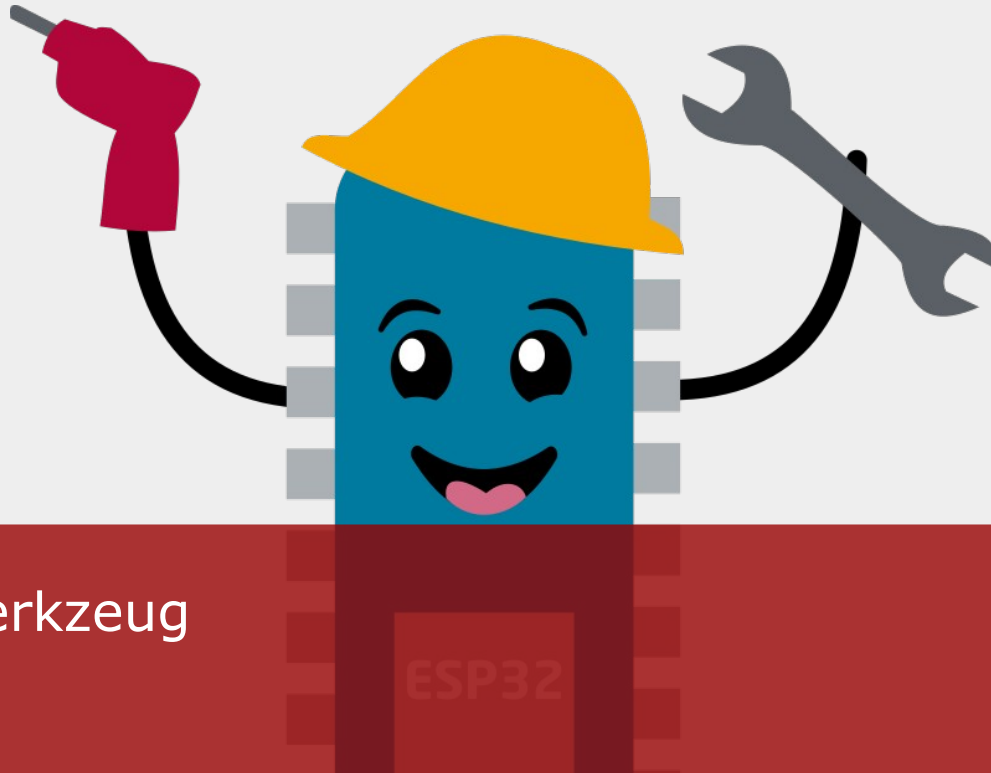




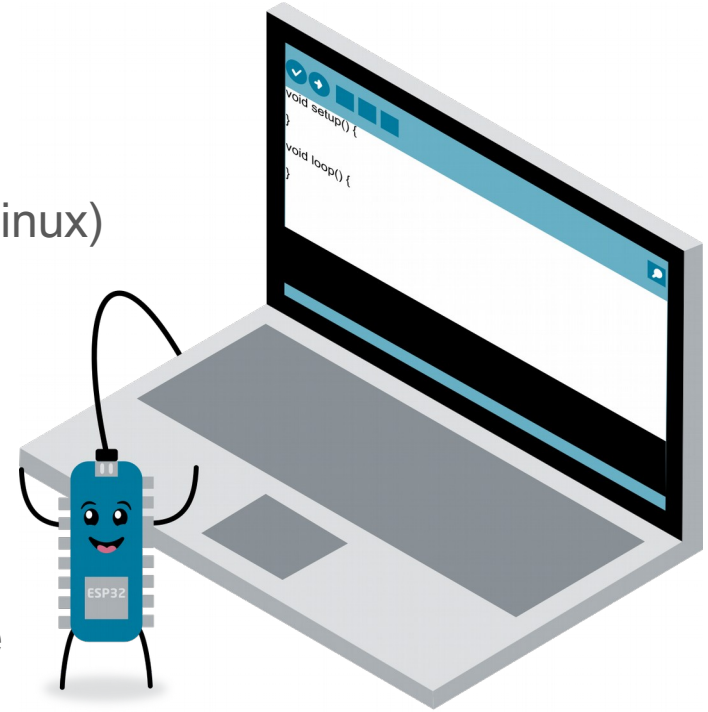
Das richtige Werkzeug

Woche 1 | Lektion 2

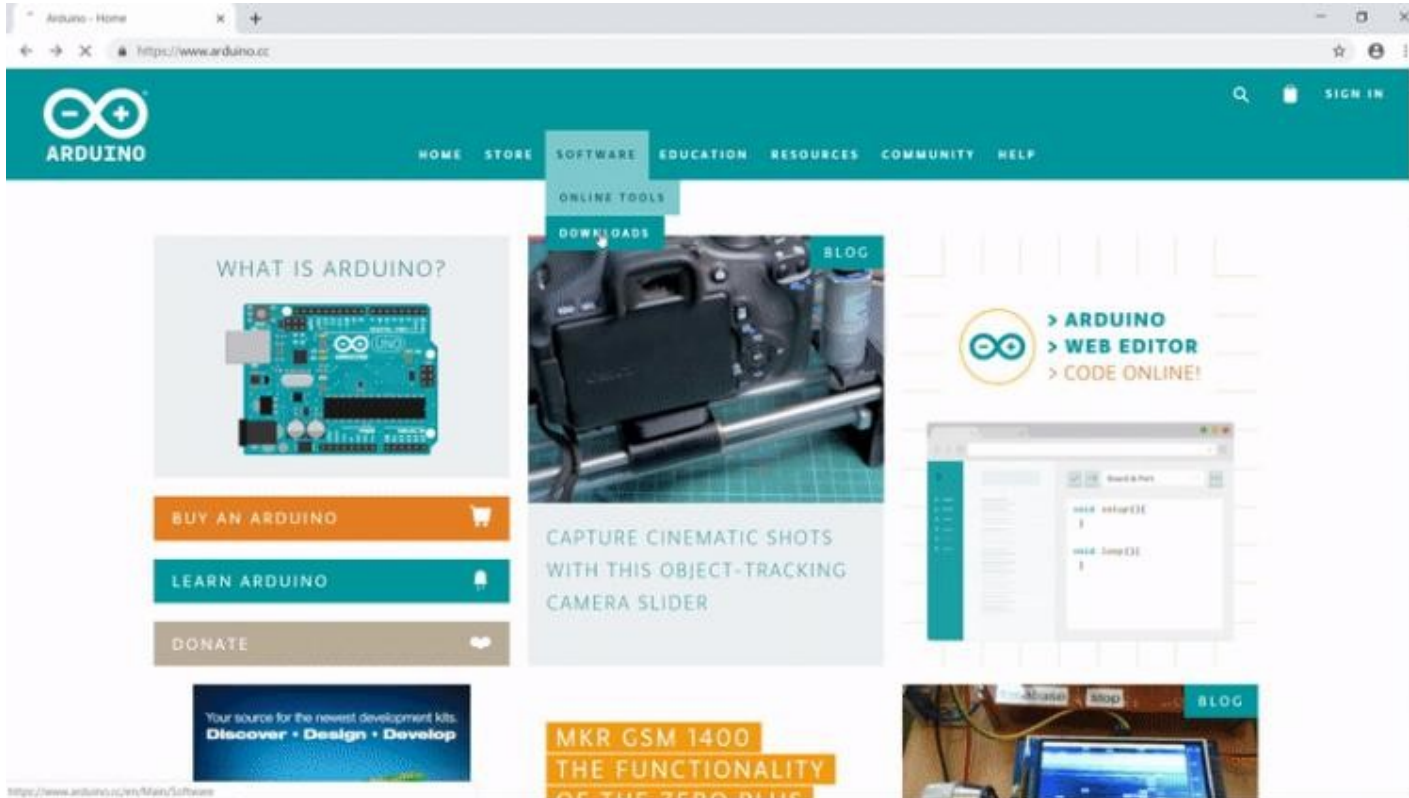
- Programmierumgebung
- Open-Source Software
- Plattformunabhängig (Windows, macOS und Linux)

