

1. Build a branching model to help your team understand the Git workflow for faster integration of work.

Steps:

- Installing Git
- Check its version
 - \$git -v / \$git --version

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1
$ git -v
git version 2.45.1.windows.1

NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1
$ git --version
git version 2.45.1.windows.1
```

- Configuration
 - \$git config -global user.name [any name]
 - \$git config -global user.email [any email]
 - Check it:
 - o \$git config -global user.name
 - o \$git config -global user.email

```
NANDAN@PHANTOM MINGW64 ~
$ git config --global user.name
Nandan Bhimani

NANDAN@PHANTOM MINGW64 ~
$ git config --global user.email
nandan.bhimani101@mail.com
```

- Create a repository
 - \$mkdir [any folder name] //Create a New Folder
 - \$cd [any folder name]
 - \$git init //It will create .git folder(Hidden Folder)

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1
$ mkdir prac_1



NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1
$ cd prac_1

NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1
$ git init
Initialized empty Git repository in D:/Marwadi University/SEMESTER - 7/DEVOPS ES
SENTIALS ( 01CE0717 )/Lab Practical/Practical - 1/prac_1/.git/

NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ |
```

➤ Adding file in that folder

- Create a file "welcome.html" with 1-2 heading content any message

 .git	01-07-2024 08:04 PM	File folder	
 welcome	01-07-2024 08:07 PM	Chrome HTML Do...	1 KB

➤ Check Status

- \$git status //File Stages/ Modified/ Untracked

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        welcome.html

nothing added to commit but untracked files present (use "git add" to track)
```

➤ Add welcome.html file

- \$git add welcome.html

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git add welcome.html
```

➤ Create one more file contact.html and add some content (add 1 line message) in welcome.html file

- \$git add -all / \$git add -A
- \$git status

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git add --all

NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   welcome.html
```

➤ Commit

- `$git commit -m "This is First Commit"`

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git commit -m "First Commit"
[master (root-commit) 46c5cab] First Commit
1 file changed, 5 insertions(+)
create mode 100644 welcome.html

NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git status
On branch master
nothing to commit, working tree clean
```

➤ Work with Git branches

- `$git branch` //Check branch status
- `$git branch [new branch name]`
- `$git branch`

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git branch
* master

NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git branch new_branch

NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git branch
* master
new_branch
```

➤ Switch between the branches




- `$git checkout [new branch name]`
- `$git branch` //Check which is active branch

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git checkout new_branch
Switched to branch 'new_branch'

NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (new_branch)
$ git branch
master
* new_branch
```

➤ In new branch

- Add some content (add 1 Image) in welcome.html
- Add that image in same directory
- Using \$git add command, add these welcome.html and image
- Command with messages

 .git	01-07-2024 08:16 PM	File folder	
 welcome	01-07-2024 08:19 PM	Chrome HTML Do...	1 KB
 img	27-08-2023 11:25 AM	JPG File	376 KB

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01  
CE0717 )/Lab Practical/Practicals/prac_1 (new_branch)  
$ git add img.jpg
```

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01  
CE0717 )/Lab Practical/Practicals/prac_1 (new_branch)  
$ git status  
On branch new_branch  
Changes to be committed:  
  (use "git restore --staged <file>..." to unstage)  
    new file:   img.jpg
```

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01  
CE0717 )/Lab Practical/Practical - 1/prac_1 (new_branch)  
$ git commit -m "Second Commit"  
[new_branch b172952] Second Commit  
1 file changed, 0 insertions(+), 0 deletions(-)  
create mode 100644 image.jpg
```

➤ Now check both branches

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git diff master
diff --git a/welcome.html b/welcome.html
index 44bc1c8..506df70 100644
--- a/welcome.html
+++ b/welcome.html
@@ -1,5 +1,6 @@
<html>
  <body>
    <h2>Welcome to Git</h2>
+   <img src='img.jpg'>
  </body>
</html>
\ No newline at end of file

NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git diff new_branch
diff --git a/img.jpg b/img.jpg
deleted file mode 100644
index 859dac0..0000000
Binary files a/img.jpg and /dev/null differ
diff --git a/welcome.html b/welcome.html
index 44bc1c8..506df70 100644
--- a/welcome.html
+++ b/welcome.html
@@ -1,5 +1,6 @@
<html>
  <body>
    <h2>Welcome to Git</h2>
+   <img src='img.jpg'>
  </body>
</html>
\ No newline at end of file
```

- You might delete the branch
- \$git branch -D [new branch name]

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git branch -D new_branch
Deleted branch new_branch (was b172952).
```

GitHub Concept:

- Create an account on <https://github.com>
- Create a Repository
 - Give any name for repository make it public or private, add or don't add the README file, just create it the way you want.
- PUSH files into this Repository
 - Copy your Repository URL
 - i.e. https://github.com/Nandan1012002/DevOps_Prac1
 - Open the CMD and add the command \$git remote add origin URL
 - \$git remote add origin https://github.com/Nandan1012002/DevOps_Prac1

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git remote add origin https://github.com/Nandan1012002/DevOps_Prac1
```

- Push all files in GitHub
 - \$git push -u origin [branch name]

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 269 bytes | 269.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote:   https://github.com/Nandan1012002/DevOps_Prac1/pull/new/master
remote:
To https://github.com/Nandan1012002/DevOps_Prac1
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.
```

- PULL files into Local Repository from GitHub
 - Goto GitHub Repository and add one file about.html and commit it to GitHub's project
 - \$git pull origin //This file will be available in local folder

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git pull origin
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 875 bytes | 218.00 KiB/s, done.
From https://github.com/Nandan1012002/DevOps_Prac1
 * [new branch]      main      -> origin/main
Already up to date.
```


