

AntiPattern

Ähnlichkeiten mit toten oder lebenden
Projekten sind rein zufällig und beabsichtigt!

Oliver Böhm



Lava-Flow



By Don Keck
WildPhotons.com



Apache Commons™
<http://commons.apache.org/>

Reinvent the Wheel

printStackTrace Logging

```
try {  
    ...  
} catch (MalformedURLException e) {  
    // TODO Auto-generated catch block  
    e.printStackTrace();  
}
```

System.out-Logging

```
if (DEBUG) {  
    System.err.println(super.getClass().getName()  
        + ".setIssueLanguages(" + isoLanguages + ")");  
}
```

```
log.debug("setIssueLanguages({})", isoLanguages);
```

Throwing Exception

```
public String checkStatus() throws Exception {  
    ...  
}
```

```
public String checkStatus() throws NoAccessException {  
    ...  
}
```

Log & Throw

```
...  
} catch (SQLException e) {  
    LOG.warn("Database error. SQL: {}; message {}",  
            sql, e.getMessage(), e);  
    throw new ServiceException("Error executing sql: "  
        + e.getMessage());  
}
```

```
...  
} catch (SQLException e) {  
    throw new ServiceException("Error executing sql: "  
        + e.getMessage());  
}
```


Destructive Wrapping

```
...  
} catch (SQLException e) {  
    throw new ServiceException("Error executing sql: "  
        + e.getMessage());  
}
```

```
...  
} catch (SQLException e) {  
    throw new ServiceException("Error executing sql: "  
        + sql, e);  
}
```

Null Flag

```
if (start == null) {  
    buffer.append("not started yet");  
}
```

```
if (start.equals(NOT_STARTED)) {  
    buffer.append("not started yet");  
}
```



log & return null / catch & ignore

```
    ...  
} catch (Exception e) {  
    LOG.warn("Cant get configuration item for key= {}/"  
            + " exception message: {}", key, e.getMessage());  
    return null;  
}
```

Faulty default implementation

```
public int compareTo(final Fraction o) {  
    // Auto-generated method stub  
    return 0;  
}
```

```
public int compareTo(final Fraction o) {  
    // Auto-generated method stub  
    throw new UnsupportedOperationException("not yet implemented");  
}
```

INITIATIVE >
Neue Soziale Marktwirtschaft

INITIATIVE >
Neue Soziale Marktwirtschaft

INITIATIVE >
Neue Soziale Marktwirtschaft

INITIATIVE >
Neue Soziale Marktwirtschaft

INITIATIVE >
Neue Soziale

Einsatz von
COPY & Paste

INITIATIVE >
Neue Soziale Marktwirtschaft

boolean equals (Object obj)

Note that it is generally necessary to override the **hashCode** method whenever this method is overridden, so as to maintain the general contract for the **hashCode** method, which states that equal objects must have equal hash codes.

undefined encoding

```
Reader fr = new FileReader(file);
Writer fw = new FileWriter(file);
Reader ir = new InputStreamReader(istream);
Writer ow = new OutputStreamWriter(ostream);
byte[] ba = "world".getBytes();
String s = new String(ba);
```

```
Reader fr = new InputStreamReader(new FileInputStream(file), "UTF-8");
Writer fw = new OutputStreamWriter(new FileOutputStream(file), "UTF-8");
Reader ir = new InputStreamReader(istream, "ISO-8859-1");
Writer ow = new OutputStreamWriter(ostream, "ISO-8859-1");
byte[] ba = "world".getBytes("ASCII");
String s = new String(ba, "ASCII");
```

untested Serializable

Cannot serialize session attribute activityController for session
a4591e053e65effc743dade67eef

```
java.io.NotSerializableException: javax.faces.component.html.HtmlSelectOneMenu
  at java.io.ObjectOutputStream.writeObject0(ObjectOutputStream.java:1164)
  at java.io.ObjectOutputStream.defaultWriteFields(ObjectOutputStream.java:1518)
  at java.io.ObjectOutputStream.writeSerialData(ObjectOutputStream.java:1483)
  at java.io.ObjectOutputStream.writeOrdinaryObject(ObjectOutputStream.java:1400)
  at java.io.ObjectOutputStream.writeObject0(ObjectOutputStream.java:1158)
  at java.io.ObjectOutputStream.writeObject(ObjectOutputStream.java:330)
  at org.apache.catalina.session.StandardSession.writeObject(StandardSession.java:2067)
  ...
```


FindBugs.sf.net

- equals / hashCode / equals(null)
- undefined Encoding
- Transient Trap
- Serializable Problems

pmd.sf.net/**cpd**.html

- printStackTrace Logging
- System.out Logging
- throwing Exception
- destructive Wrapping
- Serializable Problems
- Copy & Paste Detection

PatternTesting.org

- Lava Flow
- `printStackTrace` Logging
- `System.out` Logging
- throwing Exception
- Null Flag
- `logAndReturnNull`
- `equals` / `hashCode` / `equals(null)`
- undefined Encoding
- untested Serializable

More?

<http://sf.net/apps/mediawiki/patterntesting/index.php?title=AntiPattern>

Transient Trap

Global constant
MyInterface

Not freeing Resources

unbuffered streams
finally

Storing Money as Double

configuration Hell

Premature object decomposition

JavaBean style of construction

not overriding toString()

instanceof

Poor use of Reflection

Wrong List type

catch all

mail me:

Oliver.Boehm@T-Systems.com