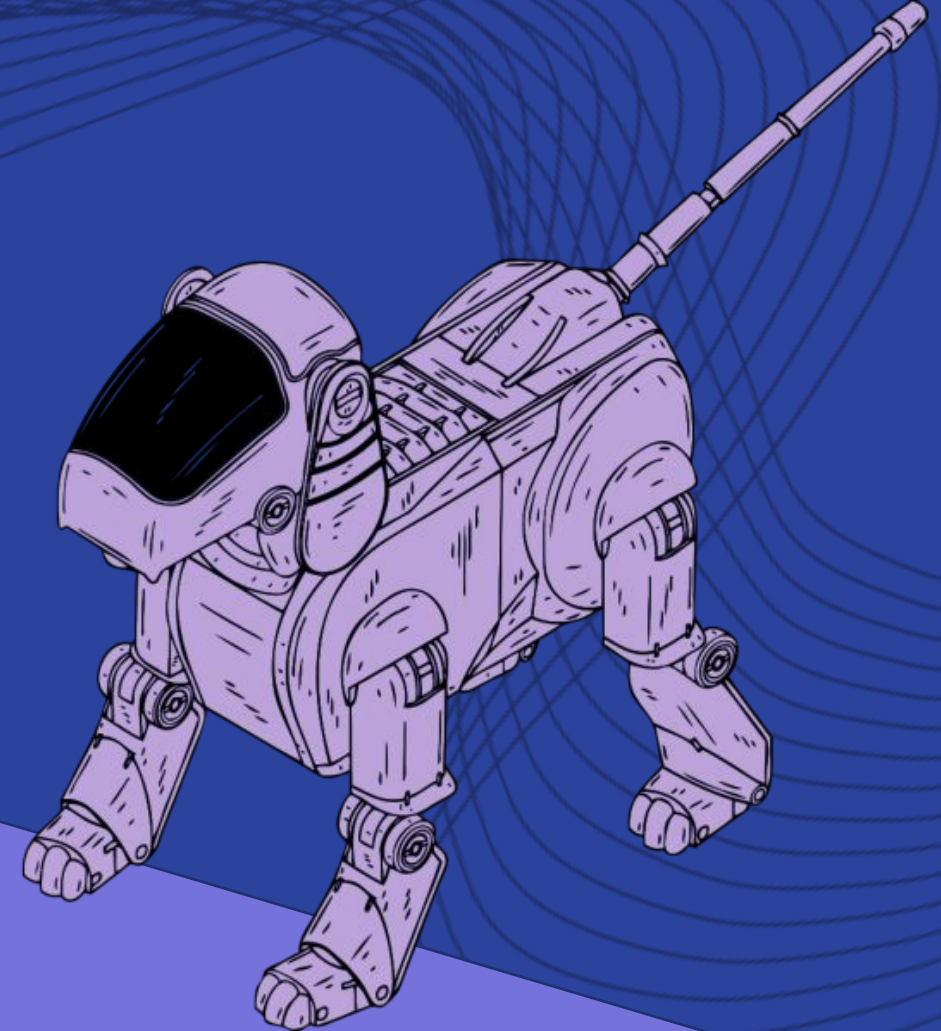


# Introduction to LEGO Spike



# Introduction

## LEGO Spike

- LEGO® Education SPIKE™ Prime combines colourful LEGO building elements, easy-to-use hardware and intuitive coding with STEAM learning units that engage students of all levels. Everything is easily adaptable to any learning environment, making it fast and simple for you and your students to get going and start learning.
- LEGO spike can be programmed with both drag and drop coding as well as being compatible with more complex languages, such as Python



# Introduction

What is included?



# Task

## Introduction to LEGO Spike

- To get started with LEGO spike, we're going to learn how to display a smiley face on the Hub.



# Process

## Introduction to the LEGO Spike

- Load onto the Spike web application
- Connect your hub to your device
- Create the program that displays the smiley face
- Experiment with changing the hub's design





# Step 1

Load onto the Spike website or app

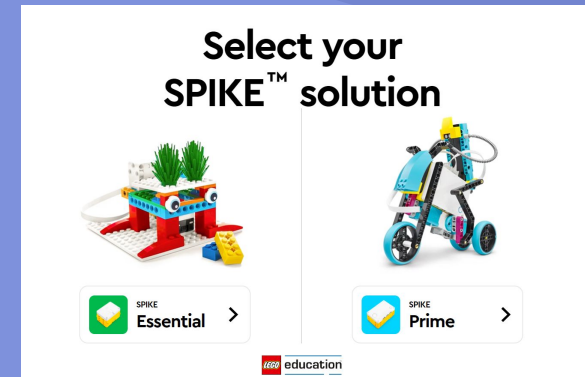


LEGO® Education SPIKE™ App

Before we can start programming our hub, we need to load up the LEGO Education Spike App.

