

## **Measuring the efficiency of MFWA technique for prioritizing event sequences test cases**

### **ABSTRACT**

The software development phase would frequently go through several changes and modifications. These are challenges that the tester of a system needs to face to ensure that the quality of the system aligns with the budget, resources, and time to deliver. Numerous techniques have been proposed to solve these problems and one of them is the test case prioritization (TCP) technique. The TCP technique is widely used for single event test cases. Thus, this paper would like to propose the Multifactor Weightage Approach (MFWA) using combinations of six factors to prioritize event sequence test cases. The percentage of test effort efficiency was used to measure the efficiency of the comparison technique. The results showed that the MFWA was more efficient compared to the random technique in terms of detecting faults earlier.

**Keyword:** Software testing; Test case prioritization; Event sequences; Multifactor; Efficiency