

WALCHAND INSTITUTE OF
TECHNOLOGY, SOLAPUR
INFORMATION TECHNOLOGY
2021-22 SEMESTER –II

DevOps

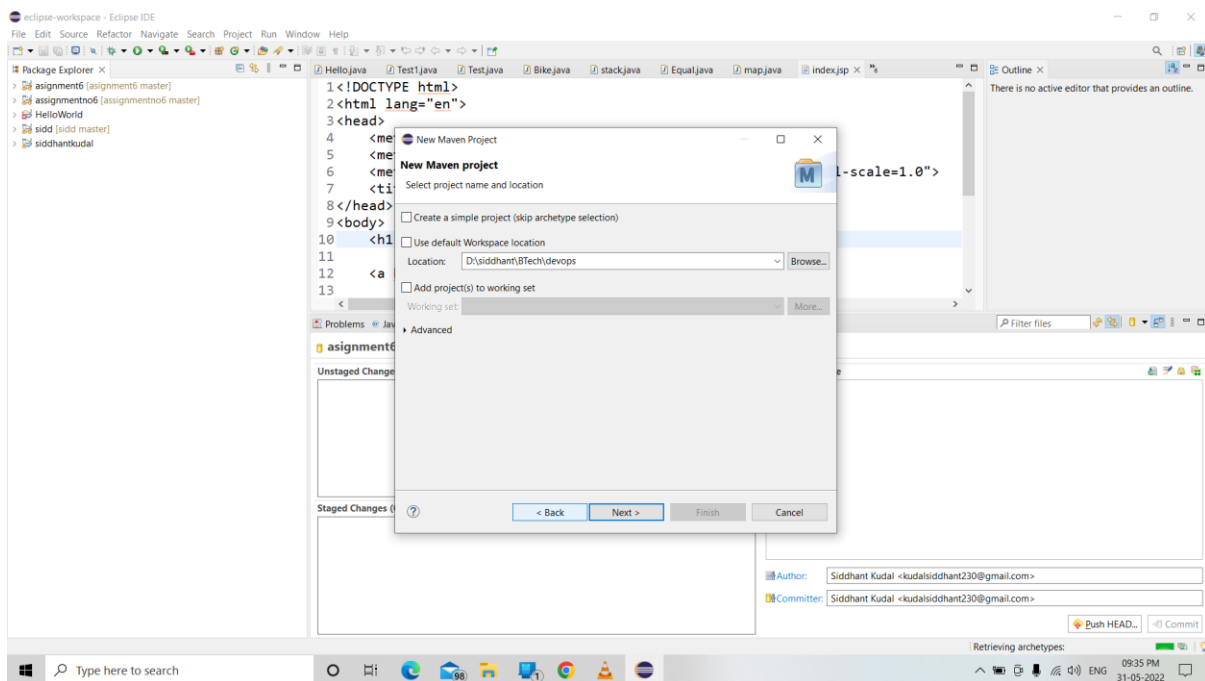
Class: Final Year BTech.- IT (Sem-2)

