

Searduino - GUI frontend for Searduino

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1 Background

The authors of Searduino loves developing code for Arduino. We love using Arduino and we believe that developing code for Arduino has been made significantly easier for not-so-experienced-developers with the Arduino IDE. However, for some of us it is easier to develop code in our favorite editors and build and upload via the command line.

Searduino was initially created to make it possible to automate the building of your arduino program which has to be done outside of the Arduino IDE. Once we had the build and linking up and running we quickly noticed that it wouldn't take that much to make it possible to turn your Arduino program into a program executing on your local computer. The writes and reads on pins in your Arduino program were 'translated' in to reads and writes on stdin/stdout, which we used to create a simple simulator communicating via a pipe. We saw the potential of the simulator and decided to write a "proper" API for it instead. To make the simulator more usable for quick checks and for people preferring GUIs we started to write a simulator GUI in Python, so we added a Python extension to the simulator API. After a while we started hacking on a GUI frontend in Java. And here we are right now....

Hope you like it! And feel free to join us!

2 Introduction

2.1 Jearduino features

2.1.1 Import Arduino sketches

2.1.2 Load Searduino projects

2.1.3 Load shared libraries

2.1.4 Verify and upload to Arduino boards