PLAN

When you start, think carefully about what small steps in particular you need to take to realize your great idea.
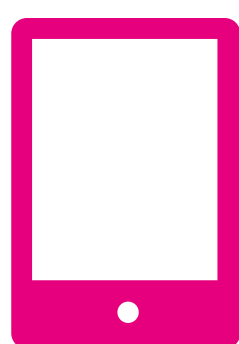
Here are some useful tips. Have fun!

CALLIOPE MINI PLAYGROUND

The Calliope mini Playground offers you an easy way to get to know the Calliope mini. In small steps you'll understand the basics of programming and control LEDs, pins, sensors and sounds. Build your own projects and prototypes with the Calliope mini.

✳ BLUETOOTH

This makes it possible to connect the Calliope mini to a tablet or smartphone.

OUTPUT

The Calliope mini has various output options. Let the LEDs light up and the letters dance.

```
display.show(text: "hi")

display.show(image: .smiley)

rgb.on(color: .green)

sound.on(note: .C)
```

ID-PATTERN

Each Calliope mini has its own ID pattern that can be used as identification and to communicate with it.

PROGRAMMING

The parameters can easily be entered using either the keyboard or the shortcut bar.

The **keyboard** is used to enter letters and numbers. Attention! Text strings are always written in quotation marks.

The **shortcut bar** offers suitable programming blocks such as colors, sounds or images.

INPUT

The Calliope mini has various input options. Buttons, pins and sensors are waiting for your action.

```
func onButtonA() {
    display.show(image: .smiley)
}

func onButtonB() {
    display.show(image: .sad)
}

func onButtonAB() {
    display.show(image: .heart)
}
```
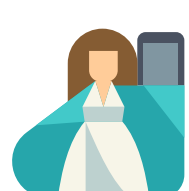
HACKING, CRAFTING, CODING

Be creative and program your own inventions!

```
rgb.off()

sound.off()

display.clear()

mini.sleep(1000)
```

