

Method -Trace Analyzer

TEAM- CODEFREAK

Video Link –
MethodTraceAnalyzer(Team-
CodeFreak))
)
<https://youtu.be/-BwoGnxf6mY>

Team Members

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Problem Statement: -

The problem statement is aimed at developing an application to assist developers in debugging code. Method tracing is one of the commonly used post-mortem diagnostic method to identify problems. It consists of timestamp of entry and exit points for each method invocation. They may also contain stack-trace for each invocation. Depending upon the time for which trace data is collected, the file-size for these traces can be huge. Parsing them manually is a time-consuming and error-prone task.

Proposed Solution : -

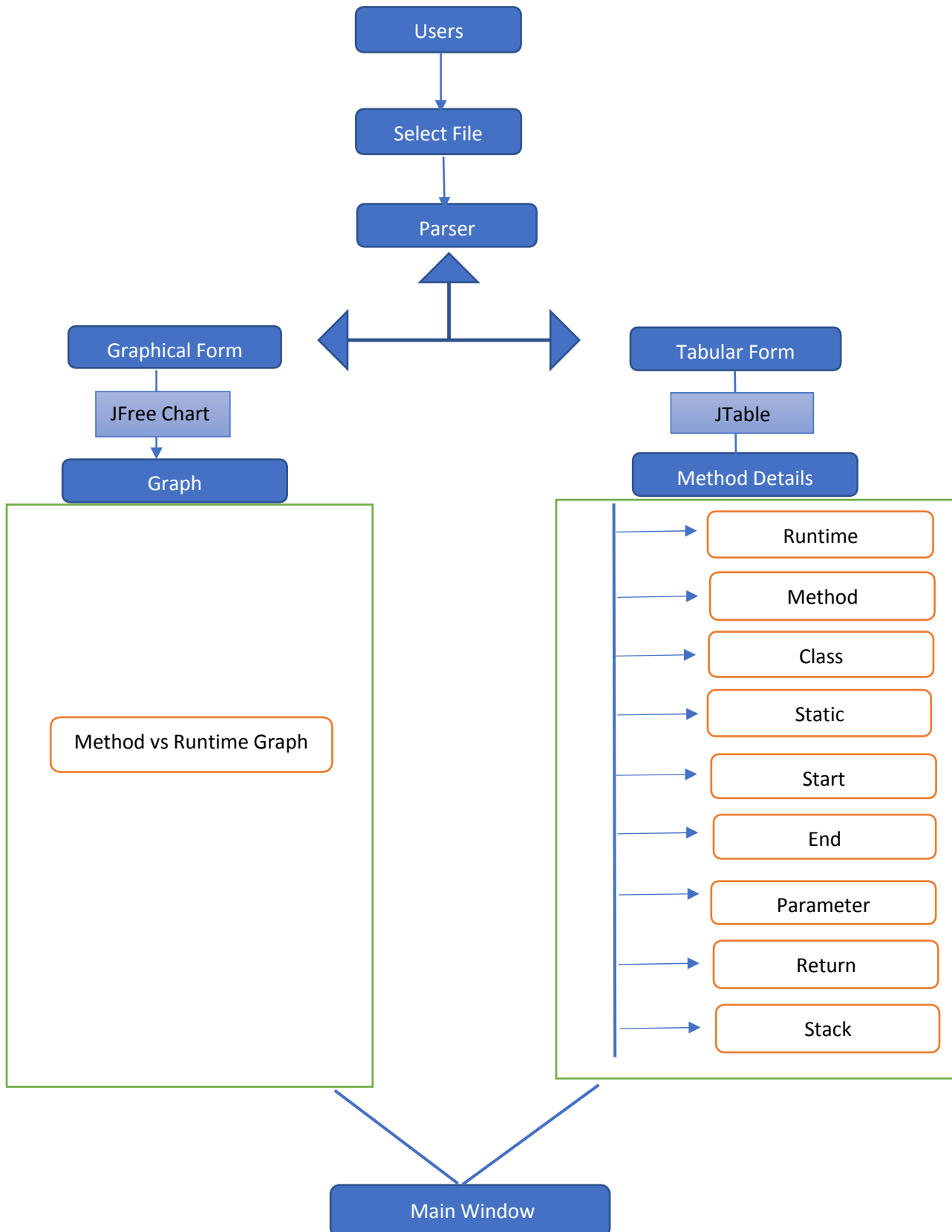
With the help of Java tools and programming skills, we are able to build the solution to trace the **methods** for a particular log file and also can compare two different log files.

Log files can be configured and generated with the help of Xtrace.

Method trace consists of timestamp of entry and exit point for each method invocation.

The users have to select the log files through GUI and the details and analysis of the methods can be seen in different windows in the the form of **Graph**.

Implemented components and the flowchart of the process:--



GUI:-

- The GUI component is build using window builder and JFree chart library.
- It asks you to select your file.
- It consists of two parts ie. To get single report and the other is to compare two files.
- The output is generated into two windows.
- The first one is in the tabular form and the other one is in the graphical form

Working:-

- After running the program, the user need to select the log file from the particular location.
- Press the submit button.
- This will lead to the execution of the program in the background.
- Then it will open the new window where you can see the details about various methods such as entry point,exit point and run time etc.
- Finally it will give the account of number of times each method of the program is invoked.
- Output is then displayed in tabular as well as graphical form.

Scope:

This application helps programmer in debugging their code at ease. Method Trace Analyser will provide the user with the running time and stack trace of the methods present in the programs by analysing the trace of the file provided by the programmer. Further these methods will be compared with each other and arranged sorted in order to make it easier for the programmer to spot the problem. Methods of two different trace files can also be compared using this application. (log files contain the list of methods traced in a program).

Technology Used:

Java is used in development of this application. To generate method trace IBM Java SDK is used.

To create charts in our application an open source library JFreeChart was used.