

PROJECT-1

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Project: Deploying a application into different environments

Pipeline Script:

```
pipeline{
  agent any
  parameters{
    choice(
      choices:['YES','NO'],
      description:'deploy to tomcat?',
      name:'DEPLOY'
    )
  }
  stages{
    stage('clone'){
      steps{
        git branch: 'DEV', url: 'https://github.com/Thiru799/raviLogin.git'
      }
    }
    stage('validate'){
      steps{
        sh'mvn validate'
      }
    }
    stage('compile'){
      steps{
        sh'mvn compile'
      }
    }
    stage('test'){
      steps{
        sh'mvn test'
      }
    }
    stage('package'){
      steps{
        sh'mvn package'
```

```

    }
  }
  stage('deploy to dev'){
    when{
      expression{
        params.DEPLOY == 'YES'
      }
    }
    steps{
      input "do you want to deploy to dev Env"
      deploy adapters: [tomcat9(credentialsId: 'tomcat', path: '', url: 'http://54.234.21.44:8080')],
contextPath: null, war: '**/*.war'
    }
  }
  stage('deploy to test'){
    when{
      expression{
        params.DEPLOY == 'YES'
      }
    }
    steps{
      input "do you want to deploy to test Env"
      deploy adapters: [tomcat9(credentialsId: 'tomcat', path: '', url: 'http://3.89.247.149:8080/')],
contextPath: null, war: '**/*.war'
    }
  }
  stage('deploy to prod'){
    when{
      expression{
        params.DEPLOY == 'YES'
      }
    }
    steps{
      input "do you want to deploy to prod Env"
      deploy adapters: [tomcat9(credentialsId: 'tomcat', path: '', url: 'http://3.81.235.144:8080')],
contextPath: null, war: '**/*.war'
    }
  }
  stage('deploy to pre-prod'){
    when{
      expression{
        params.DEPLOY == 'YES'
      }
    }
    steps{
      input "do you want to deploy to pre-prod Env"
      deploy adapters: [tomcat9(credentialsId: 'tomcat', path: '', url: 'http://54.196.244.249:8080')],
contextPath: null, war: '**/*.war'
    }
  }
}
}
}

```

->First we creat tomcat instance

Successfully started i-07dadd5d462cae545

Instances (1/7) Info

Find Instance by attribute or tag (case-sensitive)

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input checked="" type="checkbox"/>	tomcat1	i-07dadd5d462cae545	Running	t2.micro	-	No alarms	us-east-1a
<input type="checkbox"/>	jenkins1	i-0f6968b063f89db30	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a
<input type="checkbox"/>	tomcat2	i-0eb959a51f47b141c	Stopped	t2.micro	-	No alarms	us-east-1a
<input type="checkbox"/>	tomcat3	i-04ffb095c3a99f04c	Stopped	t2.micro	-	No alarms	us-east-1a
<input type="checkbox"/>	tomcat4	i-091962453bf740f98	Stopped	t2.micro	-	No alarms	us-east-1a

Instance: i-07dadd5d462cae545 (tomcat1)

