Method-trace Analyser

Problem Statement - 2

Team Name

JavaMonks

Problem Statement: Method-trace Analyser

An application to assist the developers in debugging.

- This problems is designed with a view to simplify the debugging and also provide clear graphical view of more than two log files.

- This application has four major modules:

  - 1. Anomalies between multiple files (Batch Anomalies) and One to Many Anomalies which compares a passing log with multiple failing logs.

  - CodeFlow (which shows the sequence of the methods during runtime)

  - Method time invocation for each method in milliseconds

  - Number of times each method executed.

  - jStackTrace (for getting java stack trace from the specific error or function)

- Each module will show the table as well as graph in order to make comparison more easier.

Role of each Team Member

Manjot Singh Sidhu

Christ Deemed to be University, Bengaluru (B.Tech CS 3rd Semester)

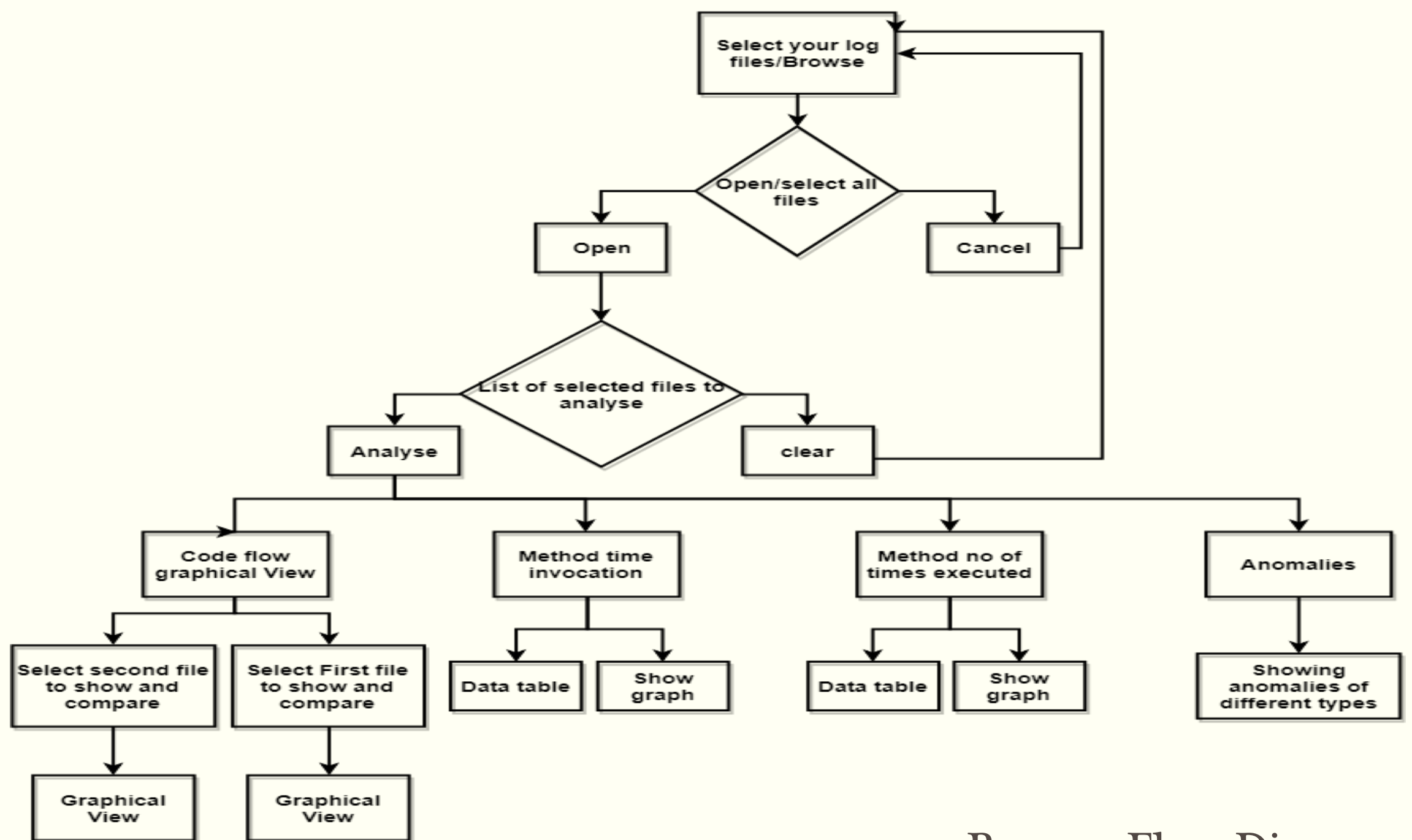- Solution Architecture, Design and Development
- Project Lead

Tools/Platform/APIs used

Tools/Platforms:

