

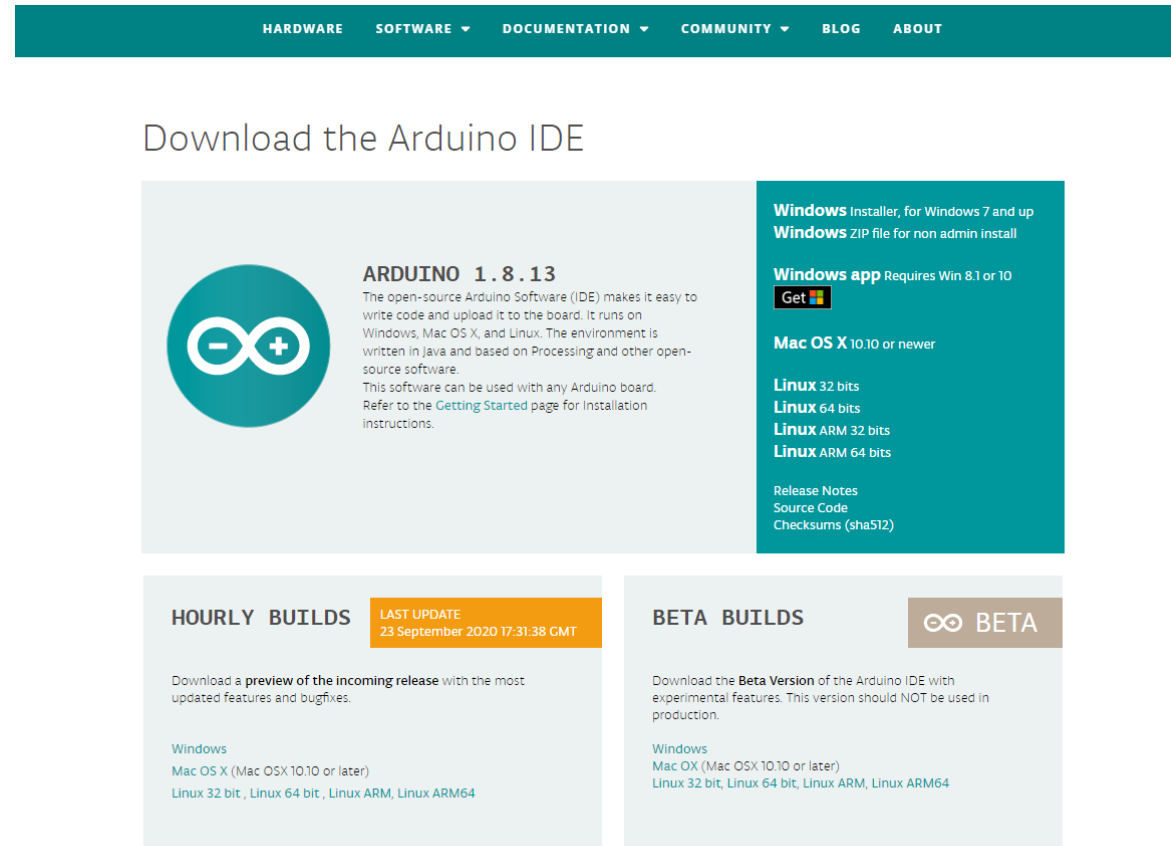


Module 2-2

SETTING UP THE ARDUINO IDE: Setting Up Arduino

Setting up – Download Arduino IDE


<https://arduino.cc/download>



The screenshot shows the Arduino IDE download page. At the top is a teal navigation bar with links for HARDWARE, SOFTWARE, DOCUMENTATION, COMMUNITY, BLOG, and ABOUT. Below the navigation bar is the heading "Download the Arduino IDE". The main content area is divided into several sections. On the left, there is a large teal circle containing the Arduino infinity logo. To its right, the text reads "ARDUINO 1.8.13" followed by a description of the IDE and its compatibility with various operating systems and boards. On the right side of this section, there are links for "Windows Installer", "Windows ZIP file", "Windows app", "Mac OS X", and "Linux" (32 bits, 64 bits, ARM 32 bits, ARM 64 bits). Below these are links for "Release Notes", "Source Code", and "Checksums (sha512)". At the bottom left, there is a section for "HOURLY BUILDS" with a "LAST UPDATE" badge showing "23 September 2020 17:31:38 GMT" and a description of the preview release. At the bottom right, there is a section for "BETA BUILDS" with a "BETA" badge and a description of the beta version.

