Orchestration framework for automated Ajax-based web application testing

ABSTRACT

The web today is a growing universe of interlinked web pages and web apps, teeming with videos, photos, and interactive content. Over time web technologies have evolved to give web developers the ability to create new generations of useful and immersive web experiences. The most important technology in realizing this shift is Ajax (Asynchronous Javascript and XML). Ajax is a major breakthrough in the web development area even though it is rather complex to set it up and test. Tools like CRAWLJAX automatically generate test cases and apply pipelined oracle comparators along with generated DOM templates. But with the huge amount of data and test cases this comes at the cost of accuracy and speed. This paper explores the web application automated testing. In this research, orchestration framework has been introduced to effectively control automated task and orchestrated process. The orchestrator has been further implemented and demonstrated on a prototype production test. The functionalities and implementation of the orchestrator has been discussed in detail in this paper.