- 1 -- Create and manage user roles etc
- 2 33. Login to jenkins
- 3 34. click manage jenkins
- 4 35. click manage users
- 5 36. from left pane cick Create User
- 6 37. Enter relevant data.
- 7 do this for say 2 users user1 and user2

8

- 9 ---manage access and roles
- 10 38. click manage jenkins
- 11 39. manage plugins
- 12 40. click Available
- 13 41. Search Role-based authorization strategy
- 14 45. select and click on install without restart
- 15 46. After plugin is installed Goto Manage Jenkins
- 16 47. configure global security
- 17 48. Under Authorization Select Role Based Strategy
- 18 49. Markup Formatter Select Safe Html
- 19 50. Apply and Save
- 20 51. Logout as admin
- 21 52 Try Logging in as user1 or user2
- 22 53. logout and login as admin
- 23 54. Manage Jenkins
- 24 55. click Manage and assign roles
- 25 56. Click Manage Roles
- 26 57. Role To Add Enter employees click add button
- 27 58. Select Read a ccess from overall and all access from view
- 28 59. For Item Role create roles developer/tester with patterns .\*Dev/.\*Test respectively Add both the roles and patterns by clicking on add each time u create the role
- 29 60. Assign all access to developer/tester roles
- 30 61. Click Apply and save
- 31 62. Click Assign Roles
- 32 63. under global roles, in user/group to add enter user1 and click add, enter user2 and click add
- 33 64. select employees checkbox for both
- 34 65. Under item roles section, in user/group to add enter user1 and user2 adding each
- 35 66. select developer checkbox for user1 and tester checkbox for user2.
- 36 67. click on apply and save
- 37 68. Goto dashboard top left corner
- 38 69. Click on new Item
- 39 70. Name Project1Dev
- 40 71. Select Freestyle project
- 41 72. Click OK
- 42 73. Click Apply Save
- 43 74. Click on new Item
- 44 75. Name Project1Test
- 45 76. Select Freestyle project

```
46 77. Click OK
47 78. Click Apply Save
48 79. logout and login as user1 and user2 see the dashboard :) :)
49 -----
50 --- Trigger a build for a project
51 --- If not already started Start Jenkins java -jar jenkins.war
52 --- Browse to localhost:8080/ login with username/password
53 --- Click on New Item in the left side pane
54 --- Name Project2Dev
55 --- select freestyle project
56 --- click on OK
57 --- On the page that opens In GENERAL tab
58 --- Description: <h2>This is Project 2 For Dev</h2>
59 --- Source code Management tab Select None
60 --- Build Trigger tab Select Build Periodically set cron as * * * * *
61 --- select Add build step dropdown and select windows batch command and type in
   command Date /t in text box
62 --- Post-Build Actions tab: Do nothing As of Now
63 --- Click Apply and save
64 --- Goto dashboard
65 --- Select dropdown of the project and select build observe the changes to the
    columns wherever you see them (refresh browser)
66 --- Goto your project --- configure --- change the windows command from date to
    dat /t apply and save
67 --- Build the project again and observe the changes in column icons
68 --- Build a few more times observe changes in icons
69
70 --- Remote Build of Project
71 --- Goto Project2Dev --- Configure --- Build trigger --- uncheck the existing ---
    Check Trigger Bulds remotely
72 --- Authentication Token : Am12Ey34a (This could be anything)
73 --- Apply and save
74 --- copy the url: JENKINS_URL/job/Project2Dev/build?token=TOKEN_NAME
75 --- Modify it as: http://localhost:8080/job/Project2Dev/build?token=Am12Ey34a
76 --- Invoke it from browser
77 --- In the jenkins browser you will see that Build Queue has 1 entry (If not
   refreshed) refresh this browser
78 --- Explore Build History from left pane
79
80 --- Build After other projects are built
81 --- create a new freestyle project Project3Dev
82 --- Goto build Trigger --- Check Build After other projects are built --- enter
    project names separated by commas: Project2Dev
83 --- Select the radio: Trigger only if build is stable
84 --- Goto build --- Add build step --- windows batch command--- type time /t
85 --- Apply and Save
86 --- create a new freestyle project Project4Dev
87 --- Click on OK --- Apply and Save
```

```
88 --- Go back to Project3Dev
89 --- Configure
90 --- Post-build Action
 91 --- Add Post-Build Action --- Build Other Project --- Type Project4Dev
92 --- Apply and Save
93 --- Goto dashboard in browser
94 --- Click on Project3Dev see that there is no build history for Project
95 --- Also observe the Upstream and downstream Projects
96 --- Do the same for Project4Dev
97 --- Now Trigger the build for Project2Dev (Either remotely or locally)
98 --- Observe the Build Queue (You might need to refresh the page)
99
100 -----
101
102 --- Build After other projects are built
103 --- create a new freestyle project Project3Dev
104 --- Goto build Trigger --- Check Build After other projects are built --- enter
