

Micro:bit Project Sheet 20

Success Criteria

- Happy face displayed
- Count down 5 seconds
- Fire bullet over radio using button a
- If player hit sad face shown and lock micro bit

Introduction

The purpose of this block code is to demonstrate the simplicity of the wireless radio feature. This is a clone of Project 12 which was written in C but this time completed using Microsoft Programmable Experience Toolkit (PXT)

<https://m.pxt.io>

This is the same as Block available from the Microbit website but has additional features not yet available via the BBC included.

Microsoft PXT

```
set Countdown to 5
set group to 0
repeat 5 times
do
  show number Countdown
  pause (ms) 1000
  change Countdown by -1
forever
  show leds
  if button A is pressed
  do
    send number 1
  else
    set time2wait to pick random 0 to 1500
    pause (ms) time2wait
  on data received
  if receive number = 1
  do
    show leds
    while true
    do
```

Testing

- Test with 2 MicroBits first
- Countdown correct
- Both happy face
- Press button on A Bit A (might need to shoot more than once) does Bit B show sad face and lock
- Reset - press button A on Bit B (might need to shoot more than once) does Bit A show sad face and die
- Retest with multiple Micro bits for “volume testing”

Notes—

Code is downloadable from the website