HARDWARE **SOFTWARE** **DOCUMENTATION** **COMMUNITY** **BLOG** **ABOUT**

Download the Arduino IDE



ARDUINO 1.8.13

The open-source Arduino Software (IDE) makes it easy to write code and upload it to the board. It runs on Windows, Mac OS X, and Linux. The environment is written in Java and based on Processing and other open-source software. This software can be used with any Arduino board. Refer to the [Getting Started](#) page for installation instructions.

Windows Installer, for Windows 7 and up
Windows ZIP file for non admin install

Windows app Requires Win 8.1 or 10
[Get](#)

Mac OS X 10.10 or newer

Linux 32 bits
Linux 64 bits
Linux ARM 32 bits
Linux ARM 64 bits

[Release Notes](#)
[Source Code](#)
[Checksums \(sha512\)](#)

HOURLY BUILDS

LAST UPDATE
23 September 2020 17:31:38 GMT

Download a **preview of the incoming release** with the most updated features and bugfixes.

[Windows](#)
[Mac OS X](#) (Mac OS X 10.10 or later)
[Linux](#) 32 bit, [Linux](#) 64 bit, [Linux](#) ARM, [Linux](#) ARM64

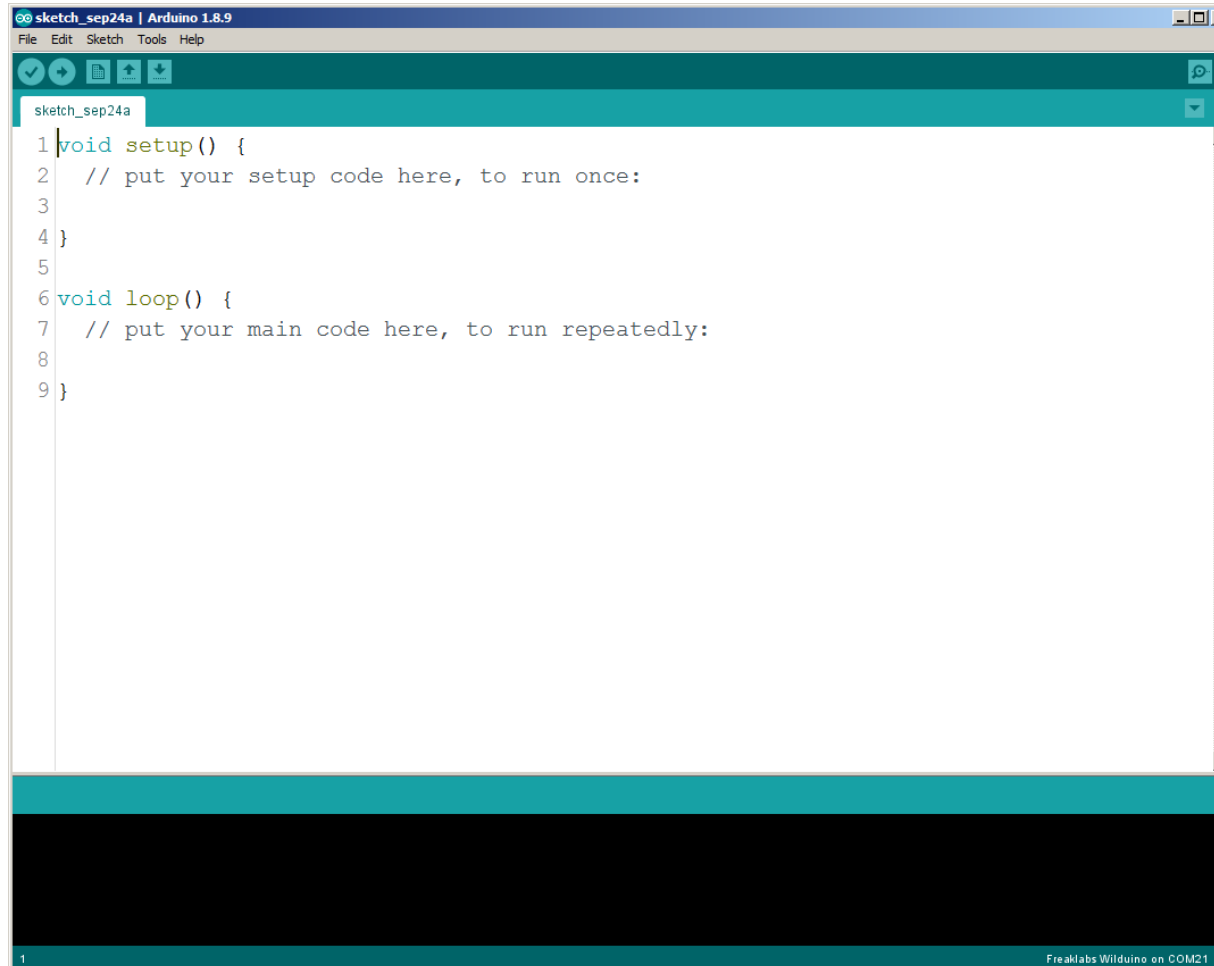
BETA BUILDS

BETA

Download the **Beta Version** of the Arduino IDE with experimental features. This version should NOT be used in production.

[Windows](#)
[Mac OS X](#) (Mac OS X 10.10 or later)
[Linux](#) 32 bit, [Linux](#) 64 bit, [Linux](#) ARM, [Linux](#) ARM64

