



We invite you through this template to get creative while getting technical support in designing a unique and inclusive project! You are free to develop your own solution or to be inspired by solutions proposals. In the end, depending on the path you choose, your solution will be unique!

Describe your project



Name your project: _____

Short introduction of what your project is about, the problem tackled behind, the pedagogical objectives

Reflect on equity and inclusiveness



ASPIRATIONS & MOTIVATIONS

How do you feel when doing STEM? What motivates you in STEM? What motivates your students? Are all your students motivated by the same? What would they like to do?

ISSUES AND BARRIERS

What worries your students? What frustrations do they have? Are there any differences that make them be at a disadvantage to other students? And regarding robotic and digital in STEM activities?

KEYWORDS

Indicate 3 or more keywords that describe the reality of your students regarding STEM/STEAM activities



- Review the table of potential use cases available at the end of this book for inspirations
- Review the "[Resources on inclusive education - Activity sheet 1 - R2AS1](#)" for reflecting on inclusiveness.
- Use the [Canva 1](#) for performing the activity.



At this stage, you are required to find a programming solution to collect your data, identify which sensors to be used and how to program them on MakeCode for the platform to communicate with your board.

ORIENTATION



Define what is the problem to be solved, what are data to be collected, what are the learning objectives behind the programming topic?

CONCEPTUALISATION



Formulate a hypothesis to answer the given problem regarding data collection



INVESTIGATION

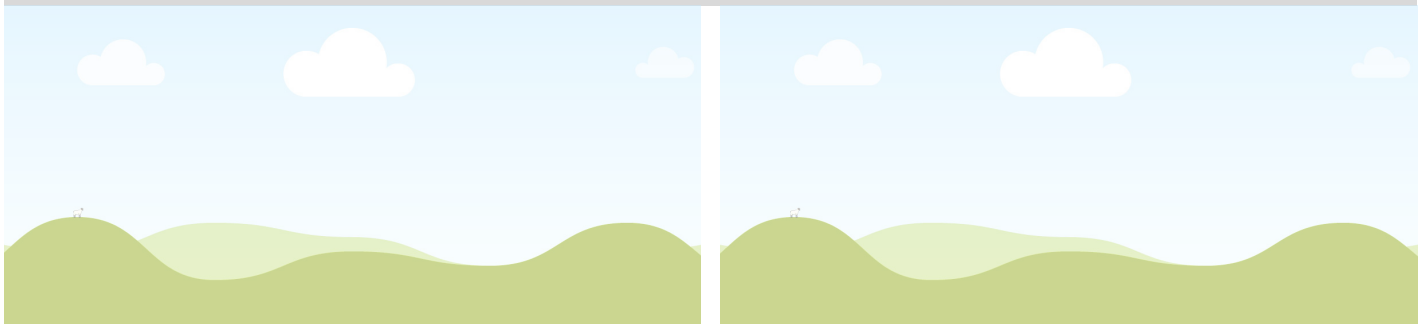


Describe the steps you need to collect the data that will be necessary for your project



For helping you in your developments and choices, check the resources available in **PART II - PROGRAMMING EASILY THANKS TO LET'S STEAM ACTIVITY SHEETS** for helping you with this step.

Provide screenshots of the MakeCode platform and of your board



DEBRIEF



Identify the knowledge mobilized during this phase, think about your classroom and identify possible learning, add references issues that may come up



INCLUSIVENESS

At this stage, you start to have a clear idea of how the project and the activity will be performed! But have you thought of the inclusiveness and equity requirements while designing it!? Let's check this out by answering the **Canva 2 - Checklist**.



At this stage, you are required to find a programming solution to display your data, enabling, now you have asked a sensor to obtain information, to make this information known to the user.

ORIENTATION



Define what is the challenge in the display of the data you need? For you? For your classroom? For the user?

