

Software Testing & Risk Assessment: Risk assessment project

Goal

The aim of this project is to perform risk assessment on a system of your choice. You will use multiple types of risk assessment, and discuss the advantages and disadvantages of each.

The project is a group project in groups of **4-5 students**. The result is a written report, which must be handed in through Canvas (deadline: **Monday March 3, 23:59**).

Report

Your report should contain the following:

- ***A description of the system and its objective.*** You are free to choose any system that you like (software, engineering, management,...) , as long as you are able to determine components, and their functions. A schematic depiction of the system may be helpful. Also clearly describe the objective(s) of which you will analyze the risks.
- ***A risk assessment of the system in three ways,*** using three risk models:
 - a risk matrix (probability vs impact), including the effect of some countermeasures. It should contain at least 5 risks.
 - an FMEA. The associated function tree should have at least 3 design functions.
 - a fault tree (static or dynamic, your choice). It should have at least 10 basic events.
 - For each of these, give a short description on how you came to your risk model, and what conclusions you can draw from the risk model: based on this model, what recommendations would you give to the system owner?
- ***A discussion on the (dis)advantages of the three methods when applied to your system.*** Apart from the risk assessments themselves, we would also like you to take a step back and reflect on the different methods. What did and didn't they capture about your system? Which, if any, would you recommend to the system owner?

The report should be **approximately 3 pages** excluding pictures and diagrams.