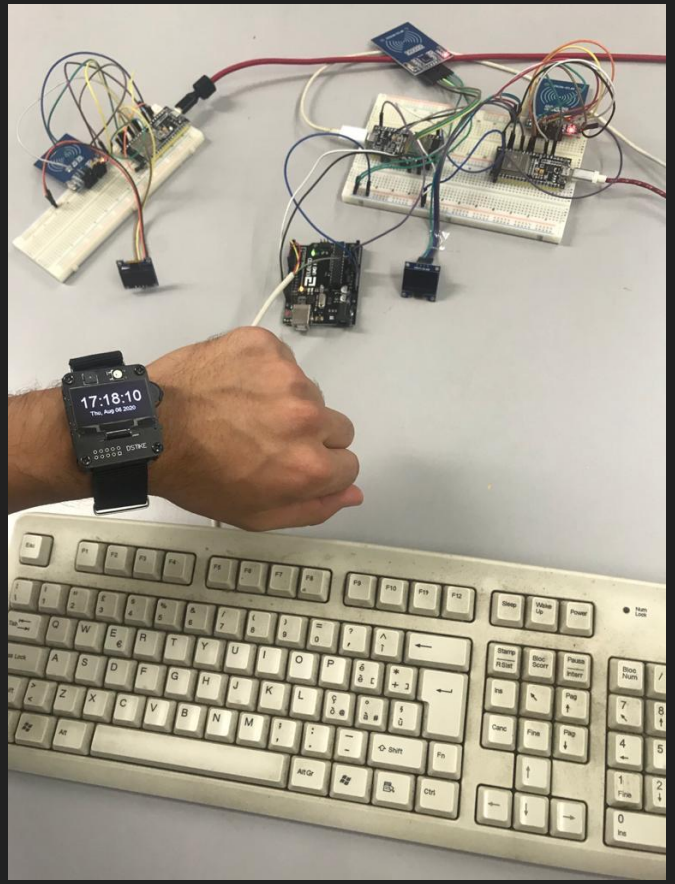
GABER

Demo 1: terminal on multiple screens

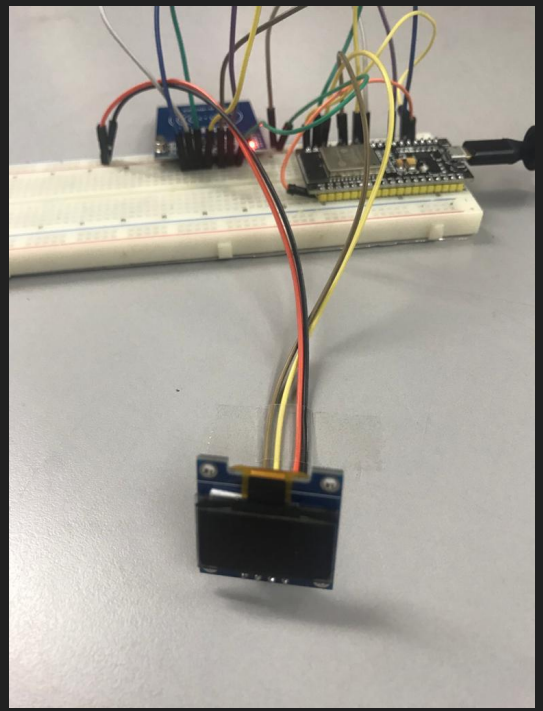


In this demo a watch acts as a controller so that the user can decide which I/O devices to connect to his virtual persona.

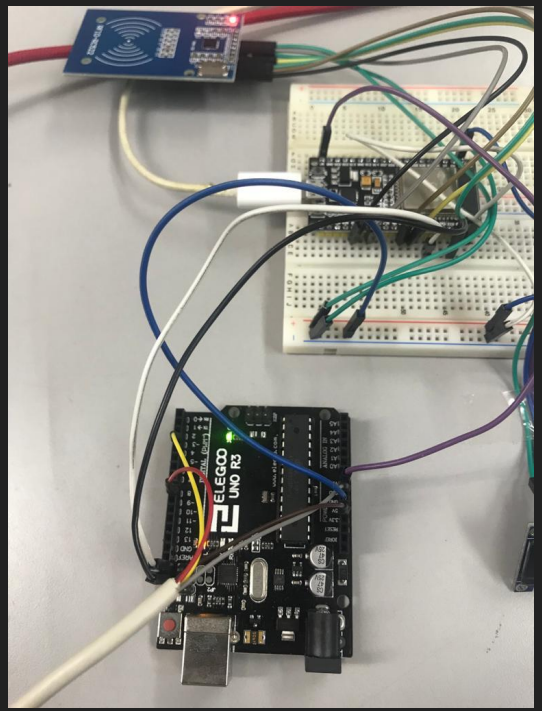
In this case, the devices are two different screens (supposed to be one in the kitchen and one in the living room) and a keyboard.