The app is compatible across most devices, like iOS and Android.

You can also access it online – click [here](#) to open the web app.

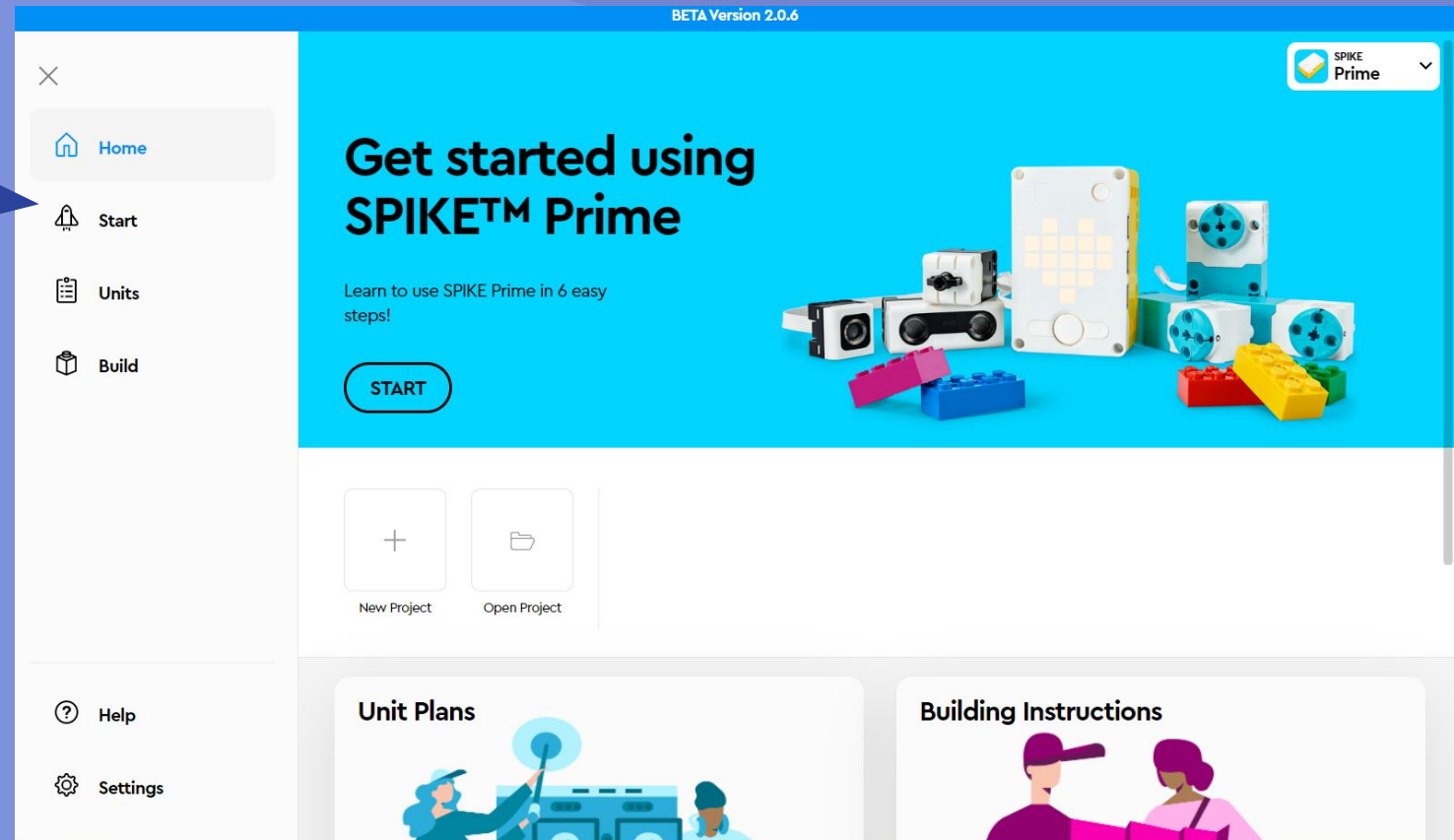


Select the SPIKE Prime option.

