



POLITECNICO
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Code Inspection Document

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1. Introduction

Code inspection is the most formal review type. It is led by the trained moderators. During inspection the documents are prepared and checked thoroughly by the reviewers before the meeting. It involves peers to examine the product. A separate preparation is carried out during which the product is examined and the defects are found.

2. Assigned Class

Requires taxcommon.class

TaxWare software

Why are they using BigDecimal. Currency calculations require precision to a specific degree, such as two digits after the decimal for most currencies. They also require a specific type of rounding behavior, such as always rounding up in the case of taxes.

Our group assigned class is `../apache-ofbiz-16.11.01/applications/order/src/main/java/org/apache/ofbiz/order`. And our task is to perform the inspection and report on the quality status of selected code extracts using the checklist for Java code inspection reported. Also we are asked to deliver a document having the structure described in the code inspection assignments document.

3. Functional role of the Class

The class assigned to us is TaxWareUTL. The class, that is part of the following package **org.apache.ofbiz.order.thirdparty.taxware**. The class is part of an integration third party software, called TaxWare. This software is a solution for calculating the taxes.

The main goal of this integration is to be able to write TaxWare libraries. After exploring the other java files present with this one, we found class TaxwareServices that make use of TaxwareUTL. This class instantiates TaxwareUTL and sets a shipping address, a shipping amount and items. The process() function is then called in order to generate the file.

TaxWare software

Why are they using BigDecimal. Currency calculations require precision to a specific degree, such as two digits after the decimal for most currencies. They also require a specific type of rounding behavior, such as always rounding up in the case of taxes.

4. Code Inspection checklist

4.1 Naming Conventions

4.2 Indention

4.3 Braces

4.4 File Organization

4.5 Wrapping Lines

4.6 Comments

4.7 Java Source Files

4.8 Package and Import Statements

4.9 Class and Interface Declarations

4.10 Initialization and Declarations

4.11 Method Calls

4.12 Arrays

4.13 Object Comparison

```
263 if (shipToAddress == null)
264     throw new TaxwareException("Shipping address has not been set.");
```

4.14 Output Format

4.15 Computation, Comparisons and Assignments

4.16 Exceptions

```
124 try {
125     fos = new FileOutputStream(outFile);
126 } catch (FileNotFoundException e) {
127     e.printStackTrace();
128 }
131 try {
132     fos.close();
133 } catch (IOException e) {
134     e.printStackTrace();
135 }
```

The two exceptions quoted before do not take any action on the fact that there is a file I/O error. only the stack trace is printed.

4.17 Flow of Control

4.18 Files

5. Effort spent