

Project Name

Abstract

java.util.concurrent contains many classes including native methods. The jpf-concurrent project supports many of these classes by using model classes and native peer classes. A part of java.util.concurrent is java.util.concurrent.atomic which can be used to implement lock-free algorithms. This project includes providing support for unhandled native calls within java.util.concurrent. Moreover, regression tests will be performed to ensure the compatibility of this package with jpf-concurrent.

Contact

student: Nastaran Shafiei <nastaran.shafiei AT gmail.com>

mentor: Mateusz Ujma <mateusz.ujma AT gmail.com>

co-mentor:

Repository

The sources for this project are located in the JPF extension called jpf-concurrent.

Description

This project extended jpf-concurrent to support new classes from java.util.concurrent package. Specifically, eight new classes were implemented along with a test suite for each of them. More details are available in the paper "Mateusz Ujma and Nastaran Shafiei, jpf-concurrent: an extension of Java PathFinder for java.util.concurrent" which has been successfully submitted to "The Java Pathfinder Workshop 2011".