All devices (watch included) are “stupid” in the sense that they do not perform any computation but can only send and receive data to and from a server that manages the user’s virtual persona.

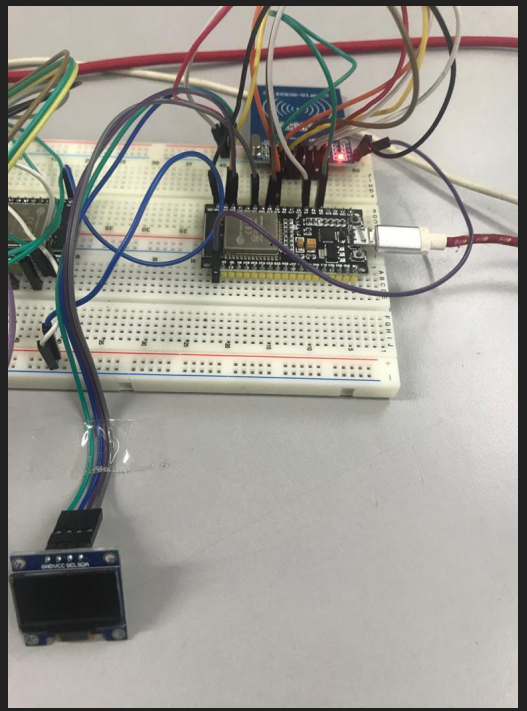
TV living room



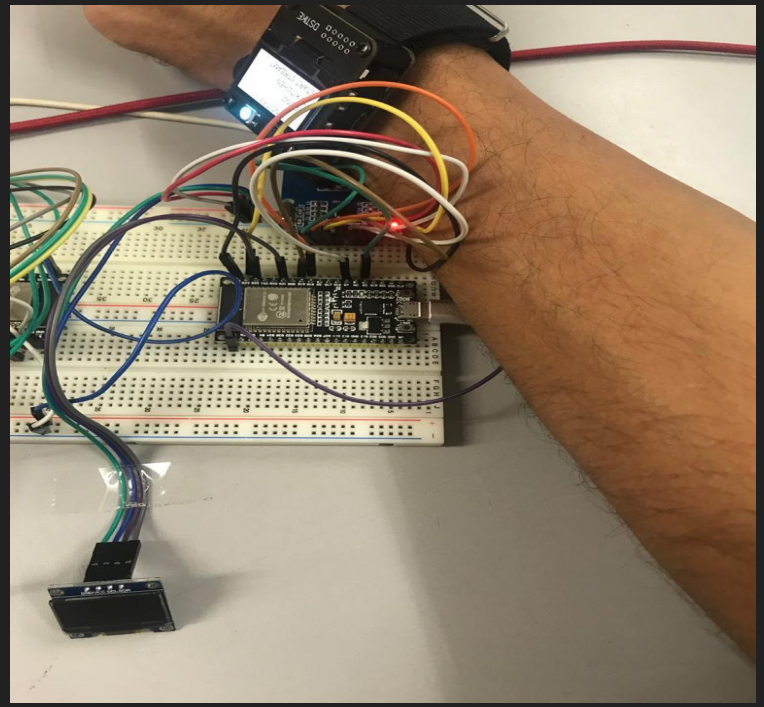
Keyboard

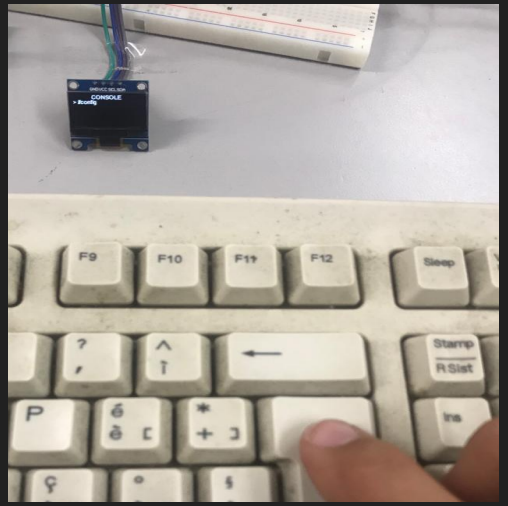


TV kitchen



First of all, we connect the “TV kitchen” to our virtual persona so that now we can start streaming video to it. We are using an RFID as a proximity sensor but it will eventually be substituted by bluetooth low energy.



