

Distributed and Pervasive Systems

Team 2

Report
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Chapter 1

Introduction

Chapter 2

Real-Time Computing

Topics/keywords:

Jobs & schedulers & task handling

2.1 Determinism

- Finite automata for determined/undetermined systems Short intro, an example DFE UDFE TFE
Compare deterministic and non-deterministic automata Talk about timed automatas and how they
comply with deadlines

2.2 Scheduling

- Introduction Arrival time, release time, deadlines Real-time computing What are jobs? Tasks?
Have the basic definition written down (at least the Task/J one)

- Schedulers Put in illustrations/drawings from exercises. We need a few examples Rate-monotonic
scheduler Deadline-first scheduler Least-slacktime-first scheduler

- Resource control Write about resource control/deadlock Priority inheritance Priority ceiling
Find Søren Hansen (grandmaster) drawings/references

Chapter 3

Synchronization

Chapter 4

Real-Time Ethernet

Chapter 5

Middleware

Chapter 6

Consistency

Chapter 7

Fault Tolerance

Chapter 8

Leader Election

Chapter 9

Positioning

Chapter 10

Discussion

Chapter 11

Conclusion

Chapter 12

Perspectives

Chapter 13

References