CONCEPTUALISATION



Formulate a hypothesis to answer the given problem regarding data display



INVESTIGATION

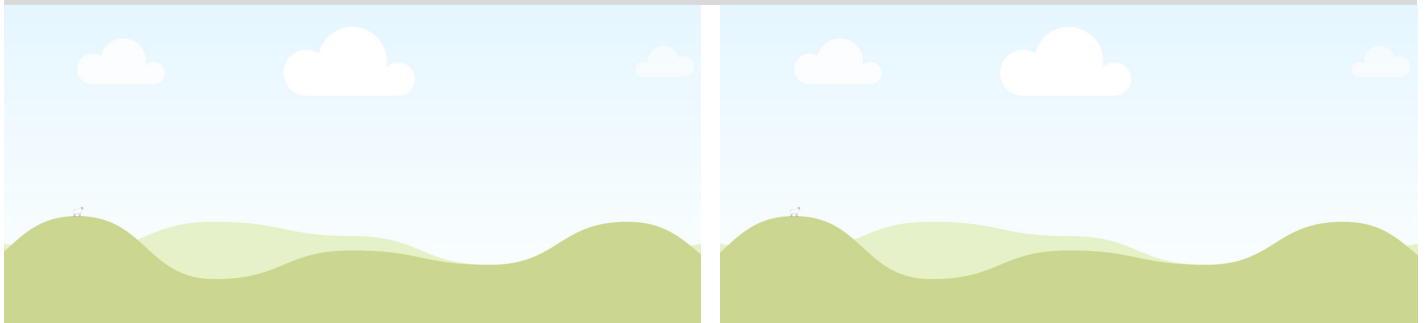


Describe the steps you need to display and show the data that will be necessary for your project



For helping you in your developments and choices, check the resources available in **PART II - PROGRAMMING EASILY THANKS TO LET'S STEAM ACTIVITY SHEETS** for helping you with this step.

Provide screenshots of the MakeCode platform and of your board



DEBRIEF



Identify the knowledge mobilized during this phase, think about your classroom and identify possible learning, add references issues that may come up



INCLUSIVENESS

Getting a bit further in your project, let's perform an addition inclusiveness check! Data collection is a crucial step in terms of potential privacy and sharing issues! Reflect on this and on the whole process by answering the **Canva 2 - Checklist**.



Now we are able to display data instantly, we need to analyze them to perform monitoring of our information (for instance, monitoring of temperature, of alerts, motion, frequency ...). This stage is made for enabling this analysis on the editor.

ORIENTATION



Define what is the challenge in this step according to your project. What is your challenge in analysing and extracting the relevant information applied to your context?

CONCEPTUALISATION



Formulate a hypothesis to answer the given problem regarding data analysis



INVESTIGATION

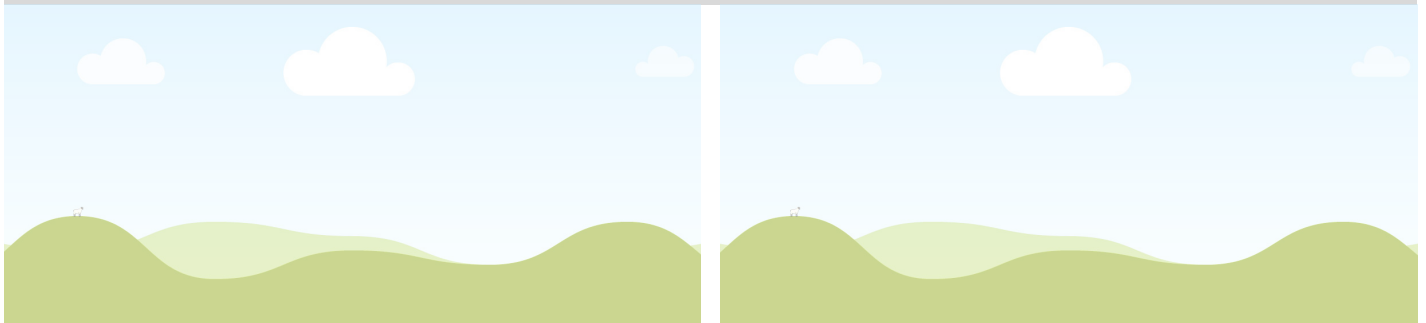


Describe the steps you need to analyse and monitor the data that will be necessary for your project



For helping you in your developments and choices, check the resources available in **PART II - PROGRAMMING EASILY THANKS TO LET'S STEAM ACTIVITY SHEETS** for helping you with this step.

Provide screen shots of the MakeCode platform and of your board



DEBRIEF



Identify the knowledge mobilized during this phase, think about your classroom and identify possible learning, add references issues that may come up

INCLUSIVENESS



Getting a bit further in your project, let's perform an addition inclusiveness check! Data collection is a crucial step in terms of potential privacy and sharing issues! Reflect on this and on the whole process by answering the **Canva 2 - Checklist**. Once you will have applied the whole activity in your classroom, we encourage you to also fill it in the **Table for Final Analysis** available in this coursebook.