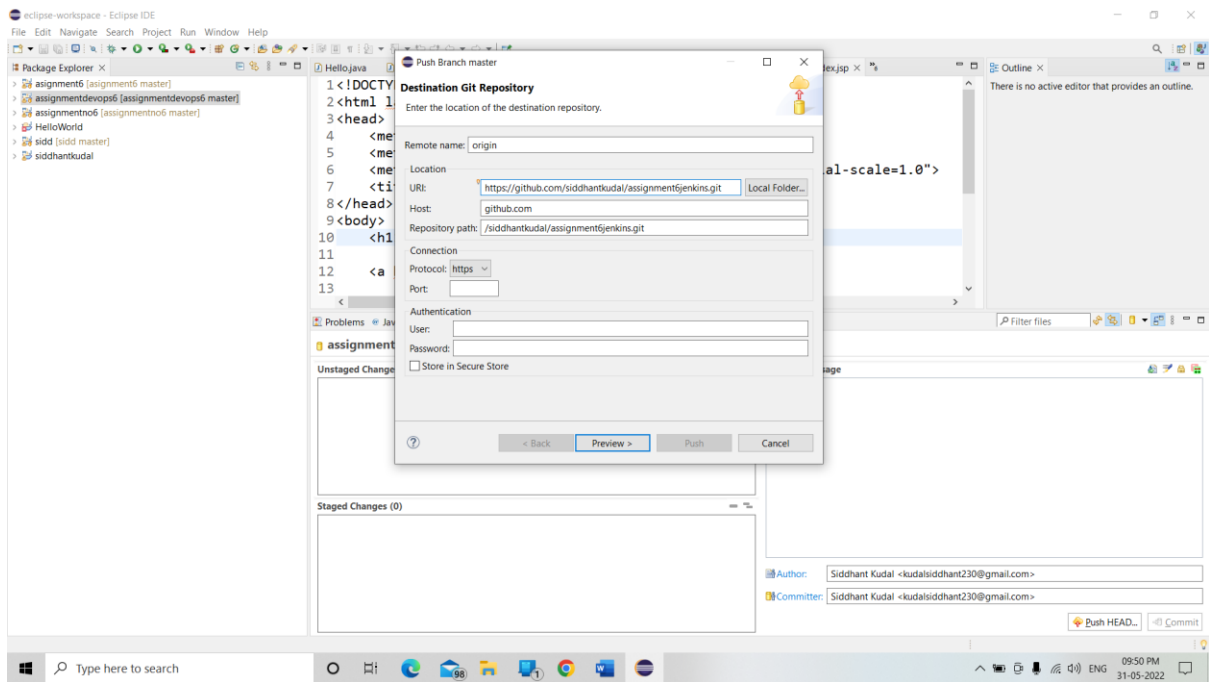
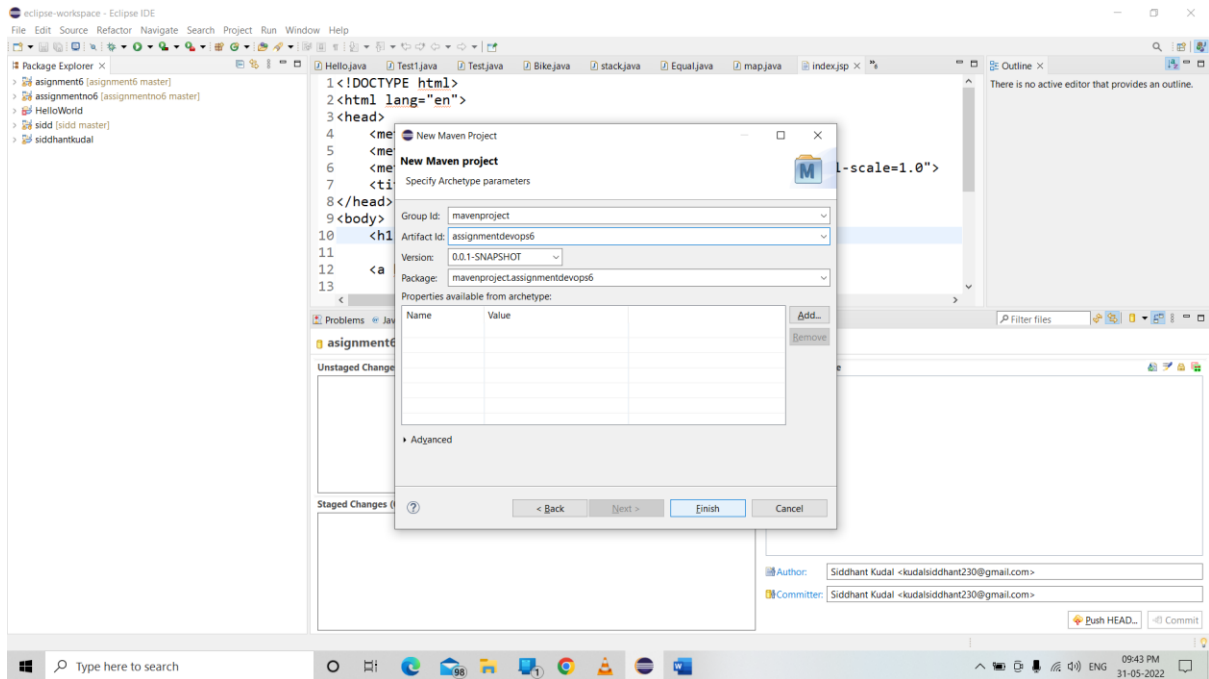
Name: Siddhant Kudal

