Experiment 6

Job Chaining in Jenkins

Objective : To Understand and Practice job chaining in Jenkins.

Steps :

1. Create a Maven Project DO-JOB-1

2. Create another Pipeline DO-JOB-2

-> In the Build triggers section Check "Build after other Projects are Build" and Enter DO-JOB-1.

-> Previous Job is now showing as Upstream Project in the new Job

3. Test the chain by building the first pipeline.

4. Create two more pipelines DO-JOB-3 DO-JOB-4 , creating a longer and branched chain.

    (a) Add DO-JOB-2 as Upstream in DO-JOB-3

Upstream Projects

    ⊘ DO-JOB-2

Downstream Projects

    ⊙ DO-JOB-4

Permalinks

    (b) Add DO-JOB-2 and DO-JOB-3 in DO-JOB-4

Upstream Projects

    ⊘ DO-JOB-2
    ⊙ DO-JOB-3

Permalinks

5. Test the complete pipeline chain by running DO-JOB-1

S	W	Name ↓	Last Success	Last Failure	Last Duration	
⊘	☀	DO-JOB-1	1 min 41 sec #3	N/A	10 sec	▷
⊘	☀	DO-JOB-2	1 min 23 sec #2	N/A	10 sec	▷
⊘	☀	DO-JOB-3	58 sec #1	N/A	12 sec	▷
⊘	☀	DO-JOB-4	38 sec #2	N/A	9.8 sec	▷

6. Checking Logs

    (a) DO-JOB-1 triggered DO-JOB-2 once it suceeded.

```
[JENKINS] Archiving /var/lib/jenkins/workspace/DO-JOB-1/target/calc-1.0-SNAPSHOT.jar to
com.example/calc/1.0-SNAPSHOT/calc-1.0-SNAPSHOT.jar
channel stopped
Triggering a new build of DO-JOB-2
Finished: SUCCESS
```

    (b) Similarly, DO-JOB-2 triggers DO-JOB3 and then DO-JOB4 respectively.

```
com.example/calc/1.0-SNAPSHOT/calc-1.0-SNAPSHOT.jar
channel stopped
Triggering a new build of DO-JOB-4
Triggering a new build of DO-JOB-3
Finished: SUCCESS
```

(c) DO-JOB-3 logs

```
[JENKINS] Archiving /var/lib/jenkins/workspace/DO-JOB-3/target/calc-1.0-SNAPSHOT.jar to
com.example/calc/1.0-SNAPSHOT/calc-1.0-SNAPSHOT.jar
channel stopped
Triggering a new build of DO-JOB-4
Finished: SUCCESS
```

(d) DO-JOB-4 logs

```
1.0-SNAPSHOT.pom
[JENKINS] Archiving /var/lib/jenkins/workspace/DO-JOB-4/target/calc-1.0-SNAPSHOT.jar to
com.example/calc/1.0-SNAPSHOT/calc-1.0-SNAPSHOT.jar
channel stopped
Finished: SUCCESS
```