

## Individual Lessons Learned

### Course:

The first series with the terminal was not easy, because even with the help of the internet it's not simple to work out the right commands. Also, the introduction to bash was too short for someone who never tried it before. The series after the first were better.

I also think that it would be nice to have at the beginning a .pdf file with the whole course so that we can take notes. It would be great to upload it on Moodle. It's not efficient to take notes on paper or only take partially notes.

I learned a new language and a deeper understanding of the memory allocation and the importance of pointers. It's also enriching to see lower level functions and languages. The questions of efficiency and logic become more important. This approach is super interesting.

### Project:

It would be nice to have 1-2 weeks more time for the project, so that not all the work has to be done in 1 week. It can be frustrating not knowing how to connect all the different parts and just starting to guess how it could work out. Also, the Arduino compiler takes so long that you cannot really test multiple approaches in a short time.

It was difficult to think about the data structure before we knew in which format the sensor will return the data. We also didn't know how to get the values in the data structure to the web API (format of JSON, String, char\* or a completely other format). So, we needed to fix the data structure before we knew how the rest worked and afterwards it's hard to change everything again (or it takes just a long time).

In general, it was hard to find examples of the sensor or API. I have the feeling that the community of C is not really helping and doesn't share the code. One has to read all documentation himself and shouldn't ask questions on the internet. I think that's hindering newcomers to get C faster.

I learned how to work with Arduino, the Atom Lite and how to set up a local web page for the first time. It's really cool when it actually works, it feels like magic when it finally works :). I also learned to work with Git and see that this tool is powerful.