

ConCodeSe – Quick Installation and run steps

Abstract

ConCodeSe ranks the source code files of an application using the details (i.e. summary and description) available on a defect document (i.e. bug report) so that the files that may be relevant to fix the defect are placed at the top-10 position of the result list.

Prerequisites

It is assumed that:

1. Java version JDK 1.8 or higher is installed
2. The environment variable JAVA_HOME on the classpath points to the java installation location
3. The license file is obtained by sending an email to info@concodese.com

Quick start

Following steps will get you started in using the tool in the basic simple mode.

1. Download the tool in a zip file from the tools category at <http://www.concodese.com/>
2. Unzip the file to a location, e.g. /Users/tezcan/tools/. This creates the sub-directory /concodese
3. Place the license.out file into the /config/lic sub-directory under main install dir /concodese
4. From a terminal command line, navigate to the directory where ConCodeSe is installed in step 1.
6. Run the following shell command: ./QuickStart.sh (on Windows: QuickStart.bat).
This will perform the following steps:
 - 6.1. Prompt you to enter the name, version of the application and the location of its source files.
 - 6.2. Create the searchable repository.
 - 6.3. Start the server service to interact with the search UI.

NOTE: Please carefully follow and provide the required information in particular the server port number.

7. In your development tool, e.g. Eclipse, open the internal Web Browser, and enter the URL `http://localhost:8080/concodese`
8. On the start page, enter the bug summary and detailed description (e.g stack trace info etc.).
9. Start a search by clicking on the search button.
10. You will get a list of source files ranked in the order of relevance to the entered search strings.

Perform bug resolution

Anyone of the candidate classes can be selected from the resulting list and its source code file can be opened for further investigation of the cause of the error.

1. Mark anyone of the candidate classes from the resulting list by highlighting it.
2. Copy/pasted into the Open Type window (ctrl+shift+T).
3. Open its source code file and investigate further.

Usage scenarios

ConCodeSe has several use-case scenarios described in detail in the user guide.

1. Swing based GUI (aimed for standalone search)
2. Web-based GUI (aimed for IDE search)
3. Issue tracking tool integration (currently plug-in for JIRA)
4. JIRA integration with the Web-based GUI
5. Bulk search using a list of existing bug reports (for compare analysis)
6. Bulk search with existing closed bug reports

For more details please read the user guide in document **ConCodeSe_user_guide.pdf**