Subject structure

Lectures

Mo 8:00 - 8:45 - BC-C1

doc. Ing. Jan Janeček, CSc.

Practices

Mo 12:45 - 13:30 - BB-7

Ing. Jan Fesl, PhD.

Lectures

1. Structure of distributed applications, communication methods
2. Proc. communication - XML-RPC, CORBA, Java RMI, SOAP
3. Model of distributed computation, simple algorithms, GoLang
4. Snapshot of distributed computation, logic time
5. Server election
6. Explicit access to devices
7. Deadlock detection - device sharing, communication
8. Distributed application end detection
9. Data sharing and replication
10. Support and use of P2P, DHT technologies
11. Agent applications, mobility
12. Cloud technologies architectures, application methods
13. Reserve

Practices

internal practices - software methods

C / C++ (Pastry, ...)
XML-RPC
Java RMI (node.js)
CORBA
SOAP, RESTful
Go

semester homework

implementation of selected distributed algorithm

Information sources

literature

Janeček J.: Distribuované systémy.

Janeček J., Kubr J., Červený M.: Distribuované systémy - cvičení.

Coulouris G., Dellimore J., Kindberg T.: Distributed Systems.

Tel G.: Introduction to Distributed Algorithms.

Lynch N.: Distributed Algorithms.

slides

moodle

Requirements

evaluation of practices

attendance on practices

implementation of seleted homework

exam

evaluation of knowledge in the subject area

written form of exam + its individual evaluation

evaluation rule

knowledge:project:activity - 50:40:10