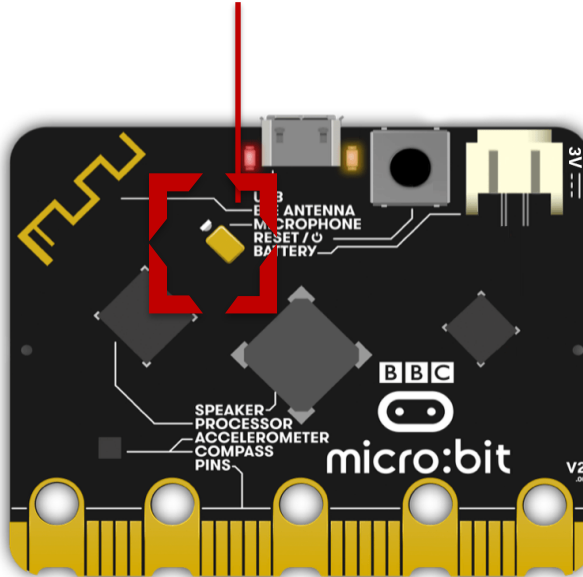


- 20 gold tab edge pins
- 5 ring connectors
- 3 for digital/analogue input/output
- 2 for power

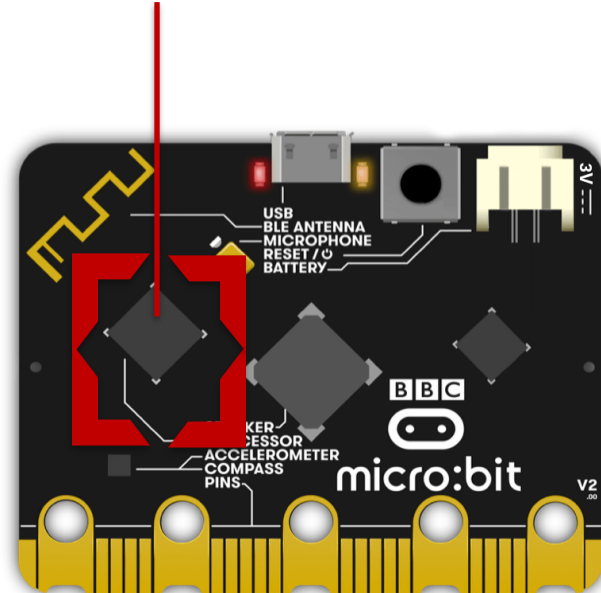
## Radio Antenna



## Microphone



## Processor



# Software

## Microsoft MakeCode

an online learn-to-code platform

<https://makecode.microbit.org/>

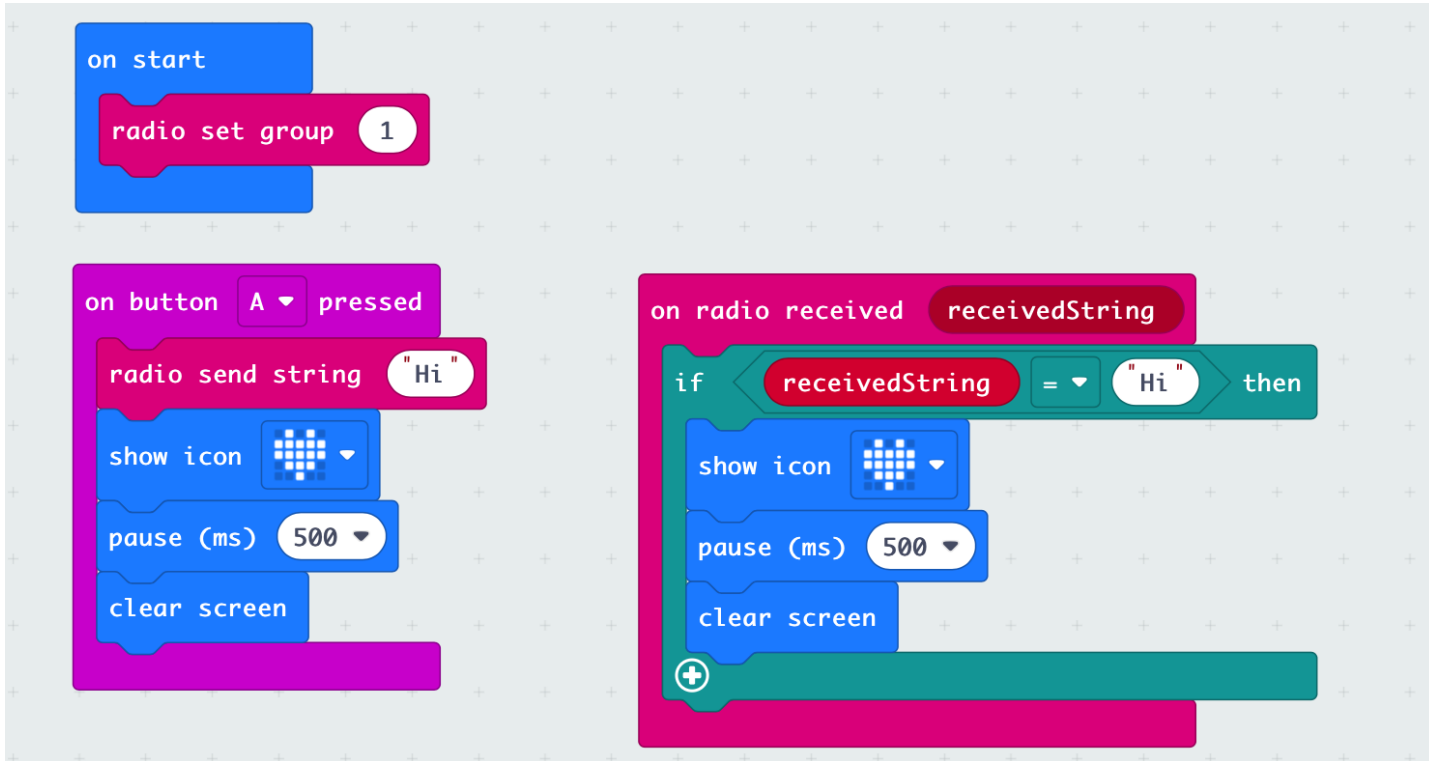
Download



Hour of Code



# Sending messages via radio (micro: bit)





# Beat the Hacker Workshop



Year 2025



Cyber Command is the government agency in-charge of all cyber security matters



