

Module documentation based testing using grey-box approach

ABSTRACT

Testing plays an important role to assure the quality of software. Testing is a process of detecting errors that can be highly effective if performed rigorously. The use of formal specifications provides significant opportunity to develop effective testing techniques. Grey-box testing approach usually based on knowledge obtains from specification and source code while seldom the design specification is concerned. In this paper, we propose an approach for testing a module with internal memory from its formal specification based on grey-box approach. We use formal specifications that are documented using Parnas's Module Documentation (MD) method. The MD provides us with the information of external and internal view of a module that can be useful in grey-box testing approach.