Abstract

Software test automation framework (STAF) is a set of concepts, assumptions or practices that provide support for automated software testing. STAF includes the following for capturing and controlling the test activity, i.e., test objects, library files and reusable scripts etc. In literature, we have identified different types of automation framework like modular framework (MF), data driven framework (DDF), keyword driven framework (KDF), and hybrid framework (HF); and selecting one of them is not an easy task according to the requirements of software testing process because each framework pursues a specific objective or goal. Therefore, in order to address this issue, we present a method for the selection of software testing automation framework (STAF) using Analytic Hierarchy Process (AHP) by considering the following criteria, i.e., Master Test Script (MTS), Reading of Data from Data Files (RDDF), Data Tables and Keyword (DTK), and Scripts, Data Table and Keywords (SDTK). Finally, the utilization of the proposed approach is demonstrated with the help of an example.


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