- Make some changes in about.html
 - Add some content



```
Code Blame 6 lines (6 loc) · 102 Bytes Code 5
1 <html>
2 <body>
3 <h2>Welcome to Git</h2>
4 <h4>Welcome to Github Concept</h4>
5 </body>
6 </html>
```

- Again, add and commit in cmd
 - \$git add about.html
 - \$git commit -m "Updated"

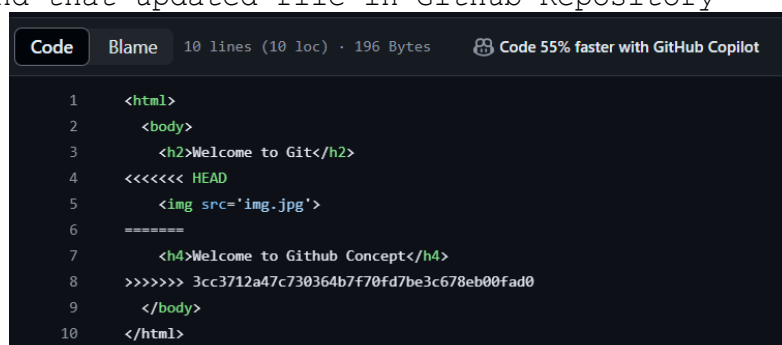
```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git add welcome.html
```

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git commit -m "Updated"
[master 05ff208] Updated
1 file changed, 1 insertion(+)
```

- Then again push it on GitHub
 - \$git push origin

```
NANDAN@PHANTOM MINGW64 /d/Marwadi University/SEMESTER - 7/DEVOPS ESSENTIALS ( 01
CE0717 )/Lab Practical/Practical - 1/prac_1 (master)
$ git push origin
Enumerating objects: 10, done.
Counting objects: 100% (10/10), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (6/6), 699 bytes | 699.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Nandan1012002/DevOps_Prac1
3cc3712..1a98f54 master -> master
```

- You will find that updated file in GitHub Repository



```
Code Blame 10 lines (10 loc) · 196 Bytes Code 55% faster with GitHub Copilot
1 <html>
2 <body>
3 <h2>Welcome to Git</h2>
4 <img src='img.jpg'>
5 <h4>Welcome to Github Concept</h4>
6 >>>>>> 3cc3712a47c730364b7f70fd7be3c678eb00fad0
7 </body>
8 </html>
```

2. Maven and Gradle environmental setup for java application

Steps: Maven

- JDK 8 or Above
- Download Maven
- Extract zip at that the desired folder
- Search bin folder and copy path and paste it in system variable
- Check maven version

- \$mvn -v

```
C:\Users\NANDAN>mvn -v
Apache Maven 3.9.8 (36645f6c9b5079805ea5009217e36f2cfd34256)
Maven home: D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\apache-maven-3.9.8
Java version: 21.0.1, vendor: Oracle Corporation, runtime: C:\Program Files\Java\jdk-21
Default locale: en_IN, platform encoding: UTF-8
OS name: "windows 11", version: "10.0", arch: "amd64", family: "windows"
```

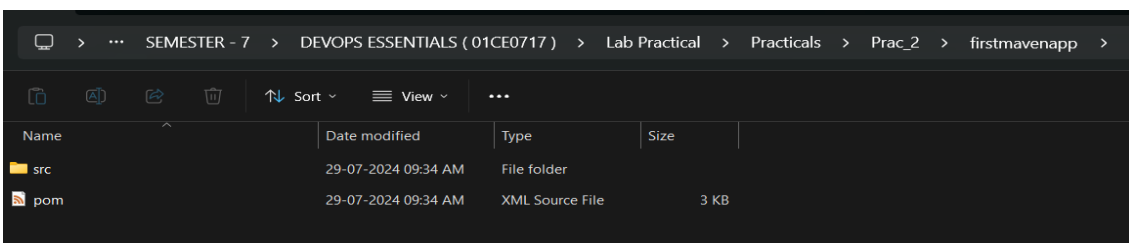
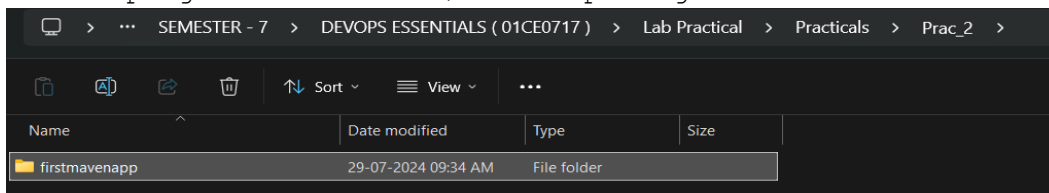
- Now create maven project using command

- mvn archetype:generate -DgroupId=com.7TC5.app -DartifactId=firstmavenapp -DarchetypeArtifactId=maven-archetype-quickstart -DarchetypeVersion=1.4 -DinteractiveMode=false

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2>mvn archetype:generate -DgroupId=com.7TC5.app -DartifactId=firstmavenapp -DarchetypeArtifactId=maven-archetype-quickstart -DarchetypeVersion=1.4 -DinteractiveMode=false
[INFO] Scanning for projects...
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/3.2.0/maven-clean-plugin-3.2.0.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/3.2.0/maven-clean-plugin-3.2.0.pom (5.3 kB at 8.6 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/35/maven-plugins-35.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/35/maven-plugins-35.pom (9.9 kB at 160 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/35/maven-parent-35.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/35/maven-parent-35.pom (45 kB at 580 kB/s)
```

```
[INFO] -----
[INFO] Using following parameters for creating project from Archetype: maven-archetype-quickstart:1.4
[INFO] -----
[INFO] Parameter: groupId, Value: com.7TC5.app
[INFO] Parameter: artifactId, Value: firstmavenapp
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] Parameter: package, Value: com.7TC5.app
[INFO] Parameter: packageInPathFormat, Value: com/7TC5/app
[INFO] Parameter: package, Value: com.7TC5.app
[INFO] Parameter: groupId, Value: com.7TC5.app
[INFO] Parameter: artifactId, Value: firstmavenapp
[INFO] Parameter: version, Value: 1.0-SNAPSHOT
[INFO] Project created from Archetype in dir: D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 02:07 min
[INFO] Finished at: 2024-07-29T09:34:03+05:30
[INFO] -----
```

