LINKÖPINGS UNIVERSITET

Project: Agile System Development

Programme course

10 credits

Projekt: Agil systemutveckling

TDP032

Valid from: 2021 Spring semester

Determined by
Board of Studies for Computer Science
and Media Technology

Date determined
2020-09-29

Main field of study

Programming

Course level

First cycle

Advancement level

G2X

Course offered for

- Bachelor's Programme in Programming

Prerequisites

Programming

Intended learning outcomes

Having passed the course, the student will be able to:

- Develop an interactive application together with clients.
- Develop software together with programmers and clients.
- Develop software based on the agile methodology's foundations.
- Understand the agile methodology compared to other methodologies
- Account for the concepts of ecological, social and economic sustainable development from an engineering perspective.
- Reason for sustainability concepts and paradigms, sustainability challenges, and the relationship between sustainability and technology development and use.
- Apply usability principles and integrate usability work within the framework of an agile system development process

Course content

Craftsmanship: Ability to work with agile methods both individually, in pairs, and in teams. Ability to communicate and function socially in a good way in a project and team (Communication). Ability to develop software in the easiest way possible to solve a given requirement (Simplicity). Ability to recieve and give feedback in a constructive way (Feedback). Work at a high speed with good quality and deliver innovative satisfying results (Courage). Work directly with source code rather than documentation and be open to continual changes (Working Software + Responding to Change). Plan an carry out usability testing.

Technology: Program language and development environment depending on project. Requirements management and project management system Trello. Version control system Git/Subversion

Teaching and working methods

IP-project, carried out according to the study plan.
The course runs over the entire spring semester.

Examination

UPG1	Assignment	0.5 credits	U, G
PRA1	Project work	9.5 credits	U, G

Grades

Two grade scale, older version, U, G

Department

Institutionen för datavetenskap

Director of Studies or equivalent

Jalal Maleki

Examiner

Annika Silvervarg

Education components

Preliminary scheduled hours: 86 h
Recommended self-study hours: 181 h

Course literature

Books

Henrik Kniberg, *Scrum and XP from the trences* tillgänglig online
https://www.infoq.com/minibooks/scrum-xp-from-the-trenches-2/
Pieter Jongerius et al., (2013) *Get Agile! Scrum for UX, design & development*
BIS Publishers