STIW3054 REAL-TIME PROGRAMMING

FIRST SEMESTER SESI 2017/2018 (A171)

GROUP: A
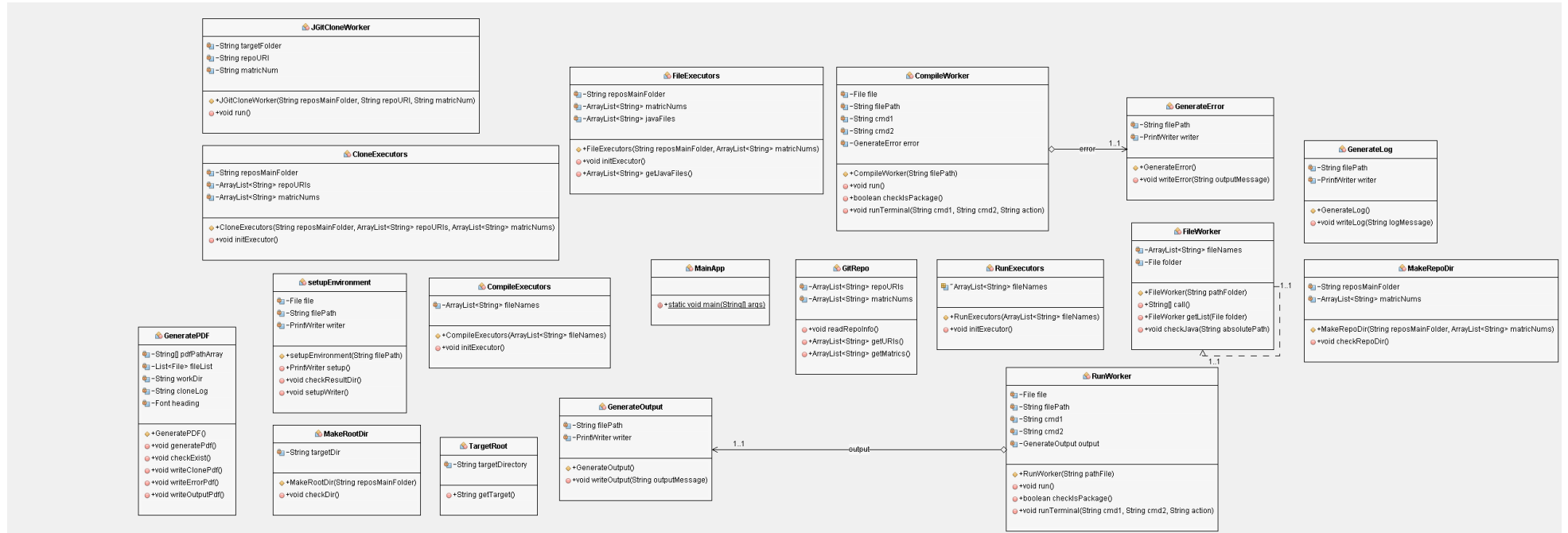
<< Group Project >>

GitHub Repositories Project

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SCHOOL OF COMPUTING

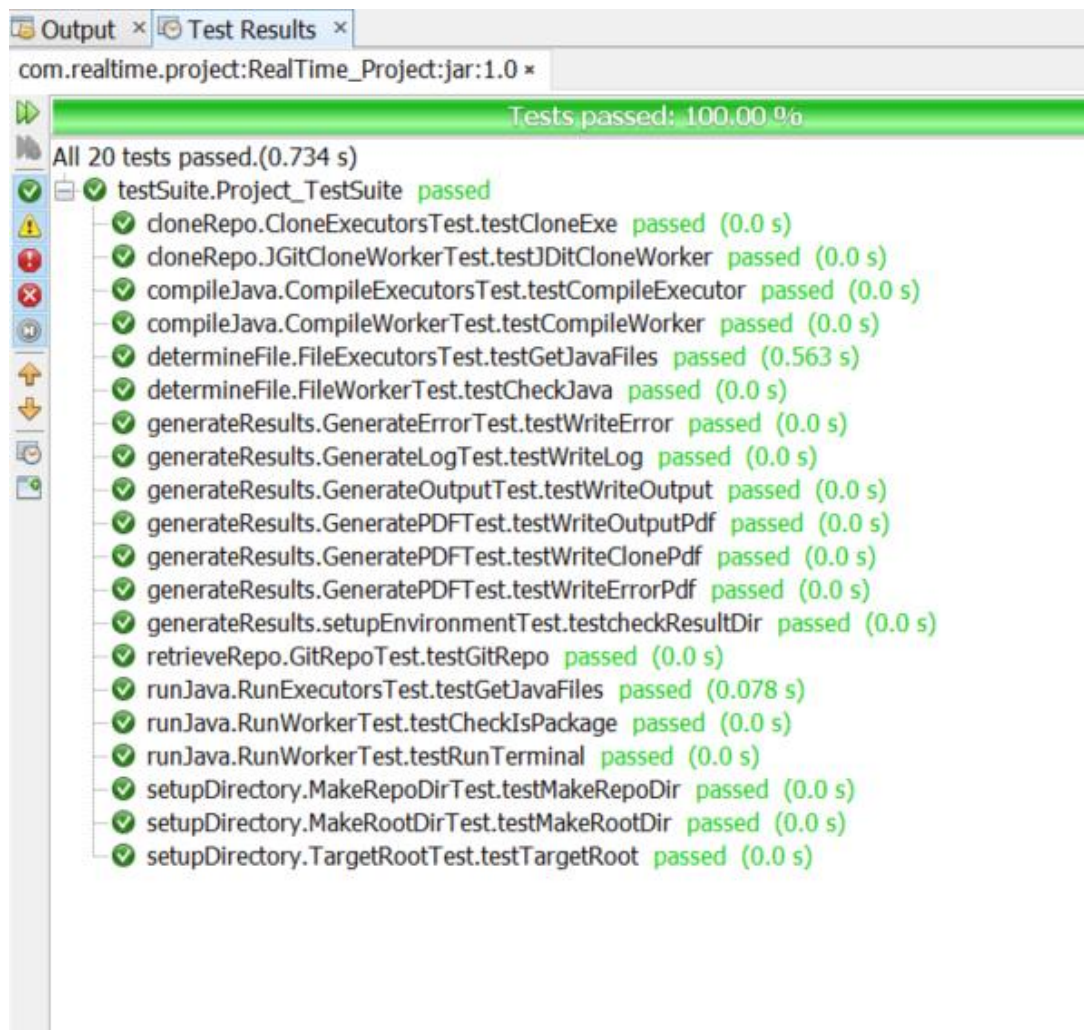## UNIVERSITI UTARA MALAYSIA

2017

Class Diagram

JGitCloneWorker
- -String targetFolder
- -String repoURI
- -String matricNum

- +JGitCloneWorker(String reposMainFolder, String repoURI, String matricNum)
- +void run()

FileExecutors
- -String reposMainFolder
- -ArrayList<String> matricNums
- -ArrayList<String> javaFiles

- +FileExecutors(String reposMainFolder, ArrayList<String> matricNums)
- +void initExecutor()
- +ArrayList<String> getJavaFiles()

CompileWorker
- -File file
- -String filePath
- -String cmd1
- -String cmd2
- -GenerateError error

- +CompileWorker(String filePath)
- +void run()
- +boolean checkIsPackage()
- +void runTerminal(String cmd1, String cmd2, String action)

GenerateError
- -String filePath
- -PrintWriter writer

- +GenerateError()
- +void writeError(String outputMessage)

GenerateLog
- -String filePath
- -PrintWriter writer

- +GenerateLog()
- +void writeLog(String logMessage)

CloneExecutors
- -String reposMainFolder
- -ArrayList<String> repoURIs
- -ArrayList<String> matricNums

- +CloneExecutors(String reposMainFolder, ArrayList<String> repoURIs, ArrayList<String> matricNums)
- +void initExecutor()

FileWorker
- -ArrayList<String> fileNames
- -File folder

- +FileWorker(String pathFolder)
- +String[] call()
- +FileWorker getList(File folder)
- +void checkJava(String absolutePath)

MakeRepoDir
- -String reposMainFolder
- -ArrayList<String> matricNums

- +MakeRepoDir(String reposMainFolder, ArrayList<String> matricNums)
- +void checkRepoDir()

setupEnvironment
- -File file
- -String filePath
- -PrintWriter writer

- +setupEnvironment(String filePath)
- +PrintWriter setup()
- +void checkResultDir()
- +void setupWriter()

CompileExecutors
- -ArrayList<String> fileNames

- +CompileExecutors(ArrayList<String> fileNames)
- +void initExecutor()

MainApp

- +static void main(String[] args)

GitRepo
- -ArrayList<String> repoURIs
