Offered by
ICT Engineering

IT-SEP2

1.3

Semester Project: Client/Server System

ECTS
10

Prerequisites
Completed the 1st semester Software Engineering course “Software Development with UML and Java” or a similar course. The course must be passed before graduation.

- IT-SDJ1

Main purpose
The purpose is to develop and document a client/server system as well as demonstrate the acquisition of process skills.

Knowledge
The student should be able to understand:

- An iterative system development method
- The relation between design and test
- Group roles
- Effective literature searching
- Deployment

Skills
The student should achieve the skills:

- Document Analysis, Design etc. with UML
- Requirements capturing, both functional and non-functional
- Write a project description for a client-server software system
- Design and describe an object-oriented model
- Design a relational database for data persistence
- Use SCRUM to control the development process
- Use Unified Process as a system development method
- Present considerable skills for presentation, both written and oral
- Present a project report in a well-structured manner
- Describe a project execution in a process report
- Solve a specific task in collaboration with group members
- Unit testing and use case testing

Competences
The student should be able to:

- Capture requirements, analyze, design, implement and test a client/server system using UML and Java
- Create a small, robust, concurrent client/server system with the proper selection of design patterns and database-persistence
- Choose between and argue for various technical solutions for implementing client/server systems
- Describe and reflect on the development process and project work
- Test a software system using relevant testing techniques
- Apply relevant design principles

Topics

Teaching methods and study activities

CATEGORY 1

Participation of lecturer and students
Initiated by the lecturer
28 hours - 10%

- Lessons
- Project supervision, meetings with supervisors
- Exam

CATEGORY 2

Participation of students

Initiated by the lecturer

56 hours - 20 %

- Hand ins
- Project work
- Homework

CATEGORY 3
Participation of students
Initiated by students
140 hours - 50 %

- Preparation for exam
- Self-study
- Project work
- Literature search

CATEGORY 4

Participation of lecturer and students
initiated by students
56 hours - 20 %

- Supervisor meetings

Resources

Evaluation
Permit criteria for attending examination:

- Mandatory assignments handed in before deadline and accepted.
- Group reports including student's name handed in before deadline.

Examination

Oral Examination

Group presentation - 5 minutes per person

Group examination - 15 minutes/student

- SWE is evaluated together with SEP2 project.
- The SEP2 project and the exam must demonstrate understanding of SWE1 topics and their use in practice
- During the SEP2 exam, specific SWE1 questions will be asked, which must be answered satisfactorily to pass SEP2
- The grade for SWE1 and SEP2 will be the same, but be given as two grades.

Allowed tools: All

Internal examiner.

Grading criteria
Examinations account for 100% of final grade.

Additional information

Responsible
Steffen Vissing Andersen

Valid from
1.2.2019

Course type
ICT Engineering;Compulsory Course for all ICT Engineering;2. semester;