

IL2212 EMBEDDED SOFTWARE

Reflection Assignment 1

Student name

January 16, 2019

*The reflection assignment shall train the students for the 'open' questions, but also improve the writing skills of the students. The participation in the reflection exercises is **mandatory**. Answer the questions **individually** in electronic form (about 3-4 pages). Be also careful about the quality of your writing.*

NOTE: There is not a single correct answer, in fact for many of these question there exist even multiple different opinions in industry and the research community. It is important that you start to think about the problems in order get a better understanding of the problems related to area of embedded software development.

Print your document four times and bring the printed copies to the seminar!

Deadline for submission of answers: Sunday, January 27, 2019.

1 Part A - Embedded Software Design

The topic of the this part of the reflection assignment are the special characteristics of embedded software and their impact on the design flow.

- 1.1 What are the special characteristics of embedded software development?**
- 1.2 What are the main problems and challenges for embedded software design?**
- 1.3 What do you view as possible solutions to tackle these problems?**

2 Part B - Real-Time Theory

The topic of this part of the reflection assignment is the real-time theory based on periodic, aperiodic and sporadic tasks.

- 2.1 What do you view as the largest achievements of the real-time theory?**
- 2.2 How can the real-time theory be used in an industrial design flow?**
- 2.3 What do you view as the biggest limitations of the real-time theory?**
- 2.4 Give suggestion how to overcome the limitations mentioned in the previous question!**