Warum?

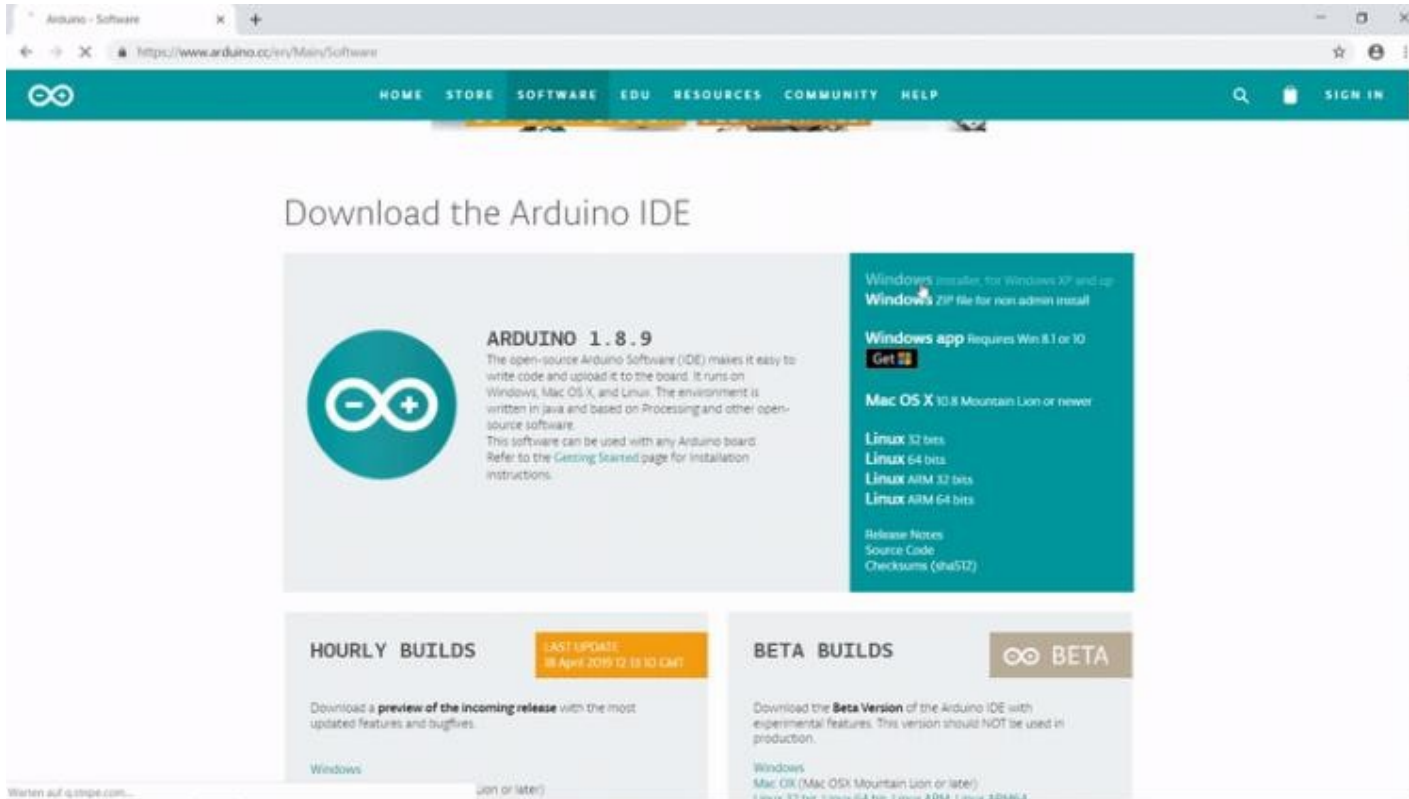
- Bessere Lesbarkeit des Codes durch Syntaxhervorhebung
- Umwandlung des Codes in Maschinensprache für den Mikrocontroller
- Code schreiben und durch Buttons einfach hochladbar auf den Mikrocontroller



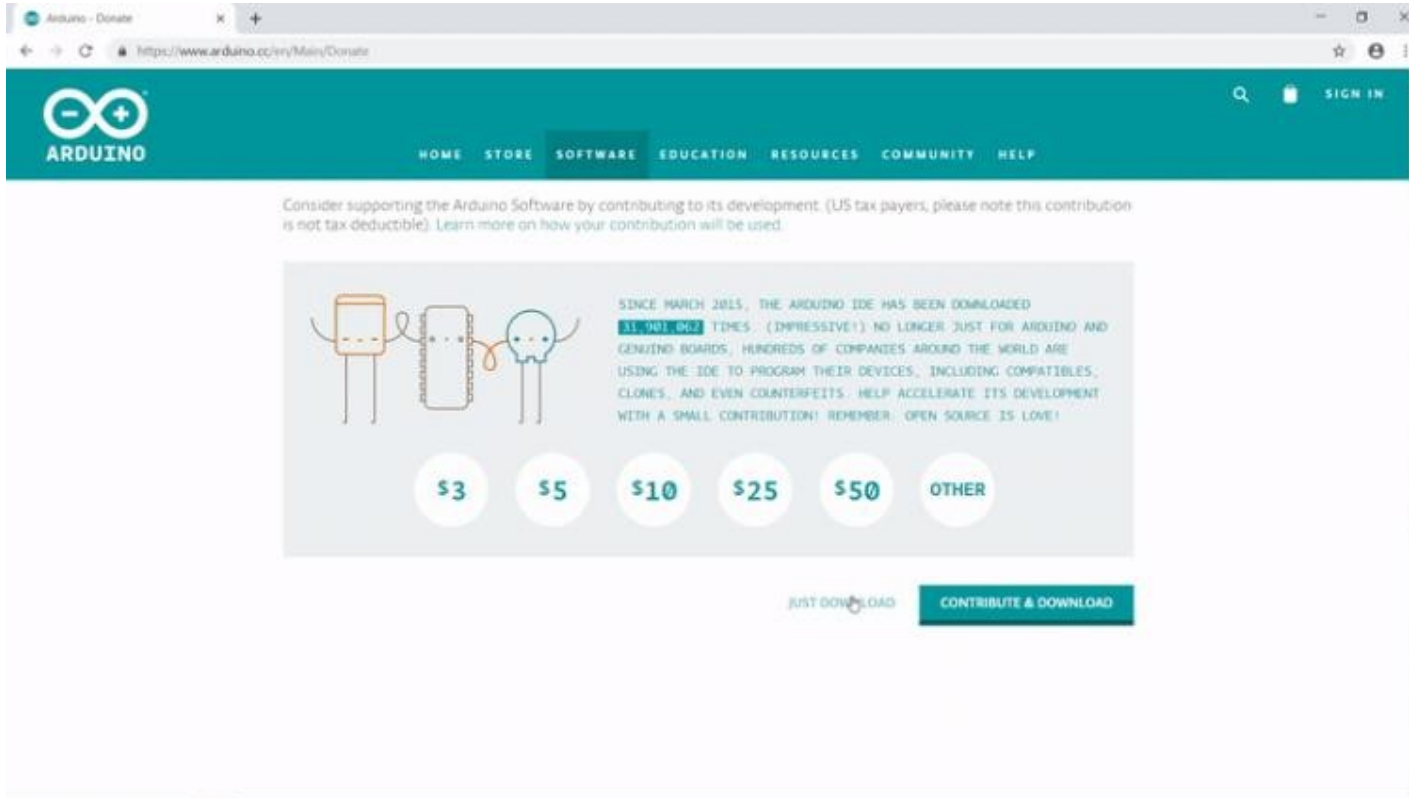
- <https://www.arduino.cc/en/main/software>



