THE HAGUE UNIVERSITY OF APPLIED SCIENCES

ADVANCED REAL-TIME SYSTEMS LAB

Final Report

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Introduction

we work from the lab assignment [1]. They state:

The students will work individually or in groups of two. During the lab sessions, the students are asked to develop different applications and practice what they have learned in the lessons. The important learning aspects involve real-time embedded software development in the FreeRTOS environment, working with sensors, and developing real-time applications. Students must understand the basic concepts of multitasking, resource management and task synchronization.

This report describes the exercises and how they were solved by the students.

- 1 Assignment 1 Controlling Digital I/O and Round Robin Scheduling
- 2 Assignment 2 Interrupts and CBP LEDS control
- 4 Assignment 4 Single Click Capacitive Touch Button
- 5 Assignment 5 A Direction Controller
- 6 Assignment 6 A Position Sensitive Wheel Slider

References

van Rijnsoever, X. (n.d.). Arts workshop embedded systems. The Hague University of Applied Sciences.