Roll No: 27

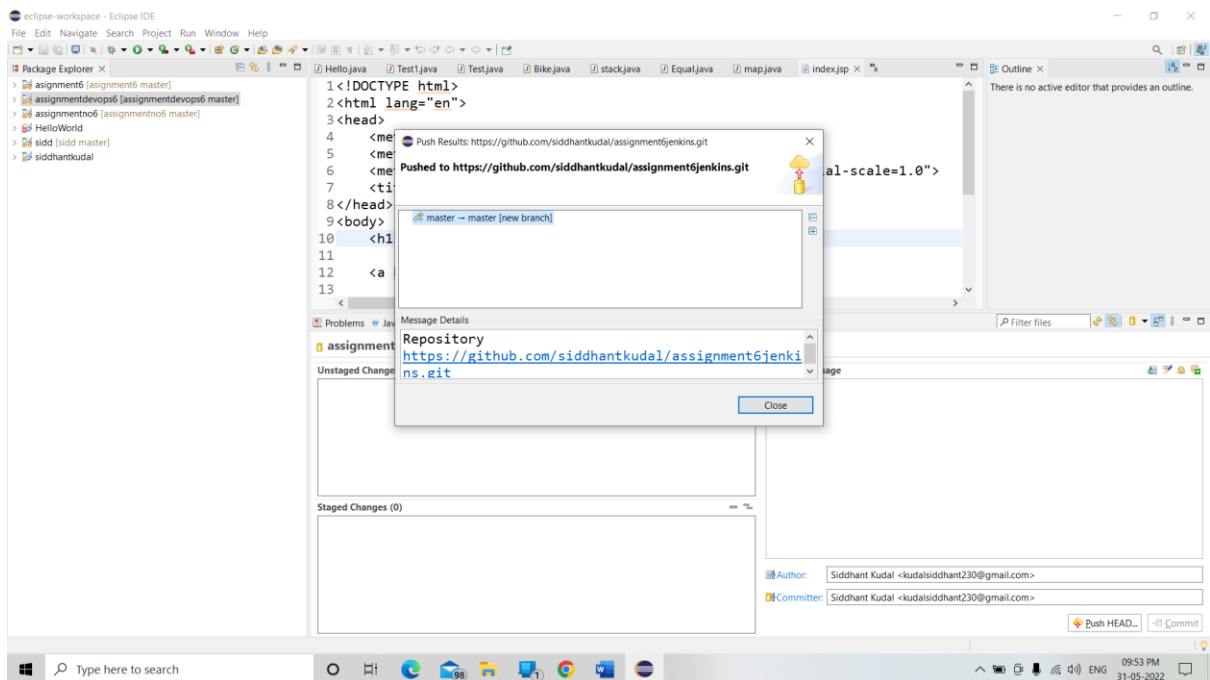
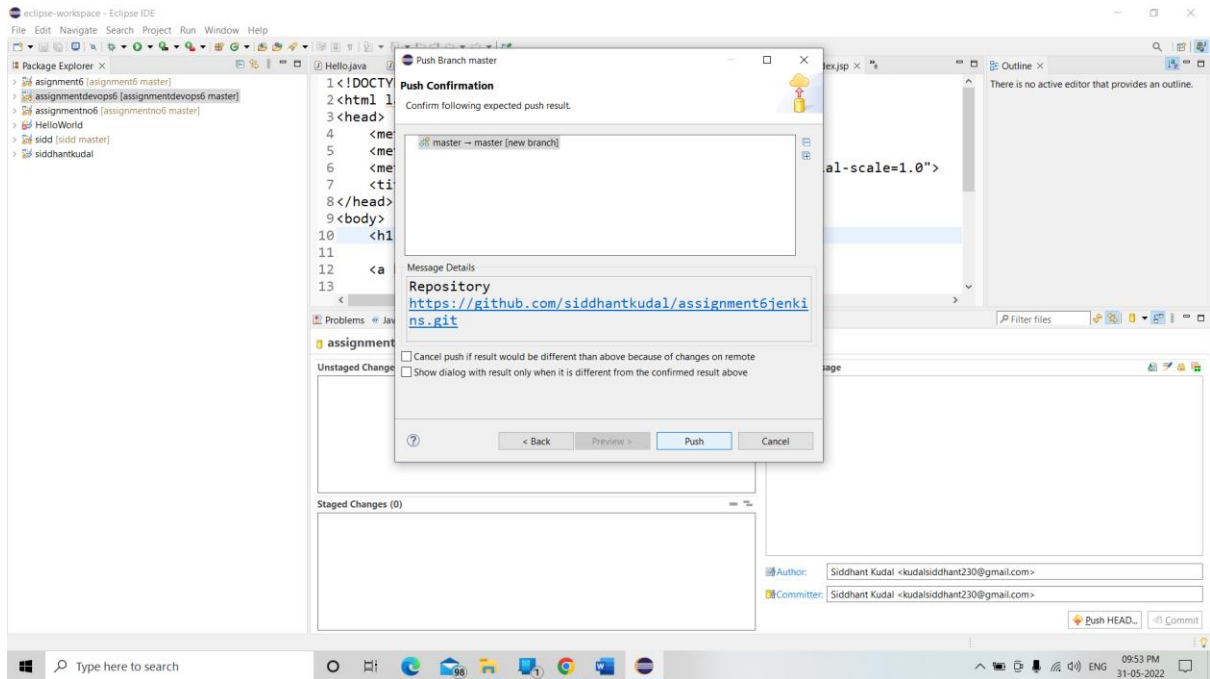
Assignment: 6

Title: Automate Deployment using Jenkins plugin "Deploy to container"





Commit and Push



Creating Job

The first screenshot shows the Jenkins 'New Item' page. The browser address bar is `localhost:8080/view/all/newJob`. The page title is 'Jenkins'. The user is logged in as 'Siddhant Kudal'. The 'Enter an item name' field contains 'A_6'. Below this, four project types are listed: 'Freestyle project', 'Pipeline', 'Multi-configuration project', and 'Folder'. The 'Pipeline' option is selected, and a tooltip is visible over it. The second screenshot shows the 'A_6 Config' page. The browser address bar is `localhost:8080/job/A_6/configure`. The 'General' tab is active. Under 'Discard old builds', the 'Discard old builds' checkbox is checked. Under 'Source Code Management', 'Git' is selected. The 'Repository URL' is `https://github.com/siddhantkudal/assignmentjenkins.git`. The 'Credentials' dropdown is set to 'none'. The 'Save' button is highlighted.

Enter an item name

A_6

» Required field

Freestyle project
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

Pipeline
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

Multi-configuration project
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

Folder
Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

OK

Waiting for localhost...

Dashboard > A_6

General Source Code Management Build Triggers Build Environment Build Post-build Actions

☐ Discard old builds ?
☐ GitHub project
☐ This build requires lockable resources
☐ This project is parameterized ?
☐ Throttle builds ?
☐ Disable this project ?
☐ Execute concurrent builds if necessary ?

Advanced...

Source Code Management

☐ None
☒ Git ?

Repositories ?

Repository URL ?

