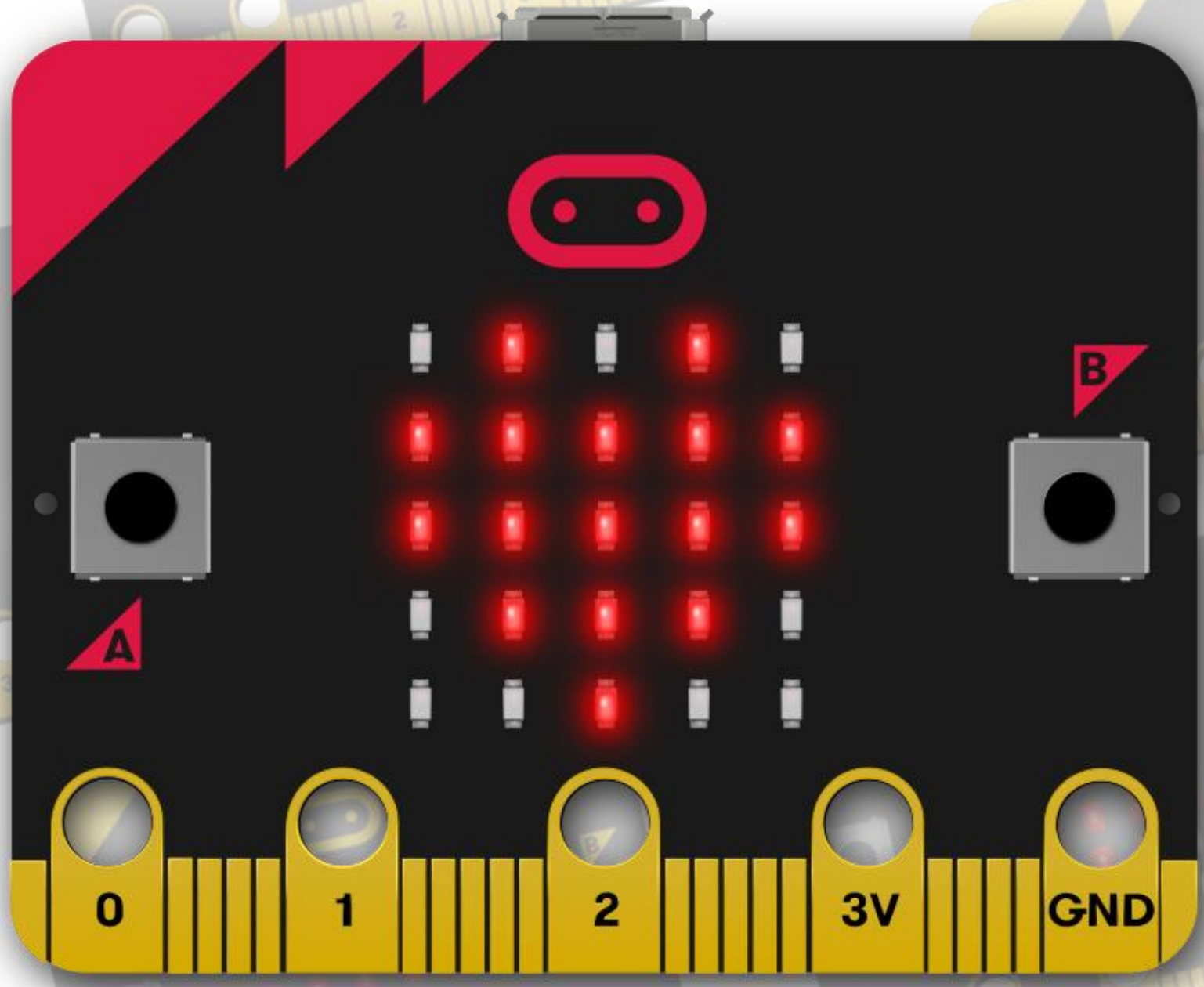
INTERNET CONNECTION NEEDED

edublocks

Making the transition from Scratch to Python easier

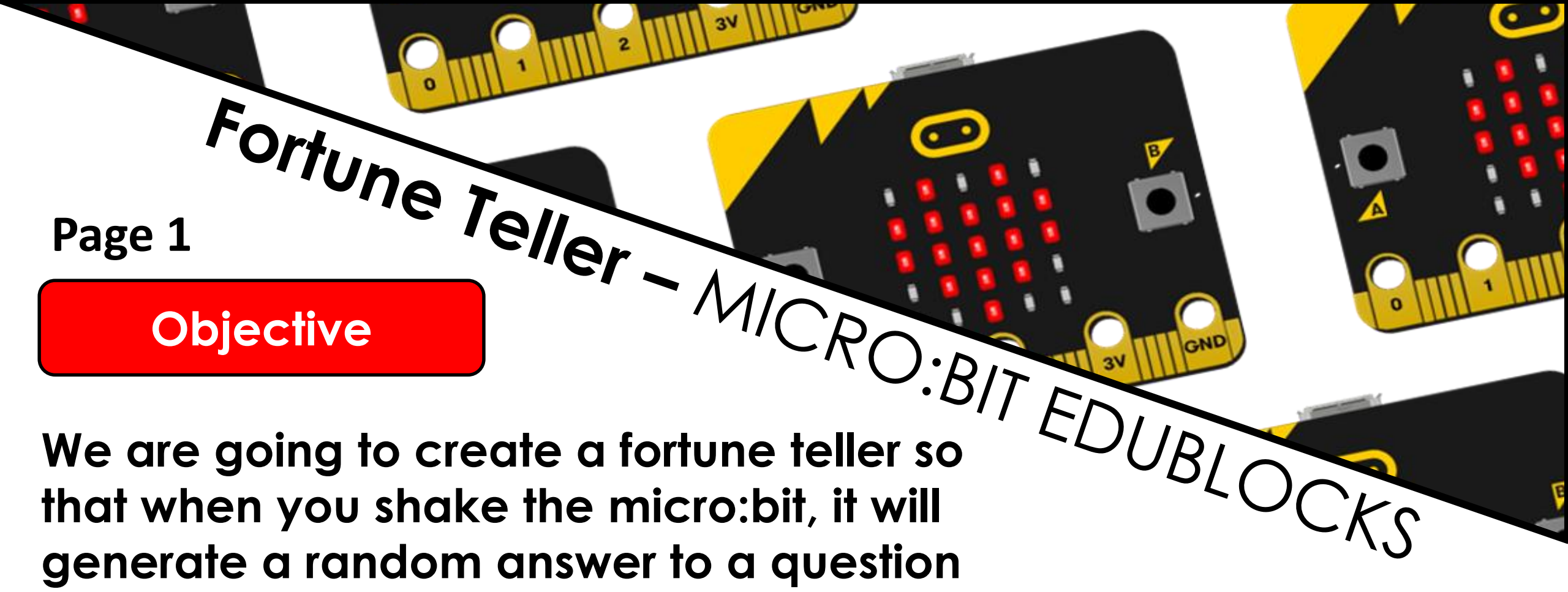


Fortune Teller

MICRO:BIT EDUBLOCKS EDITOR

EduBlocks.org
@edu_blocks

Fortune Teller – MICRO:BIT EDUBLOCKS



Objective

We are going to create a fortune teller so that when you shake the micro:bit, it will generate a random answer to a question you may have asked.

Getting Started

1. Start by going to a web browser on your PC or MAC.. Type in the following address in the search bar or click on the link below:

https://microbit.edublocks.org

Let's Code

Now its time to build our code. We can drag our code blocks from the EduBlocks toolbar which is on the left hand side of the screen. The pink blocks can be found in the basic menu. This will form the start of the code. Both blocks are necessary for this program to work.

```
from microbit import *
import random
```

INFO:

This section of code will import the micro:bit library and random library. Each library has features to communicate with micro:bit.

Fortune Teller – MICRO:BIT EDUBLOCKS

Let's Code

Our next 2 blocks can all be found inside of the basic tab.
The rest of the code for this program is going to go inside of the while true block to create a loop. This will make sure that the micro:bit is always checking if it is being shaken.

```
answers = "Yes", "No", "Maybe"
while True:
```

INFO: The first block in this section creates a store of the answers that will be displayed.