# Step 2

Load onto the Spike website or app

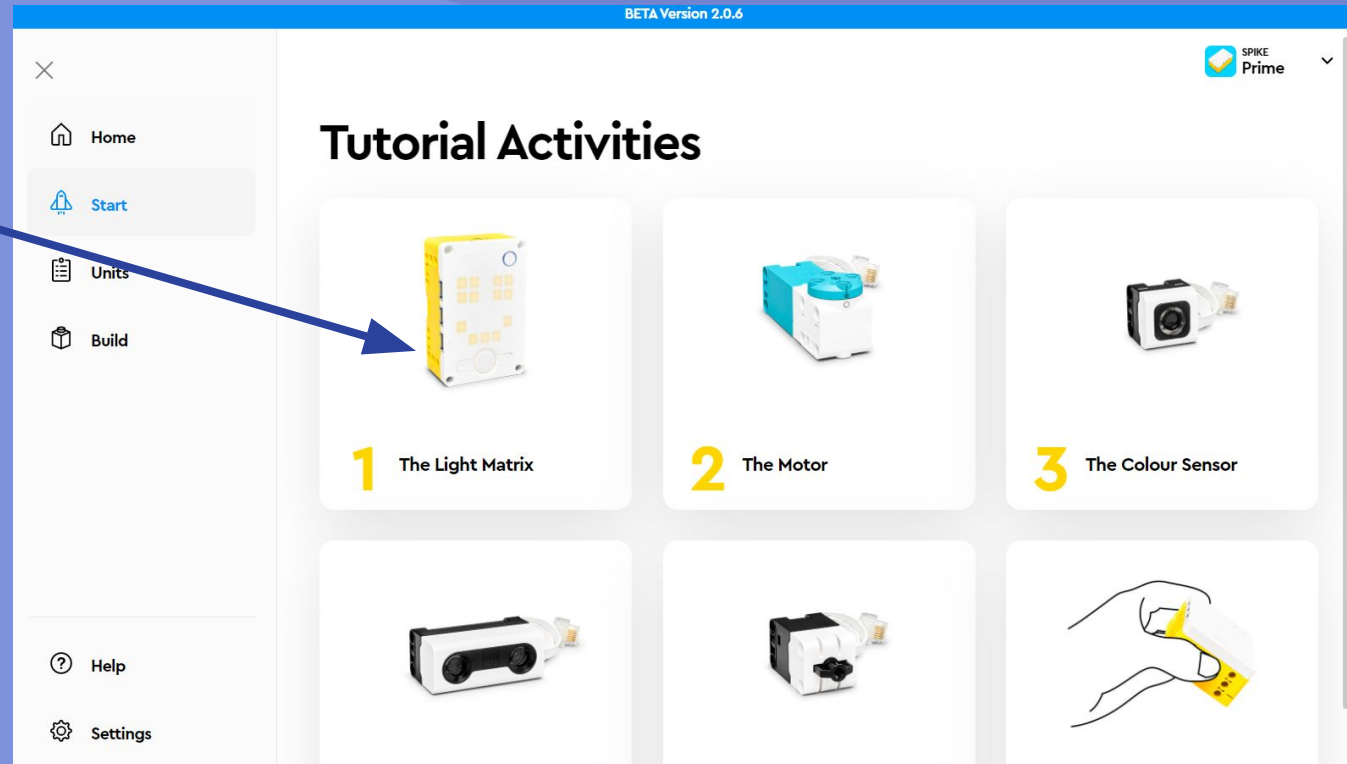
Click the 'Start' button



# Step 3

Load onto the Spike website or app

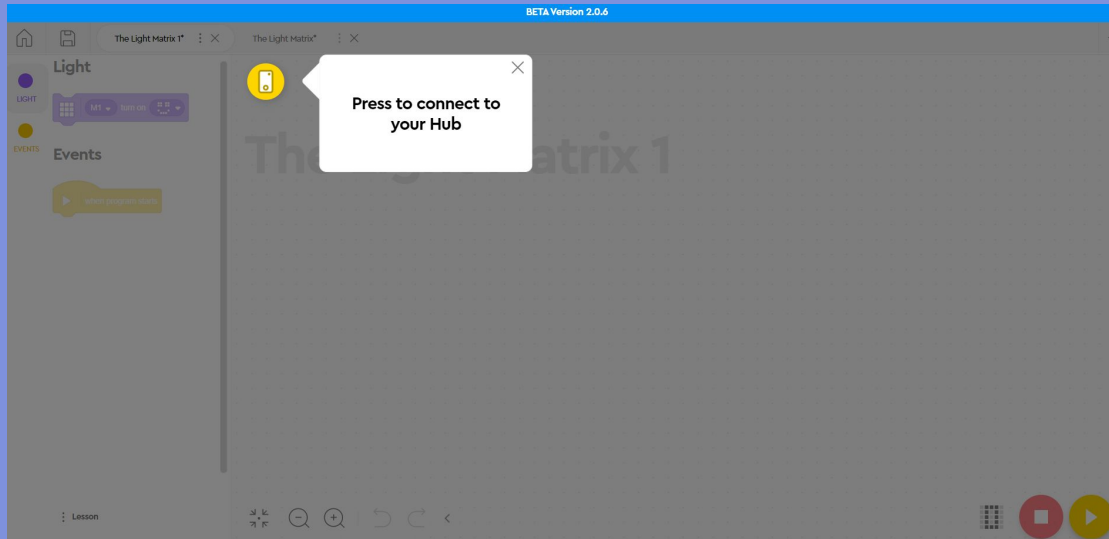
From the 'Tutorial Activities' menu, select The Light Matrix project.