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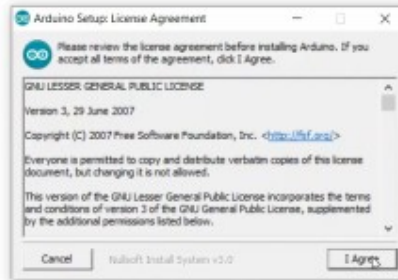
- <https://www.arduino.cc/en/main/software>



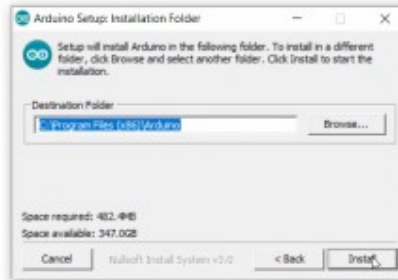
- Installationsprozess auf Windows



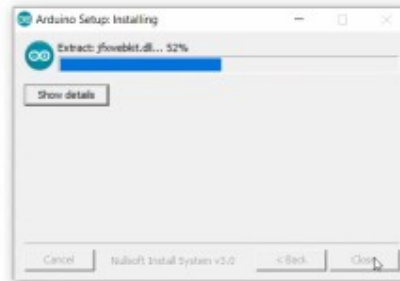
- Installationsprozess auf Windows



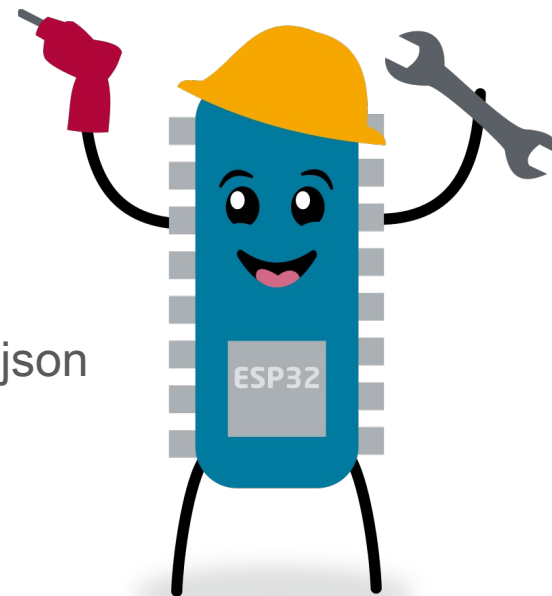
- Installationsprozess auf Windows



- Installationsprozess auf Windows



- Board-Definitionen in folgender Datei definiert:
 - https://dl.espressif.com/dl/package_esp32_index.json





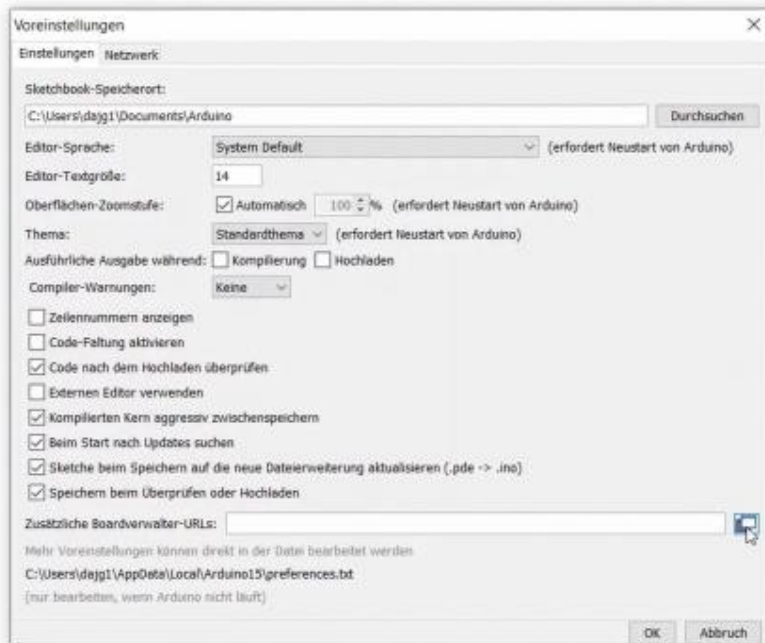
, to run once:

, to run repeatedly:

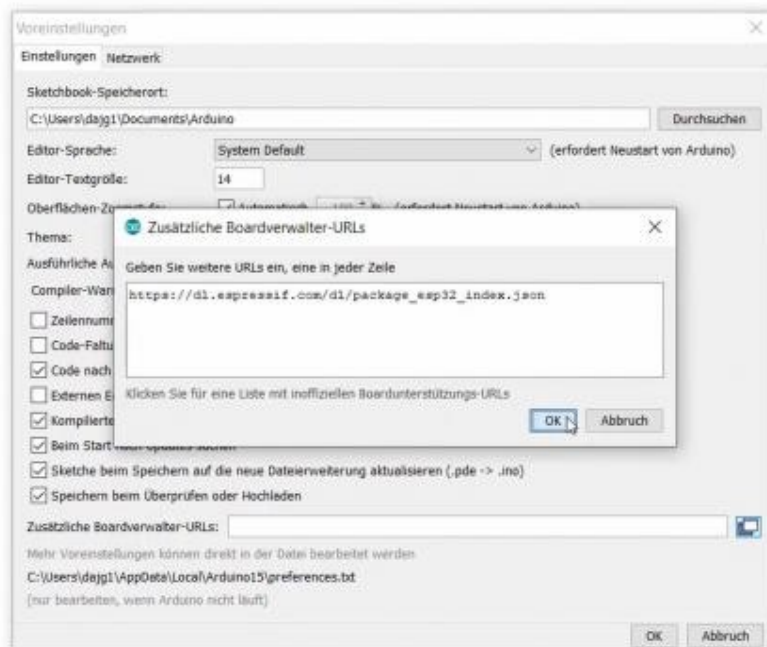


sketch_apr24a

```
void setup() {  
  // put your setup code here, to run once:  
  
}  
  
void loop() {  
  // put your main code here, to run repeatedly:  
  
}
```



