Master Thesis — Usability Evaluation of Internal Development Tools

Background
Developing software for Ericsson’s 5G products does not only entail writing new code when adding new functionality, but it also requires troubleshooting traces from base stations across the world and delivering corrections when necessary. 5G software is developed in parallel across the world in a large, distributed development organization. For Ericsson to be able to deliver high quality software it is crucial that the tools available to the developers are easy to access, understand, use, and provide the functions that developers need. Using industry standard techniques and methods for user testing and usability evaluation – this “ecosystem” of development tools could be evaluated and analyzed with the goal of producing actionable findings that could be used as input in a development tools usability improvement project.

Thesis Description
This thesis requires several steps as part of a complete usability evaluation of a few different software development tools of varying complexity. User testing is central to the evaluation and the thesis thus require recruiting test participants and conducting user testing. Using both qualitative and quantitative data, the end goal is a set of actionable findings that improve aspects of either the individual tools or the ecosystem of tools. If changes to graphical user interfaces are part of the results, the suggestion is to include wireframes detailing the proposed improvements.

The thesis will be concluded with a presentation of the results for the Traffic Control development organization.

Qualifications
This project is aimed at students in cognitive science or information systems/science (systemvetenskap).

Extent
1-2 students, 30hp each

Location
Ericsson AB Mjärdevi, Linköping

Preferred Starting Date
Spring 2023

Keywords
Usability, Software development tools, User testing, Telecom, 5G

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