- Once the project is created; build package



➤ Follow maven life cycle:

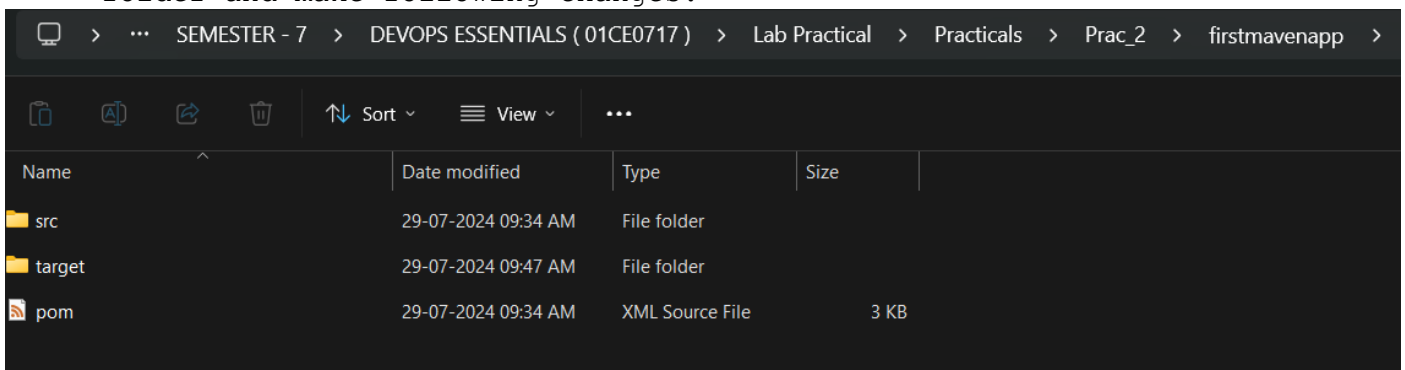
- \$mvn validate

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2>cd firstmavenapp
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>mvn validate
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.7TC5.app:firstmavenapp >-----
[INFO] Building firstmavenapp 1.0-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 0.093 s
[INFO] Finished at: 2024-07-29T09:46:51+05:30
[INFO]
[INFO] -----
```

- \$mvn compile

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>mvn compile
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.7TC5.app:firstmavenapp >-----
[INFO] Building firstmavenapp 1.0-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO]
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/3.0.2/maven-resources-plugin-3.0.2.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/3.0.2/maven-resources-plugin-3.0.2.pom (7.1 kB
at 9.0 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/3.0.2/maven-resources-plugin-3.0.2.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-resources-plugin/3.0.2/maven-resources-plugin-3.0.2.jar (32 kB
at 102 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-compiler-plugin/3.8.0/maven-compiler-plugin-3.8.0.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-compiler-plugin/3.8.0/maven-compiler-plugin-3.8.0.pom (12 kB at
50 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-compiler-plugin/3.8.0/maven-compiler-plugin-3.8.0.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-compiler-plugin/3.8.0/maven-compiler-plugin-3.8.0.jar (317 kB at 308 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm/6.2/asm-6.2.jar (111 kB at 55 kB/s)
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 1 source file to D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target\cla
sses
[INFO]
[ERROR] COMPILATION ERROR :
[INFO]
[ERROR] Source option 7 is no longer supported. Use 8 or later.
[ERROR] Target option 7 is no longer supported. Use 8 or later.
[INFO] 2 errors
[INFO]
[INFO] BUILD FAILURE
[INFO]
[INFO] Total time: 36.119 s
[INFO] Finished at: 2024-07-29T09:47:54+05:30
[INFO]
[ERROR] Failed to execute goal org.apache.maven.plugins:maven-compiler-plugin:3.8.0:compile (default-compile) on project firstmavenapp: Compilation failure:
Compilation failure:
[ERROR] Source option 7 is no longer supported. Use 8 or later.
[ERROR] Target option 7 is no longer supported. Use 8 or later.
[ERROR] -> [Help 1]
[ERROR]
[ERROR] To see the full stack trace of the errors, re-run Maven with the -e switch.
[ERROR] Re-run Maven using the -X switch to enable full debug logging.
[ERROR]
[ERROR] For more information about the errors and possible solutions, please read the following articles:
[ERROR] [Help 1] http://cwiki.apache.org/confluence/display/MAVEN/MojoFailureException
```

➤ It shows error of version not supported so go to pom.xml file in project folder and make following changes:



Name	Date modified	Type	Size
src	29-07-2024 09:34 AM	File folder	
target	29-07-2024 09:47 AM	File folder	
pom	29-07-2024 09:34 AM	XML Source File	3 KB

```
<properties>
  <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
  <maven.compiler.source>1.7</maven.compiler.source>
  <maven.compiler.target>1.7</maven.compiler.target>
</properties>
```

```
<groupId>com.7TC5.app</groupId>
<artifactId>firstmavenapp</artifactId>
<version>1.0-SNAPSHOT</version>

<name>firstmavenapp</name>
<!-- FIXME change it to the project's website -->
<url>http://www.example.com</url>

<properties>
  <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
  <maven.compiler.source>1.8</maven.compiler.source>
  <maven.compiler.target>1.8</maven.compiler.target>
</properties>
```

