

Getting Started With JavaScript Blocks: Smiley Buttons

Smiley Buttons

Overview

The ninth project gets the user sending and receiving data to and from micro:bits

Step by step

A step by step guide is given at <https://pxt.microbit.org/projects/smiley-buttons>

.hex File

Final version of the .hex file called "09 smiley-buttons.hex"

POS Reference

Designs simple algorithms using loops, and selection i.e. if statements. (AL)

Uses logical reasoning to predict outcomes. (AL)

Detects and corrects errors i.e. debugging, in algorithms. (AL)

Creates programs that implement algorithms to achieve given goals. (AL)

Understands that programming bridges the gap between algorithmic solutions and computers.(AB)

Understands data transmission between digital computers over networks, including the internet i.e. IP addresses and packet switching. (AL) (AB)

I can statements

The students can:

- Understand data can be transfer between micro:bits using "packets" of data
- Create a forever loop sending a pack of data to a second micro:bit
- Send and receive data on both micro:bits

Challenges

A number of challenges could be based upon this basic task.

- Send a written message to the second micro bit.
- Allow the user to choose a picture and send it to the second
- Allow a third micro:bit to send and receive data

Next Steps

Lesson 10 plays the game of Rock Paper Scissors.