SENSORS ON THE MINI

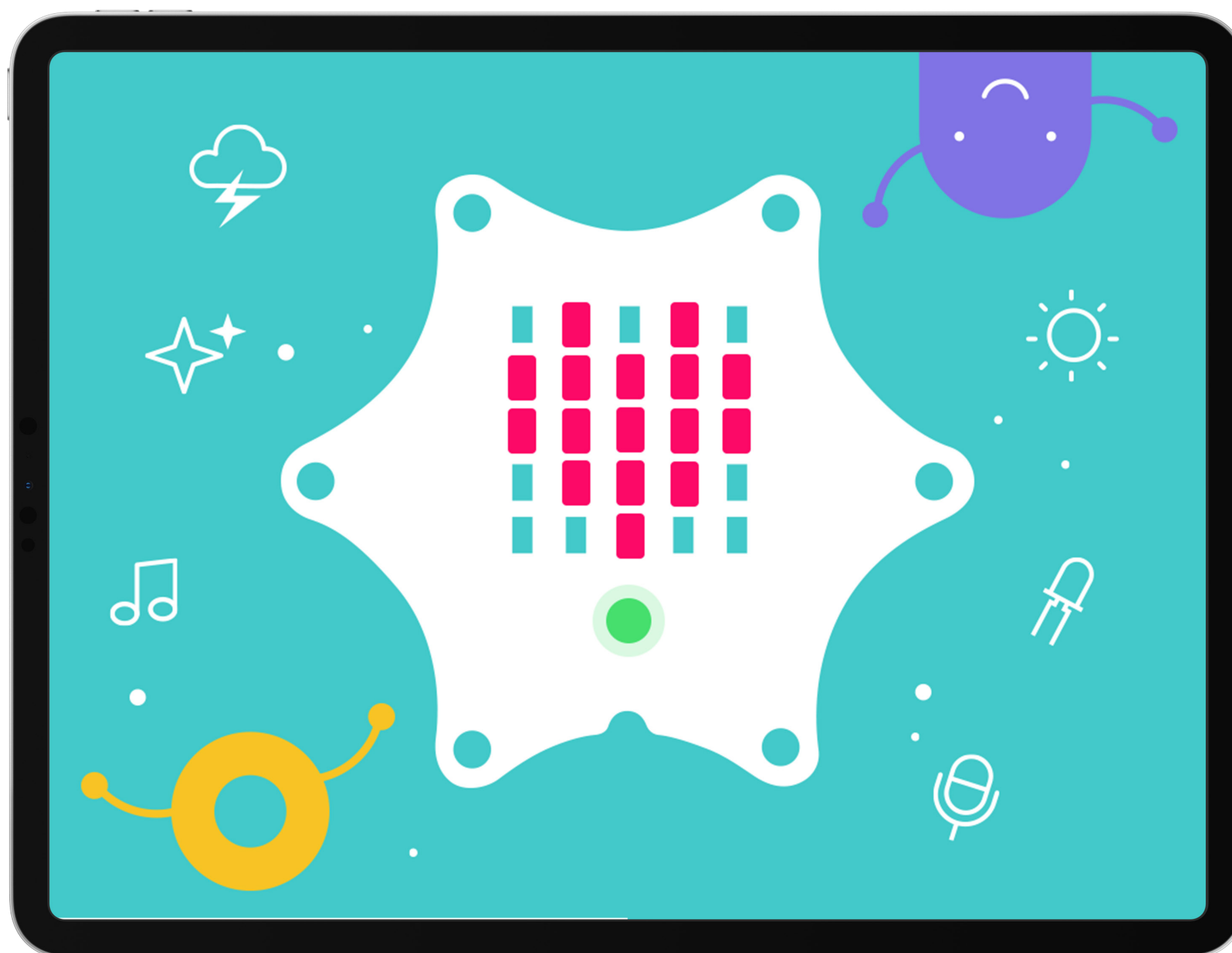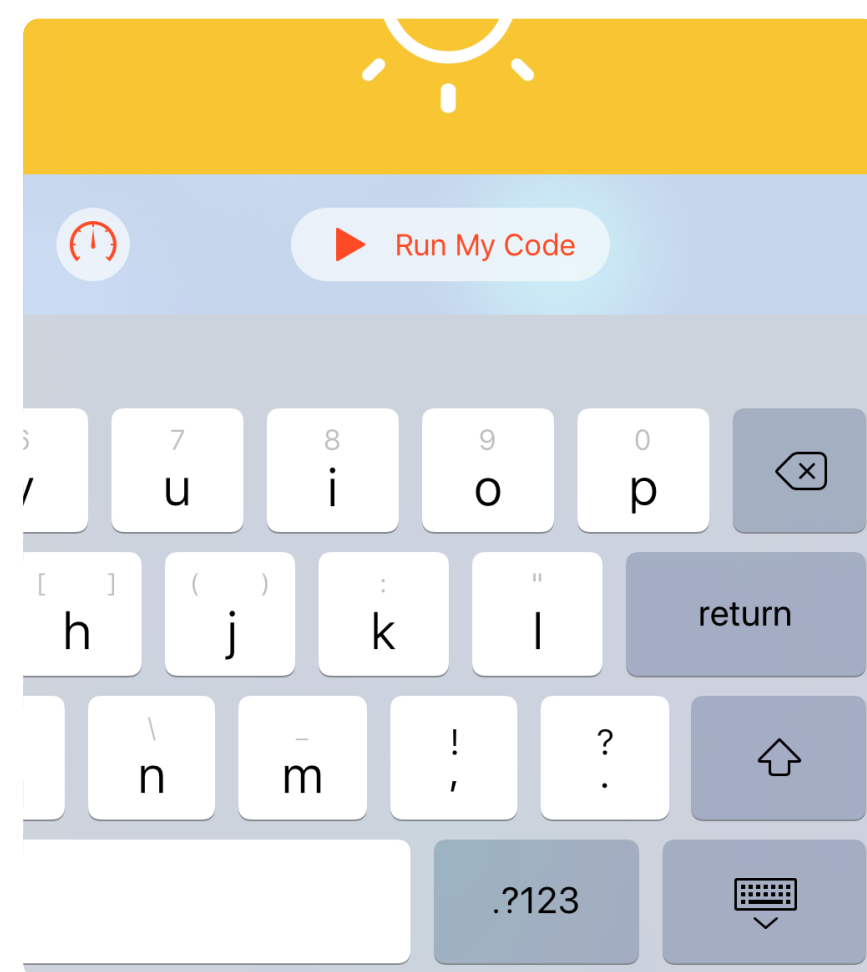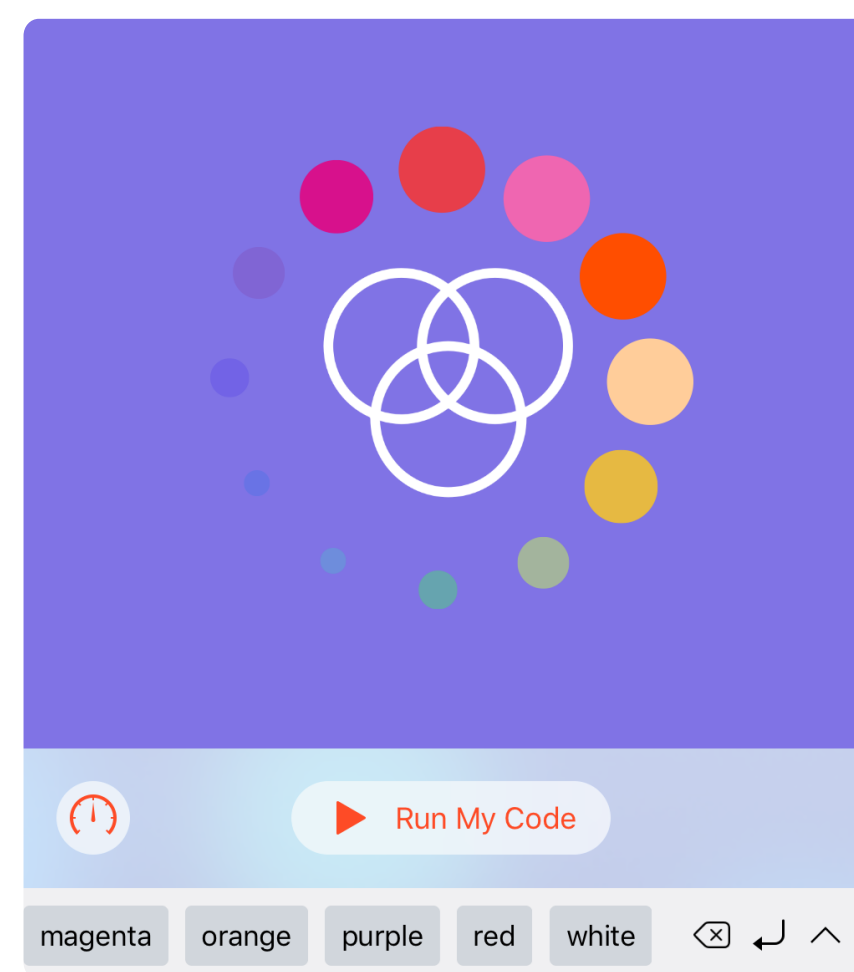Use movement, temperature and light and get creative!