➤ Now again run the following command:

- \$mvn compile

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>mvn compile
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.7TC5.app:firstmavenapp >-----
[INFO] Building firstmavenapp 1.0-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- resources:3.0.2:resources (default-resources) @ firstmavenapp ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\src\main\resources
[INFO]
[INFO] --- compiler:3.8.0:compile (default-compile) @ firstmavenapp ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 1 source file to D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target\classes
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 1.125 s
[INFO] Finished at: 2024-07-29T09:55:04+05:30
[INFO] -----
```

- \$mvn test

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>mvn test
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.7TC5.app:firstmavenapp >-----
[INFO] Building firstmavenapp 1.0-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO]
[INFO] --- resources:3.0.2:resources (default-resources) @ firstmavenapp ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\src\main\resources
[INFO]
[INFO] --- compiler:3.8.0:compile (default-compile) @ firstmavenapp ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 1 source file to D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target\classes
[INFO]
[INFO] --- resources:3.0.2:testResources (default-testResources) @ firstmavenapp ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\src\test\resources
```

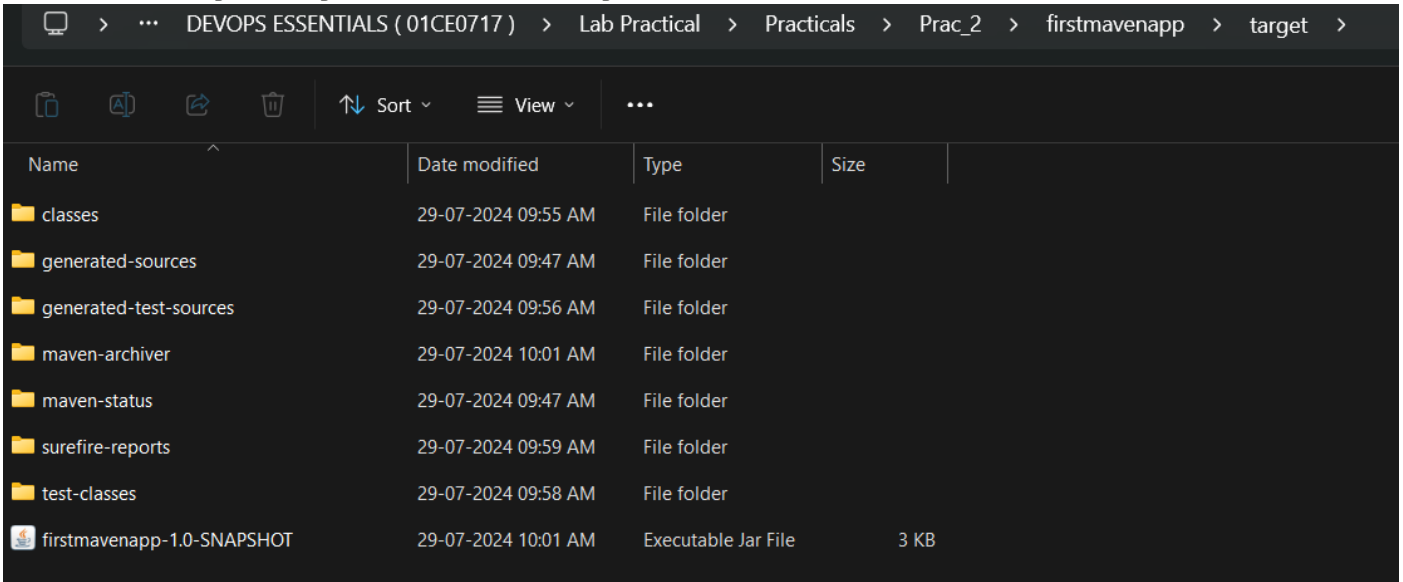
```
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-junit4/2.22.1/surefire-junit4-2.22.1.pom (3.1 kB at 6.9 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-providers/2.22.1/surefire-providers-2.22.1.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-providers/2.22.1/surefire-providers-2.22.1.pom (2.5 kB at 1.5 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-junit4/2.22.1/surefire-junit4-2.22.1.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/surefire/surefire-junit4/2.22.1/surefire-junit4-2.22.1.jar (85 kB at 29 kB/s)
[INFO]
[INFO] -----
[INFO] T E S T S
[INFO] -----
[INFO] Running com.7TC5.app.AppTest
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 0.031 s - in com.7TC5.app.AppTest
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO]
[INFO] -----
[INFO] Total time: 01:16 min
[INFO] Finished at: 2024-07-29T09:59:57+05:30
[INFO] -----
```

- \$mvn package

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>mvn package
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.7TC5.app:firstmavenapp >-----
[INFO] Building firstmavenapp 1.0-SNAPSHOT
[INFO] from pom.xml
[INFO] -----[ jar ]-----
[INFO]
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-jar-plugin/3.0.2/maven-jar-plugin-3.0.2.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-jar-plugin/3.0.2/maven-jar-plugin-3.0.2.pom (6.2 kB at 2.2 kB/s)
[INFO]
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-jar-plugin/3.0.2/maven-jar-plugin-3.0.2.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-jar-plugin/3.0.2/maven-jar-plugin-3.0.2.jar (27 kB at 58 kB/s)
[INFO]
[INFO] --- resources:3.0.2:resources (default-resources) @ firstmavenapp ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] skip non existing resourceDirectory D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\src\main\resources
[INFO]
[INFO] --- compiler:3.8.0:compile (default-compile) @ firstmavenapp ---
[INFO] Changes detected - recompiling the module!
[INFO] Compiling 1 source file to D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target\classes
```