Details | Security | Networking | Storage | Status checks | Monitoring | Tags

Instance summary Info

-> We want creat AMI by using existing tomcat to creat 3 more tomcat servers

Instances (4) Info

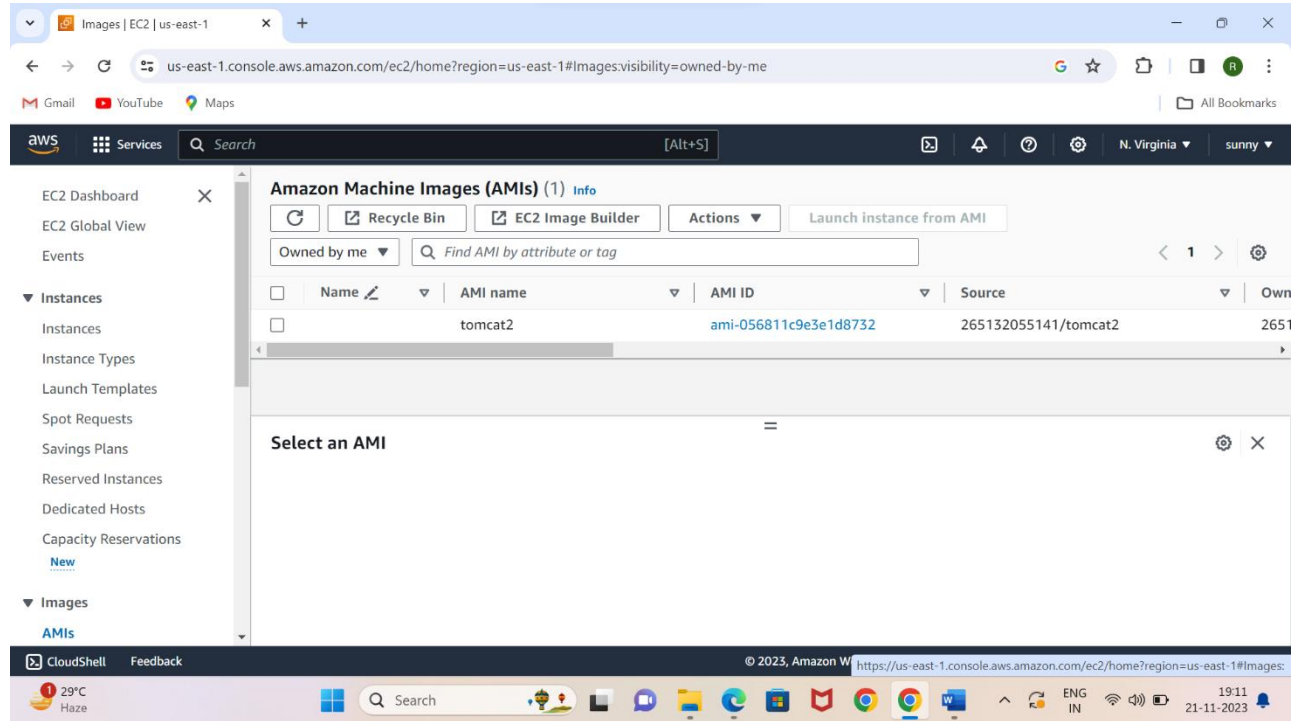
Find Instance by attribute or tag (case-sensitive)

