

Sistem Terdistribusi

Silabus

Pengantar

- Matakuliah : Sistem Terdistribusi
- SKS : 3
- Dosen :
 - Antonius Rachmat C, S.Kom, M.Cs
- Hari :
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 - B Selasa 16.30
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Deskripsi

- Matakuliah ini mengajarkan konsep dan pengertian sistem terdistribusi, model-model arsitekturnya, protokol yang digunakan, keamanannya, pemrograman remote invocation & object terdistribusi, sinkronisasi, replikasi, dan transaksi, hingga quality of service, beserta contoh kasusnya.
- Matakuliah ini juga memberikan contoh-contoh pemrograman sistem terdistribusi menggunakan Java (Socket dan RMI).
- Sebagai tambahan diberikan juga konsep mengenai multimedia distributed & mobile computing

Kompetensi

- Setelah menempuh matakuliah ini mahasiswa dapat:
 - Menjelaskan mengenai konsep sistem terdistribusi, komunikasi, transaksi, protokol yang digunakan, sinkronisasi, dan replikasi
 - Membuat program sederhana menggunakan Socket / Remote Method Invocation / Web based
 - Menjelaskan konsep dasar mengenai Multimedia Distributed & Mobile Computing

Materi

- 1 Silabus & Pengantar Sistem Terdistribusi - 24/8
- 2 Model Arsitektur Sistem Terdistribusi – 31/8
- 3 Komunikasi Antar Proses – 7/9
- 4 Pemrograman Socket – 17/9 (pengganti jumat 10.30)
- 5 Obyek Terdistribusi dan Remote Invocation - 21/9
- 6 Sistem Operasi Terdistribusi – 28/9
- TTS
- 7 Presentasi Tugas bagian 1 – 19/10
- 8 Distributed File System - 26/10
- 9 Name Service & Directory Service – 9/11
- 10 Consistency & Replication– 16/11
- 11 Peer to Peer Systems – 23/11
- 12 Multimedia & Mobile computing – 30/11
- 13 Presentasi Tugas bagian 2 (hari pengganti-senin 10.30)
- TAS

Referensi

- Distributed System : Concept and Design (George Coulouris, Jean Dollimore, Tim Kindberg - Addison-Wesley)
 - www.cdk3.net dan www.cdk4.net
- Database System Concepts (Avi Silberschatz, Henry F. Korth, S. Sudarshan, - McGraw-Hill)
 - www.db-book.com
- Operating System Concepts (Avi Silberschatz, Peter Baer Galvin, Greg Gagne - John Wiley & Sons)
 - www.os-book.com
- Distributed Systems: Principles and Paradigms (Andrew S. Tanenbaum & Maarten van Steen - Prentice Hall)
 - www.cs.vu.nl/~ast/books/ds1

