

On the use of static analysis to engage students with software quality improvement: An experience with PMD

Assignment

Description:

PMD is a source code analyzer. It finds common programming flaws like unused variables, empty catch blocks, unnecessary object creation, and so forth. It supports Java, JavaScript, Salesforce.com Apex, PLSQL, Apache Velocity, XML, XSL. Additionally it includes CPD, the copy-paste-detector. CPD finds duplicated code in Java, C, C++, C#, PHP, Ruby, Fortran, JavaScript, PLSQL, Apache Velocity, Ruby, Scala, Objective C, Matlab, Python, Go, Swift and Salesforce.com Apex.

Task:

1. Install the [Eclipse plug-in for PMD](#)
2. Run PMD on the same input code (preferably) from Part 2.
3. Pick 10 issues of different types.
4. Create a report and, for each issue, add to the report:
 1. The type of issue
 2. Whether it is a false or a true positive
 3. If it is a true positive, what are the necessary steps to fix it?
 4. How long it took you to check it / fix it.
5. Add to the report a concise comment about your experience with PMD (positives, negatives, other comments).