Instance state = running Clear filters

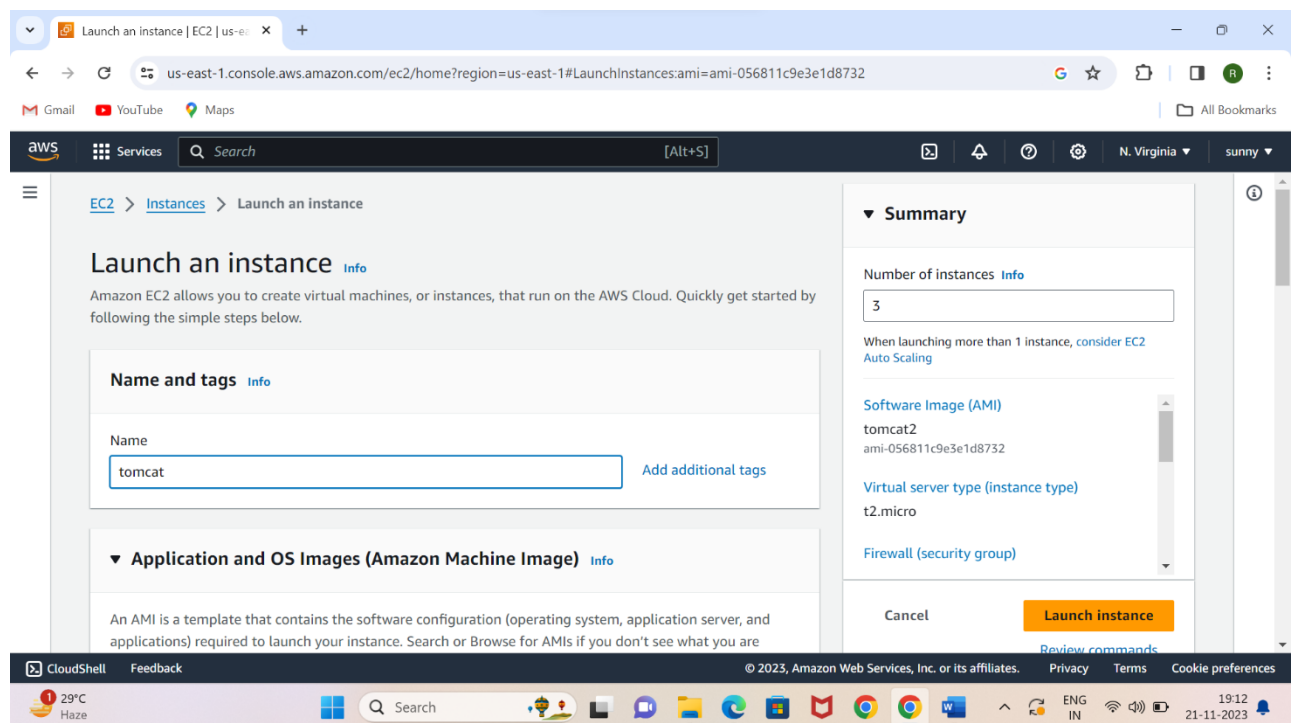
	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input type="checkbox"/>	tomcat1	i-07dadd5d462cae545	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a
<input type="checkbox"/>	tomcat2	i-0eb959a51f47b141c	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a
<input type="checkbox"/>	tomcat3	i-04ffb095c3a99f04c	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a
<input type="checkbox"/>	tomcat4	i-091962453bf740f98	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a