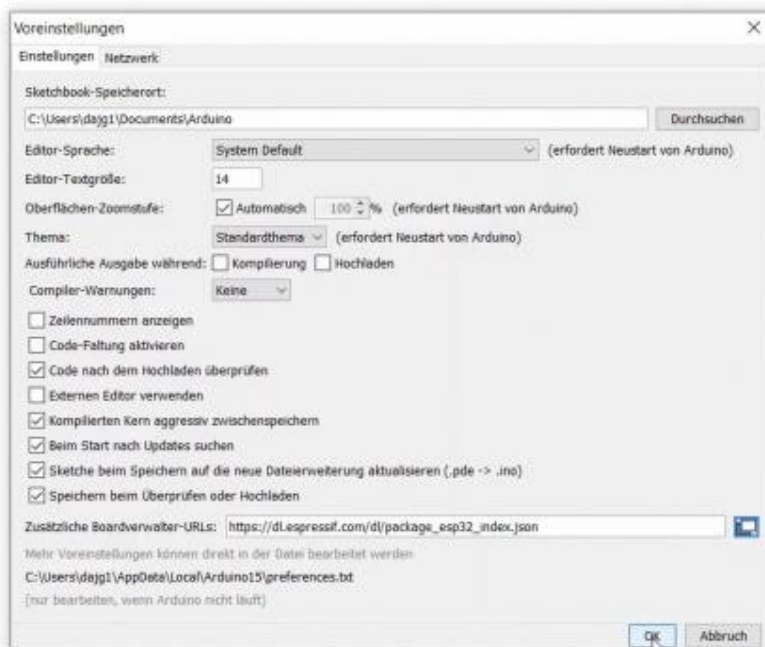
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sketch_apr24a

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void setup() {  
  // put your set
```

}

