

Politecnico di Milano

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Code Inspection Document

Version 1.0

PowerEnjoy

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1. Introduction

The code inspection is a systematic examination of computer source. It is intended to find mistakes overlooked during the initial development phase, with the aim of developing the overall quality of the software. This document indexes all coding mistakes found following a standard code inspection check-list for the requested classes listed in the underling section ??

1.1 Class overview

The Apache OFBiz Project is an open source product for the automation of enterprise processes that includes framework components and business applications for ERP,CRM and other business-oriented functionalities.¹ Among the many, the following classes were assigned for code inspection:

ProductStoreCartAwareEvents.java

- Location: apache-ofbiz-16.11.01/applications/order/src/main/java/org/apache/ofbiz/order/shoppingcart/product/ProductStoreCartAwareEvents.java
- Class role: see section ??
- Total number of issues found: TBD

• ProductDisplayWorker.java

- Location: apache-ofbiz-16.11.01/applications/order/src/main/java/org/apache/ofbiz/order/shoppingcart/product/ProductDisplayWorker.java
- Class role: see section ??
- Total number of issues found: TBD

¹Full source code: http://mirror.nohup.it/apache/ofbiz/apache-ofbiz-16.11.01.zip

2. FUNCTIONAL ROLE OF CLASSES

This section analyses the meaning and functionality for each of the inspected classes.

2.1 ProductStoreCartAwareEvents.java

This java class is composed of two static methods. The first static method takes a HttpServletRequest and HttpServletResponse as input. The method extracts the productStoreId String parameter from the request and tries to invoke the second static method. Depending on the success or failure of the second method , the the first method return either the string "success" or "error"

The second static method takes extracted productStoreID String and the HttpServletRequest as input. The method than:

- returns immediately if the productStoreID is null or if it equals the HttpSession's old productStoreID.
- throws an exception if productStoreID is not related to a valid productStore, if the webSite cannot be found in relation to the request or if webSite exists but does not allow changing of the productStoreID.
- if the points above are not matched , sets the productStoreID of the session to the one passed as parameter ,clears the old product catalogue and eventually sets the session's currency, locale and time-zone depending on the productStore. Finally the method creates a new shoppingCart for the session without erasing the old one.

2.2 ProductDisplayWorker.java

3. LIST OF ISSUES

3.1 ProductStoreCartAwareEvents.java

3.1.1 Naming conventions

- All class names, interface names, method names, class variables, method variables, and constants used have meaningful names and do what the name suggests. (setCurrencyUomIfNone che cazzo vor d?)
- The only one-character variable (Exception e) is a temporary throwaway variable.
- Class names are nouns, in mixed case, with the first letter of each word in capitalized.
- There are no interfaces.
- Method names are verbs, with the first letter of each addition word capitalized.
- All attributes, are mixed case, no one begin with an underscore. All the remaining words in the variable name have their first letter capitalized.
- There are no constant.

3.1.2 Indention

• Four spaces are used for indentation and it is done consistently.

• No tabs are used to indent.

3.1.3 Braces

- In all the class is used the Kernighan and Ritchie style (first brace is on the same line of the instruction that opens the new block).
- All if, while, do-while, try-catch, and for statements that have only one statement to execute are surrounded by curly braces.

3.1.4 File Organisation

- Either blank lines or comments are used to separate sections.
- Line length exceeds 80 characters many times. Six times it exceeds also 120 characters (3 of them are comments).

3.1.5 Wrapping Lines

- Line break occurs only after a comma or an operator.
- A new statement is aligned with the beginning of the expression at the same level as the previous line.

3.1.6 Comments

• Comments are used to adequately explain what the class, interface, methods, and blocks of code are doing.

3.1.7 Java Source Files

- The file contsins a single public class
- The public class is the first class in the file
- ??
- ??

3.1.8 Package and Import Statements

- Package is the first non comment line in the file
- All import statements follow the package

3.1.9 Class and Interface Declarations

- Class or interface declarations order:
 - 1. The file start with a class comment
 - 2. Class statement
 - 3. There is no class implementatio comment
 - 4. class (static) variables:
 - First we have class variable
 - There are no protected variables

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3.1.10	Initialisation and Declaration
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3.1.11	Method Calls
•	
• A	All methods have different name
• R	Returned values are used properly
3.1.12	Arrays
Arrays	are not used

- There are no private classe variable

5. istance variables:

6. There is the constructor

- 3.2 Object Comparison
- 3.3 Output Format
- 3.4 Computation , Comparisons and Assignments
- 3.5 Exceptions
- 3.6 Flow Control
- 3.7 Files

3.8 ProductDisplayWorker.java

3.8.1 Naming conventions

- All class names, interface names, method names, class variables, method variables, and constants used have meaningful names and do what the name suggests. (nqdbl, nqint, curpcms, curpcm che cazzo vor d?)
- The only one-character variable (Exception e) is a temporary throwaway variable.
- Class names are nouns, in mixed case, with the first letter of each word in capitalized.
- There are no interfaces.
- Method names are verbs, with the first letter of each addition word capitalized.
- All attributes, are mixed case, no one begin with an underscore. All the remaining words in the variable name have their first letter capitalized, except one (cartiter, which should have been cartIter).
- There are no constant.

3.8.2 Indention

- Four spaces are used for indentation and it is done consistently.
- No tabs are used to indent.

3.8.3 Braces

- In all the class is used the Kernighan and Ritchie style (first brace is on the same line of the instruction that opens the new block).
- All while, do-while, try-catch, and for statements that have only one statement to execute are surrounded by curly braces. There are 10 if statements which contain only one statement and are written in one line without braces.

3.8.4 File Organisation

- Either blank lines or comments are used to separate sections.
- Line length exceeds 80 characters many times. 10 times it exceeds also 120 characters One of them it's over 200.

3.8.5 Wrapping Lines

- Line break occurs only after a comma or an operator.
- A new statement is aligned with the beginning of the expression at the same level as the previous line.

3.8.6 Comments

 Comments are used to adequately explain what the class, interface, methods, and blocks of code are doing.

3.8.7 Java Source Files

- The file contsins a single public class
- The public class is the first class in the file
- ??
- ??

3.8.8 Package and Import Statements

- Package is the first non comment line in the file
- All import statements follow the package

3.8.9 Class and Interface Declarations

- Class or interface declarations order:
 - 1. The file start with a class comment
 - 2. Class statement
 - 3. There is a class implementation comment
 - 4. class (static) variables:
 - First we have class variable
 - There are no protected variables

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	6. There is no constructor
	7. Methods declaration
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3.8.10	Initialisation and Declaration
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3.8.11	Method Calls
•	
• T	hi class have two methods with the same name
• R	eturned values are used properly
2012	Arrays
3.8.12	

– There are no private classe variable

5. istance variables:

4. Other issues

Section dedicated to other issues found

5. APPENDICES

5.1 References

The following tools where used in the creation of this document:

• *TexMaker 4.5* as Editor

5.2 Effort Spent

- Simone Amico 12h
- Chianella Claudia Beatrice 12 h
- Giovanakis Yannick 12 h