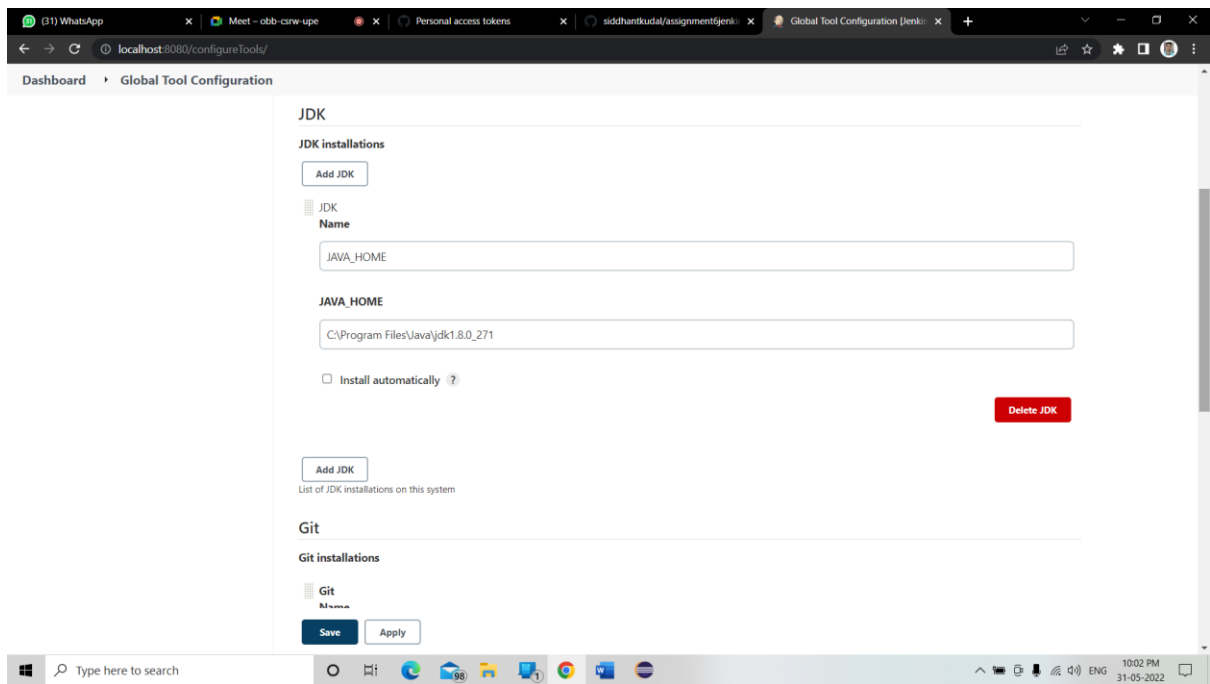
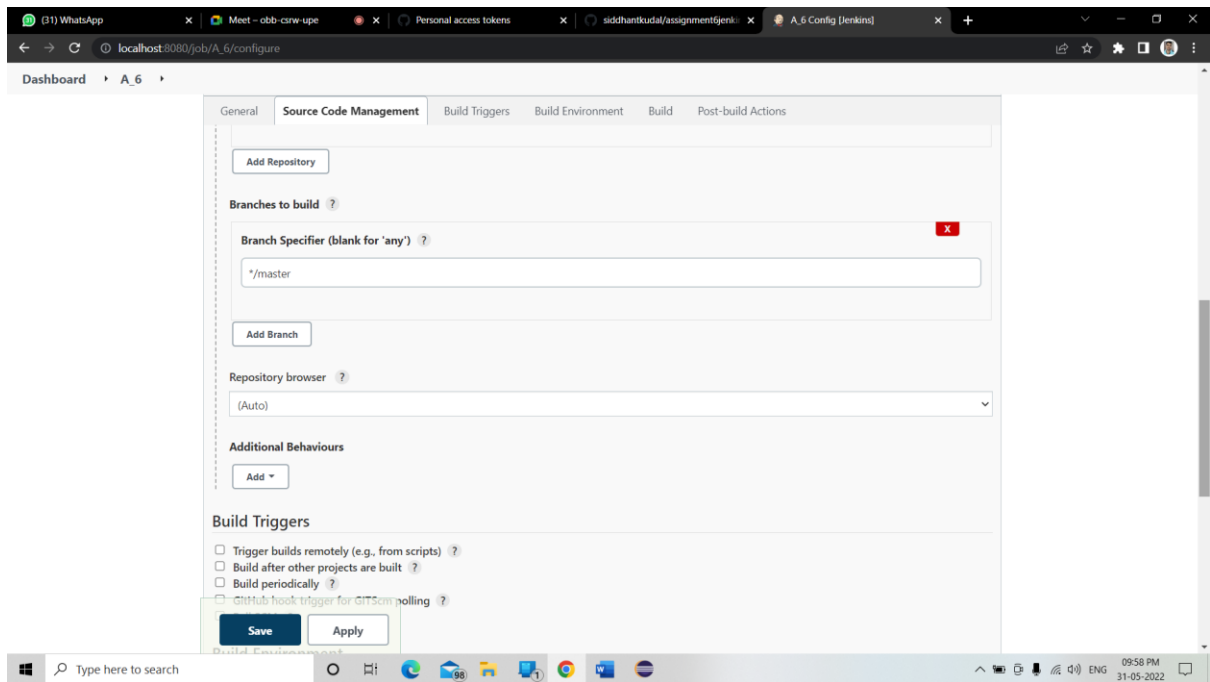
`https://github.com/siddhantkudal/assignmentjenkins.git`

Credentials ?

- none - Add

Advanced...

