

# Technical Requirements



The following slides show the technical requirements you need to run the pathways found on the Code Club website

<https://codeclub.org/en/learn-to-code>



# Pathway: Scratch

- Scratch — online access or downloaded

The pathway can be found [here](#)

Scratch can be accessed [here](#)



# Pathway: Python

- Raspberry Pi Code Editor  
Python pathways are [here](#)  
The code editor can be found  
by following the link on the  
project, or by clicking [here](#)



# Pathway: AI

The AI Pathway can be found [here](#) and is designed so you can mix and match. Please check the requirements of each project before you begin.

- A web browser, such as Google Chrome, Firefox, Safari or Microsoft Edge
- Scratch Lab, which you can find it [here](#)
- Teachable Machine, which can be found [here](#)
- Access to an LLM, such as Google Gemini or ChatGPT — [please read the information here](#) before accessing an LLM
- Adobe Firefly, which can be found [here](#)
- Machine Learning for kids, which is available [here](#)
- Ollama for Raspberry Pi, which is available [here](#)



## Pathway: AI

**In addition, depending on the project you have chosen, you may need:**

- A webcam
- A micro:bit V2
- A micro:bit battery pack and 2 x AAA batteries
- A USB cable
- A Raspberry Pi 4 or 5 with a micro SD card of at least 32GB storage
- An internet connection for the Raspberry Pi

For the Apple vs Tomato project, you will need a **red apple**, a **green apple**, and a **red tomato**.

For the Decision Tree project, you will need to print these dinosaur cards.



# Pathway: Web design

- A web browser such as Google Chrome, Firefox, Safari or Microsoft Edge  
The pathway can be found [here](#)



# Pathway: 3D & CAD

The pathway can be found [here](#)

- Unity Editor — This is a large download and install, so we recommend downloading it in advance. You can follow our [Unity guide](#) to install Unity Hub and the Unity Editor for your operating system. You will also need to download the [Unity starter package of assets](#) before starting.
- A code editor. We recommend [Visual Studio Code](#).





# Pathway: MicroBit

The Micro:Bit pathway is [here](#)

- [Microsoft MakeCode](#) online or downloaded and installed
- A micro:bit V2
- A micro:bit battery pack and 2 x AAA batteries
- USB cable



# Pathway: Physical Computing

The pathways can be found [here](#)

- A Raspberry Pi Pico
- Software installed:

## Thonny

Raspberry Pi Pico firmware (installed via Thonny)  
The Picozero library (available via PyPi in Thonny)  
— install details are found in the first project and  
in our [Raspberry Pi pico guide](#)



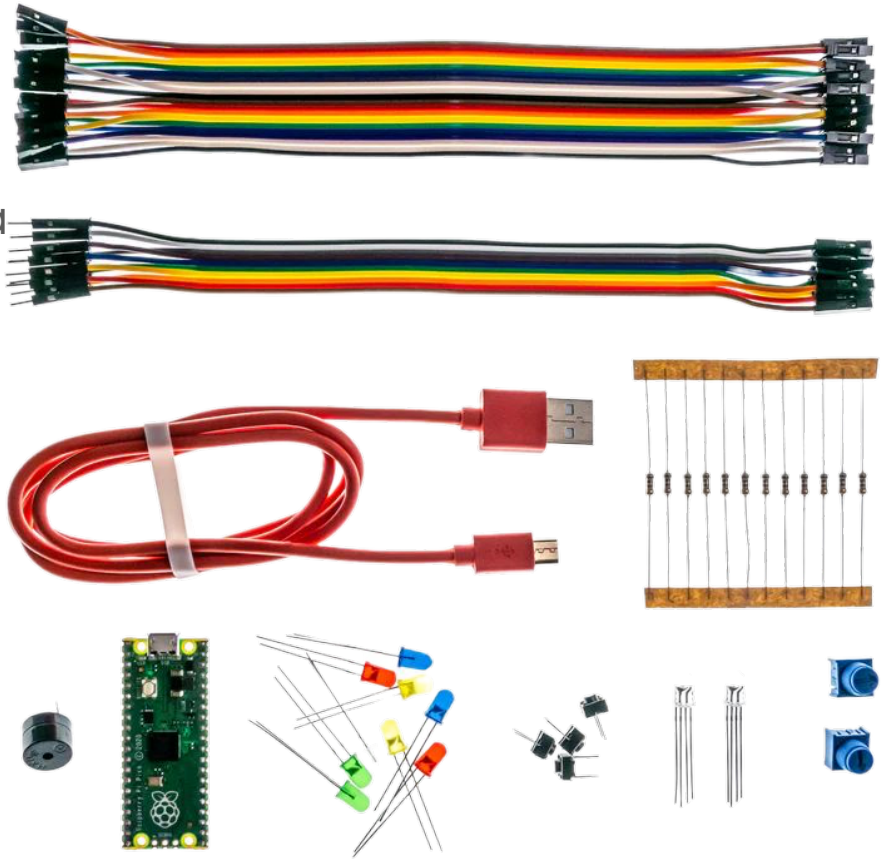
# Pathway: Physical Computing

- Microphone — inbuilt or accessory
- Various wires
- Single-colour LEDs, buzzers, and resistors
- Craft items, including aluminium foil
- USB cable (USB A to microB)
- 5mm LEDs — 2x red, 2x blue, 2x yellow, 2x green, 1x white
- RGB LEDs
- Resistors



# Pathway: Physical Computing

- Piezo transducer (can be used as a buzzer)
- 10k rotary potentiometers
- Push buttons
- Pin-to-socket jumper wires
- Socket-to-socket jumper wires



# Pathway: Raspberry Pi

Pathway can be found [here](#)

- Raspberry Pi computer
- Raspberry Pi power supply
- A microSD card with a capacity of at least 32GB
- [Check your setup here](#) for any additional requirements



# Thank you!

