

Failure categorization in SW-testing

Background

Within automotive, testing of the electrical system requires complex environments involving different variants of SW, HW and tools. Increasingly more and more testing is done automatically. A huge amount of data is produced in this process and failures occur. Analysis of these in a complex environment is complicated and takes time. Failures can be caused by software bugs in customer functionality, resulting in failed test cases. However, sometimes a failed test case is the result of an old test case that needs to be updated, a deprecated testcase or the environment itself was not working properly. Development of the test environment and the customer functionality To save time and reduce the amount of work, we propose a work to investigate how we can automate the failure categorization so that the failures can be directed to the right people including information about what probably went wrong.

Project description

The project is in collaboration with Volvo Cars infotainment department.

- 1) Investigate the test environment to understand what data is available and how it is produced
- 2) Propose a solution for how to categorize failures
- 3) Implement the solution as a proof of concept

Suggested Reading Material

General overview of software testing: https://en.wikipedia.org/wiki/Software_testing

Target Group

D, DV and IT

Group size

4

Prerequisites

Prior programming knowledge.

Familiarity with testing.

Supervisor

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