

Software Quality, 4DV607 (VT 2019)

Assignment 1: Applying VizzMaintenance

Issued: 2019-04-15

To hand in by: 2019-04-29

VizzMaintenance is an Eclipse plug-in based on the VizzAnalyzer software analysis and visualization framework. Analyze your own/third party Java project. **The project must have at least 100 classes.** Therefore:

1. Go to <http://arisa.se/products.php> to get a copy of VizzMaintenance.
2. Go to <http://www.eclipse.org> to get a copy of Eclipse (if you don't have one installed already).
3. Install VizzMaintenance as an Eclipse plug-in (see readme.txt).
4. Analyze a Java project containing at least 100 classes.
5. Create four Excel diagrams summarizing the metrics of your code. Visualize in these diagrams the classes that
 - (1) are large and complex,
 - (2) have low cohesion and high coupling,
 - (3) will often change since they depend on a lot of other classes
 - (4) will cause more work when being changed since they are complex or have many depending classes
6. Write a report describing the Java project you analyze (what's the purpose, where downloadable, how to get compiled) and interpret your analysis results.
7. Submit your results by email to rudiger.lincke@lnu.se, using 4DV607-Assignment 1 as subject:
 - (1) Attach a .zip archive containing your .pdf (.doc, .docx) report and .xls (.xlsx) raw data.
 - (2) Do not include the source code of the analyzed project! Do not use any other archive format than .zip.

Hint: Download VizzMaintenance as follows:

1. Go to <http://arisa.se/products.php>
2. Click on 'Downloads' (4th menu button from left)
3. Click on 'Register' (right below 'Home', 1st menu button from left)
4. Provide information for all fields marked with a red '*' (username, password, confirm password, first name, family name, e-mail, confirm e-mail)
5. Click on 'Register Account' (button on bottom right)
6. Login using your username and password (enter username and password in text fields on top left and click 'Login')
7. Enter 1 in 'Amount' and click 'Calculate'
8. Click 'Get'
9. Accept the license agreement (click on 'Accept')

10. Copy the license key and download the software clicking on 'here' (7th word from right in text below table with License Key).

All installation information should be available in the readme.txt file being part of the download.

Hint: Have a look at the example analysis reports provided at http://arisa.se/services_first_contact.php. They are a good basis for your report, **but do not copy/paste any text. Write in your own words and reference/quote correctly where needed.**