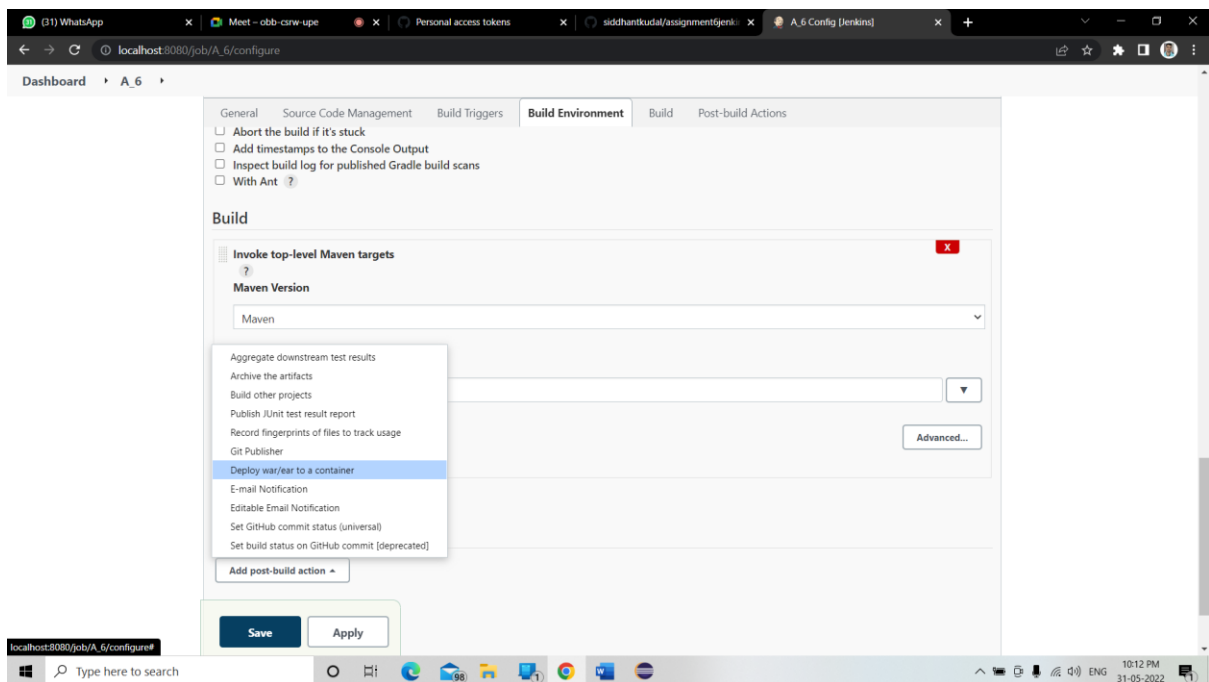
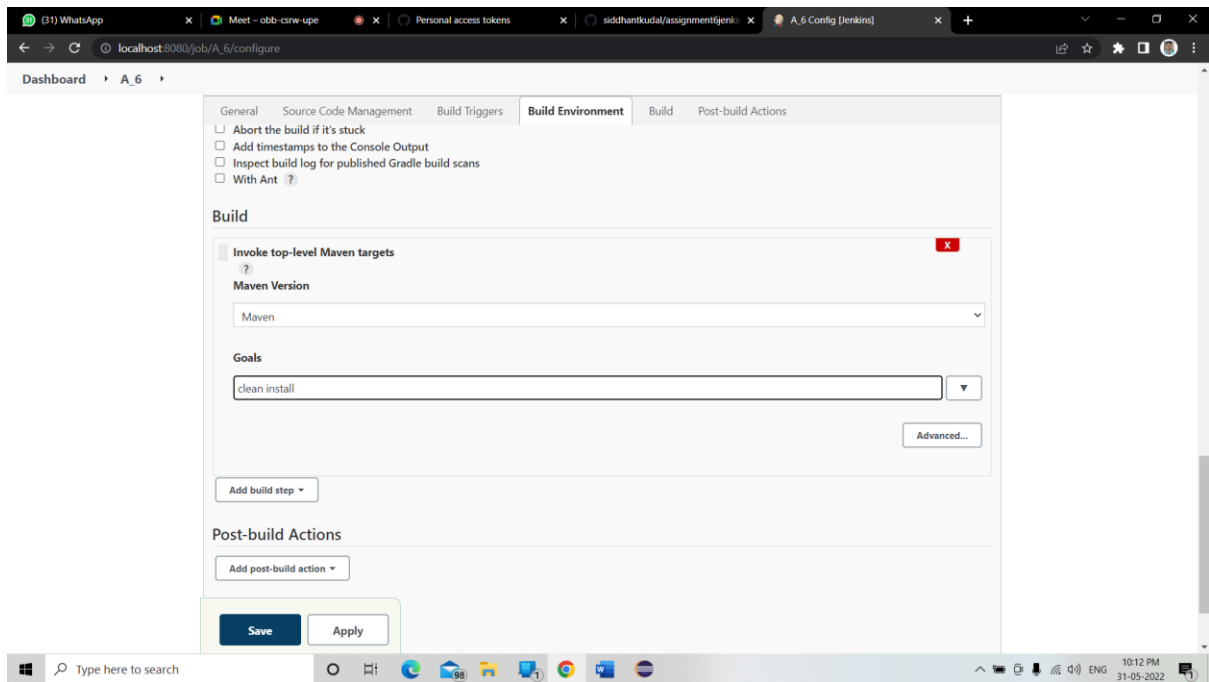
Save Apply

