

The DevOps Laboratory Report

Second Year Computing Laboratory
Department of Computing
Imperial College London

Group members

WACC group number: 40
Shiv Bhatia (sb3320)
Archie Licudi (adl20)
Deepro Choudhury (dc1819)
Szymon Kubica (sk4520)

URLs

GitLab: <https://gitlab.doc.ic.ac.uk/sk4520/simplewebapp>
Heroku: <https://sb3320-simplewebapp.herokuapp.com/>

Screenshots

Kubica, Szymon > simplewebapp > Pipelines

All66

Finished

Branches

Tags

Clear runner caches

CI lint

Run pipeline

Filter pipelines

Q

Show Pipeline ID ▾

Status	Pipeline ID	Triggerer	Commit	Stages	Duration	
<div>passed</div>	<div>#223613</div> <div>latest</div>	<div></div>	<div>master -> 34d51262</div> <div>Removed the problem...</div>	<div><div></div><div></div><div></div><div></div></div>	<div>00:05:35</div> <div>1 minute ago</div>	<div></div>
<div>failed</div>	<div>#223599</div>	<div></div>	<div>master -> dda7e391</div> <div>fix bug with empty sea...</div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div>00:00:58</div> <div>13 minutes ago</div>	<div></div> <div></div>
<div>passed</div>	<div>#223567</div>	<div></div>	<div>master -> dda7e391</div> <div>fix bug with empty sea...</div>	<div><div></div><div></div><div></div><div></div></div>	<div>00:05:01</div> <div>31 minutes ago</div>	<div></div>
<div>passed</div>	<div>#223563</div>	<div></div>	<div>master -> 52fbbe3e</div> <div>Merge branch 'master'...</div>	<div><div></div><div></div><div></div><div></div></div>	<div>00:05:03</div> <div>36 minutes ago</div>	<div></div>
<div>passed</div>	<div>#223535</div>	<div></div>	<div>master -> 0e4e4601</div> <div>Changed the Dockerfil...</div>	<div><div></div><div></div><div></div><div></div></div>	<div>00:04:56</div> <div>50 minutes ago</div>	<div></div>
<div>passed</div>	<div>#223524</div>	<div></div>	<div>master -> e420d340</div> <div>Updated the .yaml file, ...</div>	<div><div></div><div></div><div></div><div></div></div>	<div>00:04:40</div> <div>57 minutes ago</div>	<div></div>
<div>passed</div>	<div>#223509</div>	<div></div>	<div>master -> a5a5233e</div> <div>Updated the .yaml file, ...</div>	<div><div></div><div></div><div></div><div></div></div>	<div>00:04:52</div> <div>1 hour ago</div>	<div></div>
<div>passed</div>	<div>#223501</div> <div>latest</div>	<div></div>	<div>shared_runn... -> 4895019c</div> <div>Removed the unneces...</div>	<div><div></div><div></div><div></div><div></div></div>	<div>00:05:08</div> <div>1 hour ago</div>	<div></div>
<div>passed</div>	<div>#223495</div>	<div></div>	<div>shared_runn... -> 3423497c</div> <div>Added the commands ...</div>	<div><div></div><div></div><div></div><div></div></div>	<div>00:05:20</div> <div>1 hour ago</div>	<div></div>

Figure 1: Latest GitLab pipeline dashboard screenshot.

```
1 Running with gitlab-runner 14.6.0 (5316d4ac)
2   on simplewebapprunner yNwLwH2j
3   ✓ Preparing the "shell" executor 00:00
4   Using Shell executor...
5   ✓ Preparing environment 00:00
6   Running on cloud-vm-42-71...
7   ✓ Getting source from Git repository 00:00
8   Fetching changes...
9   Reinitialized existing Git repository in /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/.git/
10  Checking out dda7e391 as master...
11  Removing target/
12  Skipping Git submodules setup
13  ✓ Executing "step_script" stage of the job script 00:06
14  $ echo "Deploying..."
15  Deploying...
16  $ mvn package
17  WARNING: An illegal reflective access operation has occurred
18  WARNING: Illegal reflective access by com.google.inject.internal.cglib.core.$ReflectUtils$1 (file:/usr/share/maven/lib/guice.jar) to method java.lang.ClassLoader.defineClass(java.lang.String,byte[],int,int,java.security.ProtectionDomain)
19  WARNING: Please consider reporting this to the maintainers of com.google.inject.internal.cglib.core.$ReflectUtils$1
20  WARNING: Use --illegal-access=warn to enable warnings of further illegal reflective access operations
21  WARNING: All illegal access operations will be denied in a future release
22  [INFO] Scanning for projects...
23  [INFO] -----< ic.doc:SimpleWebApp >-----
24  [INFO] Building SimpleWebApp 1.0-SNAPSHOT
25  [INFO] -----[ jar ]-----
26  [INFO]
27  [INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ SimpleWebApp ---
28  [WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
29  [INFO] skip non existing resourceDirectory /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/src/main/resources
30  [INFO]
31  [INFO] --- maven-compiler-plugin:3.3:compile (default-compile) @ SimpleWebApp ---
32  [INFO] Changes detected - recompiling the module!
33  [WARNING] File encoding has not been set, using platform encoding UTF-8, i.e. build is platform dependent!
34  [INFO] Compiling 7 source files to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/classes
```

