Application of Base Path for Optimal Testing of Software

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Abstract

Many purposes for system testing such as testing are carried out to ensure there are no bugs in the application. Tests are also carried out due to the need for a process to evaluate a system both manually and automatically. Testing is carried out by researchers on a software that uses HTML and PHP programming languages. The software developed will be used to connect between the ordering and producers of coconut flour. Software like this is expected to make it easier for customers to place an order by simply accessing orders through the existing application system facilities through the internet network. The application of the testing carried out on the software uses the Base Path Testing method ... Base path Testing is a structural testing group. The process of basic path testing will be considered optimal if all paths that are considered independent in the program, the interface is also a logical decision that has been executed at least once. This test implementation is a white-box testing technique where graph theory is used to analyze the complexity of a structured system. The method that will be used is to make a graph of the control flow of each program function so that optimal testing will be obtained based on the test design. The basic path method is used because of the awareness
that there are functions in the system that may not interact with each other. With this testing strategy is expected to help detect the complexity of the structure of the functions developed in the software so that it can be understood by characterizing the relationship, interaction and behavior of the system or software being observed. For this reason, in this article the problem to be answered is how to implement testing using Basic Path Method on ordering coconut flour software. The goal is to produce optimal software by measuring the logical complexity of all execution paths using the basic path method.

References

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Index Terms

Computer Science  Software Engineering

Keywords

Basic path test, flow graph, cyclomatic complexity, optimal