

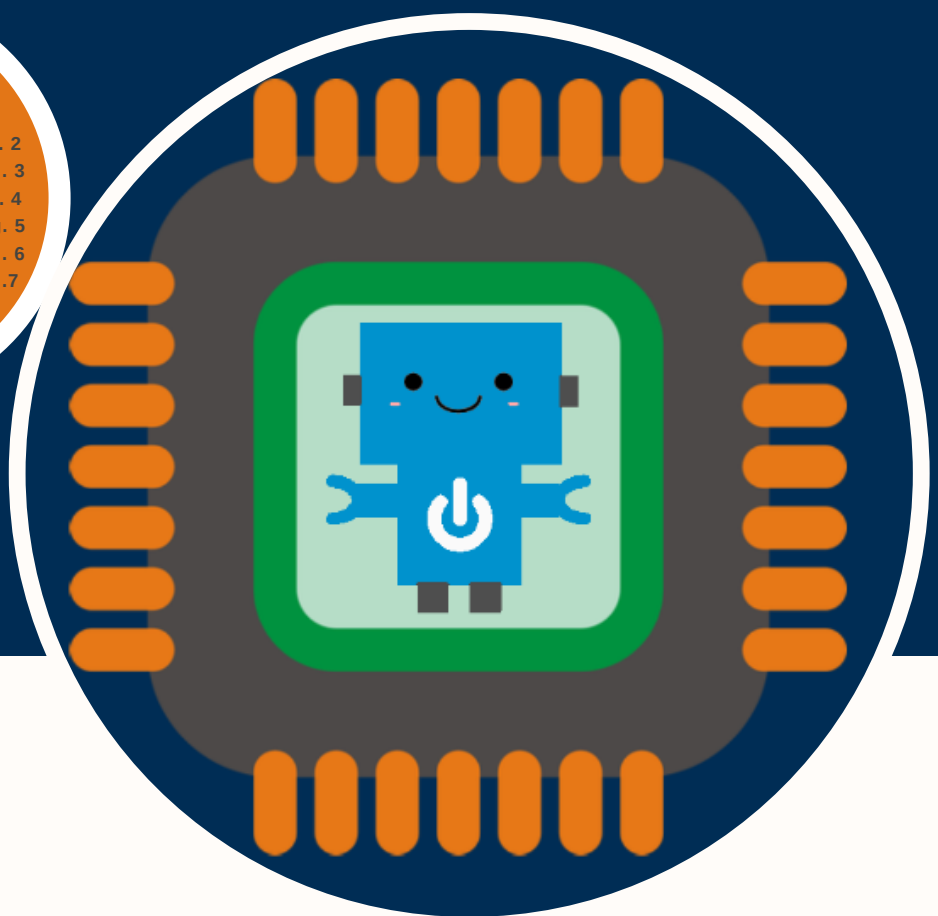
ROBOSTEM



Project No. 2019-1-RO01-KA202-063965

AGENDA:

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A TRAINERS TOOLKIT TO FOSTER STEM SKILLS USING MICROCONTROLLER APPLICATIONS

Welcome by the Robostem Group

Welcome to the Fourth & Final newsletter from the RoboSTEM group. Thank you for the time that you will spend reading this and hope that it will be useful for you and your development.



<https://robostem.netlify.com/home>



<https://www.facebook.com/Robostem.eu/>

AIM

The project RoboSTEM is intended to foster skills upon STEM subjects & create a curriculum for schools to use. The curriculum will include contents that aim to develop STEM skills in students and include examples of learning activities and evaluation methods. Topics include application of Maths, Physics, Chemistry, Biology & Technology.

TARGET GROUP

The Erasmus + RoboSTEM project is aimed at high school STEM teachers and their students.

Main Objectives of the project

The project is intended to project, program and use embedded systems for educational purposes catering mostly upon STEM (Science, Technology Engineering & Mathematics). Implementing learning activities in classrooms with the focus of familiarising students with new technologies based upon micro-controllers.