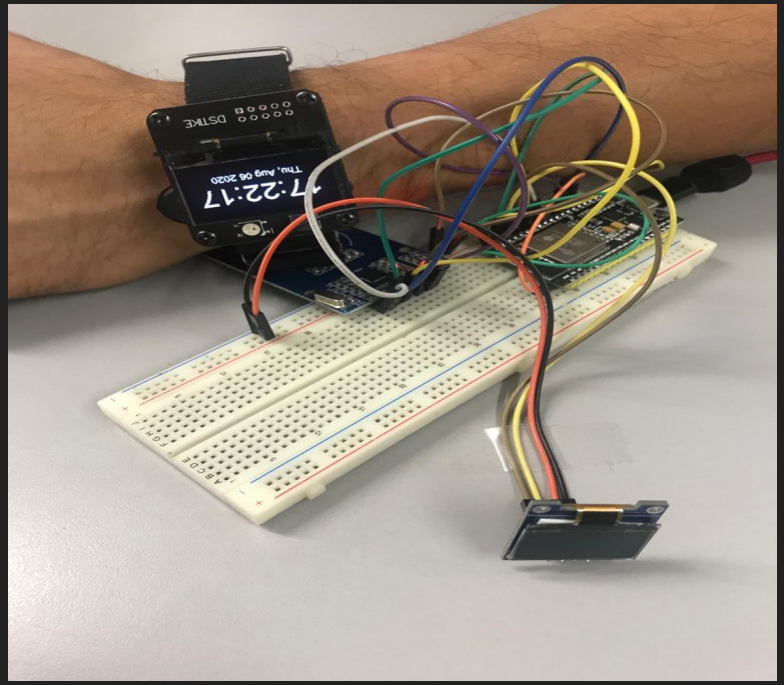


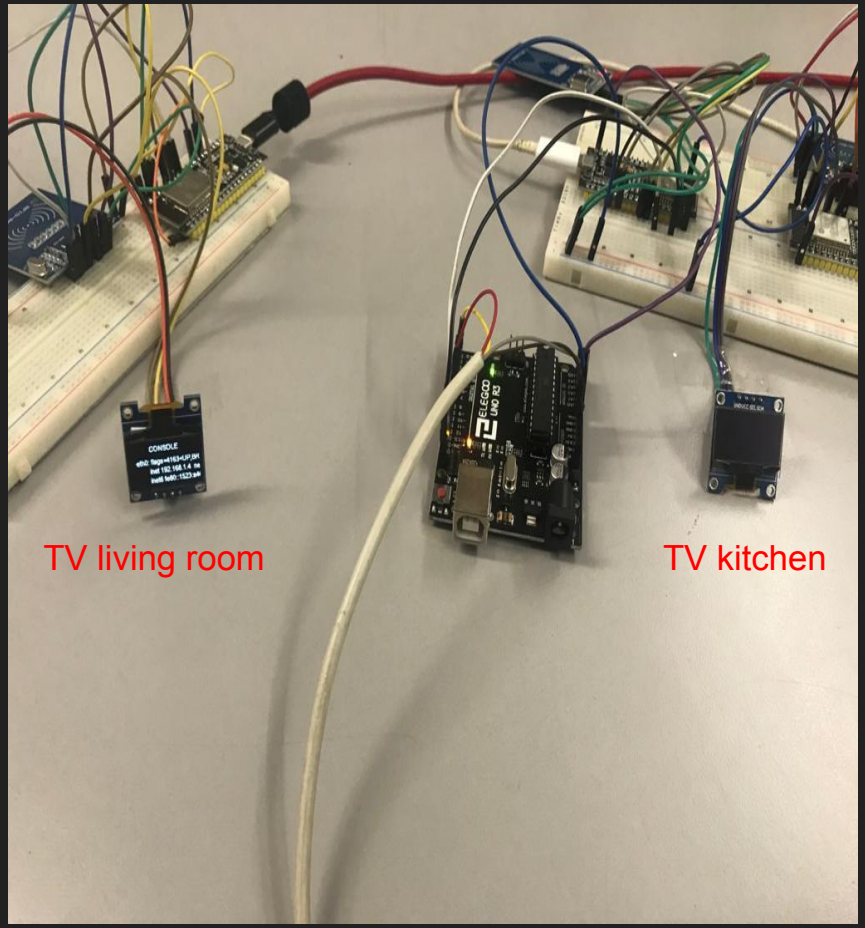
Now we connect the keyboard to our virtual persona. This way we can type on the keyboard and see what we are typing on the “TV kitchen”.

For this demo, the server is running a linux terminal so that the keyboard and the screen combined act as a computer even though they do not perform any kind of computation. They are just interfaces to the user’s virtual persona.

By typing the ifconfig command, the same result that we would get on a “normal” linux computer gets streamed to the “TV kitchen”.

Supposing we now want to move to the living room and keep working on what we were doing on the kitchen screen, the only thing we have to do is to connect the “TV living room” to our virtual persona.





Whatever we were working on gets automatically streamed to the other screen as if all the devices were one of the same computer.

By doing this, our virtual persona, with all its programs, data and preferences becomes accessible from any I/O device connected to the network.

Conclusion

While this demo would certainly be doable with today's technology, it would not be as smooth. The fact that each device has its own brain (a microprocessor) makes it inherently standalone and "hard" to interface to other devices that "may not speak the same language".

By doing it our way, different I/O devices become interfaces of a ubiquitous computer capable of interacting as if they were one single device that is available to us anytime and anywhere.

Machines should fit the human environment instead of forcing us to enter theirs and they should enhance our lives as we move around without us noticing it.