README

c) Deliverables(PDFs, runfiles, Log files) are included in the deliver/projectx subdirectory. Where x represents the project#

How TO TEST:

COMMAND LINE:

To clean, build and create JARs for all projects' code please type in the KeyVs folder:

"ant clean"

"ant jar"

Following which change directory to point to project you're testing, for example:

"cd deliver/project3"

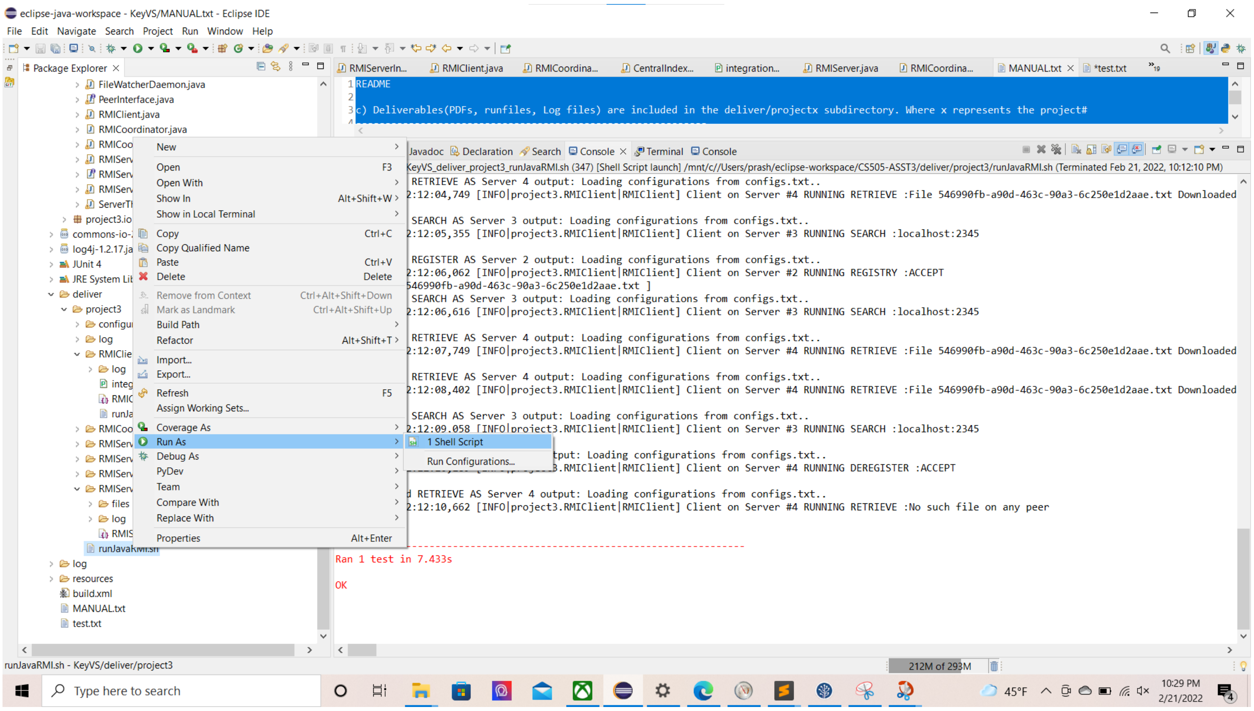
After which,

"sh runJavaRMI.sh"

This will run the unit tests as well as the integration tests written in python found in the RMIClient folder.
The RMIClient is a driver program to run on top of the RMIServers to make them behave like Peers in P2P would.
The RMICoordinator is the Coordinator
The RMIServer is any peer in the P2P.

OR ECLIPSE

Please install Eclipse for Java and then follow the screenshot!



```
1 README
2
3 c) Deliverables(PDFs, runfiles, Log files) are included in the deliver/projectx subdirectory. Where x represents the project#
```

```
KeyVS_deliver_project3_runJavaRMI.sh (347) [Shell Script launch] /mnt/c//Users/prash/eclipse-workspace/CS505-ASST3/deliver/project3/runJavaRMI.sh (Terminated Feb 21, 2022, 10:12:10 PM)
 RETRIEVE AS Server 4 output: Loading configurations from configs.txt..
2:12:04,749 [INFO|project3.RMIClient|RMIClient] Client on Server #4 RUNNING RETRIEVE :File 546990fb-a90d-463c-90a3-6c250e1d2aae.txt Downloaded

 SEARCH AS Server 3 output: Loading configurations from configs.txt..
2:12:05,355 [INFO|project3.RMIClient|RMIClient] Client on Server #3 RUNNING SEARCH :localhost:2345

 REGISTER AS Server 2 output: Loading configurations from configs.txt..
2:12:06,062 [INFO|project3.RMIClient|RMIClient] Client on Server #2 RUNNING REGISTRY :ACCEPT
546990fb-a90d-463c-90a3-6c250e1d2aae.txt ]
 SEARCH AS Server 3 output: Loading configurations from configs.txt..
2:12:06,616 [INFO|project3.RMIClient|RMIClient] Client on Server #3 RUNNING SEARCH :localhost:2345

 RETRIEVE AS Server 4 output: Loading configurations from configs.txt..
2:12:07,749 [INFO|project3.RMIClient|RMIClient] Client on Server #4 RUNNING RETRIEVE :File 546990fb-a90d-463c-90a3-6c250e1d2aae.txt Downloaded

 RETRIEVE AS Server 4 output: Loading configurations from configs.txt..
2:12:08,402 [INFO|project3.RMIClient|RMIClient] Client on Server #4 RUNNING RETRIEVE :File 546990fb-a90d-463c-90a3-6c250e1d2aae.txt Downloaded

 SEARCH AS Server 3 output: Loading configurations from configs.txt..
2:12:09.058 [INFO|project3.RMIClient|RMIClient] Client on Server #3 RUNNING SEARCH :localhost:2345

                        tput: Loading configurations from configs.txt..
                        3.RMIClient|RMIClient] Client on Server #4 RUNNING DEREGISTER :ACCEPT

d RETRIEVE AS Server 4 output: Loading configurations from configs.txt..
2:12:10,662 [INFO|project3.RMIClient|RMIClient] Client on Server #4 RUNNING RETRIEVE :No such file on any peer


----------------------------------------------------------------------
Ran 1 test in 7.433s

OK
```

ANY TESTCASE:

The tests in *RMIClient/integration_tests.py* are complete and they show expected behavior. As you can see all my tests are passing.

To quickly test if its working cd RMIClient folder and add your commands in the **runJavaRMIClient.sh** file.

```
java  -jar -DclientId=1 -DserverChoice=5 RMIClient.jar RETRIEVE alpha.txt
```

Do ensure to watch the output of this command as it may get swamped by other updates. Altenativively, also possible to add such a command at the end of integration_tests.py as a new testcase and check if it passes!

Above, there is an example of a command that says RETRIEVE the filename from the p2p and download to file server5. Please ignore clientId it is only there to designate the driver function RMIClient1 as such and plays no role in the execution of the program anywhere.

At startup all the servers will register their files automatically because of the "FILE_MODIFIED" watcher event that will poll for changes made to filesystem.