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WEB APPLICATIONS TESTING USING AGENT-BASED APPROACH

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Abstract

Nowadays Web applications have grown so quickly that they have already become very important to the success of businesses. However, since they are built on Internet and open standard technologies, Web applications bring new challenges to researchers, such as dynamic behaviors, heterogeneous representations, novel control flow and data flow mechanisms, etc. In this paper, we propose Web applications testing using agent based approach. While the agent based framework greatly reduces the complexity of Web applications, a four level data flow test approach can be employed to perform structure testing on them. In this approach, data flow analysis will be performed as Function Level testing, Function Cluster Level testing, Object Level testing, and Web Application Level testing, from low abstract level to high abstract level. Each test agent in the framework takes charge of the testing in an abstract level for a particular type of Web document or object.

Keywords: Web application, testing, test agents, internet, function level testing, function cluster level testing, object level testing, web application level testing.