Select an instance

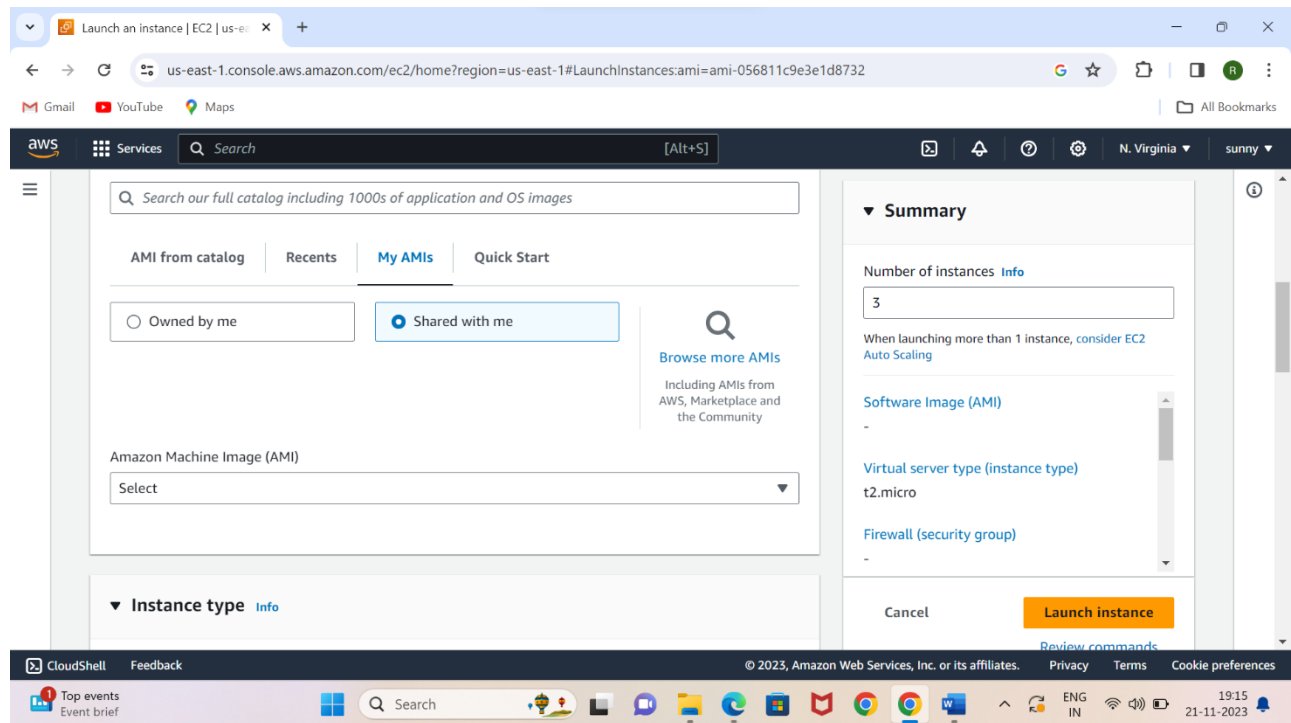
-> Then AMI will created in Images



-> Then select AMI and click on launch instance from AMI

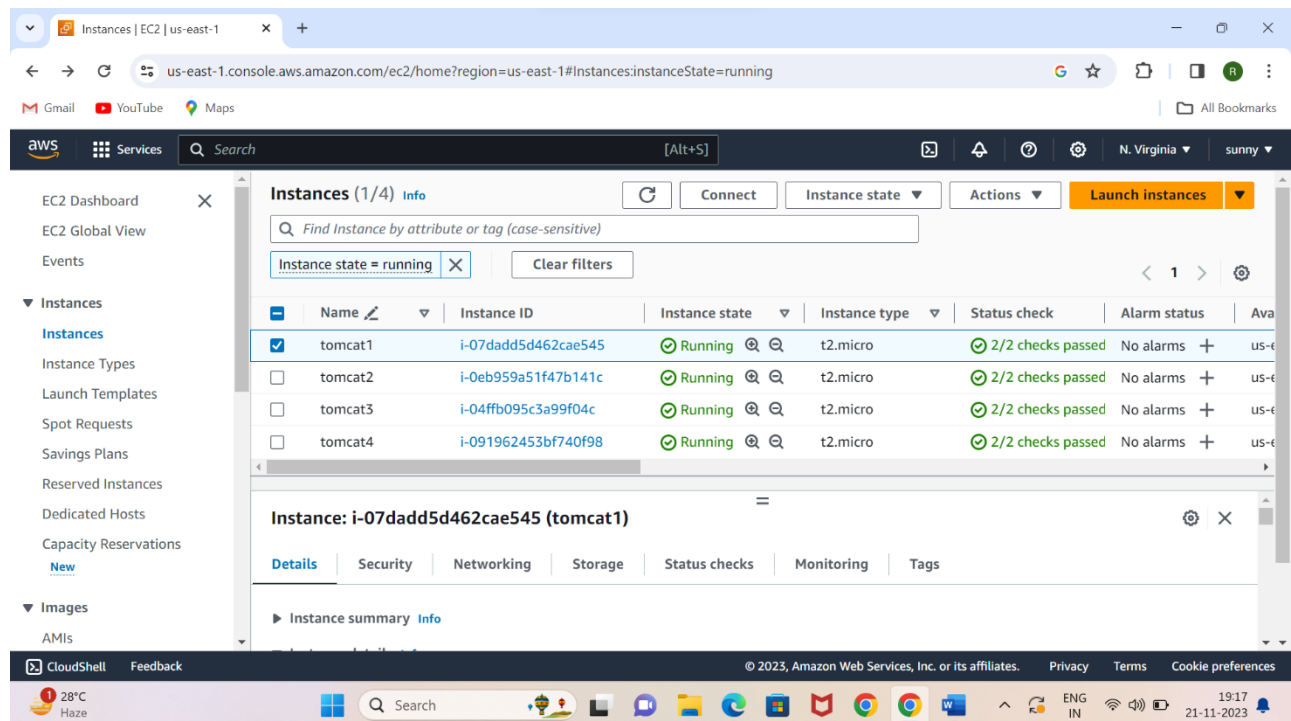


-> We want give name and right side we want give number of Instances want to be created




-> At down we want select MY AMIS and click on Shared with me and select the AMI then launch instance

-> Then the tomcat instances created



-> Now open Jenkins



Sign in to Jenkins

Username

Password

☐ Keep me signed in

Sign in

-> Create the new Pipeline

Instance details | EC2 | us-east-1 | EC2 Instance Connect | us-east-1 | New Item [Jenkins]

Not secure 174.129.173.22:8080/view/all/newJob

Gmail YouTube Maps All Bookmarks


Jenkins Search (CTRL+K) Thirapathi Rao log out


Dashboard > All >


Enter an item name

project

» 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.