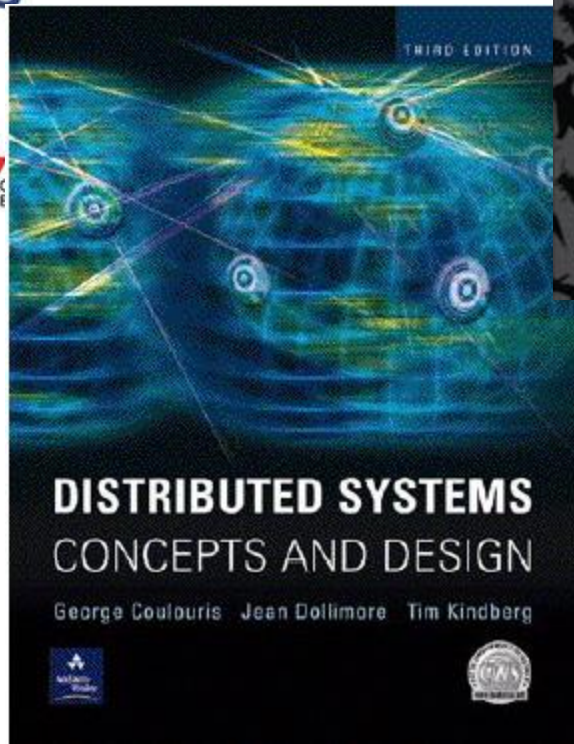
Buku



fourth edition

DISTRIBUTED SYSTEMS CONCEPTS AND DESIGN

George Coulouris
Jean Dollimore
Tim Kindberg



DISTRIBUTED SYSTEMS CONCEPTS AND DESIGN

George Coulouris Jean Dollimore Tim Kindberg



DISTRIBUTED SYSTEMS

Principles and Paradigms



Second Edition

Andrew S. Tanenbaum
Maarten Van Steen

Distributed System : Concept and Design

- Preface
- 1 Characterization of distributed systems
- 2 System models
- 3 Networking and internetworking
- 4 Interprocess communication
- 5 Distributed objects and remote invocation
- 6 Operating system support
- 7 Security
- 8 Distributed file systems
- 9 Name services
- 10 Peer-to-peer systems

Distributed System : Concept and Design

- 11 Time and global states
- 12 Coordination and agreement
- 13 Transactions and concurrency control
- 14 Distributed transactions
- 15 Replication
- 16 Mobile and ubiquitous computing
- 17 Distributed multimedia systems
- 18 Distributed shared memory
- 19 Web services
- 20 CORBA case study

Distributed Systems: Principles and Paradigms

- 1 INTRODUCTION
- 2 ARCHITECTURES
- 3 PROCESSES
- 4 COMMUNICATION
- 5 NAMING
- 6 SYNCHRONIZATION
- 7 CONSISTENCY AND REPLICATION
- 8 FAULT TOLERANCE

Distributed Systems: Principles and Paradigms

- 9 SECURITY
- 10 DISTRIBUTED OBJECT-BASED SYSTEMS
- 11 DISTRIBUTED FILE SYSTEMS
- 12 DISTRIBUTED WEB-BASED SYSTEMS
- 13 DISTRIBUTED COORDINATION-BASED SYSTEMS
- 14 SUGGESTIONS FOR FURTHER READING AND BIBLIOGRAPHY

Penilaian

• 85.0 - 100	A	4.0
• 80.0 - 84.9	A-	3.7
• 75.0 - 79.9	B+	3.3
• 70.0 – 74.9	B	3.0
• 65.0 – 69.9	B-	2.7
• 60.0 – 64.9	C+	2.3
• 55.0 – 59.9	C	2.0
• 40.0 – 54.9	D	1.0
• 0 – 39.9	E	0.0
• --	F	0.0

Distribusi Nilai

- TTS 20%
- TAS 20%
- Tugas Program 25%
- Tugas Presentasi dan Diskusi 20%
- Tugas Presentasi Kelas 15%

Tugas Presentasi Kelas (15%)

- Dilakukan kelompok : A:6, B:4 orang
- Membahas tentang materi yang ada di silabus
 - Dalam bentuk PPT dan Word (.doc)
 - Bobot 15%
 - Dikirim 3 hari sebelum hari kuliah ke mail
 - anton@ti.ukdw.ac.id
 - Email title : SISTER1
- Diundi perminggu

Paper Diskusi (20%)

- Topik:
 - Cloud Computing
 - Bit Torrent System
 - Database Terdistribusi
 - VOIP dan Streaming
 - Grid computing
 - Jabber Protocol
 - JINI – Service Oriented Architecture Framework in Java
 - DCOM (distributed component)
 - Master - Slave MySQL database (Replication)
 - Konfigurasi File Sharing di Linux
- Dibuat dalam doc dan ppt dipresentasikan pada 19/10 2010
- Dikerjakan kelompok
- Referensi dari jurnal minimal 1 buah

Tugas Program (25%)

- Membuat program client – server
- Layanan Sinkronisasi dan Sharing Sederhana
 - Berbasis web (bahasa bebas)
 - User authentication
 - User memiliki folder yang dapat diisi file-file untuk disharing
 - Ada hak akses sharing file / folder
 - Bisa sinkronisasi file-file lokal ke remote folder
- Dipresentasikan tgl 2/12 2010
- Dikerjakan kelompok

Aturan

- Absensi tidak dinilai
- Tidak ada TTS dan TAS susulan
- Sanksi berbuat curang : gugur matakuliah
 - Titip absen kepada teman
 - Menyalin hasil pekerjaan teman

NEXT

- Pengantar SISTER