    project names separated by commas: Project2Dev
105 --- Select the radio: Trigger only if build is stable
106 --- Goto build --- Add build step --- windows batch command--- type time /t
107 --- Apply and Save
108 --- create a new freestyle project Project4Dev
109 --- Click on OK --- Apply and Save
110 --- Go back to Project3Dev
111 --- Configure
112 --- Post-build Action
113 --- Add Post-Build Action --- Build Other Project --- Type Project4Dev
114 --- Apply and Save
115 --- Goto dashboard in browser
116 --- Click on Project3Dev see that there is no build history for Project
117 --- Also observe the Upstream and downstream Projects
118 --- Do the same for Project4Dev
119 --- Now Trigger the build for Project2Dev (Either remotely or locally)
120 --- Observe the Build Queue (You might need to refresh the page)
121
122 --- Git-Jenkins Integration
123 --- Create a Github/bitbucket account and a remote repo GIT-DO also create
    gitignore file for java template
124 (REFER TO GIT TRAINING MATERIAL)
125 --- Clone the remote-repo with the local-repo (Below is folder structure)
126 C:\work\sapient\
       \Devops
127
128
           \Git-DO
129
              \.git
130 --- Ensure GIT is installed and the current ws is in local repo
131 --- start eclipse and create new java project in the ws within git repo
132 (I.E. folder hierarchy is as follows)
```

```
133 C:\work\sapient\
134
        \Devops
           \Git-DO
135
136
               \.git -->Local repo
137
               \javaws --> Your ws
138
                  \Project1Dev --> Your Project
139 Replace the .gitignore contents with following
140 # Compiled class file
141 *.class
142
143 # Log file
144 *.log
145
146 # BlueJ files
147 *.ctxt
148
149 # Mobile Tools for Java (J2ME)
150 .mtj.tmp/
151
152 # Package Files #
153 *.jar
154 *.war
155 *.nar
156 *.ear
157 *.zip
158 *.tar.gz
159 *.rar
160
161 # virtual machine crash logs, see
    http://www.java.com/en/download/help/error_hotspot.xml
162 hs_err_pid*
163
164 # eclipse specific
165 *.pydevproject
166 .project
167 .metadata
168 bin/**
169 tmp/**
170 tmp/**/*
171 *.tmp
172 *.bak
173 *.swp
174 *~.nib
175 local properties
176 .classpath
177 .settings/
178
    .loadpath
179
```

```
180 # External tool builders
181 externalToolBuilders/
182
183 # Locally stored "Eclipse launch configurations"
184 * launch
185
186 --- open the git bash or cmd in GIT-DO folder (this is local repo)
187 --- run git status
188 --- Observe the status
189 --- run git add .
190 --- Create a com.ameya. Test Main. java as follows
191 ackage com.ameya;
192
193 public class TestMain {
194
195
        public static void main(String[] args) {
196
           System.out.println(" Hello Wolrd");
197
        }
198
199
200 }
201 --- run git status
202 --- run git add .
203 --- run git commit -m "Added TestMain.java with Helloworld sysout"
204 --- run git push origin master
205
206 --- goto jenkins --- manage jenkins --- configure system --- Git Plugin --- provide
     name and email
207 --- goto jenkins --- manage jenkins --- global tools configuration --- path to git
     must be path to your git installation folder/bin/git.exe
208 --- goto Project1Dev --- Configure --- Source code Management --- select Git
209 --- Add repositiries: https://github.com/amsalways/Git-DO.git
210 --- Credentials --- Add --- Jenkins --- username : bitbucket username password
     bitbucket password --- click add
211 --- In dropdown for credentials select newly added credentials
212 --- goto Build Triggers
213 --- select poll SCM
214 --- enter cron expression as * * * * *
215 --- Add Build Step --- windows batch command--- add below as per your path
216 cd C:\work\sapient\Devops\GIT-DO\javaws\Project1Dev\src\com\ameya
217 javac -d C:\work\sapient\Devops\GIT-DO\javaws\Project1Dev\bin *.java
218 cd C:\work\sapient\Devops\GIT-DO\javaws\Project1Dev\bin
219 java com.ameya.TestMain
220 --- Add PostBuild Action --- Build Other Projects --- Type Project2Dev --- Trigger
     only if build is stable
221 --- Apply and save
222 ----- Now Goto your java project
223 --- Add following NewTestClass.java
```

```
224 package com.ameya;
225
226 public class NewTestClass {
227
        public NewTestClass() {
228
           System.out.println("New Test Class Object created");
229
        }
230 }
231 --- Modify TestMain.java
232 package com.ameya;
233
234 public class TestMain {
235
236
        public static void main(String[] args) {
           System.out.println(" Hello Wolrd");
237
           NewTestClass nt=new NewTestClass();
238
239
        }
240
241 }
242 --- git add.
243 --- git commit -m "Added NewTestClass.java and Instantiated in TestMain.java"
244 --- git push origin master
245
246 --- Goto Jenkins and see in browser a new Build will be triggered
247 --- Click on the build you will see all the projects being built
248
```