

Wikiprint Book

Title: Coverage Visualization

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Coverage Visualization

Abstract

The project aims at developing set of Eclipse plug-ins that help users figure out test coverage information achieved by JPF via visualization. The proposed implementation will provide several views (such as overall view, code view, and contextual view) to assist the users to understand and investigate reasons why certain code portions are not covered.

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Description

Below are planned Steps for visualizing coverage information in JPF:

1. Analyze current JPF APIs (including symbc) and figure out how to extract coverage information in the XML format by using the APIs. If needed, we will introduce new APIs for extracting the information.
2. Develop modules for reading in the coverage information
3. The overall view will present coverage information achieved by JPF and the detailed information of exploration at the level of package, class, or methods.
4. The contextual view will show all source code files explored by JPF to help the users easily gain the knowledge of which portions of the program are covered or not. To better interpret the achieved coverage by JPF, we will use various color schemes.
5. The code view will show the source code with different background colors for presenting coverage information. For consistency, the color schemes of the background colors are the same as the contextual view.

Program & Timeline

This project is funded by the [Google Summer of Code \(GSoC\)](#) program. It follows the [GSoC timeline](#) (start 05/24, finish 08/16)

Repository

The sources for this project are available from a Mercurial repository on <http://bitbucket.org/yoonki/jpf-viscov>

Project Blog

(most recent on top) 2010-06007 (PM) - updated details

2010-05-07 (NR) - project page created