Preserve biodiversity. Monitor the number of plant species in your neighbourhood. Explore the streets and parks in your neighbourhood to find out more about the ecosystem and use technology to make this process easier! Use the STM32 card to record your findings!

Collect data thanks to the board and its embedded sensors
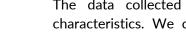
To ensure that the ecosystem in your local area is balanced and healthy, we propose you to monitor the diversity of plants species. How can we register different plant species? The parameter to be monitored is the number of species found in the ecosystem. The simplest solution is to use the STM32 board as a counter, to count the number of different plant species encountered in a walk in the streets, parks etc. of a neighbourhood.
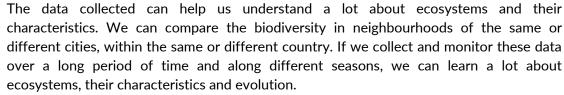
Display the data to get the needed information

We could see in the previous part how to use an input device to obtain information. It would be useful now to be able to make this information known to the user. In order to inform the user of the number of species, we can add a screen.

Analyse the data and learn from them

The data collected can help us understand a lot about ecosystems and their characteristics. We can compare the biodiversity in neighbourhoods of the same or different cities, within the same or different country. If we collect and monitor these data over a long period of time and along different seasons, we can learn a lot about ecosystems, their characteristics and evolution.

In order to be able to draw conclusions about the biodiversity in our region and make comparisons, we need to share the data collected with our project partners in other cities and countries. We can organize the information collected in an excel spreadsheet and send it to our project partners. When information from all project partners is put together, we can draw very interesting conclusions about biodiversity and create our own map of biodiversity…

Replicate the Inquiry-based approach   Ideas of project