Setting Up – Running Arduino IDE

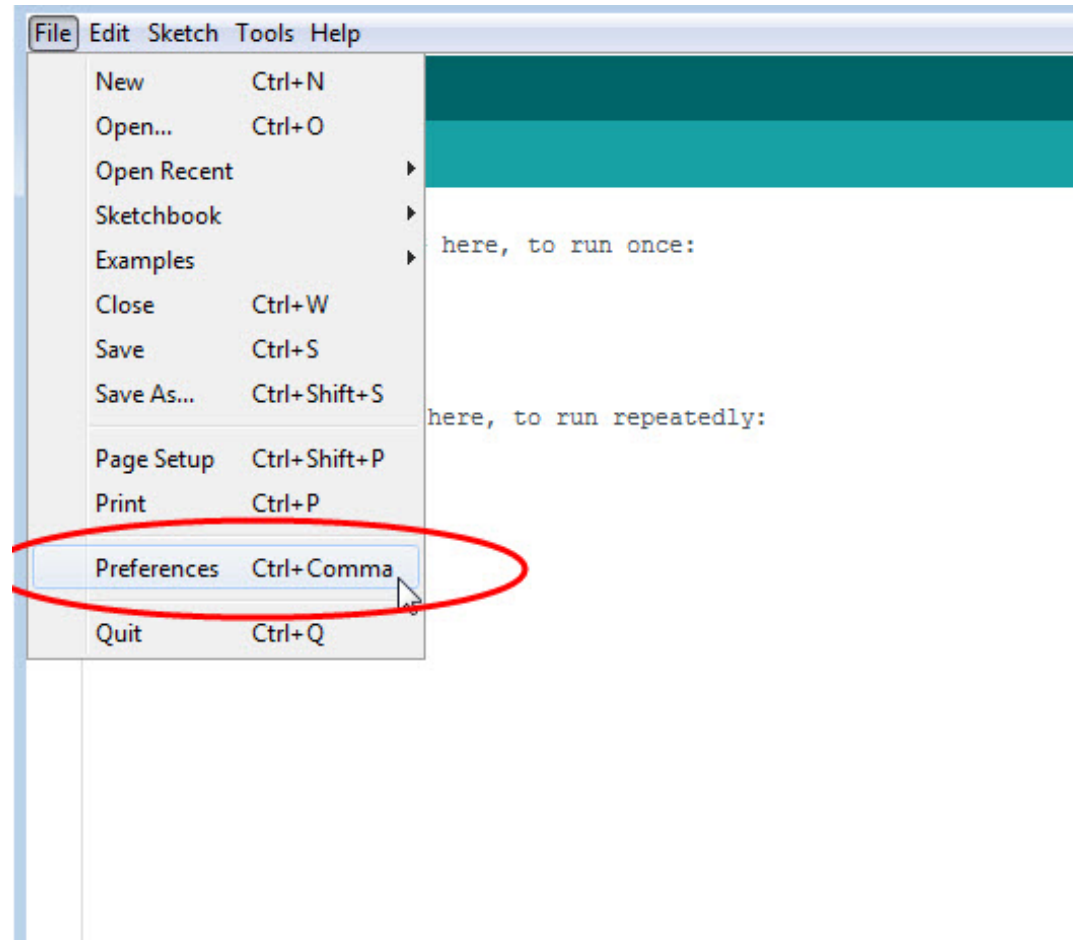


The screenshot shows the Arduino IDE window titled "sketch_sep24a | Arduino 1.8.9". The menu bar includes "File", "Edit", "Sketch", "Tools", and "Help". Below the menu bar is a toolbar with icons for