Powerful system capable of taking over and shutting down any computerised system



# Beat the Hacker Workshop



John Wick, ex- Cyber Command security researcher



Installed a back door into the Cyber Command system



Triggered a self-destruct script that will activate in 45 mins



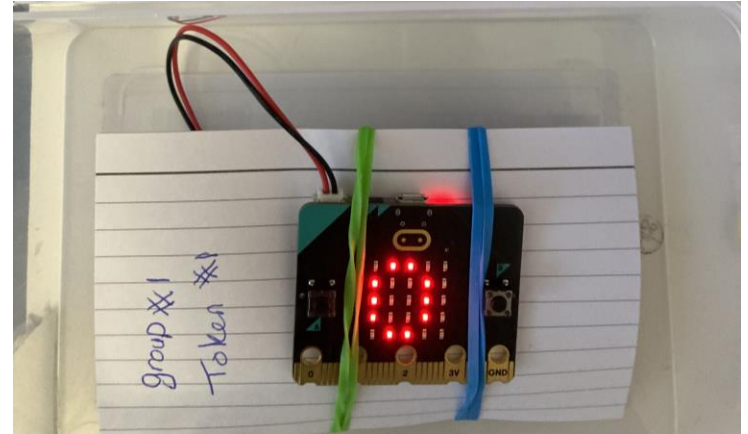
**John Wick**  
(Photo taken after his arrest)

# Beat the Hacker Workshop



Left behind 2 clues

<https://nadineab.github.io/TasterDayCS/c9428>



Token

# Any Questions?