**INSTALLATION GUIDE** This document contains all information needed to reproduce the environment to continue working on the myWolfram library and benchmarking app

**PREREQUESITIES** The following software has to be installed on a PC to reproduce the work environment

* Atom
* Ionic + Cordova
* XAMPP
* MySQL-Database

The following software hast to be installed on a Raspberry Pi 3 to reproduce the work environment

* [UlnoIoT](https://drive.google.com/file/d/1PsZz6e7Cf5-eop41_zsbA1Erl3xiuPoY/view)

**WORKSPACE** The following tasks have to be performed to recreate the workspace.

* Download the Raspberry Pi image.
* Write the image to a (at least) 8GB class-10 SD-card.
* Open the SD-card on your pc
* In the config.txt Change and uncomment the options uiot\_ap\_name and uiot\_ap\_password to your own values. This configures the pi as a wifi-router. Put the SD-card into a Raspberry Pi 3 and power it up. Connect your computer to the created wifi network. Connect to the ulnoiotgw via ssh -X pi@192.168.12.1. The default password for the user pi is ulnoiot.
* Connect a Wemos including a Sensor to the Raspberry Pi
* Copy the folder lib/system\_templates to a project directory
* type “initialize”
* Access the command prompt with “console”
* Recode every Wemos with the corresponding code in the Project Folder on the CD
* Type run()

**ADDITIONAL TOOLS** Apart from the previously mentioned software, this Hardware was used in the project.

* A Raspberry Pi 3
* Temperature Sensor DS18b20
* Six Wemos D1 Mini,
* Joystick PS2,
* Passive Buzzer,
* l2C LCD 1602 Module,
* WS2812 LED-Strip(NeoPixel),
* Reed-Switch,
* Raindrop Sensor,
* Humiture Sensor,
* Ks0087 Keystudio Electronic including i2c and l2C LCD 1602 Module,
* Power, Lan, Anti-reverse and jumper wire cables