```
void loop() {  
  // put your mai
```

}

Automatische Formatierung Strg+T
Sketch archivieren
Kodierung korrigieren & neu laden
Bibliotheken verwalten... Strg+Umschalt+I
Serieller Monitor Strg+Umschalt+M
Serieller Plotter Strg+Umschalt+L
WiFi101 / WiFiNINA Firmware Updater

Board: "Arduino/Genuino Uno"

Port: "COM6"

Boardinformationen holen

Programmer: "USBtinyISP"

Bootloader brennen

Boardverwalter...

Arduino AVR-Boards

Arduino Yún

• Arduino/Genuino Uno

Arduino Duemilanove or Diecimila

Arduino Nano

Arduino/Genuino Mega or Mega 2560

Arduino Mega ADK

Arduino Leonardo

Arduino Leonardo ETH

Arduino/Genuino Micro

Arduino Esplora

Arduino Mini

Arduino Ethernet

Arduino Fio

Arduino BT

LilyPad Arduino USB

LilyPad Arduino

Arduino Pro or Pro Mini

Arduino NG or older

Arduino Robot Control

Arduino Robot Motor

Arduino Gemma

Adafruit Circuit Playground

Arduino Yún Mini

Arduino Industrial 101

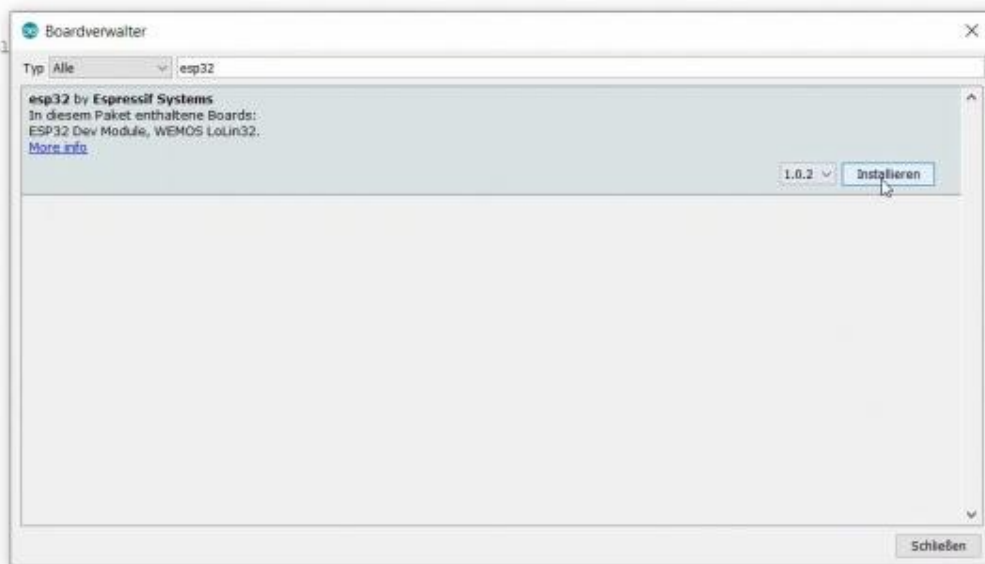
Linino One

Arduino Uno WiFi



sketch_apr24a

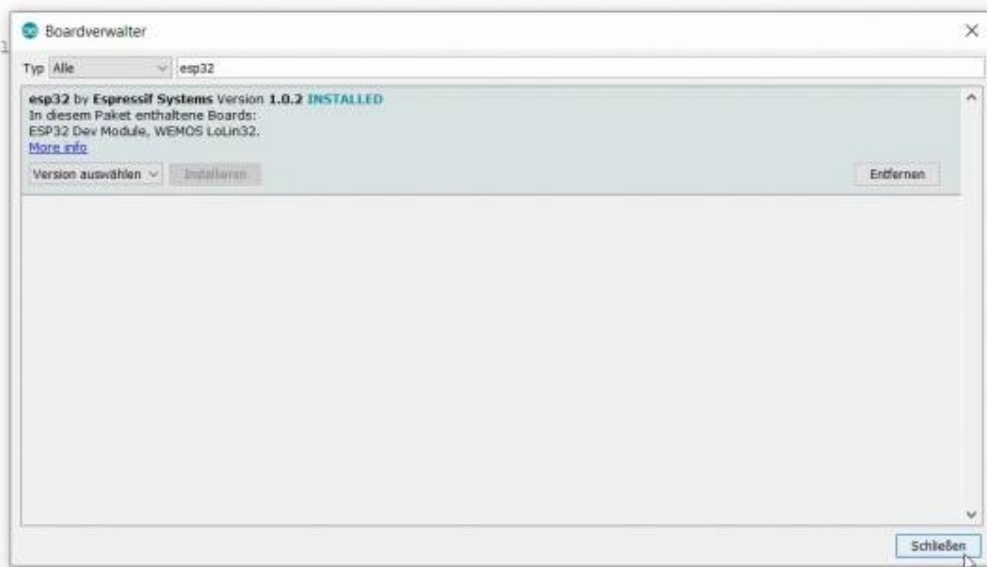
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}  
  
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Automatische Formatierung Strg+T
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WiFi101 / WIFININA Firmware Updater

Board: "Arduino/Genuino Uno"

Port: "COM6"

Boardinformationen holen

Programmer: "USBTinyISP"

Bootloader brennen

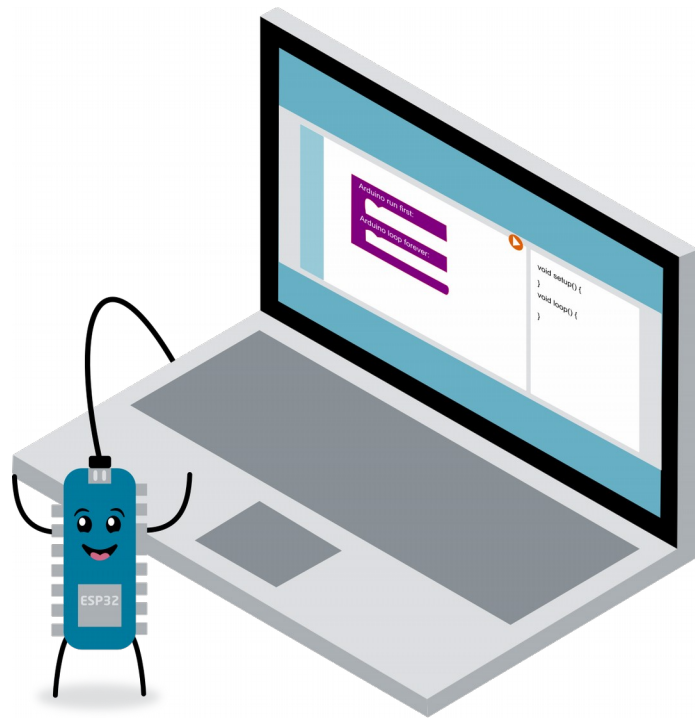
Boardverwalter...

▲
Arduino Ethernet
Arduino Fio
