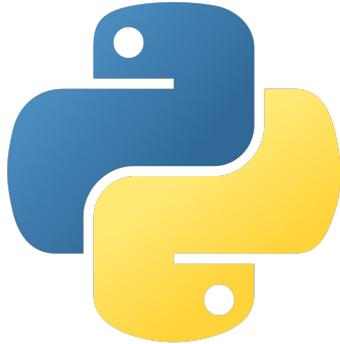


# Team TexWiller

Team members:

Thomas Andreatta, David Cavada, Sebastian Cavada, Julian  
Palmarin



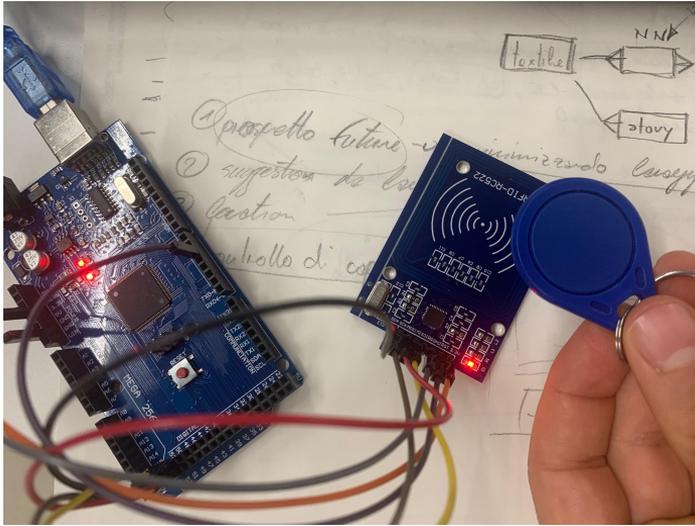
Challenge

SÜDBUND

# Tasks

1. State the **location** of each object (curtains, carpets...) and help in this way to find it or place it.
2. Create an **object history** that helps the user understand the work to do and give suggestions based on set priorities.
3. **Warn the user** when filling a washing machine if the object can't be washed with the program chosen.
4. **Optimize** the washing routine

# Prototype based on RFIDs



Every different RFID is identified by a reader and sends its id to a database where all the informations about it are stored.

Here begins the second part of the program...

## Arduino & Python

# Managing Data & Program

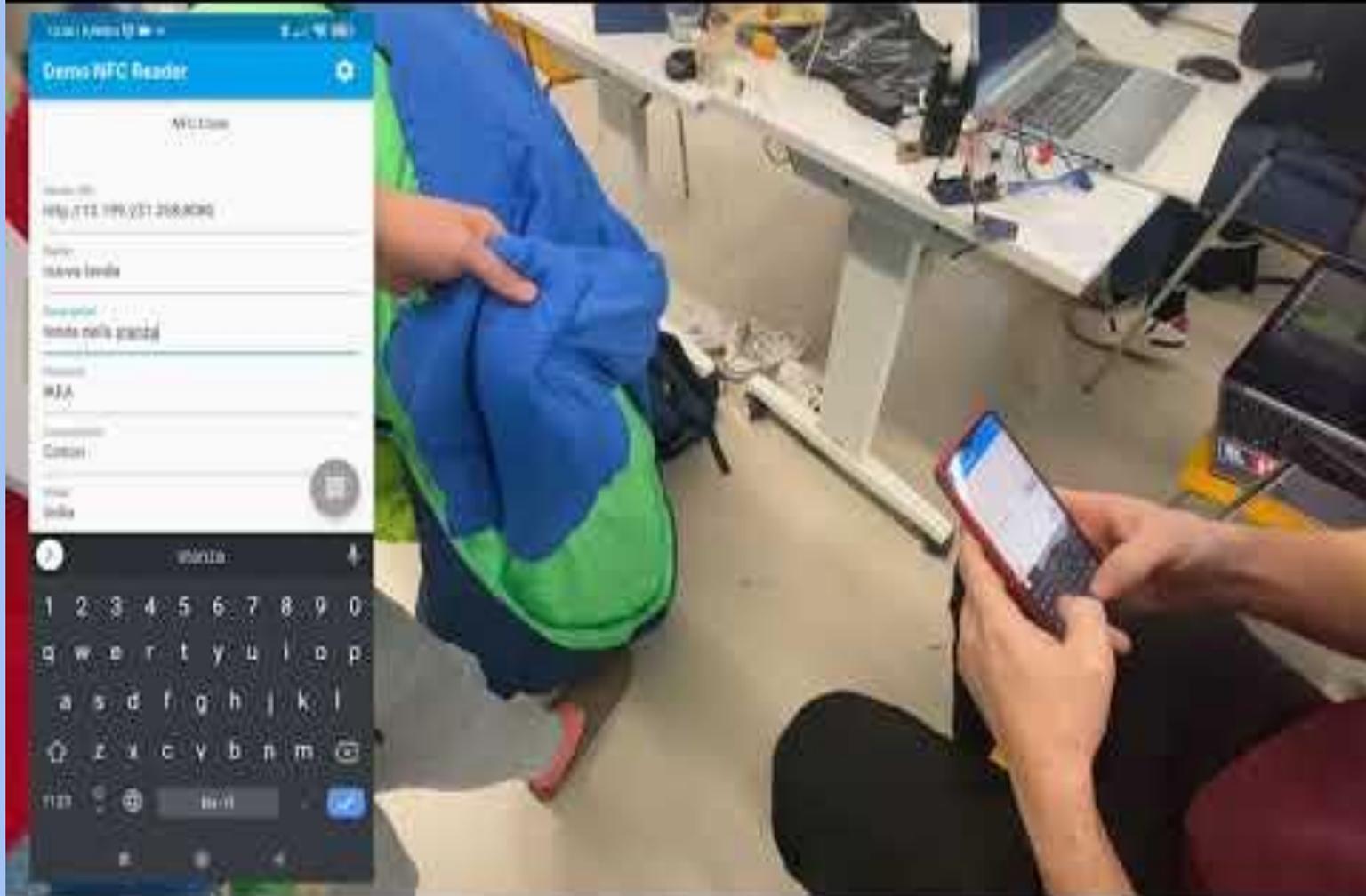
## MYSQL

1. **Database** that stores all informations about RFIDs, hypothetically inserted by the Artisan.
2. **Program** warning the user while filling the washing machine if a curtain can't be washed with the other previously inserted.



# Mobile App

Read or write informations about a curtain



# Achieved!



1. Every legal and useful **tag**
  - a. Name, ID, Producer, Washing Properties, Location, Composition, Weight, Owner, MADE IN, CE, Description.
2. **When** and with which garment was it washed
3. **Optimized** washing **routine**
4. Smart washing **error detection**



# Convincing Hotels



## Industry 4.0 infrastructure (IoT)

1. Optimized **washing routine**
  - a. Clothes to-be-washed with the same washing properties
  - b. Quantity and Type of dirty laundry (number, kg)
2. Clean laundry **warehouse** availability
3. **Tracking** the 'history' and the location of each cloth

# Pricing

Name	Price per unit	Quantity	Total Price
RFIDs	0,1	200	20
Reader	150	3	450
Writer (Application)	free	1	
Reader Installation	150	1	150
RFID application and writing (on old laundry/clothes)	0,3	200	60
Database mainainance	50	1	50 per year
Total			730 €
<b>Total + IVA</b>			<b>890,6 €</b>

Thanks for  
your  
Attention

