Abstract

Web components and their underlying parts are evolving rapidly to provide services and information over the internet. Web sites are becoming a basic part of business quality of service. As web services play an important role in providing different functionality, their correctness becomes an important factor. The diversity and complexity of web systems derived the need for test automation. Test Automation is the use of software for automatic execution of test cases and their comparison with expected outcome. In this paper, we present an analysis based modeling and regression testing technique for web applications. Model based testing is a test automation approach that generates and maintains more useful and flexible tests from explicit descriptions of the application. Models describing web components structure before and after the changes are incorporated. It helps to identify test cases generated for the initial version of component that can be re-run on the changed component. The regression test-suite
generated for the component is optimized using “all-path” coverage criteria. The proposed approach yields substantial results with optimized test data generation.

**Reference**

Index Terms

Computer Science
Algorithms

Key words

Web Components
Domain Analysis
Test Automation