This will create a study platform for the free access to curricular resources upon the theme of creating and developing upon applications with micro-controllers. This will create new EU partnerships with the transfer of good practices and innovations between institutions that target the development of STEM skills.





The journey started back in January 2020 where the first international meeting was held in Romania, Iasi.

Case Study Title:	Arduino 3D printed robot															
Problem Background	The industrial sector needs workers with skills related to 3D printing and robotics as well as with soft skills like teamwork, creativity and problem-solving. However, the curricula includes only theoretical notions of STEM or isolated concepts of mechanics and engineering. Consequently, a methodology that promotes the development of such complex and interdisciplinary skills for students is required.															
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<p>RoboSTEM Project No. 2019-2-RO01-64282-013945 This project has been funded with support from the European Commission. The content reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.</p>																



Choosing a Motor Controller

Developed by Ludor Engineering



Assembling the Device

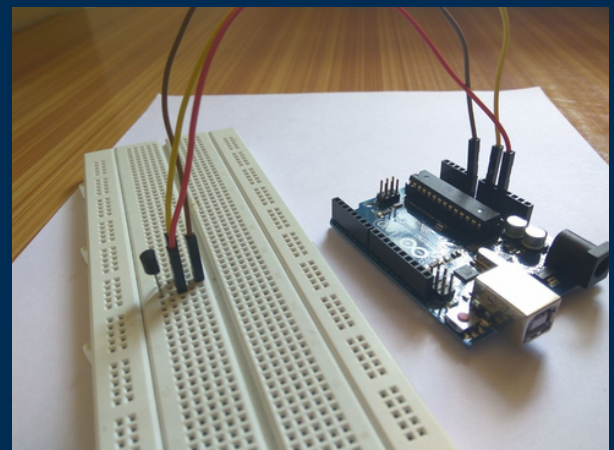
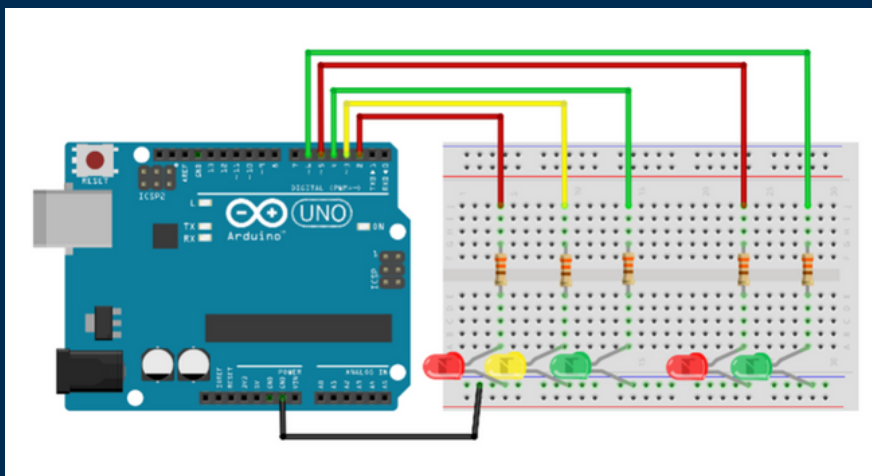
Developed by LIIS

First, we created some background knowledge into the project, what the kids wanted, and what topics

Creating the toolkits

4

Many different scenarios were created, so that the students can have a variety to choose from. Each one is aimed at trying to tackle a different subject to encompass as much as possible from the field of STEM.



All of these were made to inspire creativity in students.

Student Engagement

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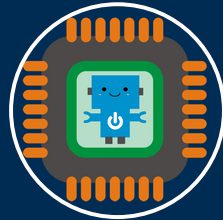
Students engagement was exceptional, most felt involved in the learning process and could reliably work on their own after only a short introduction into the subject.



Robostems last meeting was held in the lovely city of Dubrovnik.



Although the project has ended. All of the material is accessible for any other interested parties. See the link below. Link: <https://robostem.vercel.app/?fbclid=IwAR3eE7srr1c5jJrh6dmmod2cCZNUZJ1l-FQDP76AzY5mRgAaZ2CilxgckvU>



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