Figure 2: Gitlab log of the latest deploy - part 1.

```

38 [INFO] Compiling 7 source files to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/classes
39 [INFO]
40 [INFO] --- maven-resources-plugin:2.6:testResources (default-testResources) @ SimpleWebApp ---
41 [WARNING] Using platform encoding (UTF-8 actually) to copy filtered resources, i.e. build is platform dependent!
42 [INFO] skip non existing resourceDirectory /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/src/test/resources
43 [INFO]
44 [INFO] --- maven-compiler-plugin:3.3:testCompile (default-testCompile) @ SimpleWebApp ---
45 [INFO] Changes detected - recompiling the module!
46 [WARNING] File encoding has not been set, using platform encoding UTF-8, i.e. build is platform dependent!
47 [INFO] Compiling 1 source file to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/test-classes
48 [INFO]
49 [INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ SimpleWebApp ---
50 [INFO] Surefire report directory: /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/surefire-reports
51 .....
52 T E S T S
53 .....
54 Running ic.doc.QueryProcessorTest
55 Tests run: 4, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.118 sec
56 Results :
57 Tests run: 4, Failures: 0, Errors: 0, Skipped: 0
58 [INFO]
59 [INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ SimpleWebApp ---
60 [INFO] Building jar: /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/SimpleWebApp-1.0-SNAPSHOT.jar
61 [INFO]
62 [INFO] --- appassembler-maven-plugin:1.1.1:assemble (default) @ SimpleWebApp ---
63 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-servlet/9.2.14.v20151106/jetty-servlet-9.2.14.v20151106.jar to /home/gitlab-
runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-servlet/9.2.14.v20151106/jetty-servlet-9.2.14.v20151106.jar
64 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-security/9.2.14.v20151106/jetty-security-9.2.14.v20151106.jar to /home/gitla
b-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-security/9.2.14.v20151106/jetty-security-9.2.14.v20151106.jar
65 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-server/9.2.14.v20151106/jetty-server-9.2.14.v20151106.jar to /home/gitlab-ru
nner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-server/9.2.14.v20151106/jetty-server-9.2.14.v20151106.jar
66 [INFO] Installing /home/gitlab-runner/.m2/repository/javax/servlet/javax.servlet-api/3.1.0/javax.servlet-api-3.1.0.jar to /home/gitlab-runner/builds/yNwL
wH2j/0/sk4520/simplewebapp/target/repo/javax/servlet/javax.servlet-api/3.1.0/javax.servlet-api-3.1.0.jar
67 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-http/9.2.14.v20151106/jetty-http-9.2.14.v20151106.jar to /home/gitlab-runner
/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-http/9.2.14.v20151106/jetty-http-9.2.14.v20151106.jar
68 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-util/9.2.14.v20151106/jetty-util-9.2.14.v20151106.jar to /home/gitlab-runner
/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-util/9.2.14.v20151106/jetty-util-9.2.14.v20151106.jar

```

Figure 3: Gitlab log of the latest deploy - part 2.

```

64 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-security/9.2.14.v20151106/jetty-security-9.2.14.v20151106.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-security/9.2.14.v20151106/jetty-security-9.2.14.v20151106.jar
65 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-server/9.2.14.v20151106/jetty-server-9.2.14.v20151106.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-server/9.2.14.v20151106/jetty-server-9.2.14.v20151106.jar
66 [INFO] Installing /home/gitlab-runner/.m2/repository/javax/servlet/javax.servlet-api/3.1.0/javax.servlet-api-3.1.0.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/javax/servlet/javax.servlet-api/3.1.0/javax.servlet-api-3.1.0.jar
67 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-http/9.2.14.v20151106/jetty-http-9.2.14.v20151106.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-http/9.2.14.v20151106/jetty-http-9.2.14.v20151106.jar
68 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-util/9.2.14.v20151106/jetty-util-9.2.14.v20151106.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-util/9.2.14.v20151106/jetty-util-9.2.14.v20151106.jar
69 [INFO] Installing /home/gitlab-runner/.m2/repository/org/eclipse/jetty/jetty-io/9.2.14.v20151106/jetty-io-9.2.14.v20151106.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/eclipse/jetty/jetty-io/9.2.14.v20151106/jetty-io-9.2.14.v20151106.jar
70 [INFO] Installing /home/gitlab-runner/.m2/repository/javax/servlet/servlet-api/2.5/servlet-api-2.5.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/javax/servlet/servlet-api/2.5/servlet-api-2.5.jar
71 [INFO] Installing /home/gitlab-runner/.m2/repository/junit/junit/4.12/junit-4.12.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/junit/junit/4.12/junit-4.12.jar
72 [INFO] Installing /home/gitlab-runner/.m2/repository/org/hamcrest/hamcrest-core/1.3/hamcrest-core-1.3.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/hamcrest/hamcrest-core/1.3/hamcrest-core-1.3.jar
73 [INFO] Installing /home/gitlab-runner/.m2/repository/org/json/json/20211205/json-20211205.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/org/json/json/20211205/json-20211205.jar
74 [INFO] Installing /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/SimpleWebApp-1.0-SNAPSHOT.jar to /home/gitlab-runner/builds/yNwLwH2j/0/sk4520/simplewebapp/target/repo/ic/doc/SimpleWebApp/1.0-SNAPSHOT/SimpleWebApp-1.0-SNAPSHOT.jar
75 [INFO] -----
76 [INFO] BUILD SUCCESS
77 [INFO] -----
78 [INFO] Total time: 3.580 s
79 [INFO] Finished at: 2022-01-25T10:12:20Z
80 [INFO] -----
81 $ sh ~/killcommand.sh || true
82 $ export PORT=5000
83 $ nohup sh target/bin/simplewebapp >> ~/CIlog.txt 2>&1 &
84 $ rm ~/killcommand.sh
85 $ echo "kill $!" > ~/killcommand.sh
86 $ echo "Finished deploying"
87 Finished deploying
88 Cleaning up project directory and file based variables
89 Job succeeded

```

Figure 4: Gitlab log of the latest deploy - part 3.