Agile Software Engineering

Exam Assignment

The **deadline** for submission is **Thursday, January 2, 2025, at 12:00**. This assignment is individual and must be submitted through the digital exam system: www.de.aau.dk/studerende. The course carries a weight of 5 ECTS, and the exam will be graded according to the 7-point scale, with external censoring.

You are permitted to use any resources (fully open-book exam); however, collaboration with other students is not allowed.

The task is to write an assessment report on a software company or department. *The objective is not simply to describe the tools and processes used by the organization, but to critically evaluate them in light of the material covered in class.* To this end, you must conduct an interview with a knowledgeable software engineer of your choice. The name, company, and professional email address (not Gmail *et similia*) of the interviewee must be uploaded in the designated document on Moodle before the exam submission deadline. You may analyze different companies, but ensure that the company has multiple development departments if choosing more than one. If in doubt, contact the instructor well in advance.

To adequately reflect on the required topics, students are advised to use the course literature provided on Moodle, as well as relevant academic sources found on Google Scholar.

The case study you are presenting must be original. Please note that the digital exam system includes an **automatic plagiarism detection mechanism**. This means your assignment will be checked for similarities with (i) publicly available materials and (ii) previously submitted student reports at AAU.

You must include a transcript of the interview (in English or Danish) as an attachment to your report.

Your report must cover the following topics discussed during the course. These are not direct questions for the interview but rather the areas your analysis should focus on:

1. The primary factors contributing to the success or failure of software projects within the company.
2. The alignment of different professional roles involved in software development (e.g., The Agile Success Model).
3. A description and critical discussion of the company's software development process (i.e., what factors have influenced the process to take its current form?).
4. An evaluation of how the company monitors and improves key aspects such as Management Support, Team Autonomy, Continuous Improvement, Stakeholder Concern, Responsiveness, and Team Effectiveness.
5. How the company identifies and maps its stakeholders.
6. Software quality management: Discuss how the company handles quality assurance, planning, and control practices.
7. A critical assessment of the integration of Generative AI into the software development pipeline.
8. An analysis and recommendations for improvements to the company's software production pipeline.