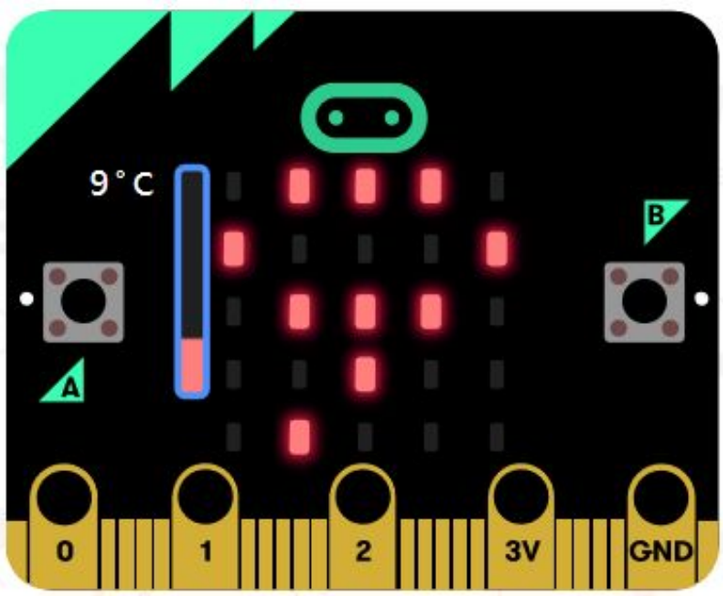
Coding Microbits using Python

Plans, Notes, Sketches & Reflections



STEAM

Science Technology Engineering Arts Math

Grades 7-9
Student Booklet

A Project by
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Utah Coding Project

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Name

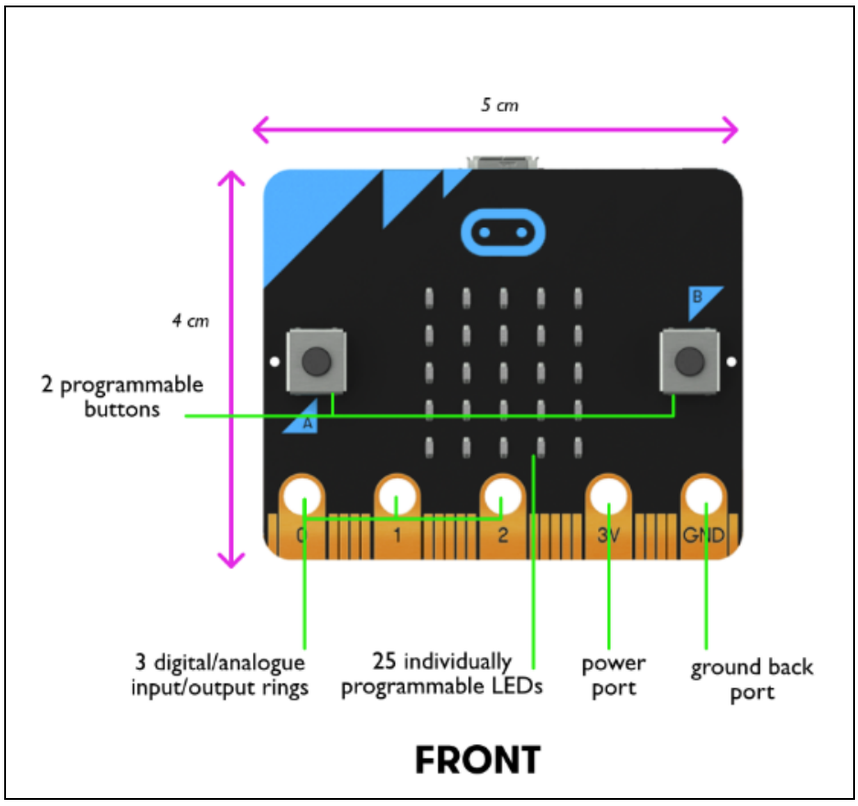
School

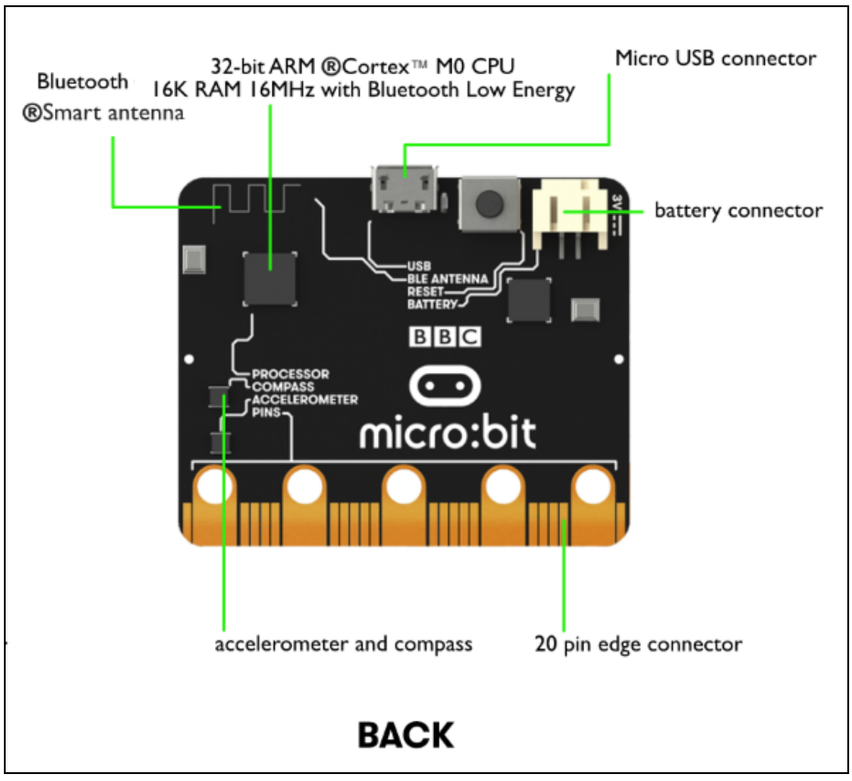
Introduction
This booklet has been created for use in teaching **Coding Microbits using Python**. It is designed to be used in 7th - 9th grades. In this booklet there are pages for planning projects, notes & reflections, and pages to make sketches of ideas.