PARAMETERS

The Swift programming language is explained in an uncomplicated way by entering and adjusting parameters. Parameters are values which can be used to change a function (e.g. the colour of the RGB LED).
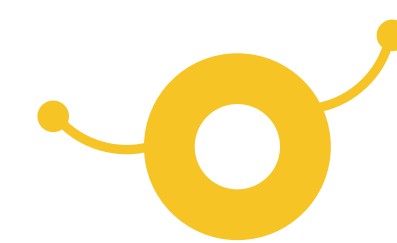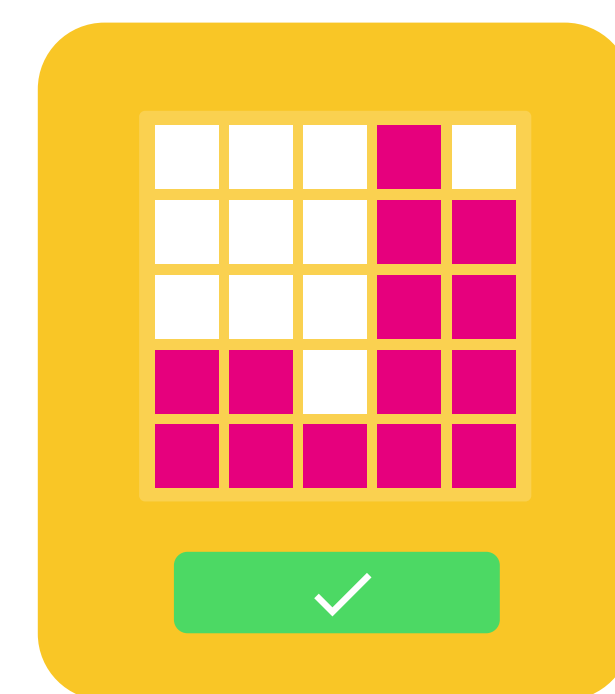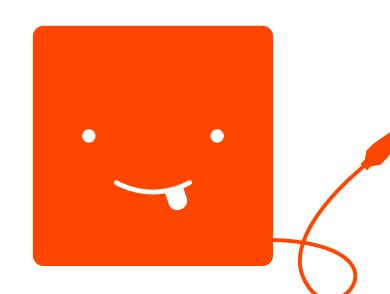
PINS 0-v3

```
func onPin(pin:UInt16) {
    if pin == 1 {
        rgb.on(color: .purple)
    }
}
```

```
func onShake() {
    display.show(text: "YEAH!")
}
```

CALLIOPE.CC/EN/LETS-START/EDITOR

CALLIOPE