 **Configuration project**
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific

28°C Haze 19:19 21-11-2023

We want to write the script in pipeline

The screenshot shows a web browser window with the URL `34.235.88.163:8080/job/project1/configure`. The page is titled "Configure" and has a sidebar with options: "General", "Advanced Project Options", and "Pipeline". The "Pipeline" option is selected. The main content area displays a YAML script for a Jenkins pipeline:

```
1 pipeline{
2   agent any
3   parameters{
4     choice(
5       choices:['YES','NO'],
6       description:'deploy to tomcat?',
7       name:'DEPLOY'
8     )
9   }
10  stages{
11    stage('clone'){
12      steps{
13        git branch: 'DEV', url: 'https://github.com/Thiru799/raviLogin.git'
14      }
15    }
16    stage('validate'){
17      steps{
18        sh'mvn validate'
19      }
20    }
21    stage('compile'){
22      steps{
23        sh'mvn compile'
24      }
25    }
26    stage('test'){
27      steps{
28        sh'mvn test'
29      }
30    }
31  }
32 }
```

Below the script, there are "Save" and "Apply" buttons. The Windows taskbar at the bottom shows the date and time as 13:19 on 19-11-2023.

Browser tabs: (2) WhatsApp, Daggubati Harsha, New Tab, Instance details | E, EC2 Instance Conn, project1 Config [J].

Address bar: Not secure 34.235.88.163:8080/job/project1/configure

Navigation: Dashboard > project1 > Configuration

Configure

- General
- Advanced Project Options
- Pipeline

```
20 stage('test') {
21   steps {
22     sh 'mvn test'
23   }
24 }
25
26 stage('package') {
27   steps {
28     sh 'mvn package'
29   }
30 }
31
32 stage('deploy to dev') {
33   when {
34     expression {
35       params.DEPLOY == 'YES'
36     }
37   }
38   steps {
39     input 'do you want to deploy to dev Env'
40     deploy adapters: [tomcat9(credentialsId: 'tomcat', path: '', url: 'http://54.234.21.44:8080')],
41   }
42 }
43
44 stage('deploy to test') {
45   when {
46     expression {
47       params.DEPLOY == 'YES'
48     }
49   }
50   steps {
51     // ...
52   }
53 }
```

Buttons: Save, Apply

System tray: 29°C Haze, Search, Windows icons, 13:20 19-11-2023

Browser tabs: (2) WhatsApp, Daggubati Harsha, New Tab, Instance details | E, EC2 Instance Conn, project1 Config [J].

Address bar: Not secure 34.235.88.163:8080/job/project1/configure

Navigation: Dashboard > project1 > Configuration

Configure

- General
- Advanced Project Options
- Pipeline

```
50 // ...
51 }
52
53 stage('deploy to test Env') {
54   when {
55     expression {
56       params.DEPLOY == 'YES'
57     }
58   }
59   steps {
60     input 'do you want to deploy to test Env'
61     deploy adapters: [tomcat9(credentialsId: 'tomcat', path: '', url: 'http://3.89.247.149:8080')],
62   }
63 }
64
65 stage('deploy to prod') {
66   when {
67     expression {
68       params.DEPLOY == 'YES'
69     }
70   }
71   steps {
72     input 'do you want to deploy to prod Env'
73     deploy adapters: [tomcat9(credentialsId: 'tomcat', path: '', url: 'http://3.81.235.144:8080')],
74   }
75 }
76
77 stage('deploy to pre-prod') {
78   when {
79     expression {
80       params.DEPLOY == 'YES'
81     }
82   }
83   steps {
84     input 'do you want to deploy to pre-prod Env'
85   }
86 }
```

Buttons: Save, Apply

System tray: 29°C Haze, Search, Windows icons, 13:22 19-11-2023

Browser tabs: (2) WhatsApp, Daggubati Harsha, New Tab, Instance details | E, EC2 Instance Conn, project1 Config [J].

