Software quality is a make-or-break criterion for acceptance and success of software systems. Therefore, developers have to pay great attention to performance, stability and the long-term cost efficiency of software systems. Key to achieve these attributes is a high software quality. However, even the term “software quality” itself is highly disputed and no broadly accepted definition exists. At the same time, it is clear that achieving this elusive goal is one of the greatest challenges in software engineering and that due to its multi-faceted nature, all activities exercised as part of a development effort need to contribute to achieve high quality software. This report offers insight into selected aspects in the field of software quality. All of the topics are active fields of research and innovative ideas and results are shown. The report is a result of the master seminar “Software Quality” at the Technische Universität München. To ensure practical relevance, the seminar was carried out in collaboration with itestra GmbH.

Stichworte:
software quality; quality requirements; model inconsistency; model-based testing; cost-benefit of quality assurance; process quality; sustainable change