```
Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-io/2.7.1/plexus-io-2.7.1.jar (86 kB at 16 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-archiver/3.4/plexus-archiver-3.4.jar (187 kB at 35 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/tukaani/xz/1.5/xz-1.5.jar (100 kB at 18 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/shared/maven-shared-utils/3.0.1/maven-shared-utils-3.0.1.jar (154 kB at 23 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/commons/commons-compress/1.11/commons-compress-1.11.jar (426 kB at 24 kB/s)
[INFO] Building jar: D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target\firstmavenapp-1.0-SNAPSHOT.jar
[INFO]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO]
[INFO] -----
[INFO] Total time: 29.498 s
[INFO] Finished at: 2024-07-29T10:01:36+05:30
[INFO] -----
```

- Goto inside target folder
 - \$cd target
 - \$java -jar [file name].jar



```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target>java -jar firstmavenapp-1.0-SNAPSHOT.jar
no main manifest attribute, in firstmavenapp-1.0-SNAPSHOT.jar
```

- if it shows no main manifest attribute error then, add the following code:

```
<plugin>
  <artifactId> maven-jar-plugin</artifactId>
  <version>3.0.2</version>
  <configuration>
    <archive>
      <manifest>
        <addClasspath>true</addClasspath>
        <mainClass>com.TC5.app.App</mainClass>
      </manifest>
    </archive>
  </configuration>
</plugin>
```

```
<plugin>
  <artifactId>maven-surefire-plugin</artifactId>
  <version>2.22.1</version>
</plugin>
<plugin>
  <artifactId>maven-jar-plugin</artifactId>
  <version>3.0.2</version>
  <configuration>
    <archive>
      <manifest>
        <addClasspath>true</addClasspath>
        <mainClass>com.TC5.app.App</mainClass>
      </manifest>
    </archive>
  </configuration>
</plugin>
<plugin>
  <artifactId>maven-install-plugin</artifactId>
  <version>2.5.2</version>
</plugin>
```

- Come back to project folder
 - \$cd..

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target>cd..
```

- Then clean package
 - \$mvn clean package

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>mvn clean package
[INFO] Scanning for projects...
[INFO]
[INFO] -----< com.7TC5.app:firstmavenapp >-----
[INFO] Building firstmavenapp 1.0-SNAPSHOT
[INFO] from pom.xml
[INFO]
[INFO] -----[ jar ]-----
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/3.1.0/maven-clean-plugin-3.1.0.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/3.1.0/maven-clean-plugin-3.1.0.pom (5.2 kB at 7.2 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/31/maven-plugins-31.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/31/maven-plugins-31.pom (10 kB at 95 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/3.1.0/maven-clean-plugin-3.1.0.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/3.1.0/maven-clean-plugin-3.1.0.jar (30 kB at 195 kB/s)
[WARNING] Parameter 'archive' is unknown for plugin 'maven-resources-plugin:3.0.2:resources (default-resources)'
[WARNING] Parameter 'archive' is unknown for plugin 'maven-resources-plugin:3.0.2:testResources (default-testResources)'
[INFO]
[INFO] --- clean:3.1.0:clean (default-clean) @ firstmavenapp ---
[INFO] Deleting D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target
[INFO]
[INFO]
[INFO] --- jar:3.0.2:jar (default-jar) @ firstmavenapp ---
[INFO] Building jar: D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target\firstmavenapp-1.0-SNAPSHOT.jar
[INFO]
[INFO] -----
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 2.608 s
[INFO] Finished at: 2024-07-29T10:30:23+05:30
[INFO] -----
```

- Now again go to target folder and execute following code:
 - \$java -jar [jar file name].jar

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>cd target
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\target>java -jar firstmavenapp-1.0-SNAPSHOT.jar
Hello World!
```

- Successfully we got the output of java code: "Hello World".

Steps: Gradle

- JDK 8 or Above
- Download Gradle
- Extract zip at that the desired folder
- Search bin folder and copy path and paste it in system variable
- Check Gradle Version
 - \$gradle -v

```
C:\Users\NANDAN>gradle -v

Welcome to Gradle 8.9!

Here are the highlights of this release:
- Enhanced Error and Warning Messages
- IDE Integration Improvements
- Daemon JVM Information

For more details see https://docs.gradle.org/8.9/release-notes.html

-----
Gradle 8.9
-----

Build time:      2024-07-11 14:37:41 UTC
Revision:        d536ef36a19186ccc596d8817123e5445f30fef8

Kotlin:          1.9.23
Groovy:          3.0.21
Ant:             Apache Ant(TM) version 1.10.13 compiled on January 4 2023
Launcher JVM:    21.0.1 (Oracle Corporation 21.0.1+12-LTS-29)
Daemon JVM:      C:\Program Files\Java\jdk-21 (no JDK specified, using current Java home)
OS:             Windows 11 10.0 amd64
```

- \$gradle init

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2_gradle>gradle init
Starting a Gradle Daemon (subsequent builds will be faster)

Select type of build to generate:
 1: Application
 2: Library
 3: Gradle plugin
 4: Basic (build structure only)
Enter selection (default: Application) [1..4] 1

Select implementation language:
 1: Java
 2: Kotlin
 3: Groovy
 4: Scala
 5: C++
 6: Swift
Enter selection (default: Java) [1..6] 1

Enter target Java version (min: 7, default: 21): 21

Project name (default: Prac_2_gradle): test_gradle

Select application structure:
 1: Single application project
 2: Application and library project
Enter selection (default: Single application project) [1..2] 1
```



```
Select build script DSL:
  1: Kotlin
  2: Groovy
Enter selection (default: Kotlin) [1..2] 1

Select test framework:
  1: JUnit 4
  2: TestNG
  3: Spock
  4: JUnit Jupiter
Enter selection (default: JUnit Jupiter) [1..4] 1

