

LAB-TYPE LEARNING

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Abstract

Feel

Imagine

This projects funding would make possible to create a fablearn lab to our school's premise, which would be the center of operating technology devices. The main purpose on doing things with fablearn lab is learning, learning things through technology and using inventing pedagogy. There is also a possibility to take in use devices to other places in school to use when necessary. The main purpose is for student use, but the use is also available to other partners for example, clubs, societies, associations: adults, retired persons, unemployed persons.

We will first build a Lego driving robot 1. Later you can also build additional parts, but we will start building and coding practice with a simple robot. Open the Lego spike prime program on the iPad and select building instructions and then Lego driving robot 1. You can start building according to the instructions.

When the robot has been built, the programming practice begins. First you need to launch the coding part of Lego spike prime software. by placing the control commands in the order "when the program starts" below the bar, the commands will occur in that order.

For those who have done Lego robot building and programming before, we have something different to do. Open the micro:bit program on the iPad, and choose the programming you like from the coding software.

There are many steps and things to take into account when working. You must have some experience in using iPads, and in addition, when using Lego software and micro:bit software, you need to know how to take into account the special areas of each application.

There are ready-made instructions for building and coding robots, but you can also start working without instructions if necessary. We can look at some things together, but it would be good to find out some things yourself and come up with solutions.

Description

This coding project that we are introducing next, is completed in our school's technology club. Both schools Matti Lohen koulu and Kerkonjoen koulu are participated. We work together so we will do only one project. In this project, we are learning to build a Lego robot and program it to move with different-by-different kind of coding patterns. For advanced coders we are going to use micro:bit controllers.



Create



At some points you may encounter difficulties, the software does not work or there are some other problems. Then it is important to stay calm and look for solutions and ask for help. Coding is largely about asking the right questions and finding the answers.

Share

Our goal was to build robots, learn to code and make some advanced programming. Getting to know new coding software was also an important part of our project. Children worked very hard to learn and reach our goal. we are continuing our technology club and other school projects to learn coding even better.

Link on the portal

<https://www.schoolofthefuture.eu/index.php/fi/osos/osos-project/lab-type-learning>