Software Engineering Seminar

Regression Test Selection

Description

Recognition of a bug is the first step to be able to fix it. As, generally, there does not exist a formal specification for the software system under consideration, a *test suite* is being used to help ensure the correctness of the system. When executing a test suite, a failing test case is an indication of an error that resides in the system.

Whenever changes to the program are being introduced, the existing tests in the test suite should be run to ensure that the change didn't break any existing functionality. This process is called *regression testing* and may take very long, depending on the size of the test suite. Therefore, researchers proposed various techniques to effectively *reduce the number of regression tests* that need to be run.

The goal of this topic is to discuss and examine the current state of the art of regression test selection techniques.

References

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