Our next 3 blocks can be found in the 3 different sections of Accelerometer, Basic & Display. Pink in basic, Orange in accelerometer & Yellow in display. This code goes underneath the if block inside the while true. Check the next page for a full code listing if you are unsure.

```
if accelerometer.is_gesture( 'shake' ) :
    display.scroll( random.choice(answers) )
    reset ()
```

INFO: These 3 blocks will check to see if the micro:bit has been shaken and then scroll a random answer.

Fortune Teller – MICRO:BIT EDUBLOCKS

Download Your Code

Here is the full code:

```
from microbit import *
import random
answers = "Yes", "No", "Maybe"
while True:
    if accelerometer.is_gesture( 'shake' ) :
        display.scroll( random.choice(answers) )
        reset ()
```

INFO: Your program should look like the one at the top of this INFO BOX. Go back and check through all of your code to make sure you have not made any mistakes.

Plug in your micro:bit to a USB port. To download our code onto the microbit. Click the DOWNLOAD HEX button in the navigation bar at t

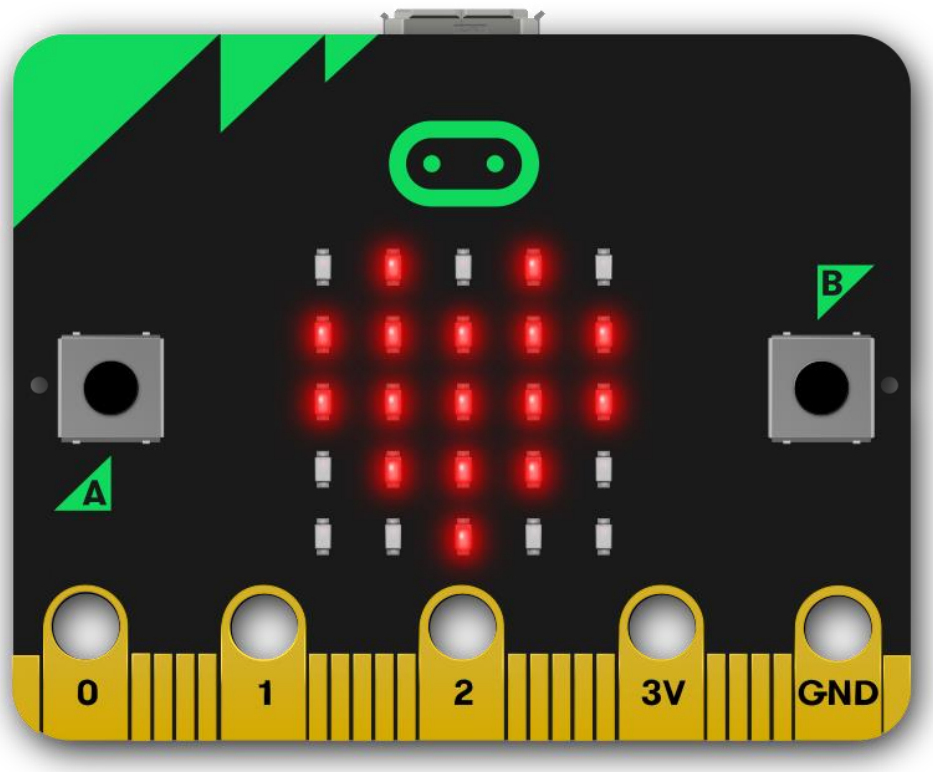
The file will now download to your PC. On Google Chrome, it will show at the bottom. Click on the up arrow on the grey file at the bottom and select Show in folder. Drag the highlighted file onto the micro:bit on the left hand side. For a guide on how to do this check:

uploadmymicrobit.edublocks.org

Fortune Teller – MICRO:BIT EDUBLOCKS

Run Your Code

Now it's time to run our code. Once the file has been dragged onto the micro:bit and the orange light on the back has finished blinking, you should now be able to interact with your micro:bit. Ask your micro:bit a question then shake it and it will generate a random answer.



Outcomes

In this tutorial we have learnt how we can use the EduBlocks to code in MicroPython to use the accelerometer on the micro:bit.

Challenge: Try adding more answers to the variable to see if you can get the micro:bit to show different answers.