WORKSHEET 2

MORSE CODE

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This project is to demonstrate the implementation of a simple communication protocol that transmits data between 2 Micro:bit devices using GPIOs.

As an example in this project, we used Morse code.

The idea being when a button is pressed for a certain duration, it should be registered as a DOT or a DASH.

Two Micro:bits are connected using crocodile pins by their pin1 and pin2.

If the button is pressed for less than 250 ms then it is considered a DOT and is stored in a variable as DOT and displayed on the LED.

If the button is pressed for more than 250 ms and less than 500 ms then it is considered a DASH and is stored in a variable as DASH and displayed on the LED.

When pressed in a particular sequence it will show the corresponding character in the receiver Micro:bit LED and and stored in a message variable.

When the desired characters are generated the receiver Micro:bit can be shaken to display the full message by scroll.

A video clip is included in the files that shows a demonstration of this process.