Address bar: Not secure 34.235.88.163:8080/job/project1/configure

Navigation: Dashboard > project1 > Configuration

Configure

- General
- Advanced Project Options
- Pipeline

```
61      params.DEPLOY == 'YES'
62    }
63  }
64  steps{
65    input "do you want to deploy to prod Env"
66    deploy adapters: [tomcat9(credentialsId: 'tomcat', path: '', url: 'http://3.81.235.144:8080')], con
67  }
68  }
69  stage('deploy to pre-prod'){
70    when{
71      expression{
72        params.DEPLOY == 'YES'
73      }
74    }
75    steps{
76      input "do you want to deploy to pre-prod Env"
77      deploy adapters: [tomcat9(credentialsId: 'tomcat', path: '', url: 'http://54.196.244.249:8080')], c
78    }
79  }
80  }
81  }
```

☒ Use Groovy Sandbox ?

[Pipeline Syntax](#)

Save Apply

Taskbar: 29°C Haze, Search, Task View, File Explorer, Edge, VS Code, Docker Desktop, Jenkins, WSL, ENG IN, 13:22 19-11-2023.

->After writing script we want apply and save it and Build with parameters

Browser tabs: Instance details | EC2 | us-east-, EC2 Instance Connect | us-east-, Jenkins.

Address bar: Not secure 174.129.173.22:8080/job/project1/build?delay=0sec

Navigation: Dashboard > project1 >

Pipeline project1

This build requires parameters:

DEPLOY
deploy to tomcat?