saving, undo, redo, and other functions. The main text area contains the following code:

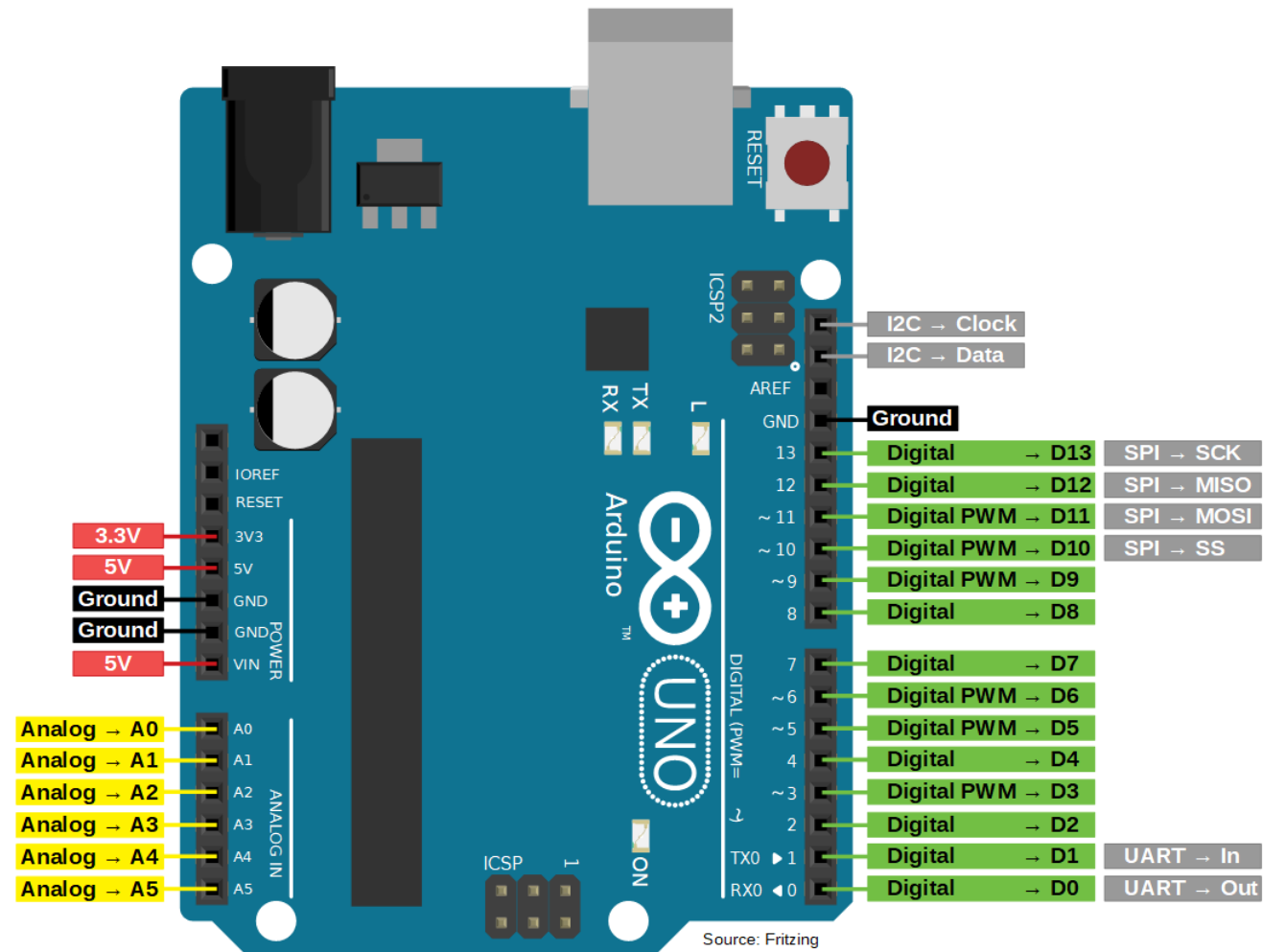
```
1 void setup() {  
2   // put your setup code here, to run once:  
3  
4 }  
5  
6 void loop() {  
7   // put your main code here, to run repeatedly:  
8  
9 }
```

