



Enterprise Computing

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Team

Lecturers of Enterprise Computing

- Prof. Dr.-Ing. Stefan Tai
- Markus Klems
- Dr. David Bermbach

ISE Research Group at TU Berlin

Information Systems Engineering (ISE) is a new research group of faculty IV at TU Berlin, founded in June 2014.

Our team consists mainly of researchers from a previous research group of Prof. Tai at the Karlsruhe Institute of Technology (KIT).

The ISE research agenda focuses on software system design and interdisciplinary evaluation of distributed platform-based IT systems in emerging application domains.

Tuesday, Oct 14
Organizational Aspects

Fundamentals

Monday, Oct 20
Introduction

Monday, Oct 27
Messaging

Monday, Nov 3
Services

Engineering

Monday, Nov 10
Hadoop and MapReduce

Monday, Nov 17
Platforms

Monday, Nov 24
Configuration Management

Technologies and
Systems

Monday, Dec 1
Case Study: Dynamo


Monday, Dec 8
Case Study: GFS, BigTable

Monday, Dec 15
Case Study: Cassandra

Hands-on Exercises

Tuesday, Dec 16
Kick-Off

Tuesday, Jan 20
End of Exercises



Further Topics

Monday, Jan 26
Benchmarking

Monday, Feb 2
Assessment

Wrap-Up

Monday, Feb 9
Summary

Contents:

The lecture and lab introduces methods and technologies for the design and deployment of large-scale IT systems. Focus is set on cloud systems for enterprise computing, covering fundamentals and select advanced topics. Hands-on exercises complement the learning experience.

Learning Objectives:

You are familiar with all subjects covered, allowing you to assess and appreciate enterprise solutions, and to apply concepts, methods, and technologies studied in system design and realization. You have both a conceptual, theoretical understanding as well as hands-on practical experience with select cloud technologies.

Requirements

- Java programming skills are required
- Basic knowledge of Linux is useful
- Interest in learning new technologies, such as Hadoop, Cloud, NoSQL, etc.

Important dates

- Final **written** exam: Feb 24th 2015 in a time slot between 09:00 -12:00
 - Room and exact time of the exam will be announced in one of the next lectures and online in the ISIS2 forum
- Application start date (“Anmeldestart”): Oct 17th 2014
- Application end date (“Rücktrittsende”): Nov 3rd 2014

Exercise dates

- Every week Tuesday from 2PM to 4PM in room MA 850
- First exercise: Oct 28th 2014
- Hand in first assignment by Nov 4th 2014
- Between Dec 17 and Jan 19 no compulsory attendance
- Ask questions in ISIS2 online forum or via e-mail: klems@tu-berlin.de
- <https://www.isis.tu-berlin.de/2.0/course/view.php?id=2803>

Grading: „Portfolioprüfung“

- The exam at the end of the lecture counts 70 Portfoliopunkte
- The exercises during the lecture count 30 Portfoliopunkte
 - There is a total of 10 exercises
 - Per exercise you can achieve a max of 3 Portfoliopunkte:
 - At least 40% correct answers => 1 Portfoliopunkt
 - At least 60% correct answers => 2 Portfoliopunkte (total)
 - At least 80% correct answers => 3 Portfoliopunkte (total)

Grading: „Portfolioprüfung“

Grading key: Portfoliopunkte => Final Grade

More or equal to 95 => 1,0

More or equal to 90 => 1,3

More or equal to 85 => 1,7

More or equal to 80 => 2,0

More or equal to 75 => 2,3

More or equal to 70 => 2,7

More or equal to 65 => 3,0

More or equal to 60 => 3,3

More or equal to 55 => 3,7

More or equal to 50 => 4,0

Less than 50 => 5,0