

SR (Systèmes Répartis)

Overview

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The lecturer

- François Taiani

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- Background

- My interests

 - system software (OS, middleware)

 - large scale distributed computing



The module

- SR (Systèmes Répartis)

- Aims: introduction to
 - foundation of distributed computing
 - common distributed problems and their solutions
 - common distributed services and concepts
 - construction of distributed computing programs

Assessment

- 2 in-class test (17% + 33%, 50% in total)
 - 25% for each test
 - Test 1: Wednesday 28/11/2012 at 10h15 (**1h, 17%**)
 - Test 2: Tuesday 12/02/2013 at 16:15 (**2h, 33%**)
- 1 monitored project (2 marking sessions, 50% in total)
 - marked during lab sessions
 - schedule and project to be announced
 - first session: Friday 30/11/2012 at 16:15

Outline: Part I Foundations

- Unit 1a Intro
- Unit 1b Middleware
- Unit 2 Basic mechanisms and properties:
Synchrony, Asynchrony, Reliable Channels
- Unit 3 One fundamental problem: Distributed Snapshots
- Unit 4 Time in distributed systems
- Unit 5 Ordering in distributed systems
- Unit 6 Synchronisation in distributed systems (+ **test 1h**)

Outline: Part II Engineering

- Unit 7 RPC and Indirect Communication
- Unit 8 An example of group communication (+ JGroup)
- Unit 9 Fault Tolerance (I)
- Unit 10 Fault Tolerance (II)
- Unit 11 Perspective: Cloud computing + **Guest Lecture**
- Unit 12 **Test (2h)**

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