Code Coverage for High Productivity Languages – Code coverage tool for managed x10

Goal – To develop a code coverage tool for managed X10 leveraging the existing Java code coverage tool (Jacoco)

Learning Objectives

- Understand how code coverage works
- Understand the importance of code coverage
- Identify the flaws of managed x10 source-to-source compiler (x10 to java).

Week 1-2

- Learn about x10
- Set up environment
- Write simple x10 codes, test it on Jacoco.

Week 3-4

- Initial presentation in week 4
- Learn more about Jacoco (How well does the existing test suites works on Jacoco etc)
- Read the source code of Jacoco.

Week 5 – 6

- Make changes to Jacoco to map the output of generated Java code back to X10

Week 7-10

- Tweak either X10 compiler/Jacoco output against test suites to solve the false negative and have an understandable and useful output

Week 11-12

- Write report

Week 13

- Final presentation