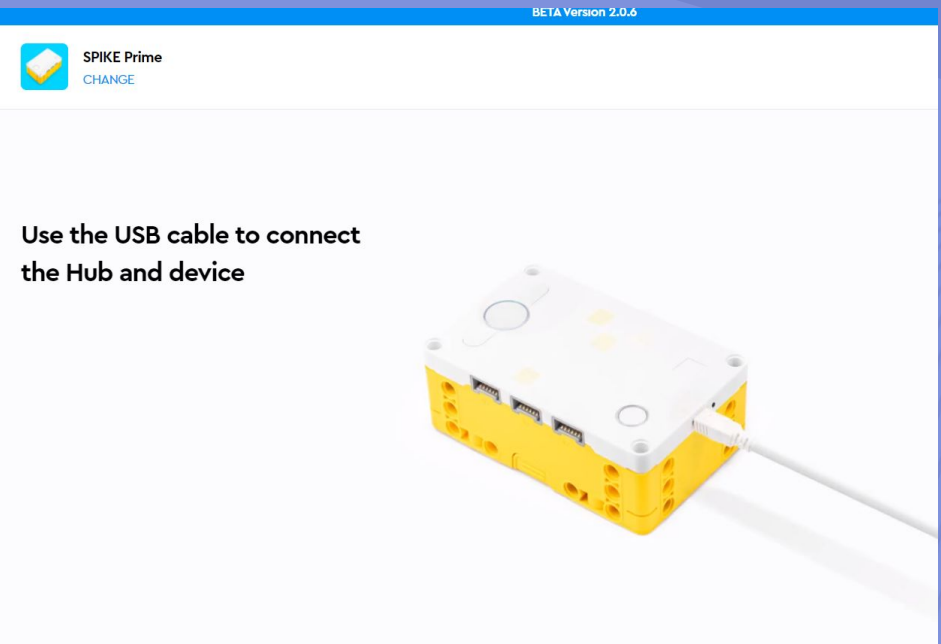
# Step 4

## Connect your hub



Click the button in the top left corner to connect your Hub.

You can connect your Hub via Bluetooth or using a USB cable.