Arduino BT
LilyPad Arduino USB
LilyPad Arduino
Arduino Pro or Pro Mini
Arduino NG or older
Arduino Robot Control
Arduino Robot Motor
Arduino Gemma
Adafruit Circuit Playground
Arduino Yun Mini
Arduino Industrial 101
Linino One
Arduino Uno WiFi
ESP32 Arduino
ESP32 Dev Module
ESP32 Wrover Module
ESP32 Pico Kit
Turta IoT Node
TTGO LoRa32-OLED V1
XinaBox CW02
SparkFun ESP32 Thing
u-blox NINA-W10 series (ESP32)
Widora AIR
Electronic SweetPeas - ESP320
Nano32
LOLIN D32
LOLIN D32 PRO
WEMOS LOLIN32
Dongsen Tech Pocket 32
"WeMos" WiFi&Bluetooth Battery
▼

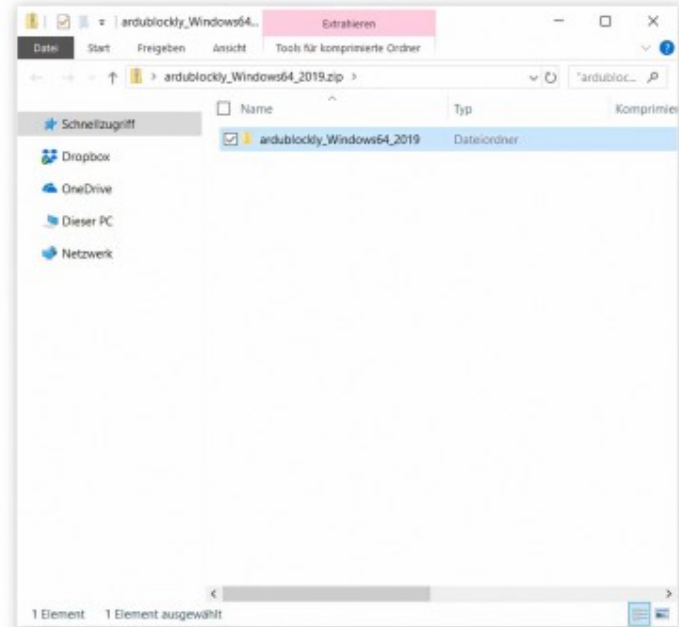
- Programmierumgebung, welche blockbasiert ist und Code für die Arduino IDE generiert

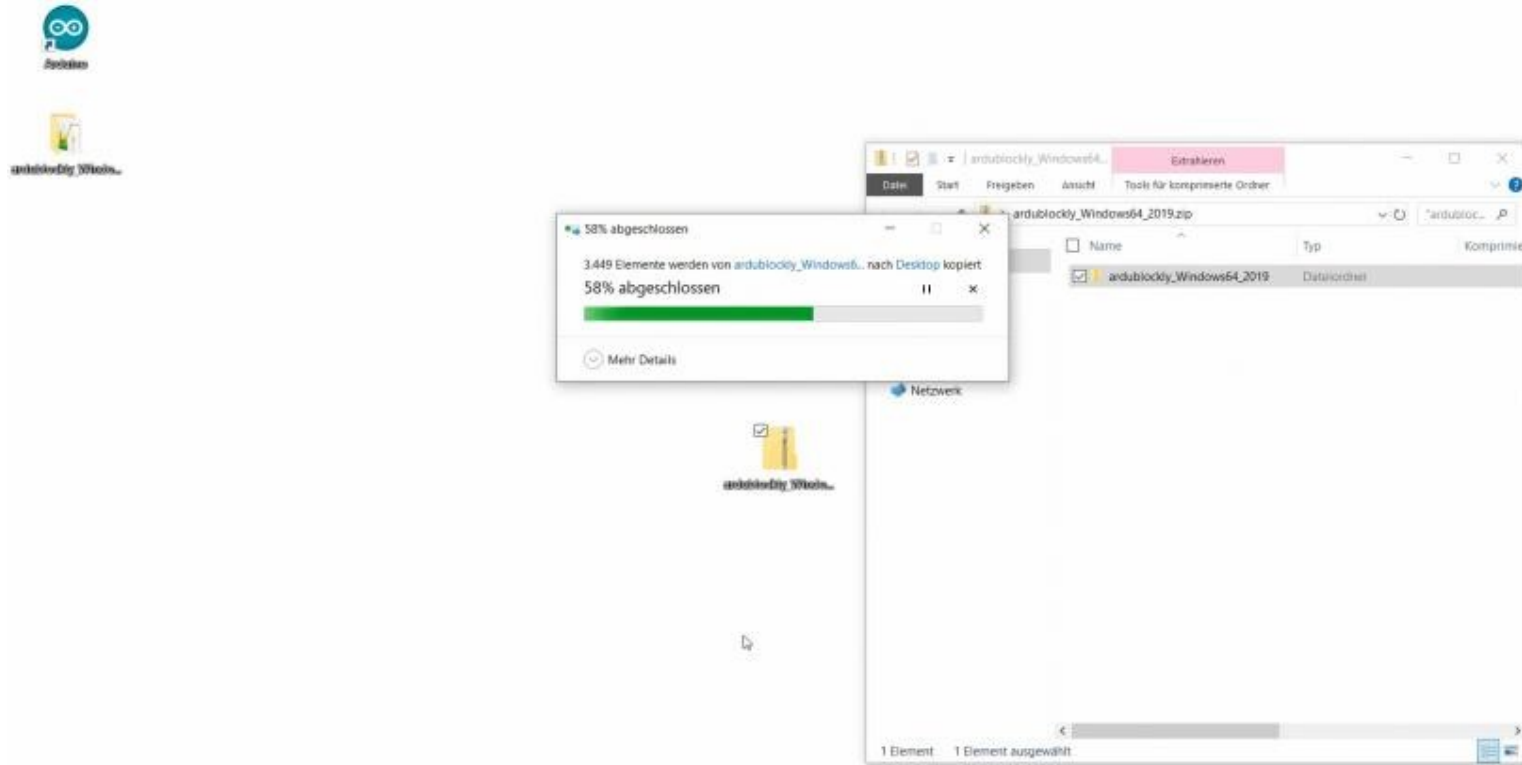
Warum?

