BaciBeans: A NetBeans Plugin for Concurrent Programs

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Background

What is parallel processing?

What is C--?

When do we use this?

http://developer.axis.com/old/products/mcm/
Problem: JavaBACI Teaching Tool

JavaBACI is an open-source command line concurrency simulator used by students to compile and run C++ programs.

How do we use JavaBACI?
Problem: JavaBACI Teaching Tool

JavaBACI is an open-source command line concurrency simulator used by students to compile and run C++ programs.

How do we use JavaBACI?

With great difficulty.
Solution:

BaciBeans: A NetBeans Plugin
Solution:

BaciBeans: A NetBeans Plugin

What is BaciBeans?
- BaciBeans is a NetBeans plugin that integrates JavaBACI into NetBeans, combining the familiarity and ease of use of NetBeans with the concurrency interpreter.
Software Tool: the NetBeans IDE
With BaciBeans: Advantages

Project Actions

Project Management

File Editor

Program Execution
BaciBeans: Demo
Conclusion

- Bacibeans provides students with a new and improved way to program in C-- by allowing students to use the familiar NetBeans IDE.
Conclusion

- BacBeans has several advantages over the existing system to edit, build, run, and debug on the command line interface using the JavaBACI executable by incorporating the C-- project, file type, and actions within the NetBeans IDE.
Conclusion

- Students also benefit from the project management feature of NetBeans, which allows them to maintain Java, C++, and C-- programs coexisting in the same project group.
Conclusion

- BacBeans is successfully used in the Programming Paradigms course at Pepperdine University.
Further Plans

We have several plans for improving BaciBeans in the future including

- C-- syntax highlighting and formatting
- code completion capabilities
Acknowledgements:
Support for this project was provided by the Natural Science Division at Pepperdine University and the Academic Year Undergraduate Research Initiative (AYURI) Fall 2013.

References: