Abstract

A pervasive method for GUI testing is the Capture and Playback (CP) technique. This commonly used technique cannot be used until an Application Under Test (AUT) is completely developed. In this paper we propose a specification driven approach to test GUI-Based java programs as an alternative to the CP technique. We introduce a GUI-event test specification language based on Java Script from which an automated test engine is generated. The esteem of Java as a scripting language is its ease of use and its standard format that have made writing a test script using our proposed specification language makes it an easy task. Beside the ability to test AUT before being completely developed we have implemented our approach that can generate the test specification file for an already existing AUT. The Tool generates GUI events, where Captures and Playback event responses to automatic verification of the results for the test cases which are written to a test log file. This approach supports M-version testing, where each version of the application is intended to satisfy the same specification.
A Model for GUI Automated Testing Framework in Software System

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Index Terms

Computer Science  
Software Engineering
Keywords
GUI Testing  Testing Tools  Java Script  Graphical User Interfaces  Application Under Testing