Generate build using new APIs and behavior (some features may change in the next minor release)? (default: no) [yes, no]
no

> Task :init
Learn more about Gradle by exploring our Samples at https://docs.gradle.org/8.9/samples/sample_building_java_applications.html

BUILD SUCCESSFUL in 1m 14s
1 actionable task: 1 executed
```

➤ \$gradle tasks

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2_gradle>gradle tasks

> Task :tasks

-----
Tasks runnable from root project 'test_gradle'
-----

Application tasks
-----
run - Runs this project as a JVM application

Build tasks
-----
assemble - Assembles the outputs of this project.
build - Assembles and tests this project.
buildDependents - Assembles and tests this project and all projects that depend on it.
buildNeeded - Assembles and tests this project and all projects it depends on.
classes - Assembles main classes.
clean - Deletes the build directory.
jar - Assembles a jar archive containing the classes of the 'main' feature.
testClasses - Assembles test classes.

Build Setup tasks
-----
init - Initializes a new Gradle build.
updateDaemonJvm - Generates or updates the Gradle Daemon JVM criteria.
wrapper - Generates Gradle wrapper files.

Distribution tasks
-----
assembleDist - Assembles the main distributions
distTar - Bundles the project as a distribution.
distZip - Bundles the project as a distribution.
installDist - Installs the project as a distribution as-is.

Documentation tasks
-----
javadoc - Generates Javadoc API documentation for the 'main' feature.
```

```
dependencies - Displays all dependencies declared in root project 'test_gradle'.
dependencyInsight - Displays the insight into a specific dependency in root project 'test_gradle'.
help - Displays a help message.
javaToolchains - Displays the detected java toolchains.
kotlinDslAccessorsReport - Prints the Kotlin code for accessing the currently available project extensions and conventions.
outgoingVariants - Displays the outgoing variants of root project 'test_gradle'.
projects - Displays the sub-projects of root project 'test_gradle'.
properties - Displays the properties of root project 'test_gradle'.
resolvableConfigurations - Displays the configurations that can be resolved in root project 'test_gradle'.
tasks - Displays the tasks runnable from root project 'test_gradle' (some of the displayed tasks may belong to subprojects).

Verification tasks
-----
check - Runs all checks.
test - Runs the test suite.

To see all tasks and more detail, run gradle tasks --all

To see more detail about a task, run gradle help --task <task>

BUILD SUCCESSFUL in 22s
1 actionable task: 1 executed
```

➤ \$gradle build

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2_gradle>gradle build

BUILD SUCCESSFUL in 5s
7 actionable tasks: 7 executed
```

➤ \$gradle run

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2_gradle>gradle run

> Task :app:run
Hello World!

BUILD SUCCESSFUL in 849ms
2 actionable tasks: 1 executed, 1 up-to-date
```

3. Create Jenkins job and pipeline it from GitHub repository to run using build.

Steps:

- Push the maven application on GitHub; (Maven Application which we created in 2nd Practical)
 - Goto second practical Maven Application folder
 - Open CMD
 - \$git init //Initialize git
 - \$git add -A //Add all files in stage area
 - \$git commit -m "commit maven application"
 - \$git remote add origin
 - \$git push -u main/master //write any one branch name //check your branch name

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>echo "# MavenApplication" >> README.md
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>git init
Initialized empty Git repository in D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp\.git\
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>git add README.md
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>git commit -m "first commit"
[master (root-commit) b769153] first commit
1 file changed, 1 insertion(+)
create mode 100644 README.md
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>git branch -M main
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>git remote add origin https://github.com/Nandan1012002/MavenApplication.git
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 239 bytes | 239.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/Nandan1012002/MavenApplication.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

```
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>git add .\
warning: in the working copy of 'target/maven-status/maven-compiler-plugin/compile/default-compile/createdFiles.lst', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'target/maven-status/maven-compiler-plugin/compile/default-compile/inputFiles.lst', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'target/maven-status/maven-compiler-plugin/testCompile/default-testCompile/createdFiles.lst', LF will be replaced by CRLF the next time Git touches it
warning: in the working copy of 'target/maven-status/maven-compiler-plugin/testCompile/default-testCompile/inputFiles.lst', LF will be replaced by CRLF the next time Git touches it
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>git commit -m "commit maven application"
[main a591018] commit maven application
13 files changed, 190 insertions(+)
create mode 100644 pom.xml
create mode 100644 src/main/java/com/TTC5/app/App.java
create mode 100644 src/test/java/com/TTC5/app/AppTest.java
create mode 100644 target/classes/com/TTC5/app/App.class
create mode 100644 target/firstmavenapp-1.0-SNAPSHOT.jar
create mode 100644 target/maven-archiver/pom.properties
create mode 100644 target/maven-status/maven-compiler-plugin/compile/default-compile/createdFiles.lst
create mode 100644 target/maven-status/maven-compiler-plugin/compile/default-compile/inputFiles.lst
create mode 100644 target/maven-status/maven-compiler-plugin/testCompile/default-testCompile/createdFiles.lst
create mode 100644 target/maven-status/maven-compiler-plugin/testCompile/default-testCompile/inputFiles.lst
create mode 100644 target/surefire-reports/TEST-com.TTC5.app.AppTest.xml
create mode 100644 target/surefire-reports/com.TTC5.app.AppTest.txt
create mode 100644 target/test-classes/com/TTC5/app/AppTest.class
D:\Marwadi University\SEMESTER - 7\DEVOPS ESSENTIALS ( 01CE0717 )\Lab Practical\Practicals\Prac_2\firstmavenapp>git push
Enumerating objects: 44, done.
Counting objects: 100% (44/44), done.
Delta compression using up to 8 threads
Compressing objects: 100% (19/19), done.
Writing objects: 100% (43/43), 7.67 KiB | 1.28 MiB/s, done.
Total 43 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/Nandan1012002/MavenApplication.git
 b769153..a591018  main -> main
```

