41686 – Project in Automation Engineering

Project Brief

Project name:	Bancada Virtual de Diagnóstico de Equipamentos Industriais
Customer:	SCIENT-IoT
Team members:	Coordinators: Pedro Fonseca (pf@ua.pt) David Lopes (david.lopes@scient-iot.com) Other team members: Andrea Domigos (andrea.domingos@ua.pt) Diogo Vieira (diogoscsv@ua.pt) Gil Viegas (gilviegas@ua.pt) Leonardo Lucas (leonardo.lucas@ua.pt) Rodrigo Ferreira (rodrigo.ferreira@ua.pt)
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Revision History

Date	Issue	Description	Author

• Project description

Our project aims to build a portable data collecting device, that's compatible with a wide range of sensors and that's easy to install (plug-and-play). This device would serve as a virtual bench for the collection and treatment of data in real time. The existence of such a tool would allow the detection of eventual malfunctions or equipment damage, which would be very useful to a maintenance team.

• Deliverables/Outcome

The end goal of the project is an IOT2040 based system that can collect data from various types of sensors in industrial scenarios and that stores this data in a local database. This data would be accessible through a computer, which can connect to the IOT2040 via an Ethernet connection. The system would also raise some form of alarm when it detects some problematic values in the data.

- ## Customer / End users / Market

The end users of his product would be the maintenance departments in the industry.

- ## Budget

We estimate the following costs:

- IOT2040 + I/O Module: 300€ + 60€
- 24V Power Supply: 35€
- Box: around 20€

To these values, we can add about 120 hours of work for each of the five team members, totalling 600 hours. We can estimate a price of 8€ per hour, totalling 4800€ in labour.

- ## Success Criteria

We can declare the project successful if we have a working prototype of the above mentioned system that is compatible with the more common sensors.