README.md 11/22/2019

Java Program Profiling

Group Members

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How To Run

• This project needs both JDK7 (for Dava decompilation) and JDK8 for both static/dynamic analysis. When you run with JDK7, you should select the external soot library soot-2.5.0.jar. Otherwise, that's to say, you are running with JDK8, the external soot library should be selected as sootclasses-trunk-jar-with-dependencies.jar.

- For the four sample test programs, Test{1-4}.java, you should run static AND dynamic analysis under JDK8, and then SWITCH to JDK7 with the soot library for decompilation. Then you can find your decompiled JAVA program under sootOutput/dava/src/. Repeat this procedure for ALL test cases you have.
- Go to sootOutput/dava/src/ to do manual compilation for all *. java you got.
- Just run the code using java Test1 if you are to run Test1. class you just compiled.

One More Note

- You MUST change the configuration in Line 467 of Main. java by yourself with your local path.
- Though we tried to avoid SocketFlow.* generated by Dava decompilation, there still exists this issue in the decompiled Java programs. You can modify SocketFlow.* to an integer manually to make the decompiled Java program ready to compile.
- Test2 is faulty due to the existing bug in Dava.

Sample Output

- I saved ALL static profiling output results under myOutput/staticOutput.
- Dynamic profiling output results are generated by running the runDynamic.sh. The output results are saved under my0utput/dynamic0utput.