- Windows, LINUX

- OpenJDK 8

- NetBeans IDE 8.2

- Apache Maven 3.39

- JAVA FX with FXML for GUI rendering
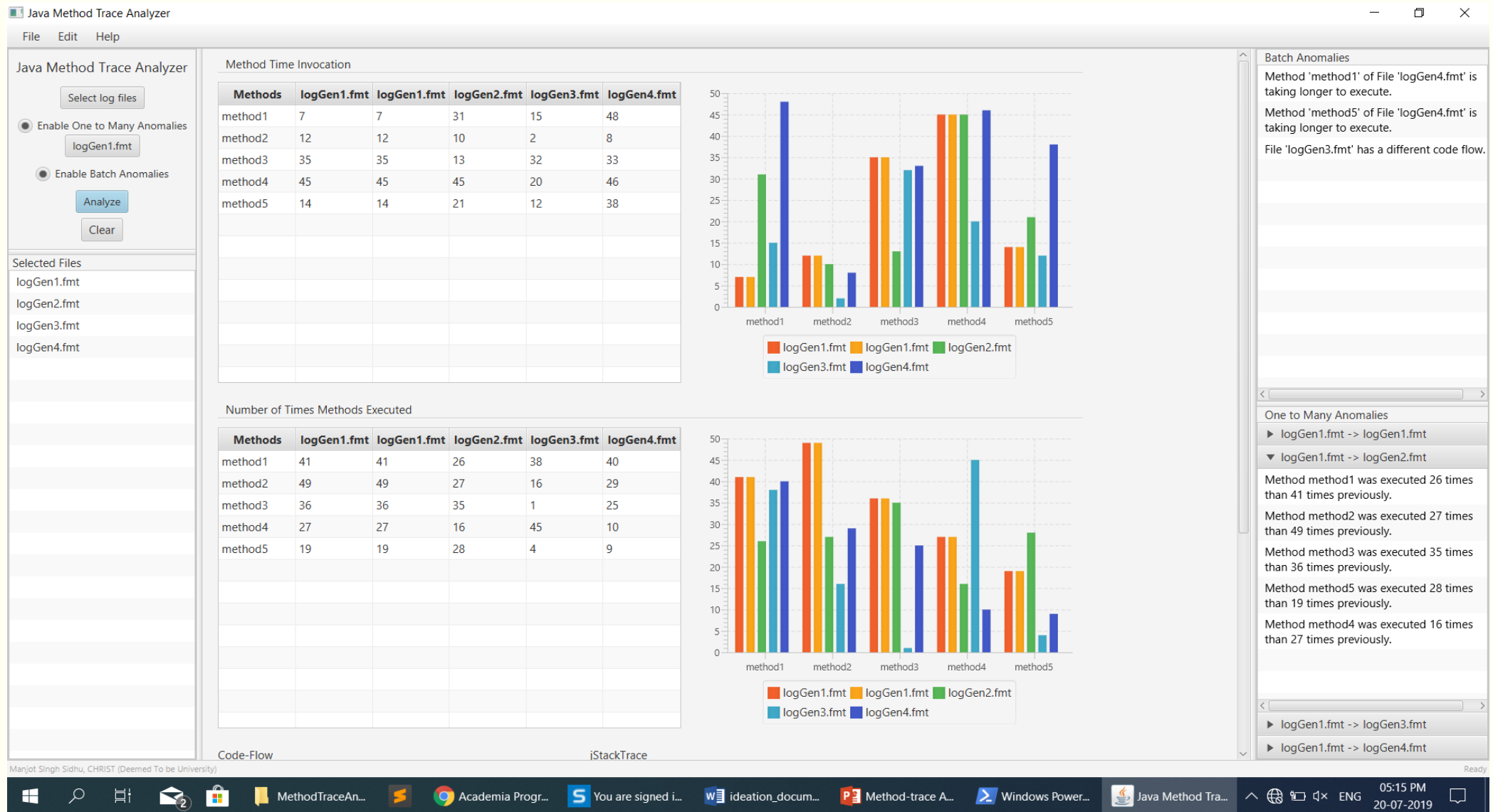
- Scene Builder by Oracle

Dependencies/APIs:

- org.apache.commons (commons.io) used in reading files to string.

Process Flow Diagram

Screenshot of Solution

Functional Requirements

HARDWARE REQUIREMENTS

Same as Standard OpenJDK 8 system requirements:

Specified in web link below:

https://java.com/en/download/help/sysreq.xml

Minimum Requirement:

RAM: 128 MB

Disk Space: 100 MB

SOFTWARE REQUIREMENTS

Operating system as per OpenJDK 8

Link given below:

https://java.com/en/download/help/sysreq.xml

Develop & Tested on OS:

Windows 10, Ubuntu 16.04 LTE

Software used for development:

OpenJDK 8

NetBeans IDE 8.2

Apache Maven 3.39

Highlighting points

Below are some of the highlighted points which are specially taken care of during UI/UX:

- Batch Anomalies and One to many anomalies directly notifies about performance, hang, longer execution time issues.

- One page nested split pane design for comparing and analyzing log files with anomalies and data.

- Accordion tabs for better and understandable view for one to many anomalies.

- Detailed and scrollable main view.

- Scalable and flexible graph with different colours of bars to represent different files.

- In-depth summary for long jStackTrace of methods.

Thank you

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