PowerEnJoy

Politecnico di Milano

Industrial and Information Engineering Computer Science and Engineering

Cattaneo Davide

El Hariry Matteo

Frontino Francesco

## Code Inspection

Contents

1. ***Classes***
   1. Assigned classes 3
   2. Functional description 3
2. ***List of issues*** 4
   1. Naming conventions
   2. Indention
   3. Braces
   4. File organization
   5. Wrapping lines
   6. Comments
   7. Java source file
   8. Package and import statement
   9. Class and interface declaration
   10. Initialization and declaration
   11. Method calls
   12. Arrays
   13. Object comparison
   14. Output format
   15. Computations, comparisons and assignments
   16. Exceptions
   17. Flow of control
   18. Files
   19. Other Problems
3. ***Revision***
   1. Team work 26
4. ***Classes and functional description***
   1. ***Assigned Classes***

The class assigned for code inspection is:

* *FinAccountServices.java*

and is part of the project Apache OFBiz. The class taken into account for the analysis can be found at the following path:

* *../apache-ofbiz-16.11.01/applications/accounting/src/main/java/org/apache/ofbiz/accounting/finaccount/FinAccountServices.java*
  1. ***Functional description***

Purpose of the FinAccountServices class is to provide methods for the management of the users’ accounts and their transactions.

These methods include authentication, transaction management, balance checking, refunds and account status checking.

1. ***List of issues***
   1. ***Naming conventions***

Class variables, also called attributes, are mixed case, but might begin with an underscore (‘ ’) followed by a lowercase first letter. All the remaining words in the variable name have their first letter capitalized.

|  |  |
| --- | --- |
| ***Code line*** | ***Problem*** |
| *386* | *Eli it is not a well-represented variable name. (a best name can be, lastTransaction i.e.)* |

* 1. ***Indention***
  2. ***Braces***

|  |  |
| --- | --- |
| ***Code line*** | ***Problem*** |
| *310* | *If statement declared inline with no braces* |

* 1. ***File organization***

|  |  |
| --- | --- |
| ***Code line*** | ***Problem*** |
| *80* | *The line contains more than 120 characters (122)* |
| *100* | *The line contains more than 120 characters (122)* |
| *113* | *The line contains more than 120 characters (122)* |
| *119* | *The line contains more than 120 characters (123)* |
| *127* | *The line contains more than 120 characters (123)* |
| *193* | *The line contains more than 120 characters (121)* |
| *454* | *The line contains more than 120 characters (224)* |
| *337* | *No space before attributes declarations* |
| *334* | *GenericValue finAccount; blank space lines error* |
| *345* | *Blank lines error* |

* 1. ***Wrapping lines***
  2. ***Comments***
  3. ***Java source files***
  4. ***Package and import statements***
  5. ***Class and interface declarations***
  6. ***Initialization and declarations***
  7. ***Method calls***
  8. ***Arrays***
  9. ***Object comparison***

All the objects and Strings compared using “==” are compared with “null” which is correct and all the other ones uses equals, therefore are correct.

* 1. ***Output format***
  2. ***Computation, comparisons and assignments***
  3. ***Exceptions***
  4. ***Flow of control***

No switch statements and no loops for the first class inspected.

* 1. ***Files***

No files are used in the classes inspected.

* 1. ***Other Problems***

|  |  |
| --- | --- |
| ***Code line*** | ***Problem*** |
| *393* | *BigDecimal txAmt = trans.getBigDecimal("amount");*  *BigDecimal refAmt = txAmt;*  *The variable txAmt is not usefull.* |

1. ***Revision***
   1. ***Team work***

Here is reported a compact table showing how the work was brought on by all the members of the group.

Document work finished on the 5th February 2017.