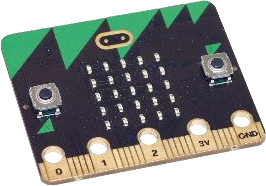
Micro:bit Display

Micro:bit is a programmable minicomputer used as a great prop to learn writing software. The user can see or ‘feel’ the program.

It has inbuilt sensors which make programming more interesting and can be done in different environments. We are going to explore the block environment MakeCode, particularly into the library of commands to write text or displaying pictures.

The programs are to be tried at makecode.microbit.org.

**The MakeCode environment**

Graphical user interface, text, application, chat or text message

Description automatically generated

space for programming

command library

simulator

downloading the program

# 

# Selected parts of the *Basic* library:

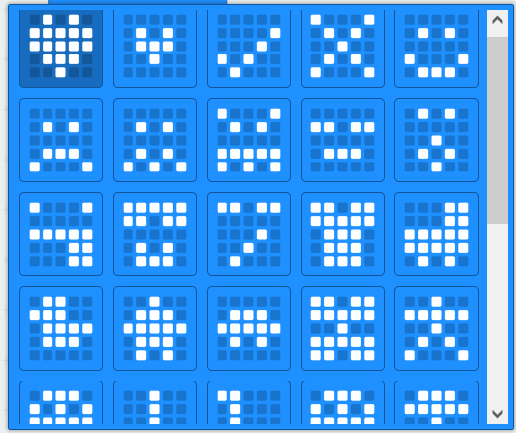
Icon

Description automatically generated The program will be repeated.

Application

Description automatically generated with low confidence The program will start and finish when done.

Graphical user interface

Description automatically generated Shows a heart icon. If we want a different icon, the options will appear after opening the menu:

Background pattern

Description automatically generated with medium confidence If we want an icon MakeCode does not offer, we can create our own.

Icon

Description automatically generated A left click on the grid activates the squares we want to display, in this case the letter H.

Graphical user interface, text, application, chat or text message

Description automatically generatedUsing this command will cause the text to scroll (letter by letter).

A picture containing diagram

Description automatically generated This command is used to clear the screen after finishing a task or at the end of a program.

Graphical user interface, text, application, chat or text message

Description automatically generated A command to pause in milliseconds.

# Selected parts of the *Input* library:

Graphical user interface

Description automatically generated with medium confidence After pressing the A button, the micro:bit executes the command. After rolling out the menu we can choose the B button or press both buttons at the same time.

Graphical user interface, application

Description automatically generated

A picture containing text, clipart

Description automatically generated Micro:bit also has a movement sensor; therefore, it reacts to various events. This block will execute a command after shaking. There are other options for events, which can be accessed by opening the menu.



**Writing a program**

Graphical user interface

Description automatically generatedGraphical user interface, application

Description automatically generated

In MakeCode we click on a new project. Then we select the suitable commands from the library. In the space for writing the program we arrange the commands to form a unit. In the simulator the micro:bit program can be tested. When everything works, the program can be downloaded into the micro:bit.

**Literature**

https://www.ucimeshardverom.sk/materialy/microbit\_makecode/

https://makecode.microbit.org/#editor