## Code-Diff Parser and Visualization

Thank you for participating in this study. This tutorial will guide you through the installation process of the software. It should take about 15 minutes.

Requirements: Google Chrome, Java JRE 11 (or higher), Git Console

## 1 Installation

Download the repository:

- CodeDiffParser: Java program, that analyzes the two Git branches per merge request
- CodeDiffVis: Chrome extension for the visualization

## 1.1 CODEDIFFPARSER

You need to execute the following for each merge request manually. Later, the idea would be to install the parser on a Jenkins such that it automates that process.

You can use the pre-compiled version of CodeDiffParser or you can compile it yourself. Copy JAR and the script run\_codediffparser.sh, i.e., to C:\dev\study.

Use a Unix-like command line tool (e.g. MINGW64) and execute the script run\_codediffparser.sh. The JAR of the parser needs to be in the same directory.

./run\_codediffparser.sh source-branch target-branch git-project-url local-maven-repo
./run\_codediffparser.sh myfeature master https://gitlab.com/group/project.git ~/.m2/

After a successful execution, copy the resulting out.json into your CodeDiffVis directory. Chrome does not allow access to any other directory except to the extension itself.

## 1.2 CODEDIFFVIS

- 1. In Google Chrome, under <a href="mailto:chrome://extensions/">chrome://extensions/</a> enable the «developer mode» (top right)
- 2. Choose «load unpacked» and select your CodeDiffVis directory (e.g. C:\dev\study\CodeDiffVis)
- 3. On the top right of your browser you should see a greyed-out symbol of CodeDiffVis

If you have already installed a previous version of CodeDiffVis, to update the extension you must click its reload button in the extension overview.

Now you are ready to proceed with «Tutorial – CodeDiffVis».