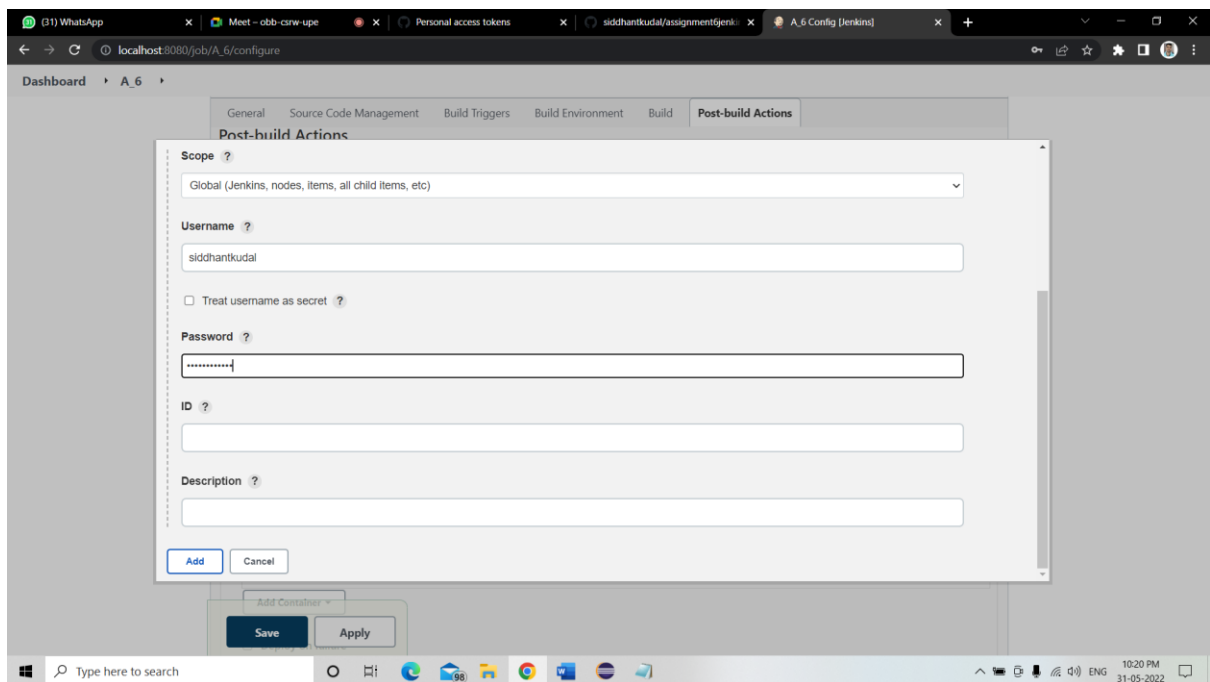
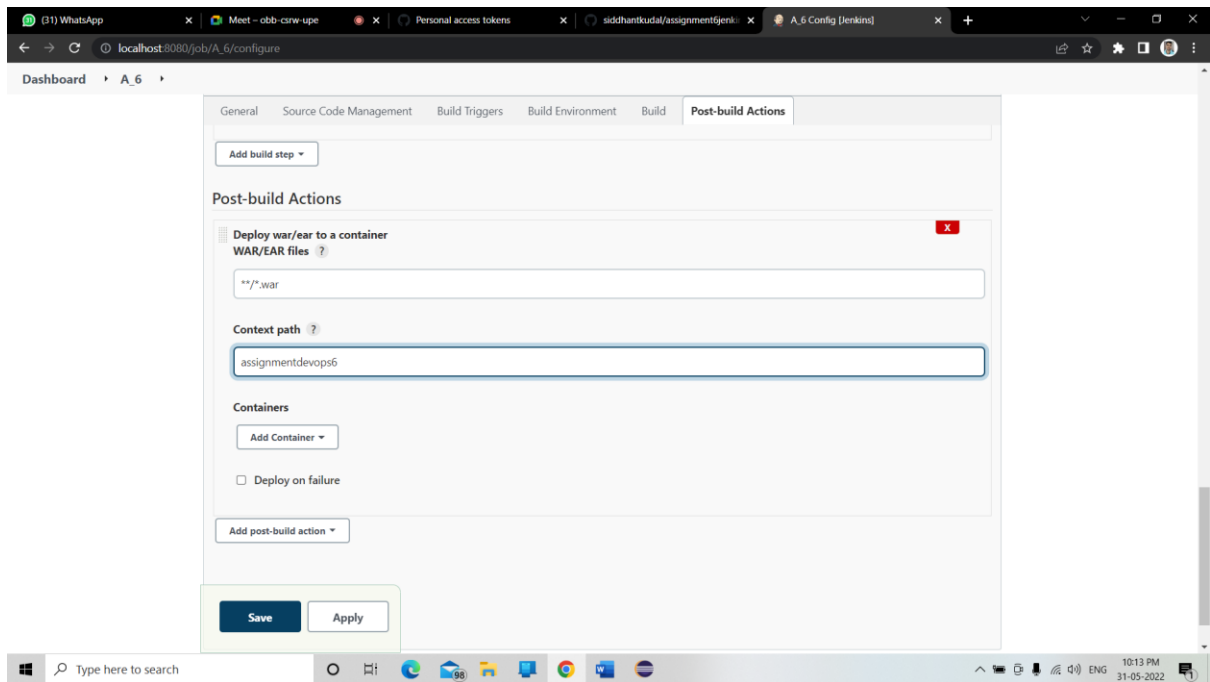