At the bottom of the window, there is a status bar with the number "1" on the left and the text "Freaklabs Willduino on COM21" on the right.

Setting Up – Installing Board Files

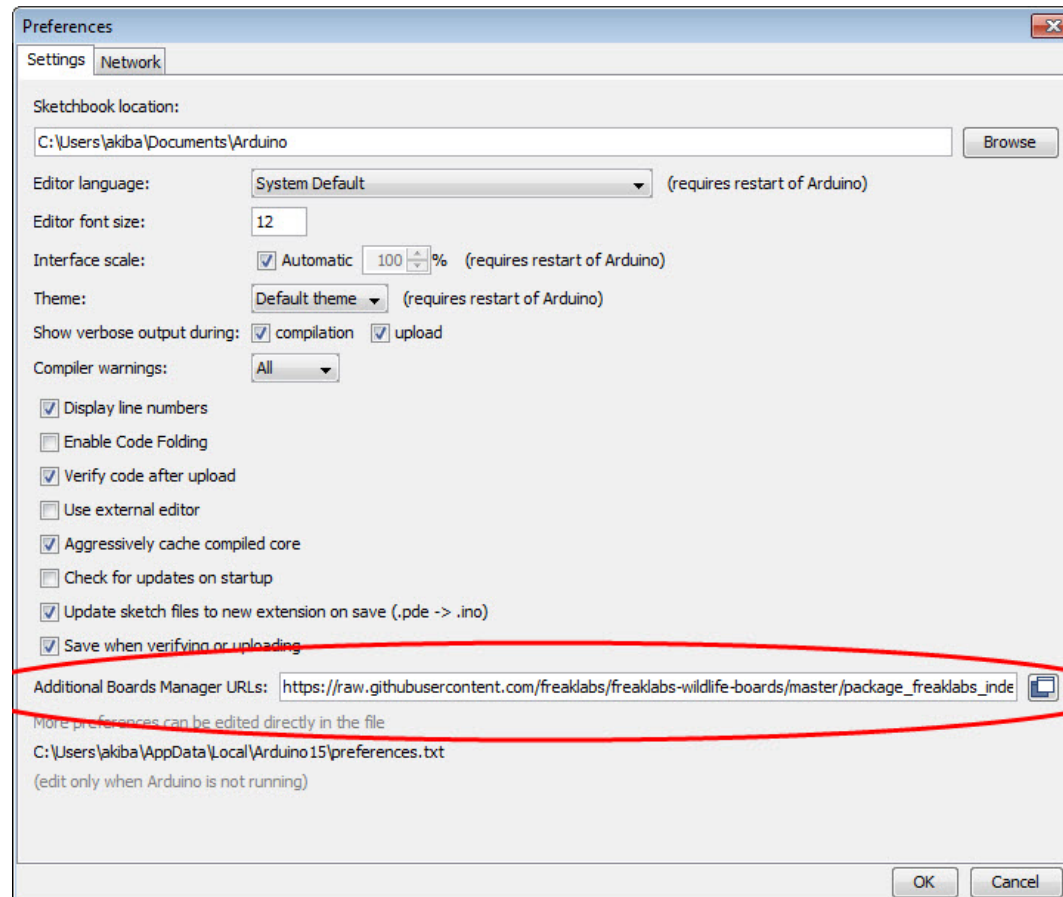


Setting Up – Arduino Board File

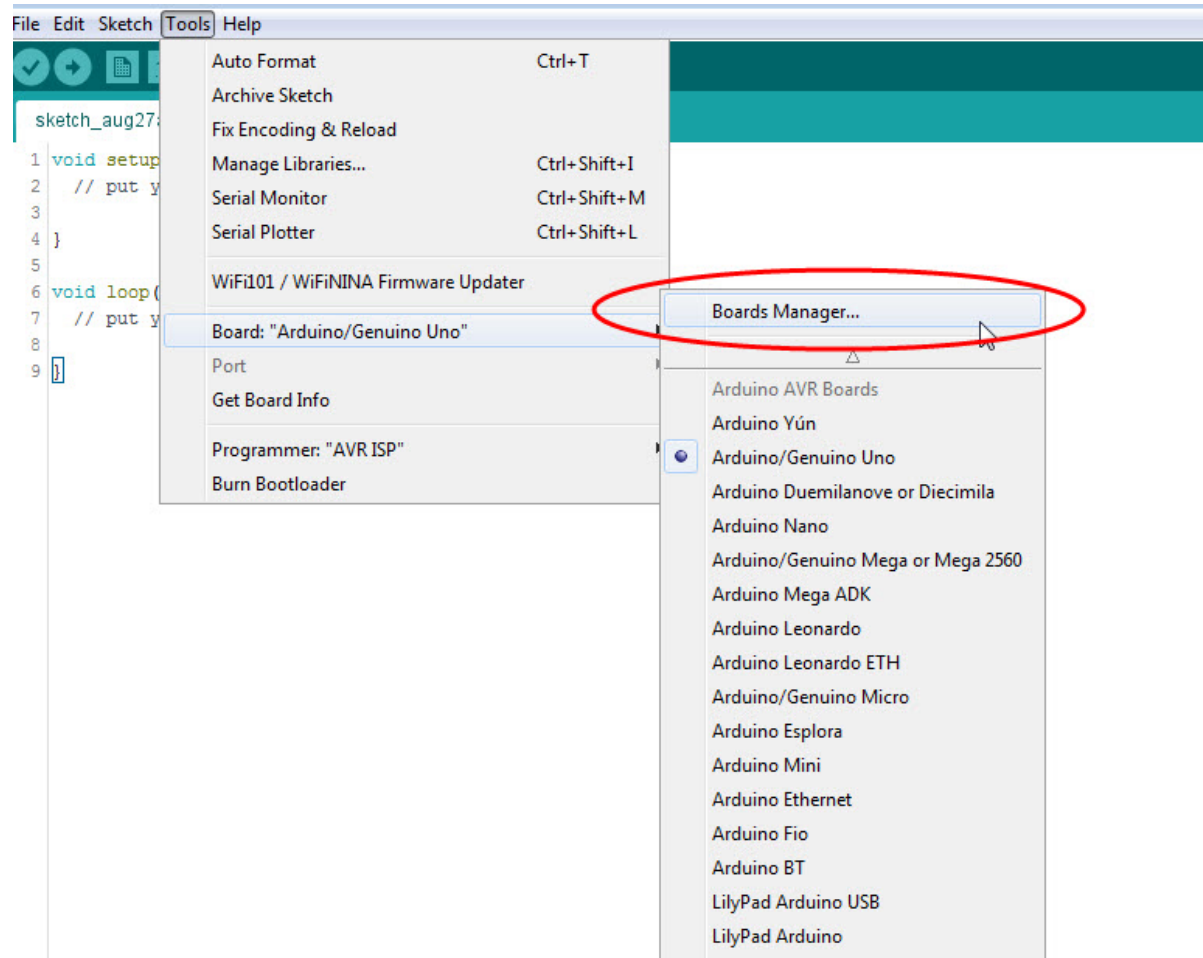


Setting Up – Installing Board Files

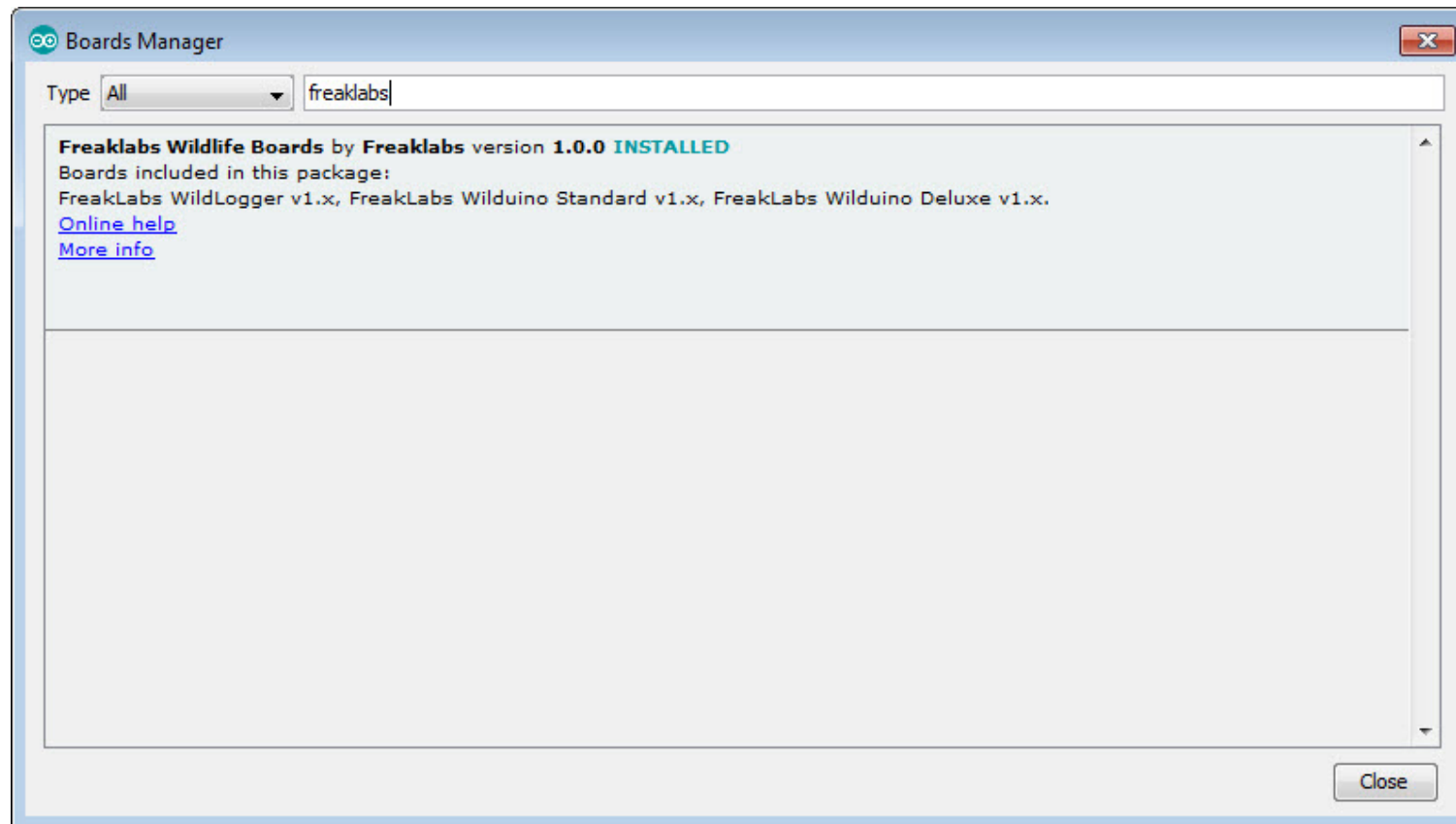
https://raw.githubusercontent.com/freaklabs/freaklabs-wildlife-boards/master/package_freaklabs_index.json



Setting Up – Installing Board Files



Setting Up – Installing Board Files



Setting Up – Installing USB Drivers

- Download the USB drivers here:
 - <https://bit.ly/wildlogger-driver>
- Unzip and install Windows or Mac driver based on OS
- On Linux, driver should be built-in
- We use the CH340 USB Serial IC.
 - If driver is already installed, test before you install new driver
- There may be some issues on MacOS High Sierra. If you're using this OS and the driver is giving you trouble, let us know

An Arduino Uno microcontroller board is housed inside a white plastic enclosure. A black battery pack is connected to the board via red and black wires. A breadboard with a blue integrated circuit and other components is connected to the board's headers. A white USB cable is plugged into the board's USB port. The background is a dark grey surface with green borders at the top and bottom.

COMING UP
Module 2-3
Arduino Program Structure