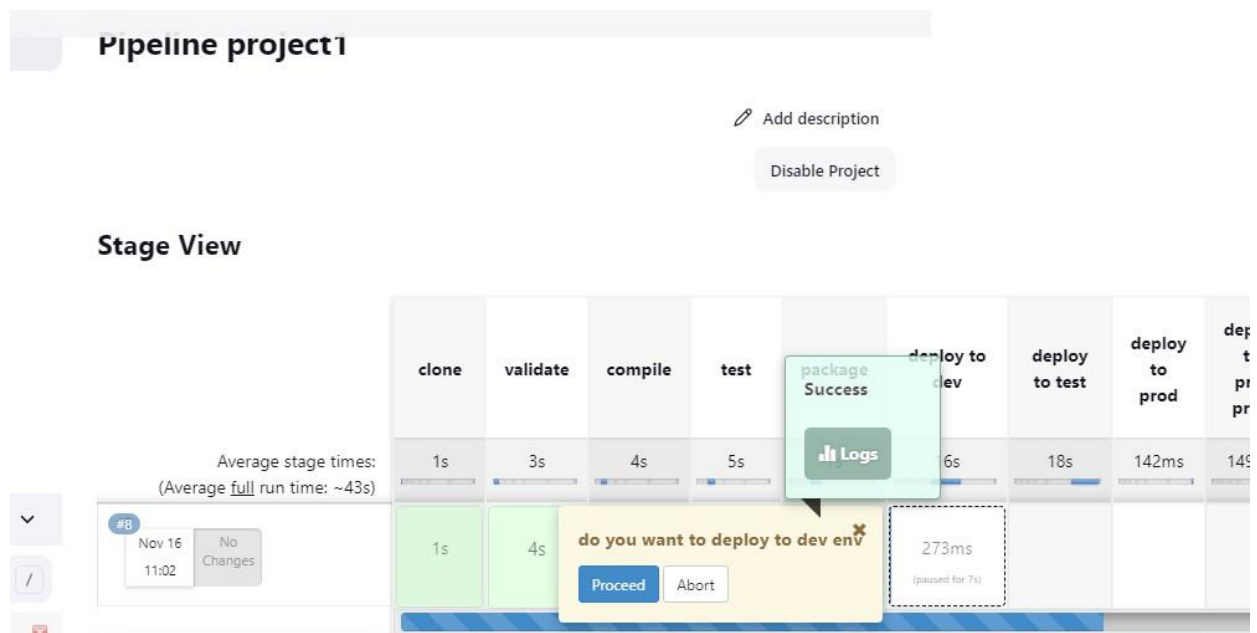
YES

Build Cancel

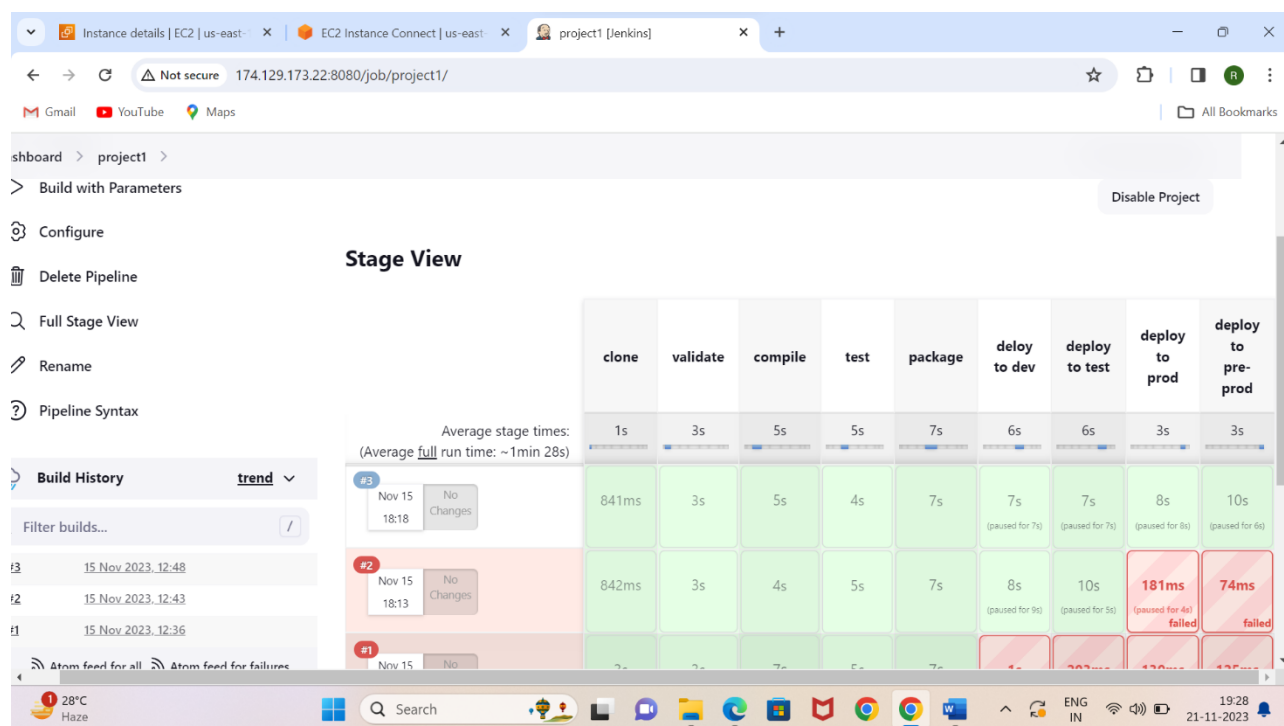
Build History [trend](#)

Taskbar: 28°C Haze, Search, Task View, File Explorer, Edge, VS Code, Docker Desktop, Jenkins, WSL, ENG IN, 19:26 21-11-2023.