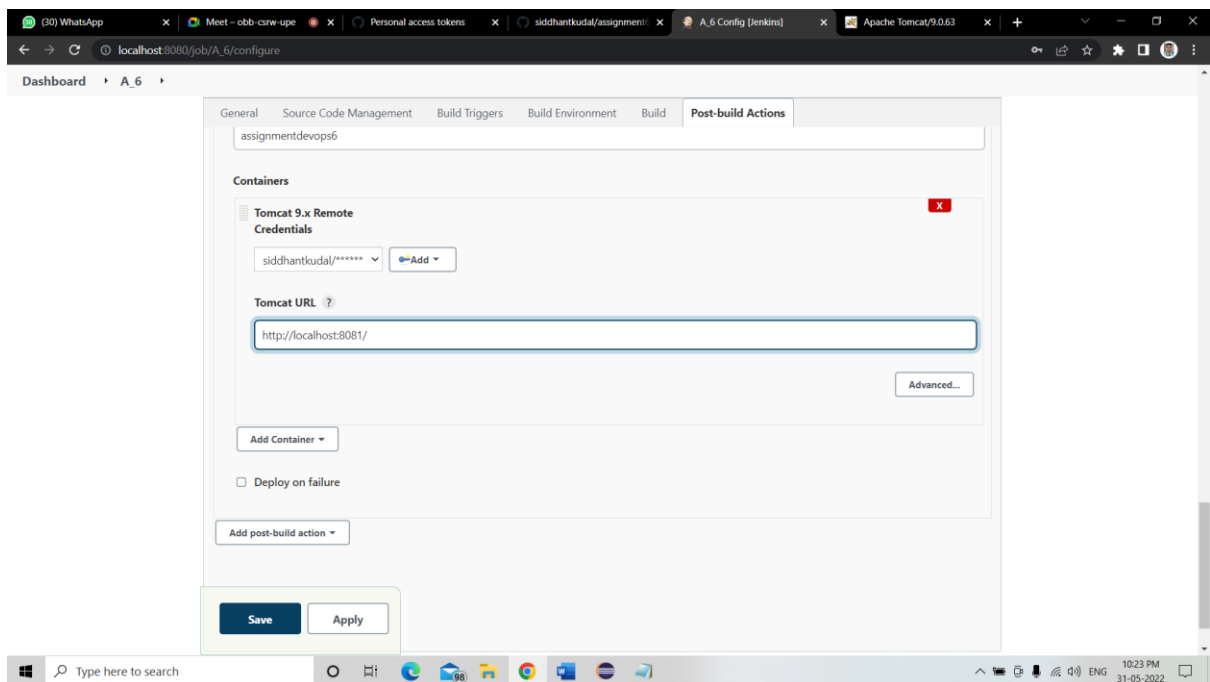
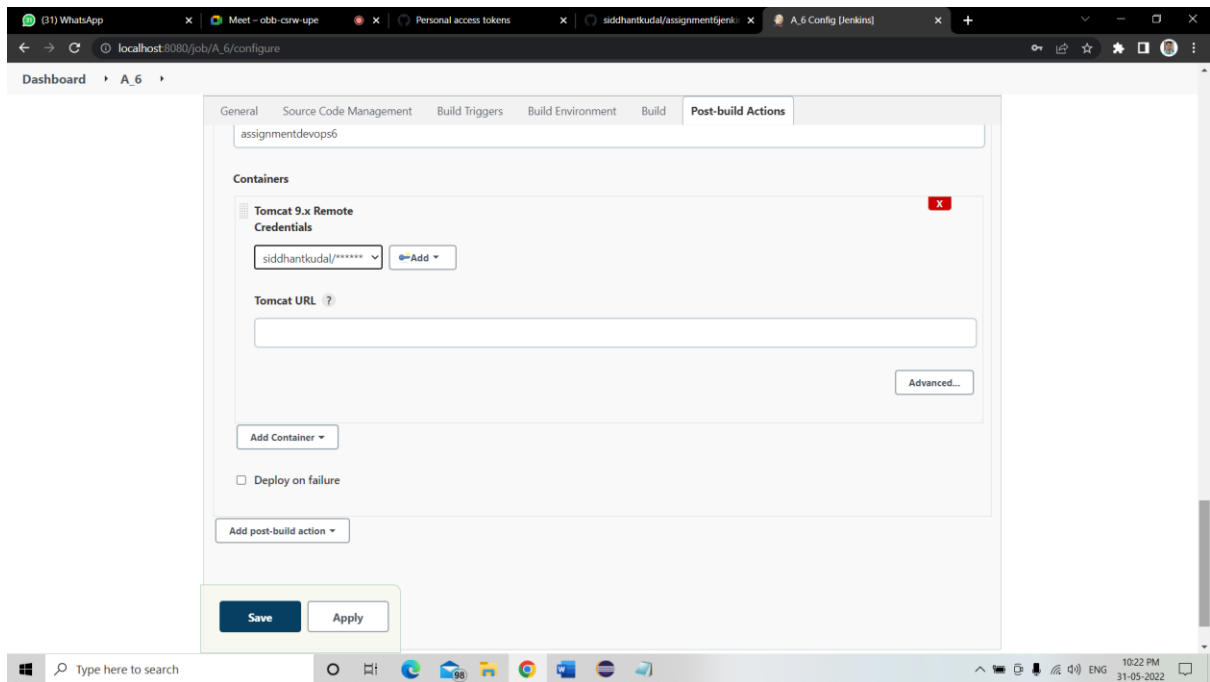
Installed deploy to container plugin

The screenshot shows the Jenkins web interface at `localhost:8080/pluginManager/installed`. The 'Plugin Manager' page has tabs for 'Updates', 'Available', 'Installed', and 'Advanced'. The 'Installed' tab is active, showing a list of installed plugins. The 'Deploy to container Plugin' (version 1.16) is listed as 'Enabled' with a green checkmark. Below it, a red error message states: 'Failed to load: Jenkins Workspace Cleanup Plugin (ws-cleanup 0.42) - Plugin is missing: resource-disposer (0.16)'. A yellow warning icon indicates 'Changes will take effect when you restart Jenkins', with a 'Restart Once No Jobs Are Running' button. The left sidebar shows 'Back to Dashboard', 'Manage Jenkins', and 'Update Center'. The top right shows the user 'Siddhant Kudal' and a 'log out' link. The bottom status bar shows 'REST API' and 'Jenkins 2.332.3'.

