

IS502052

Enterprise Systems Development Concepts

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Outline

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Course description

- This course is to train students to be conversant in the approaches and technologies to develop an enterprise level software
- The emphasis concentrates on teaching Java EE (Java Enterprise Edition)
- After completing this course, you can understand how-to deploy an enterprise software by using Java EE technology, and also some fundamental knowledge about Enterprise Systems Development

Syllabus

Topics include:

- The Systems Analyst And Information Systems Development;
- Project Selection And Management;
- Requirements Determination;
- Use Case Analysis;
- Process Modeling;
- Data Modeling;
- Moving into Design;
- Architecture Design;
- User Interface Design;
- Data Storage Design;

Syllabus

Topics include:

- Moving into Implementation;
- Transition To The New System;
- Enterprise Platforms;
- Distributed Computing Concepts;
- Model, View, Controller model;
- Service-Oriented Architecture and Web Services,
- Deployment;
- Persistence Management and Security

Lab Syllabus (*Tentative*)

1. Java Review
2. Java Serialization
3. Java - Remote Method Invocation
4. Enterprise JavaBeans
5. EJB – Stateless & Stateful
6. Java Webservices with Tomcat

Textbooks

1. Alan Dennis, Barbara Haley Wixom, Roberta M. Roth, [2018], ***Systems Analysis and Design***, 7th Edition, John Wiley & Sons, Inc.
2. Eric Jendrock, Ricardo Cervera-Navarro, Ian Evans, Devika Gollapudi, Kim Haase, William Markito, Chinmayee Srivathsa, [2013], ***The Java EE 7 Tutorial, Release 7 for Java EE Platform***, Oracle, United States.
3. Andrew Lee Rubinger, Bill Burke, [2010], ***Enterprise JavaBeans 3.1***, O'Reilly Media, United States.
4. Michał Ćmil, Michał Matłoka, Francesco Marchioni, [2014], ***Java EE 7 Development with WildFly***, Packt Publishing, United States.
5. Rima Patel Sriganesh, Gerald Brose, Micah Silverman, [2006], ***Mastering Enterprise JavaBeans™ 3.0***, Wiley Publishing, Canada.

Teaching materials

All resources (lectures, exercises, etc.) are available on the following sites:

- SAKAI Portal – <http://sakai.it.tdt.edu.vn>
- Course Homepage – <https://duonghuuphuc.com/teaching/cs502052>

Assessment (1)

- 10%** Exercises (on-class + homework)
- 20%** Mid-term exam (on-lab + 45 minutes + open-book)
- 20%** Seminar
- 50%** **Final project**

Assessment (2)

Assignment & Final Project:

- Each team will study several materials assigned by the instructor in details
- Prepare and make a presentation and lead classroom discussion
- By the second week, students will be formed into several "groups", each group may consist of *1 - 2* students
- The topics will be chosen in consultation with the instructor
- Using **English** for report document and slide
- Using LaTeX format for both documents and slides

Seminar & Final Project Plans

- 5-Jan: register groups
- 13-Jan: assign topic
- From 21-Jan: begin the first topic of Seminar [20%]
- From 21-Jan: begin the presentation of System Requirement, System Analysis, System Design
- 9-Apr & 12-Apr: present Final Project

Policies

Assignment and final project must be submitted by the due date. No late submission will be accepted. All members of each group must submit the work also.

About collaboration, you may discuss with other students on the review reports. However, you must write up the reports on your own independently.

You need to be honest in all academic work and understanding that failure to comply with this commitment will result in disciplinary action.

Teaching staffs

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