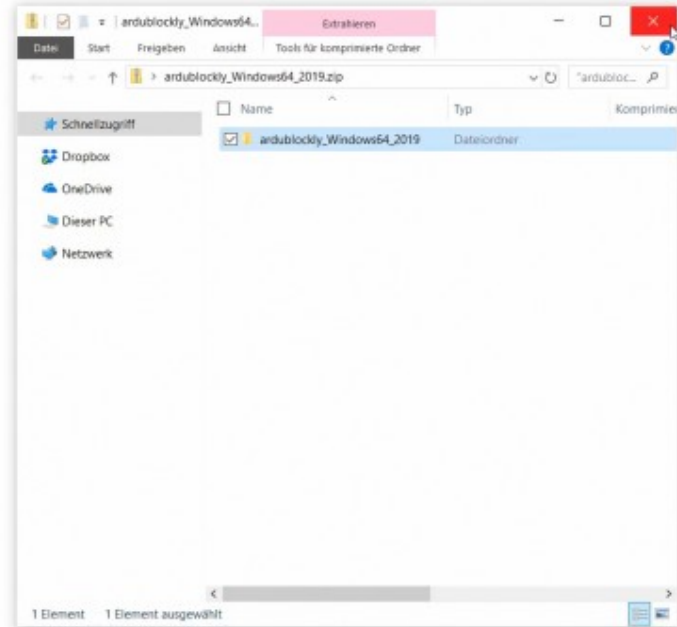
- Einstieg ins Programmieren vereinfacht
- Weniger Programmierfehler
- Umstieg zum Programmieren mit einer nicht visuellen Programmiersprache leichter

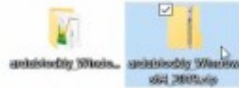




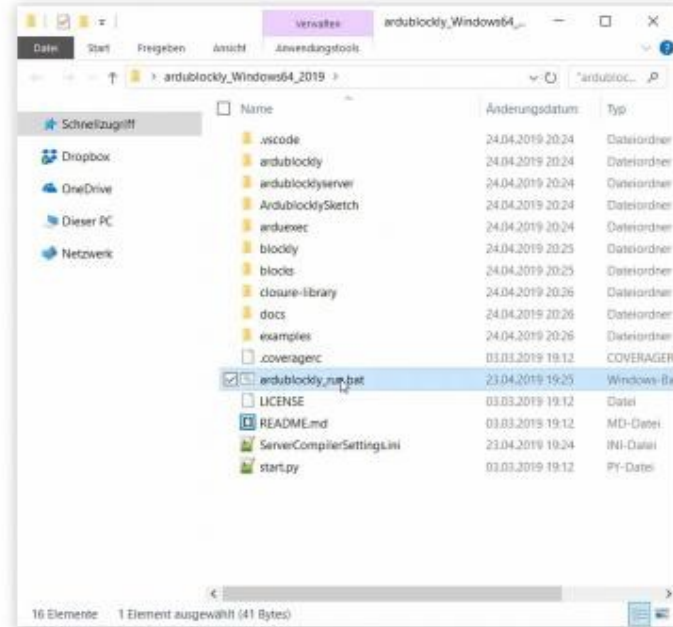


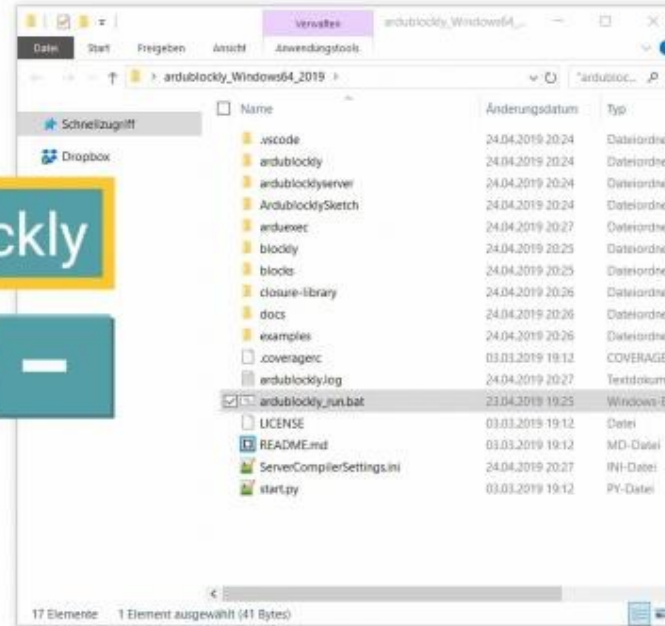
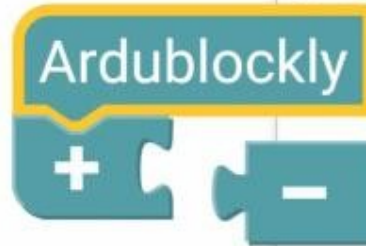




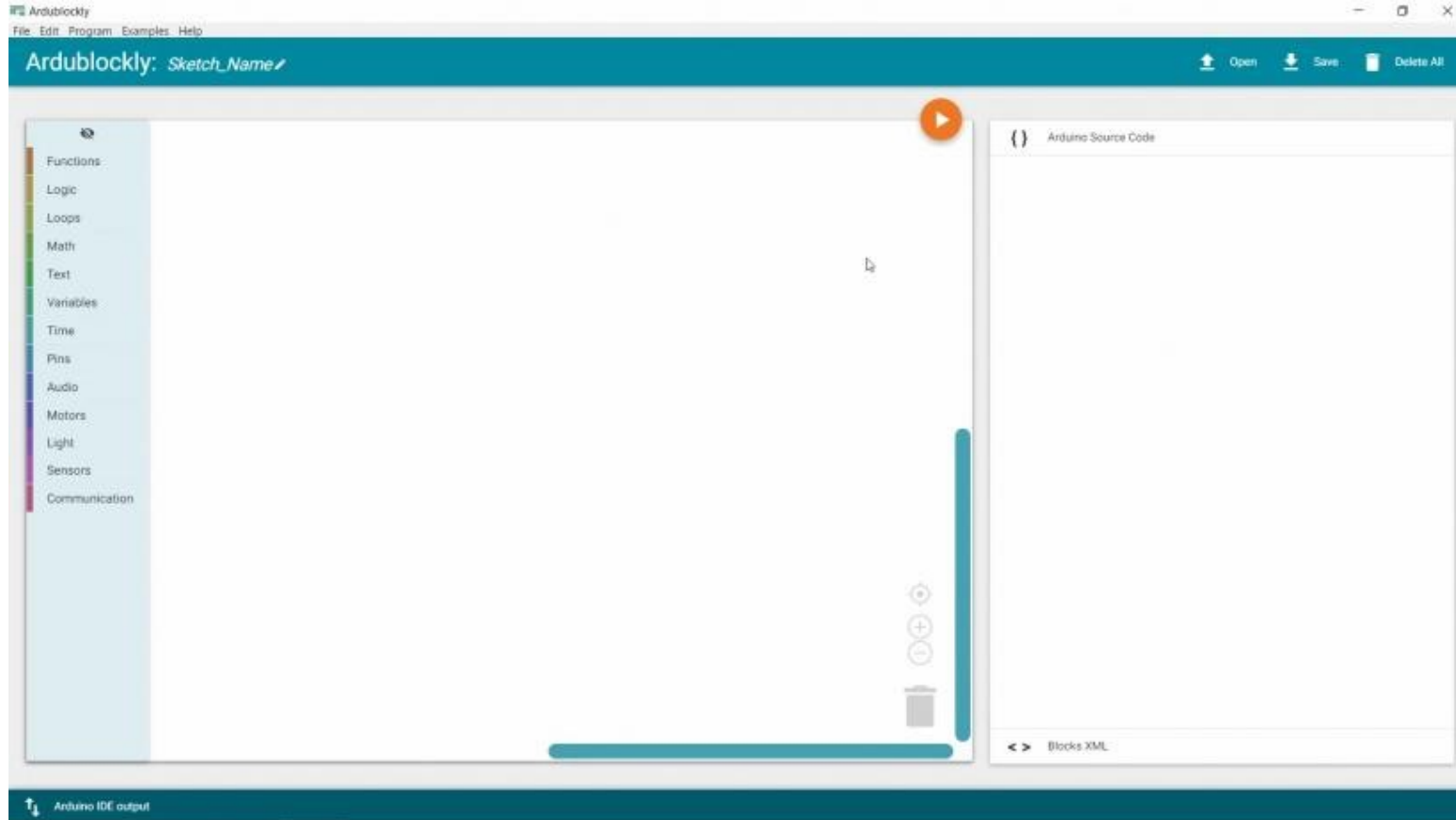




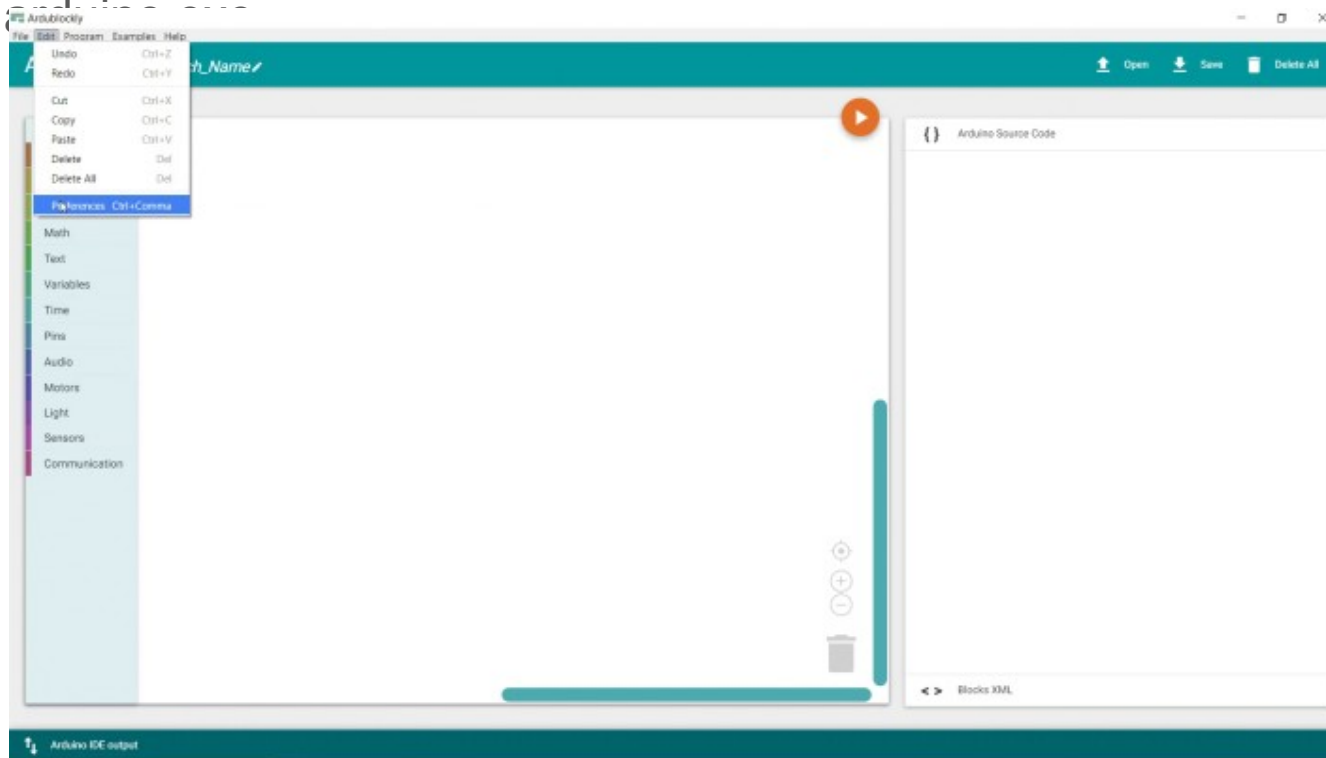




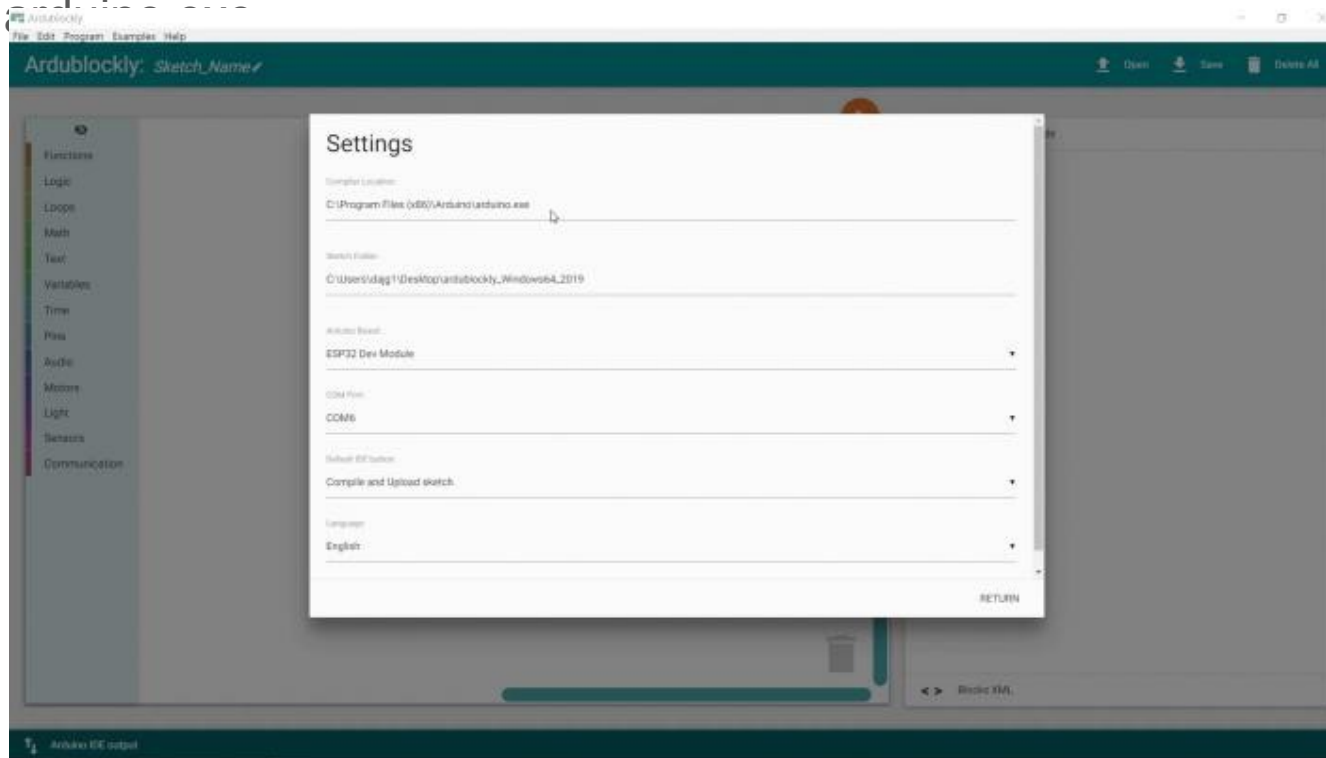
Installation - Ardublockly



- C:\Program Files (x86)\Arduino\

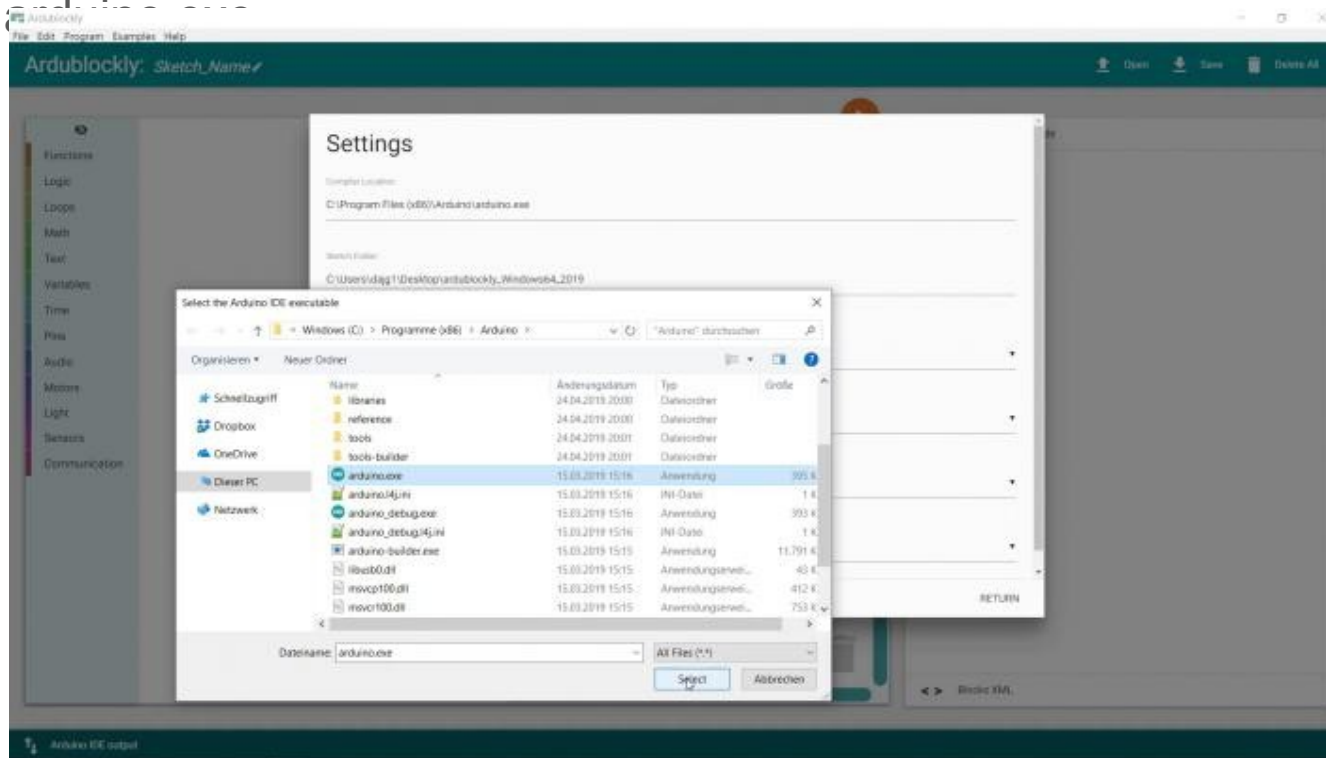


- C:\Program Files (x86)\Arduino\



Ardublockly mit der Arduino IDE verknüpfen

- C:\Program Files (x86)\Arduino\



- C:\Program Files (x86)\Arduino\

