LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Agil programvaruutveckling - projekt
Agile Software Development - Project

EDAG05, 7,5 credits, G2 (First Cycle)

Valid for: 2023/24
Faculty: Faculty of Engineering, LTH
Decided by: PLED C/D
Date of Decision: 2023-04-18

General Information

Elective Compulsory for: I3
Elective for: C4, E4, F4, L5-gi, M4, Pi4
Language of instruction: The course will be given in English on demand

Aim

To give knowledge and practical experience of how to develop software together in a team. Focus in on practical experience of methods and tools suitable for a smaller software project with one developer team.

Learning outcomes

Knowledge and understanding
For a passing grade the student must

- be able to define basic concepts within software development.
- be able to describe and motivate different techniques used in software development.

Competences and skills
For a passing grade the student must

- be able to develop and deliver software in collaboration with others.
- be able to apply techniques and tools for software development.

Judgement and approach
For a passing grade the student must

- be able to assess how activities in a software project affect the development process.

- be able to see connections between activities in the development process and the final software product.

Contents

- Software development in teams with close customer connection.
- Iterative software development (extreme programming, agile programming).
- Methods for planning and prioritizing the development work (planning game, kanban).
- Pair programming.
- Praxis and tools for version control, code review, testing, and code maintenance (Git, Gerrit, continuous integration, refactorings).
- Automated testing and delivery.
- Relation to development of open-source software.

Examination details

Grading scale: UG - (U,G) - (Fail, Pass)
Assessment: For a passing grade the students need to complete laboratory exercises, planning meetings, development sessions, and the presentation of the project.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Parts
Code: 0120. **Name:** Laboratory Work.
Credits: 2,5. **Grading scale:** UG. **Assessment:** Passed laboratory work.
Code: 0220. **Name:** Project.
Credits: 5. **Grading scale:** UG. **Assessment:** Passed all parts of the project. **Contents:** The project includes four software development iterations. Each iteration includes a planning meeting, self-study time, joint software development time, and hand-in assignments. The project ends with a written report, an oral presentation, and a review of another groups project.

Admission

Admission requirements:

- Approved laboratory work and assignments in EDAA01 Programming in Java - continuation course or laboratory work and assignments in EDAA30 Programming in Java - continuation course

The number of participants is limited to: No
The course overlaps following course/s: ETSA02, EDAF45, ETSA03

Contact and other information

Course coordinator: Emma Söderberg, emma.soderberg@cs.lth.se
Course homepage: http://cs.lth.se/EDAG05
Further information: Project course.