Risk-Based Software Testing: Increasing Effectiveness and Efficiency in Testing

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Risk-based testing (RBT) is a testing approach which considers risks of the software product as the basis to support decisions in all phases of the test process. Risk-based testing has a high potential to improve the software test process as it helps to optimize the allocation of resources and provides decision support for the management. An adequate test strategy plays a key role in increasing test effectiveness and efficiency in terms of balancing product quality with cost and time-to-market. Establishing a risk-based testing approach and its integration into an existing test process is a challenging task due to the lack of concrete guidelines and empirical evidence on success criteria. In this talk we present the concept of risk in software testing as well as a practical approach for developing a risk-based test strategy. The talk is based on results from previous research and studies investigating the introduction of risk-based testing in large organizations as well as the application of risk in testing in small and medium enterprises. Intended learning objectives include insights into the benefits and challenges of risk-based testing in practice, knowledge about a process for risk-based test strategy development and refinement, and an overview of open research issues.

Vortragssprache: Englisch