

Physical Computing with Device Simulator Express



# TITLE

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- 02 Devices Supported by DSE
- 03 Prerequisites
- 1 Integration of VSE to VS Code



# What is Device Simulator Express (DSE)?

It is a Microsoft Garage project, allows you to code microcontrollers without the hardware on hand!\*

Test and debug your code on the device simulator and see the same result when you plug in your actual microcontroller.\*

\*https://marketplace.visualstudio.com/items?itemName=mspython.devicesimulatorexpress

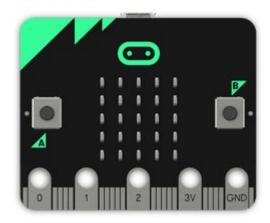
# **Devices Supported by DSE**



Adafruit Circuit Playground Express (CPX)



BBC micro:bit



Adafruit CLUE





# Adafruit Circuit Playground Express (CPX) Simulator

#### Included in the simulator

- Green I FD
- Red LED
- Push Buttons A and B
- Slider Switch
- Speaker: Play .wav file
- 10 NeoPixels
- Light sensor
- Motion sensors
- Acceleration detection
- Device shake detection
- Temperature sensor
- 7 Capacitive Touch sensors

Adafruit Circuit Playground Express (CPX)



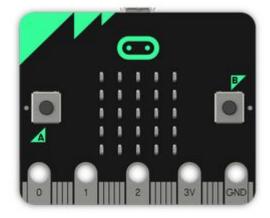
### **BBC** micro:bit Simulator



#### Included in the simulator

- 25 LEDs
- Push Buttons A and B
- Light sensor
- Motion sensors
- Acceleration detection including gesture detection
- Temperature sensor

BBC micro:bit



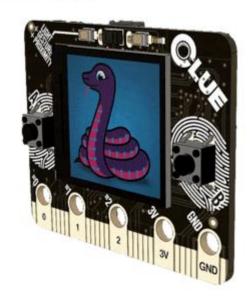
## **Adafruit CLUE Simulator**



#### Included in the simulator

- 25 LEDs
- Push Buttons A and B
- Light sensor
- Motion sensors
- Acceleration detection including gesture detection
- Temperature sensor

#### Adafruit CLUE



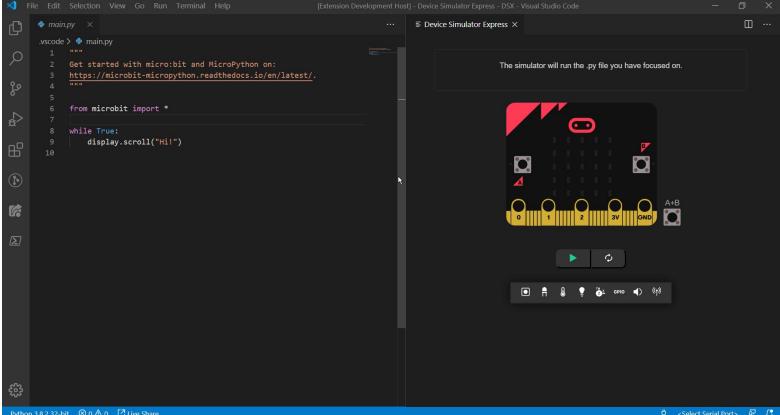
# **Prerequisites**



- Visual Studio Code
- Python 3.7+: Make sure you've added Python and pip to your PATH in your environment variables.
- Python VS Code extension: This will be installed automatically from the marketplace when you install Device Simulator Express.



## **Integration of DSE to Visual Studio** Code





Thank you!



www.passerellesnumeriques.org

#### **TOOL BOX - 1**





**Technical** Training



Selection



Partnership





Graduation



Information





**Employment** 



Job Search





Palm Tree



Idea



Laptop











**Email** 



**Twitter** 



Exclamation



**Arrow** 



Arrow



**Arrow** 



Facebook



Youtube



Website

#### **TOOL BOX - 2**



#### **Sustainable Development Goals**