- -ArrayList<String> matricNums

- +void readRepoInfo()
- +ArrayList<String> getURIs()
- +ArrayList<String> getMatrics()

RunExecutors
- -ArrayList<String> fileNames

- +RunExecutors(ArrayList<String> fileNames)
- +void initExecutor()

GeneratePDF
- -String[] pdfPathArray
- -List<File> fileList
- -String workDir
- -String cloneLog
- -Font heading

- +GeneratePDF()
- +void generatePdf()
- +void checkExist()
- +void writeClonePdf()
- +void writeErrorPdf()
- +void writeOutputPdf()

MakeRootDir
- -String targetDir

- +MakeRootDir(String reposMainFolder)
- +void checkDir()

TargetRoot
- -String targetDirectory

- +String getTarget()

GenerateOutput
- -String filePath
- -PrintWriter writer

- +GenerateOutput()
- +void writeOutput(String outputMessage)

RunWorker
- -File file
- -String filePath
- -String cmd1
- -String cmd2
- -GenerateOutput output

- +RunWorker(String pathFile)
- +void run()
- +boolean checkIsPackage()
- +void runTerminal(String cmd1, String cmd2, String action)

Clearer view: https://i.imgur.com/5HavaA7.png

Source Codes

Refer https://github.com/STIW3054/Repo1 for project source code

Junit Testing Report

User Manual

1. Download the project and import into NetBeans
2. To run the project, run MainApp.java from Source Packages > mainPak
3. Wait for program completion.
4. All github repositories will be downloaded into STIW3054-A171 folder at your desktop
5. You can view project summary reports in STIW3054-Result folder located at the root directory of this project.

References

1. Java Callable Future Example
   https://www.journaldev.com/1090/java-callable-future-example

2. PrintWriter to append data if file exist
   https://stackoverflow.com/questions/24982744/printwriter-to-append-data-if-file-exist

3. Java – Create New File
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4. How to delete a folder with files using Java
   https://stackoverflow.com/questions/20281835/how-to-delete-a-folder-with-files-using-java

5. Getting Started with IText PDF API for Java
   http://tutorials.jenkov.com/java-itext/getting-started.html

6. Generating UML diagram using NetBeans 7.2
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