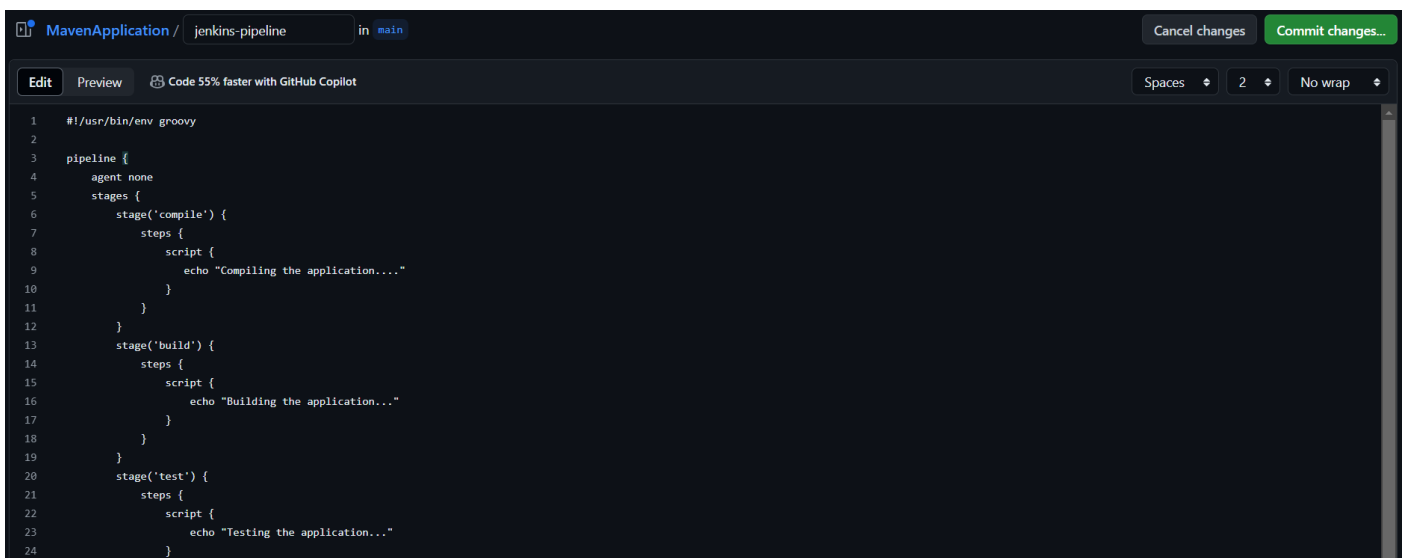
➤ **Pipeline Script**

- Create a new-file in git repository
- Give name "jenkins-pipelin"
- Write the following

```
#!/usr/bin/env groovy

pipeline {
  agent none
  stages {
    stage('compile') {
      steps {
        script {
          echo "Compiling the application...."
        }
      }
    }
    stage('build') {
      steps {
        script {
          echo "Building the application..."
        }
      }
    }
    stage('test') {
      steps {
        script {
          echo "Testing the application..."
        }
      }
    }
  }
}
```

```
stage('deploy') {  
    steps {  
        script {  
            echo "Deploying the application..."  
        }  
    }  
}
```



```
1 #!/usr/bin/env groovy  
2  
3  pipeline {  
4      agent none  
5      stages {  
6          stage('compile') {  
7              steps {  
8                  script {  
9                      echo "Compiling the application...."  
10                 }  
11             }  
12         }  
13         stage('build') {  
14             steps {  
15                 script {  
16                     echo "Building the application..."  
17                 }  
18             }  
19         }  
20         stage('test') {  
21             steps {  
22                 script {  
23                     echo "Testing the application..."  
24                 }  
25             }  
26         }  
27     }  
28 }
```

- Click on **"Commit and Save"**

- Open Jenkins Dashboard
- Click on **"Manage Jenkins"**
 - Select **"Plugins"**
 - Select **"Available Plugins"**
 - Search: **"pipeline:stage view"**
 - Click on **"Install"**
- Click on **"Dashboard"**
- Click on **"New Item"**
- Give Project Name i.e. **"TC5_A_Prac-3"**
- Select **"Pipeline"** job type
- Click on **"OK"**

New Item

Enter an item name

TC5_A_Prac-3

Select an item type



Freestyle project

Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.



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

OK

➤ Give few words description "First Pipeline Job"

