ROBOTICA 2021-2022

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Abstract—**This document is a initial description of our 1st assignment from the subject Robotics. In this subject our job it's design the software of an autonomous robot.**

Index Terms—**software,robot, robotics,engineering**

I. Setting the environment

We have done two projects using C++/Qt5 where we have learnt how to program a simple timer app using standard Qt and the standard C++ library. First of all we have installed our tools (Qt5, C++, GCC, git, cmake and our IDE vscode). The installation step was smooth and easy. We didn't have any problem. Then we started programming the examples issued.

II. Programming the first two examples.

A. Example1

First we downloaded the example1 code and we run it. Then we started developing the timer function using QTimer. According to the Qt manual we learnt how to create and connect our timer and combine this functionality with the LCD display. This went pretty well and we jumped to the second example.

B. Example2

This example was a little more tricky to understand but we managed. We understood how the thread called the function and we saw the differences between this and the QTimer. Then we developed three different changes where the period change with QSlider, another LCD display that show the period and another LCD display with a QTimer that show the elapsed time since the app started.