1. Presentation

Good afternoon! My name is \_\_\_*pitcher*\_\_\_. Our project is called the COOLschrank and we are now going to show what it does and how it works.

1. (2,3,4,5)

Since we chose to work on the *Internet of Me* track, we decided to solve a problem that bothers us. And by us I mean basically all people in this room: we are students or recently graduated and (next slide) most of us live in dorms, studios and WGs, (next slide) which means we have very limited space in our pantries, fridges and wardrobes and (next slide), because of that, we do our groceries little by little. We can’t stock a lot so when we’re out of milk, we buy some, when we’re out of beer, we buy some… and every now and the we end up forgetting the things that were missing or even completely forgetting to do groceries.

1. (6,7)

One easy option to remind us those things is having a smart home, in this case, a smart fridge. Problem is, those things cost a fortune, thousands of euros! Also, they are pretty bulky to fit my small kitchen. (next slide) So instead, we can use our own current fridges along with cheap, yet powerful, technologies such as the Raspberry Pi to make the smart for way less than a tenth of the cost of an actual smart fridge!

1. (8)

Thus we created the COOLschrank, an add-on to our normal fridges that uses sensors such as pressure sensors or even simple buttons to sense if we still have milk, for example, in the fridge or in the pantry. Then it reminds us before we leave that we need to buy something by displaying messages and blinking LEDs for alerts.

1. (9)

But sometimes we forget to check the display or don’t take note on what we need to get from the grocery store. That’s why we also linked the COOLschrank to Azure IoT, so we can have this information accessible anywhere through the cloud. To make it easier to integrate Azure to the Raspberry Pi, it runs Windows 10 as its operating system. So every now and then, the COOLschrank sends an update to the cloud on what we have in stock, so we can check it anywhere, at anytime.

1. (10)

Also, to make it less tedious to have an app only for checking a list, we integrated the SMS service of Twilio to send us an update on our stock whenever we need with a simple text message! I know nowadays everybody has one but it doesn’t even need to be a smartphone to work with the COOLschrank!

1. (11)

Here is an overview of the whole system. As you can see, the only hardware necessary for our COOLschrank is a few, very cheap sensors, some very cheap LEDs and displays for a physical output and a Raspberry Pi, that is also very affordable!

Then we have the Windows 10 operating system, which is free!, the Azure IoT and Twilio, to allow us to easily access how much stuff we need to buy!

1. (12) Acknowledgements

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