General

Enabled



Description

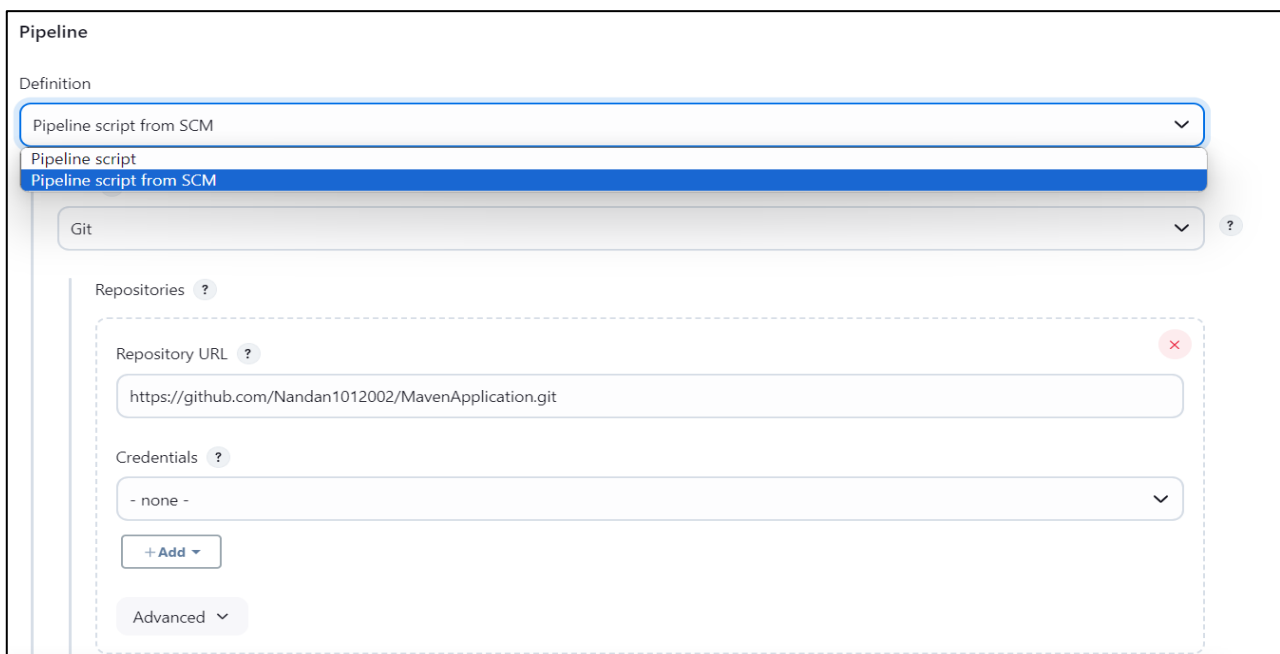
"First Pipeline Job"

Plain text [Preview](#)

- ☐ Discard old builds ?
- ☐ Do not allow concurrent builds
- ☐ Do not allow the pipeline to resume if the controller restarts
- ☐ GitHub project
- ☐ Pipeline speed/durability override ?
- ☐ Preserve stashes from completed builds ?

➤ Go to "Pipeline"

- There are two option (i) Pipeline Script (ii) Pipeline script from SCM
- Select option two (ii) Pipeline script from SCM
- SCM -> Git -> Paste your Git repository link in "**Repository URL**" field
 - Credentials->None //because in your git repository is public; no need of username-password
- **Branches to Build**
 - */main //check your branch name in your git repository and then write
- **Script Path**
 - "jenkins-pipeline" //which we have created in our git repository; give the same name



The screenshot shows the 'Pipeline' configuration page in Jenkins. Under the 'Definition' section, 'Pipeline script from SCM' is selected. Below this, 'Git' is chosen as the SCM. The 'Repositories' section is expanded, showing a 'Repository URL' field with the value 'https://github.com/Nandan1012002/MavenApplication.git'. The 'Credentials' dropdown is set to '- none -'. There are buttons for '+ Add' and 'Advanced'.



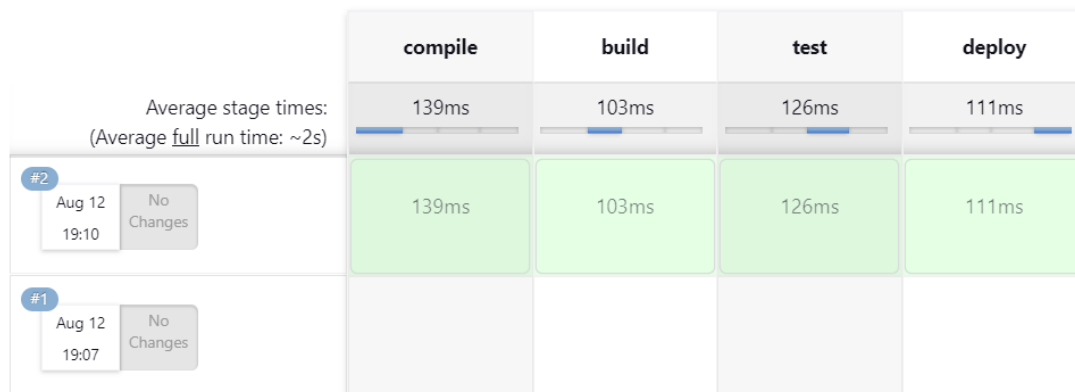
The screenshot shows the 'Branches to build' section of the Jenkins Pipeline configuration. The 'Branch Specifier (blank for 'any')' field contains '*/main'. There is an 'Add Branch' button. The 'Repository browser' dropdown is set to '(Auto)'. Under 'Additional Behaviours', there is an 'Add' button. The 'Script Path' field contains 'jenkins-pipeline'. At the bottom, the 'Lightweight checkout' checkbox is checked.

- Click on **"Apply"** and then click on **"Save"**
- Click on **"Build Now"**

TC5_A_Prac-3

"First Pipeline Job"

Stage View



✓ Console Output

[Download](#)[Copy](#)[View as plain text](#)

```
Started by user Nandan Bhimani
Obtained jenkins-pipeline from git https://github.com/Nandan1012002/MavenApplication.git
[Pipeline] Start of Pipeline
[Pipeline] stage
[Pipeline] { (compile)
[Pipeline] script
[Pipeline] {
[Pipeline] echo
Compiling the application...
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (build)
[Pipeline] script
[Pipeline] {
[Pipeline] echo
Building the application...
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (test)
[Pipeline] script
[Pipeline] {
[Pipeline] echo
Testing the application...
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (deploy)
[Pipeline] script
[Pipeline] {
[Pipeline] echo
Deploying the application...
[Pipeline] }
[Pipeline] // script
[Pipeline] }
[Pipeline] // stage
[Pipeline] End of Pipeline
Finished: SUCCESS
```