Abstract

Software development projects involve a number of companies and individuals with diverse knowledge and expertise. Failure of software development projects is usually due to weak testing processes. Finding and fixing bugs is time-consuming and costly. Bugs can be resolved by the testing process. In the testing process, there are test cases. However, designing test cases manually is a time-consuming and costly process.

This study presents a Test Case Catalog design that reuses existing test cases, focusing on the XYZ campus system application. Test cases are organized based on existing requirement documents as a basis for testing. By utilizing relevant test case repositories, the Test Case Catalog offers a systematic tool for application testing of the XYZ project. The catalog is designed using Text Mining, including Bag of Words, to extract and analyze relevant features or functions from the requirement documents. Based on the threshold results with a percentile value of 70 not only selects relevant features to generate test cases but also improves the testing process, as evidenced by the better success rate compared to the pre-test phase, without using the catalog. Thus, the Test Case Catalog emerged as an effective and efficient tool in software testing.