The course contains 6 modules and with project in the end. Each module should be able to be completed in about 3-5 hours. The projects are designed to teach creativity, collaboration, problem solving, computational thinking, coding using Python, and thinking that leads to innovation.

Resources
Microbit website - https://microbit.org/
Python IDE - https://python.microbit.org/v/1.1
Micro Python reference - https://microbit.org/guide/python/
Microbit projects - https://microbit.org/ideas/ > Python
Microbit Courses - https://makecode.microbit.org/courses
Coding Microbits using Python website - http://UtahCoding.org > Microbits > Python Coding Microbits
GitHub version - https://carllyman.github.io/Python-Microbits/

Microbit Front & Back Features

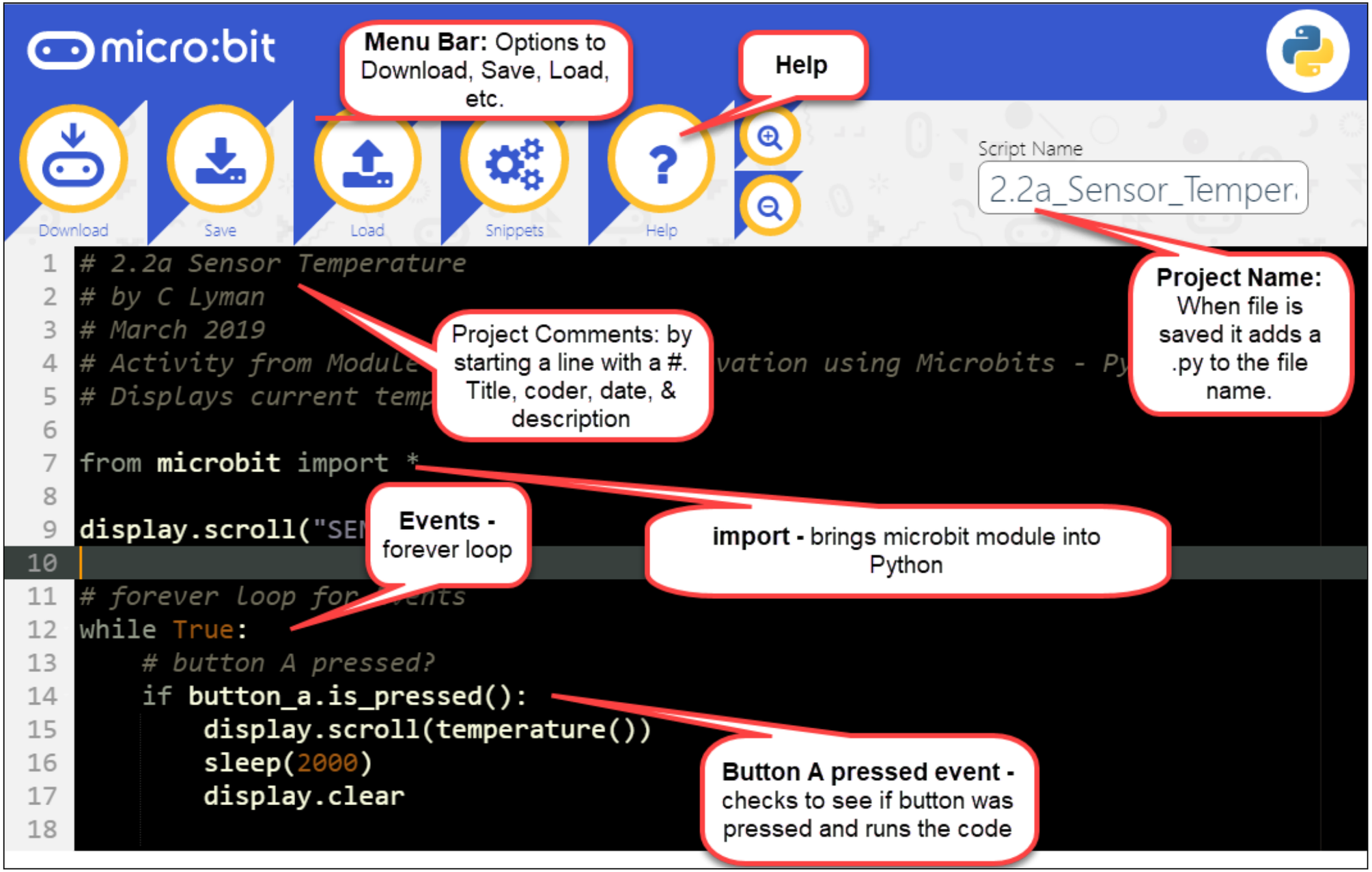




The micro:bit has the following physical features:

- 25 individually-programmable LEDs
- 2 programmable buttons
- Physical connection pins
- Light and temperature sensors
- Motion sensors (accelerometer and compass)
- Wireless Communication, via Radio and Bluetooth
- USB interface

Source: https://microbit.org/guide/features/



Micro Python IDE