

Research on applying Java PathFinder in automatic test case generation.

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Abstract: This topic aims to study and deploy the use of the Java PathFinder (JPF) tool to automate the process of generating test cases for software systems. Given the difficulty in detecting errors early in the development phase, especially complex ones, the topic focuses on the ability to analyze and develop test cases by using JPF in a real-world environment. The research methodology includes both theoretical and experimental approaches, aiming to build an effective support system for the software testing process. The expected result is that the application of JPF will significantly improve testing quality and ensure the reliability of software products.

Keywords: Java PathFinder, automatic test case generation, software testing