# Step 5

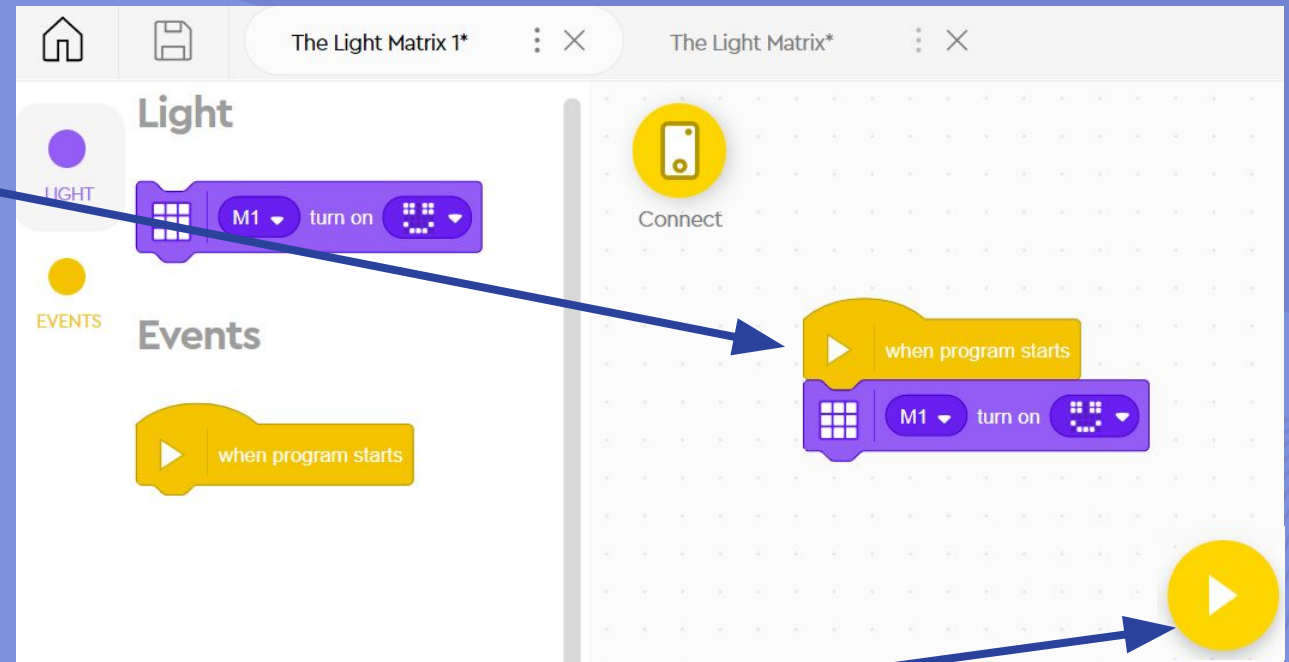
## Writing the code

Drag the following blocks into the central code panel.

The yellow event block will be triggered when the run button is clicked.

The purple block will light up the hub in a smiley face panel.

To run the code, click the play button in the bottom right corner.

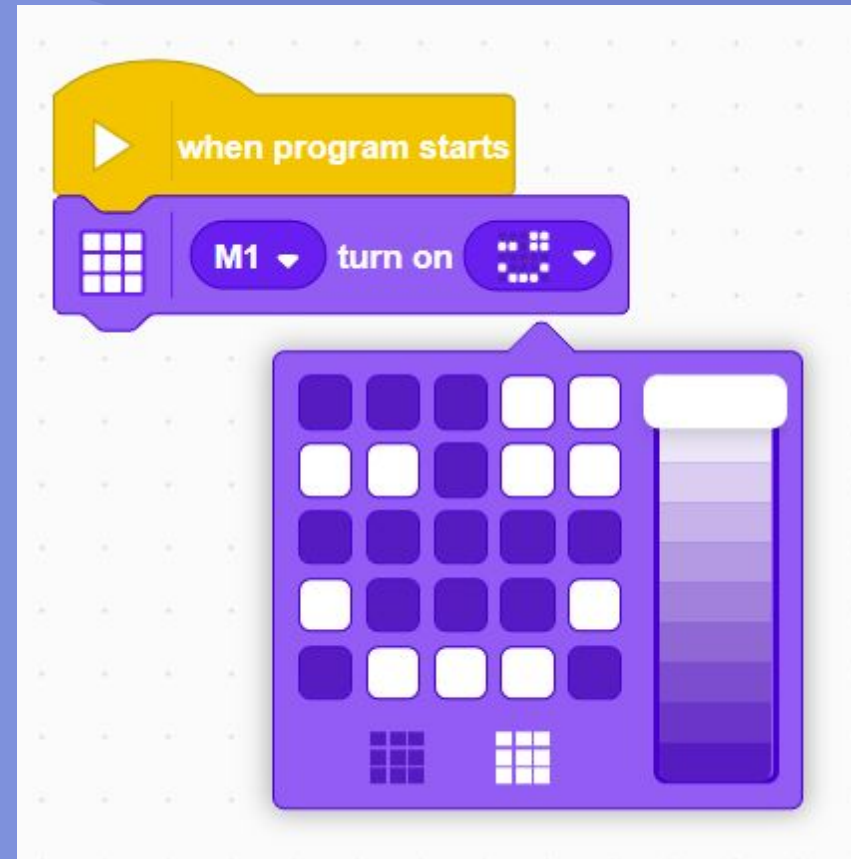


# Step 6

## Experimenting with different designs

Change the LED pattern on the purple block to change the output on the hub.

Could you make your hub wink? Or look sad?



# Conclusion

## Learning outcomes

- ✓ Get started with your LEGO Spike Prime Kit.
- ✓ Sync up your Hub to a device and use the LEGO App.
- ✓ Write a program that changes the output of your Hub.

# Congratulations!

You have set up your Raspberry Pi!

