Primary Teacher Webinar

February 2022

CODING IRELAND

Agenda

1. Introduction
2. Tips for Scratch & Scratch Jr
3. Introduction to Microbits
4. Open teacher chat ☕

Introduction

- Meet once a month online. We will send invites to all teachers on the list.
- Coding Ireland present a new coding/STEM topic each month.
- Open teacher chat at the end to discuss common issues and ideas.
- Help each other to become better at teaching coding & STEM.
- Webinar is being recorded for teachers that can’t make it.

Tips for Scratch & Scratch Jr

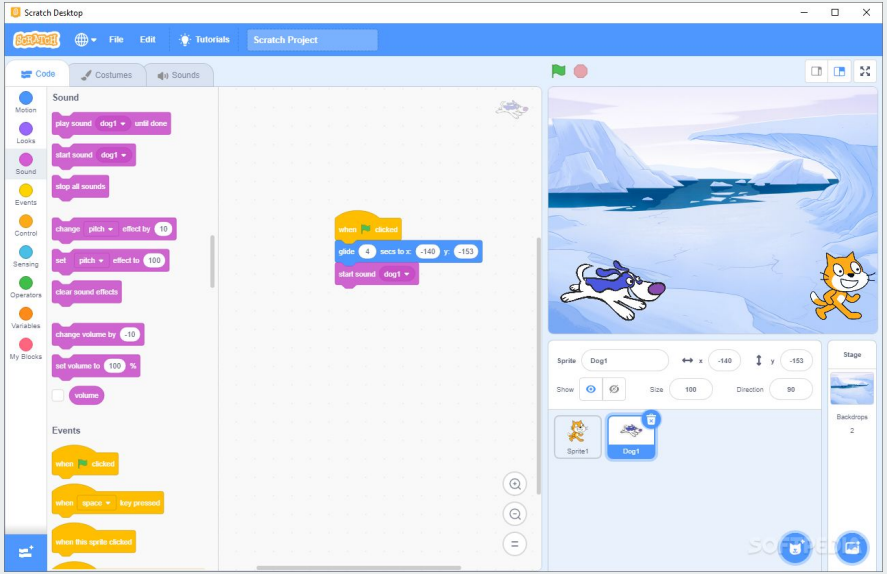
What is Scratch?

- Visual programming language created by MIT
- Program games, animations, interactive stories, anything really!
- It's free to use
- Students can share projects and view other student's projects.

Scratch Jr

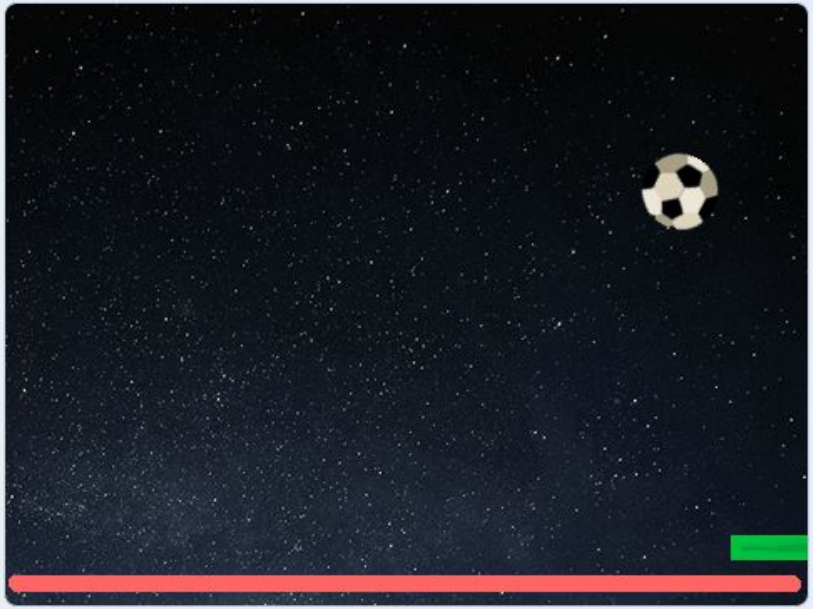
- Scratch Jr is an app available for iPads and Android tablets
- It's designed for ages 5-7
- Students drag and drop blocks to create their code
- The blocks are colour coded and have icons on them so children do not have to have reading skills

Scratch Website



- Designed especially for ages 8 to 16, but it is used by people of all ages
- It is available on the Scratch website at https://scratch.mit.edu
- Internet connection is therefore required
- There is an offline version available that can be installed, but this has some limitations

Scratch Demo



- Demonstration of coding a Scratch lesson
- Make a paddle ball game
- See how a teacher would present and teach a coding lesson in Scratch
- See how students would do a coding lesson in Scratch

Introduction to Microbits

What is a Microbit?

A Microbit is tiny programmable computer, designed especially for learning and teaching coding.

It has a processor inside it (like the brain of the computer) and has the following:

- an accelerometer (for sensing movement).
- a compass (for sensing direction).
- a microphone.
- a speaker.
- Bluetooth and USB port for connectivity.
- a display consisting of 25 LEDs lights.
- two programmable buttons.
- and can be powered by either USB or an external battery pack.

What is a Microbit?

- Designed for ages 10+ but can be used by younger
- Various online sellers, costs about €18 each. Coding Ireland can provide them.
- Can connect to other accessories i.e. a line following car

Programming a Microbit

In a similar way to Scratch, you can create programs using a special website but you then need to download the program to your computer and then send the program to the Microbit.

1. Create your program using www.makecode.com
2. Download the program to your computer
3. Send the program to your Microbit by USB cable

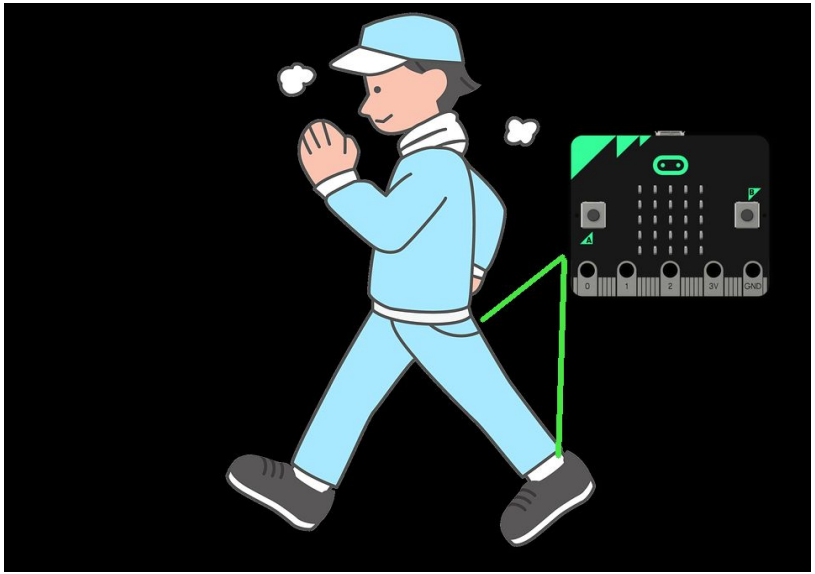
Step 1.) Create your Program

Step 2.) Download it to your computer

Step 3.) Send it to your Microbit

Microbit Demo

- Demonstration of coding a Microbit lesson
- Make a fit bit (step counter)
- See how a teacher would present and teach a Microbit coding lesson
- See how students would do a Microbit coding lesson



Teacher chat ☕