

Empirical Assessment of Changeability Decay in Object-Oriented Software

In ICSE'99 Workshop on Empirical Studies of Software Development and Evolution, Los Angeles, CA, pages 62-69

Abstract

Genera AS is a vendor of a CASE tool called Genova. The work described in this paper aims to define and evaluate an evolutionary development process (the Genova process) to complement and support the use of the Genova tool. As a starting point, we used a lightweight version of the Rational Unified Process in a development project for one of our customers. This process was instrumented to enable process improvement activities. An essential question is what to improve the defined or the actual process? Based on quantitative and qualitative data, we identified improvements related to the distribution of test effort throughout the life cycle. Furthermore, we gained useful experience on the management of evolutionary development projects. Our case study also provided insight for instrumentation of the process for collecting data related to the cost of changes.