The screenshot shows the Jenkins 'A_6 Config' page, specifically the 'Build Triggers' tab. The 'Additional behaviours' section has an 'Add' button. Under 'Build Triggers', the following options are listed: 'Trigger builds remotely (e.g., from scripts)', 'Build after other projects are built', 'Build periodically', 'GitHub hook trigger for GITScm polling', and 'Poll SCM' (which is checked). Below these is a 'Schedule' field containing '****'. A note states: 'No schedules so will only run due to SCM changes if triggered by a post-commit hook'. There is also an 'Ignore post-commit hooks' checkbox. The 'Build Environment' section includes options like 'Use secret text(s) or file(s)', 'Abort the build if it's stuck', 'Add timestamps to the Console Output', 'Inspect build log for published Gradle build scans', and 'With Ant'. At the bottom, there are 'Save' and 'Apply' buttons. The left sidebar shows 'Dashboard' and 'A_6'. The top right shows the user 'Siddhant Kudal' and a 'log out' link. The bottom status bar shows '10:08 PM' and '31-05-2022'.







localhost:8081/assignmentdevops x A_6 #3 Console [Jenkins] x Ass_9 #3 Console [Jenkins] x practice1/jenkinsfile at master x Assignment No. 9 x +

localhost:8080/job/A_6/3/console

Jenkins

Dashboard A_6 #3

- Back to Project
- Status
- Changes
- Console Output
- View as plain text
- Edit Build Information
- Git Build Data
- Previous Build

Console Output

Started by user Siddhant Kudal
Running as SYSTEM
Building in workspace C:\ProgramData\Jenkins\jenkins\workspace\A_6
The recommended git tool is: NONE
No credentials specified
> C:\Program Files\Git\bin\git.exe rev-parse --resolve-git-dir C:\ProgramData\Jenkins\jenkins\workspace\A_6\.git # timeout=10
Fetching changes from the remote Git repository
> C:\Program Files\Git\bin\git.exe config remote.origin.url https://github.com/siddhantkudal/assignment6jenkins.git # timeout=10
Fetching upstream changes from https://github.com/siddhantkudal/assignment6jenkins.git
> C:\Program Files\Git\bin\git.exe --version # timeout=10
> git --version # 'git version 2.34.1.windows.1'
> C:\Program Files\Git\bin\git.exe fetch --tags --force --progress -- https://github.com/siddhantkudal/assignment6jenkins.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> C:\Program Files\Git\bin\git.exe rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
Checking out Revision 0356508394406234f5f83405b76d5d38620d875b (refs/remotes/origin/master)
> C:\Program Files\Git\bin\git.exe config core.sparsecheckout # timeout=10
> C:\Program Files\Git\bin\git.exe checkout -f 0356508394406234f5f83405b76d5d38620d875b # timeout=10
Commit message: "first commit"
> C:\Program Files\Git\bin\git.exe rev-list --no-walk 0356508394406234f5f83405b76d5d38620d875b # timeout=10
[A_6] \$ cmd.exe /C "C:\Program Files\Apache-Maven\apache-maven-3.8.5-bin\apache-maven-3.8.5\bin\mvn.cmd" clean install && exit %ERRORLEVEL%"
[INFO] Scanning for projects...
[INFO]
[INFO] -----< mavenproject:assignmentdevops6 >-----
[INFO] Building assignmentdevops6 Maven Webapp 0.0.1-SNAPSHOT
[INFO] -----[war]-----
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ assignmentdevops6 ---
[INFO] Deleting C:\ProgramData\Jenkins\jenkins\workspace\A_6\target
[INFO]
[INFO] --- maven-resources-plugin:2.6:resources (default-resources) @ assignmentdevops6 ---

localhost:8081/assignmentdevops x A_6 #3 Console [Jenkins] x Ass_9 #3 Console [Jenkins] x practice1/jenkinsfile at master x Assignment No. 9 x +

localhost:8080/job/A_6/3/console

Dashboard A_6 #3

```
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ assignmentdevops6 ---
[INFO] No sources to compile
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ assignmentdevops6 ---
[INFO] No tests to run.
[INFO]
[INFO] --- maven-war-plugin:2.2:war (default-war) @ assignmentdevops6 ---
[INFO] Packaging webapp
[INFO] Assembling webapp [assignmentdevops6] in [C:\ProgramData\Jenkins\jenkins\workspace\A_6\target\assignmentdevops6]
[INFO] Processing war project
[INFO] Copying webapp resources [C:\ProgramData\Jenkins\jenkins\workspace\A_6\src\main\webapp]
[INFO] Webapp assembled in [27 msecs]
[INFO] Building war: C:\ProgramData\Jenkins\jenkins\workspace\A_6\target\assignmentdevops6.war
[INFO] WEB-INF\web.xml already added, skipping
[INFO]
[INFO] --- maven-install-plugin:2.4:install (default-install) @ assignmentdevops6 ---
[INFO] Installing C:\ProgramData\Jenkins\jenkins\workspace\A_6\target\assignmentdevops6.war to
C:\Windows\system32\config\systemprofile\.m2\repository\mavenproject\assignmentdevops6\0.0.1-SNAPSHOT\assignmentdevops6-0.0.1-SNAPSHOT.war
[INFO] Installing C:\ProgramData\Jenkins\jenkins\workspace\A_6\pom.xml to
C:\Windows\system32\config\systemprofile\.m2\repository\mavenproject\assignmentdevops6\0.0.1-SNAPSHOT\assignmentdevops6-0.0.1-SNAPSHOT.pom
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 5.653 s
[INFO] Finished at: 2022-06-01T12:24:30+05:30
[INFO]
[DeployPublisher][INFO] Attempting to deploy 1 war file(s)
[DeployPublisher][INFO] Deploying C:\ProgramData\Jenkins\jenkins\workspace\A_6\target\assignmentdevops6.war to container Tomcat 9.x Remote with context
assignmentdevops6
[C:\ProgramData\Jenkins\jenkins\workspace\A_6\target\assignmentdevops6.war] is not deployed. Doing a fresh deployment.
Deploying [C:\ProgramData\Jenkins\jenkins\workspace\A_6\target\assignmentdevops6.war]
Finished: SUCCESS
```

REST API Jenkins 2.332.3

