

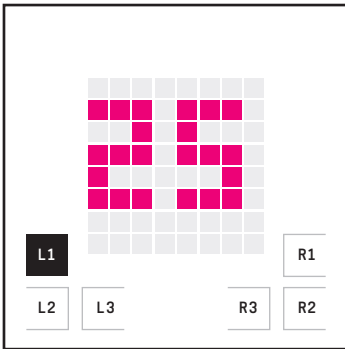
WORKSHEET W015

WEATHER

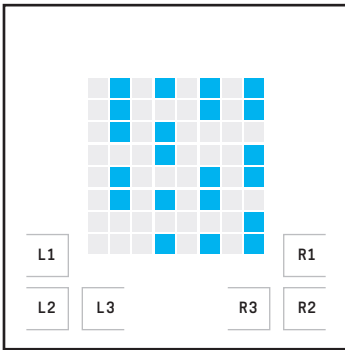
Thanks to a collaboration with Meteotest you can turn the Oxocard into a weather station.

EXERCISE

Show the weather icon and display the current temperature in your city by pressing the left button.



The Oxocard must connect to the Internet to access Meteotest's data.

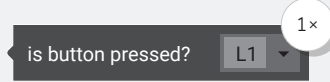
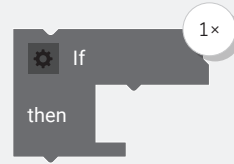


Depending on the forecast weather situation, a different icon will be displayed when you insert the «Draw forecast icon» block.

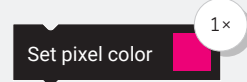
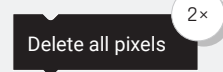
HINT

Connecting to the Internet and getting the weather data only needs to be done once and therefore comes outside the «Do forever» block.

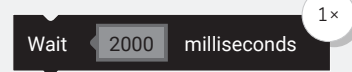
LOGIC



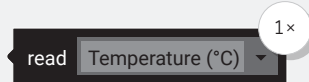
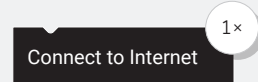
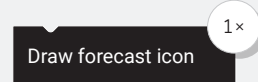
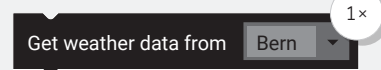
MATRIX



TIME



WEATHER



PARTS LIST

LIST OF BLOCKS TO BE USED



LEVEL INTERMEDIATE

ADDITIONAL TASK:

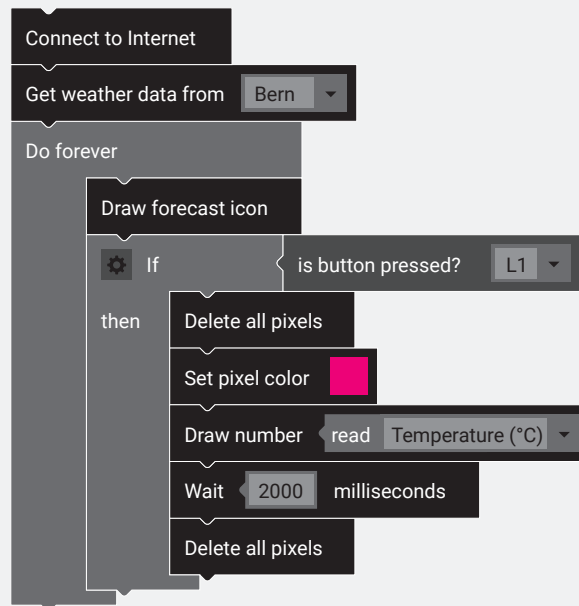
Display more weather data for the other buttons of the Oxocard.

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WEATHER

SOLUTION

PROPOSED SOLUTION

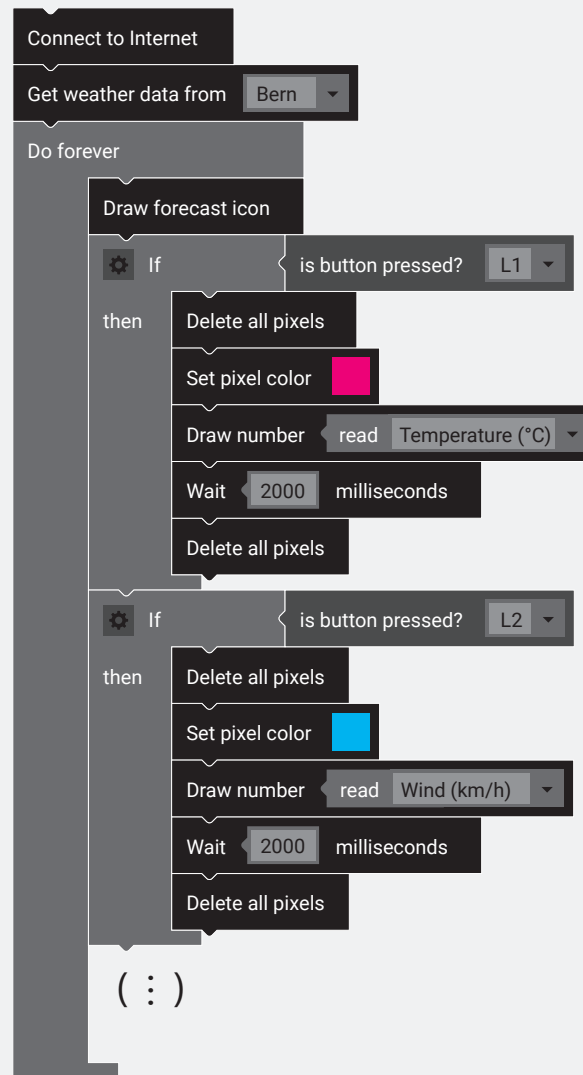


WORKSHEET W015

WEATHER

ADDITIONAL TASK

PROPOSED SOLUTION



WORKSHEET W015

WEATHER

Learning objective:

Capacity to connect the Oxocard to the Internet and to get data from Meteotest.

WHAT TO DO

1. First you connect the Oxocard to the internet and get the weather data of an available location.
2. Then comes the „«Do forever» loop. All other blocks must be positioned in this loop.
3. Now you place the new «Draw forecast icon» block.
4. Next comes the «if/then» block by asking if a button is pressed.
5. In the «then» section all pixels are deleted first. Then select a suitable pixel color, draw the number and set for example „read temperature“ in the gap. The value is displayed for a few seconds and deleted again.

NEW COMMANDS

Get weather data from

With this block you can get the current weather data from Meteotest. In the drop down menu you can select a location available at Meteotest.

Connect to Internet

This block connects the Oxocard to the Internet. This can take a few seconds.

Draw forecast icon

The «Draw forecast icon» block displays a suitable icon for the forecast weather of the following day on the LED matrix.

read

If you fetched weather data in advance, you can use this block to retrieve certain values: Temperature, precipitation, dew point, wind and humidity.

ADDITIONAL INFORMATION: METEOTEST

Meteotest is a Bernese company that was founded in 1981 as one of the first service providers in the field of weather and climate. Today Meteotest has a total of 40 scientists, engineers and computer scientists. Meteotest provides measurement data and weather forecasts for selected cities and municipalities. These data can be retrieved with the Oxocard.

- Wind velocity (km/h)
- Relative humidity (%)
- Precipitation (mm)
- Dew point (°C)
- Temperature (°C)

