## Open Source Project Name and Link:

java-client - https://github.com/appium/java-client

### Commit hash of project I used:

# e337d12

## Number of tests passing before refactoring:

44 of 44 tests passed

### Code Smell and Refactor methods:

# <u>Set - 1</u>

#### A) Long Identifier

<u>Location</u>: src/main/java/io/appium/java\_client/android/options/adb contained in 3 methods

<u>Desc</u>: the length of the field CLEAR\_DEVICE\_LOGS\_ON\_START\_OPTION is 33. <u>Solution/refactoring:</u> changed field name in 4 locations using built in refactor function

### B) Complex Method

<u>Location:</u> src/main/java/io/appium/java\_client/pagefactory/AppiumFieldDecorator.java <u>Method:</u> decorateWidget

Desc: Cyclomatic complexity is 8

<u>Solution/refactoring:</u> compartmentalized the if statements into separate methods getWidgetType(), createWidgetListProxy(), and createWidgetProxy() to reduce the complexity of the original method. Method is much easier to read and comprehend now.

Completed 2 refactors total.

### Number of tests passing after refactoring:

44 of 44 tests passed

Number of smells in CSV file went down 4

#### Before and After of CSV files included in submission folder.

The repository I used is <a href="https://github.com/Tklyne5/java-client">https://github.com/Tklyne5/java-client</a>