Ardublockly-ESP – Quick Start Guide for Teachers

Ardublockly-ESP is a didactically optimized Open Source Blockprogramming IDE which generates Arduino program code and supports the microcontrollers ESP9266, ESP32 and many Arduino models. It is an extension from the Blockprogramming IDE Ardublockly and is based on the Blockly Framework from Google. Ardublockly-ESP has been published unter the Apache 2.0 License on Github at https://github.com/pati5000/Ardublockly-ESP. The full documentation on Ardublockly-ESP can be found there as a Wiki page: https://github.com/pati5000/Ardublockly-ESP/wiki. For questions and issues there is a supporting Community available via the Link: https://github.com/pati5000/Ardublockly-ESP/issues.

1. Requirements

Ardublockly-ESP is a software that needs to be installed on each PC. The PC needs to fullfill the following requirements to run Ardublockly-ESP:

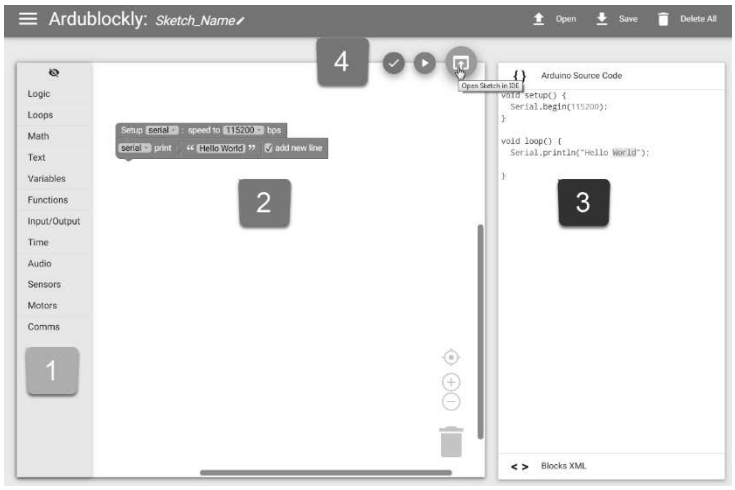
- Operating System Windows or Linux
- Ardublockly IDE from Version 1.6
  https://www.arduino.cc/en/main/software
- Python from Version 2.7
  https://www.python.org/downloads/
- Suggested Browser: Google Chrome
  https://www.google.com/chrome/

2. Download & Installation

1. Download the ZIP-File of the latest Release for your Operating System (Windows or Linux) by opening this Link:
   https://github.com/pati5000/Ardublockly-ESP/releases/
   If you want you can also use Git Tools to perform this step.
2. Extract the ZIP-File to the location on your PC, which is intended to contain Program Files.
3. Now create a folder for the start menu of the students accounts named Ardublockly-ESP.
4. There create a Shortcut which points to the file *start.py* in the program folder from Step 2 and name that „Run Ardublockly“.

3. Usage

As soon as you have opened the file *start.py* (or the created start menu entry), a local webserver will be started and your standard browser will open Ardublockly-ESP with the URL http://localhost:8000/ardublockly/index.html:



The key elements in the user interface are:

1. Sidebar which contains block categories that can be opened and contain the related blocks.
2. Area, which contains the block program. The blocks from the sidebar are moved there to add them to the program.
3. Area where the generated Arduino program code for the current block program is shown. The last added block will automatically be highlighted in yellow.
4. Arduino IDE control elements, which are verifying the program, upload it to the microcontroller or open it in the Arduino IDE.