

Reading guide Real-Time Architectures 2005 - 2006

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Abstract

This note is a reading guide to the 2nd edition of the book of Buttazzo [1], identifying those parts that are to be studied for the examination. Note that in addition to the book, both the slides and the articles of the “Expected reading” on the web have to be studied as well! Moreover, it is strongly encouraged to take a look at the slides of Buttazzo [2] and the errata [3].

Introduction

Roughly speaking, Chapters 1 till 5, 7, and 11, and Sections 8.1, 8.3.1 have to be studied. Below, the Chapters will be discussed in more detail.

Discussion by Chapter

Chapter 1

To be studied entirely.

Chapter 2

To be studied entirely.

Chapter 3

You should know that EDF is *optimal* for both independent tasks as well as tasks with precedence constraints for preemptive tasks with asynchronous activation. This implies that you have to study Sections 3.1, 3.3, and 3.5.2.

Chapter 4

To be studied entirely.

Chapter 5

To be studied, except for Sections 5.3.1, 5.3.2, 5.4.1, 5.4.2, 5.5, and 5.7.

Chapter 7

To be studied, except for Section 7.5.

References

- [1] G.C. Buttazzo, “Hard real-time computing systems, predictable scheduling – algorithms and applications, Springer, 2004, ISBN 0-387-23137-4 (2nd edition).
- [2] <http://feanor.sssup.it/~giorgio/slides/realtime/>
- [3] <http://feanor.sssup.it/~giorgio/errata-HRT2.pdf>