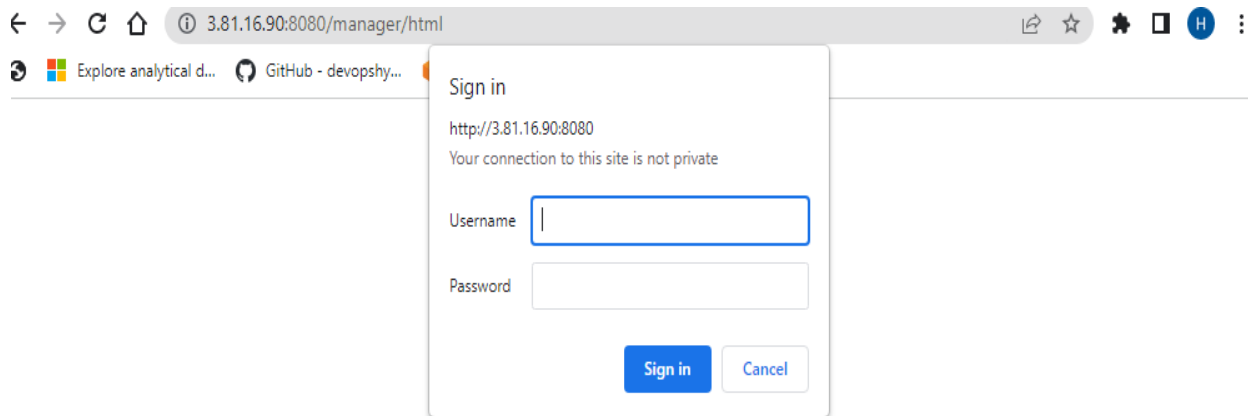
-> It will ask the permission for deploying to tomcat Proceed or Abort



->After that deployment will be successfully



->First opening the tomcat we want give the id and password



OUTPUTS

->deploy to Dev OUTPUT

Manager						
List Applications		HTML Manager Help		Manager Help		Server Status
Applications						
Path	Version	Display Name	Running	Sessions	Commands	
/	None specified	Welcome to Tomcat	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>	
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes	
/docs	None specified	Tomcat Documentation	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>	
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes	
/examples	None specified	Servlet and JSP Examples	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>	
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes	
/host-manager	None specified	Tomcat Host Manager Application	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>	
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes	
/manager	None specified	Tomcat Manager Application	true	2	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>	
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes	
/raviLogin-2.0	None specified	Account Registration Web Application	true	1	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>	
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes	
/taxi-booking-1.0.1	None specified	Webapp	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>	
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes	

->Deploy to the test

Applications					
Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/docs	None specified	Tomcat Documentation	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/examples	None specified	Servlet and JSP Examples	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/host-manager	None specified	Tomcat Host Manager Application	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/manager	None specified	Tomcat Manager Application	true	2	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/traviLogin-2.0	None specified	Account Registration Web Application	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/taxi-booking-1.0.1	None specified	Webapp	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>

->Deploy to prod

Message: OK

Manager			
List Applications	HTML Manager Help	Manager Help	Server Status

Applications					
Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/docs	None specified	Tomcat Documentation	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/examples	None specified	Servlet and JSP Examples	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/host-manager	None specified	Tomcat Host Manager Application	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/manager	None specified	Tomcat Manager Application	true	2	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/traviLogin-2.0	None specified	Account Registration Web Application	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>
/taxi-booking-1.0.1	None specified	Webapp	true	0	<div>Start Stop Reload Undeploy</div> <div>Expire sessions with idle ≥ 30 minutes</div>

->Deploy to pre-prod

Manager					
List Applications		HTML Manager Help		Manager Help	Server Status
Applications					
Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes
/docs	None specified	Tomcat Documentation	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes
/examples	None specified	Servlet and JSP Examples	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes
/host-manager	None specified	Tomcat Host Manager Application	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes
/manager	None specified	Tomcat Manager Application	true	2	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes
/traviLogin-2.0	None specified	Account Registration Web Application	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes
/taxi-booking-1.0.1	None specified	Webapp	true	0	Start <input type="button" value="Stop"/> <input type="button" value="Reload"/> <input type="button" value="Undeploy"/>
					<input type="button" value="Expire sessions"/> with idle ≥ <input type="text" value="30"/> minutes