**Jenkins Installation**

Step1: Go to URL

<https://www.jenkins.io/download/>

Step2: Download the file Generic Java Package(.war)

Step3: Create a folder name it as Jenkins and place that file in that file   
Step4: Install JDK 11 or 17 Version Only

Step5: Open CMD on the Jenkins folder then write command

Java –jar Jenkins.war

Step6: Copy the password shown in the command prompt

Step7: Go to browser then enter url

localhost:8080

Step8: Create username and password for Jenkins

Step 9: Click on manage Jenkins

Step 10: Click on manage plugin

Step 11: Click on available plugin

Step 12: Search for allure plugin and add allure plugin

Step13: Then click on global tool configuration

Step14: Then add allure command line version 2.13.9 and name as “allurecmdline”

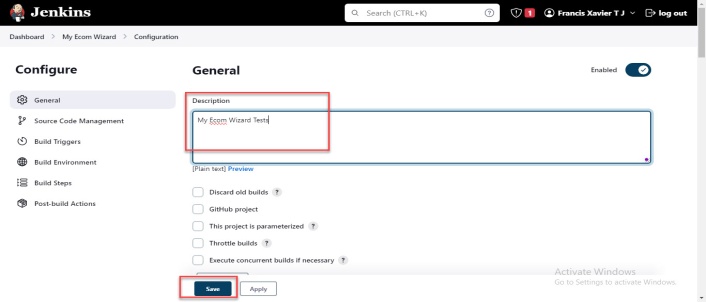
Step15 : Add maven version 3.8.5 and name as “maven385”

Step16: Click on new item

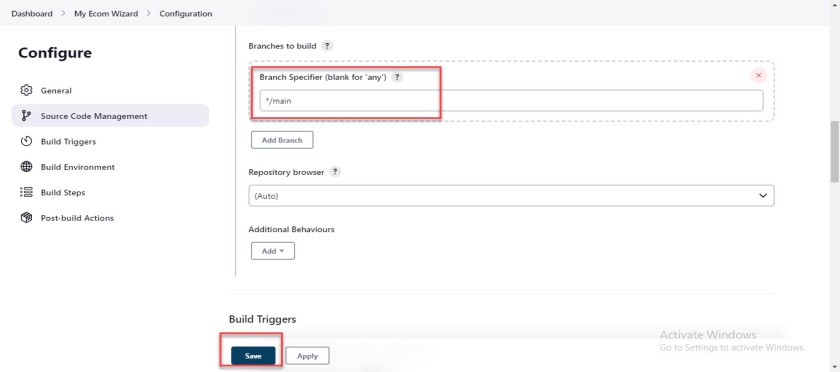
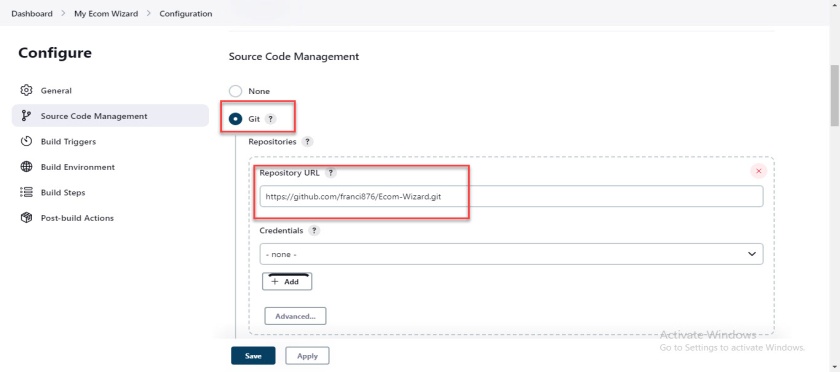
Step17: Then enter item name   
Step18: Then select free style project then click ok

Step19: Then click on project name then click on configure

Step20: Then add a description

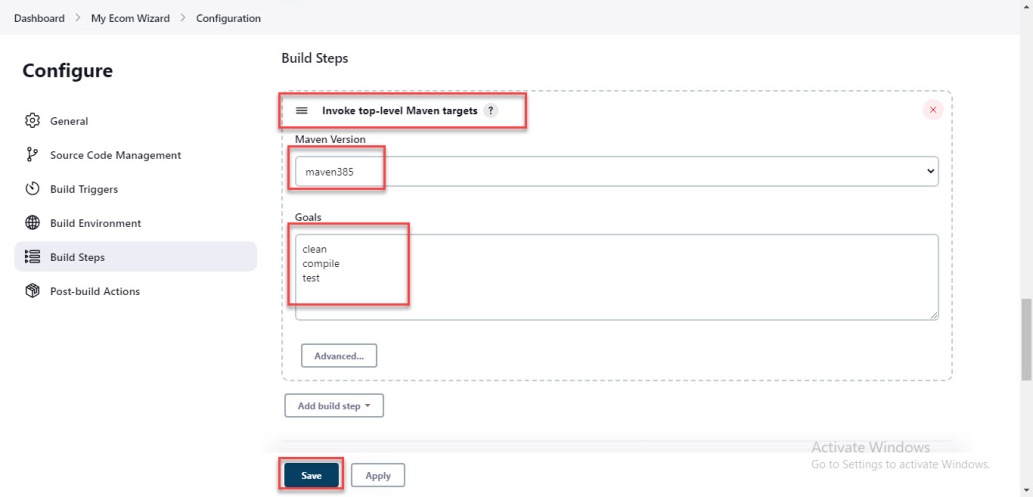


Step21: Add git repository url and branch as main (branch name as in git)



Eg: /\*main

Step 22: Select build steps as “**Invoke top-level Maven targets “**



Step23: Select maven version eg: maven385

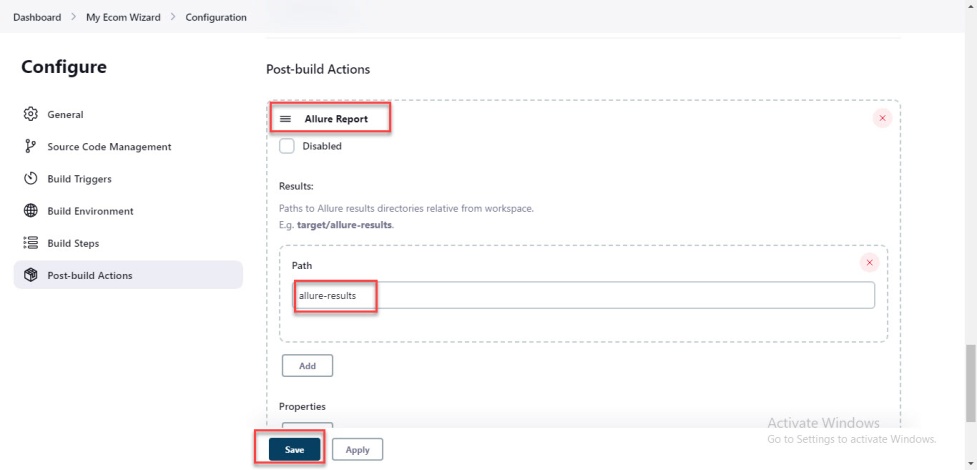
Step24: Enter goals as

“ clean

compile

test ”

Step25: Select allure from Post-build Actions

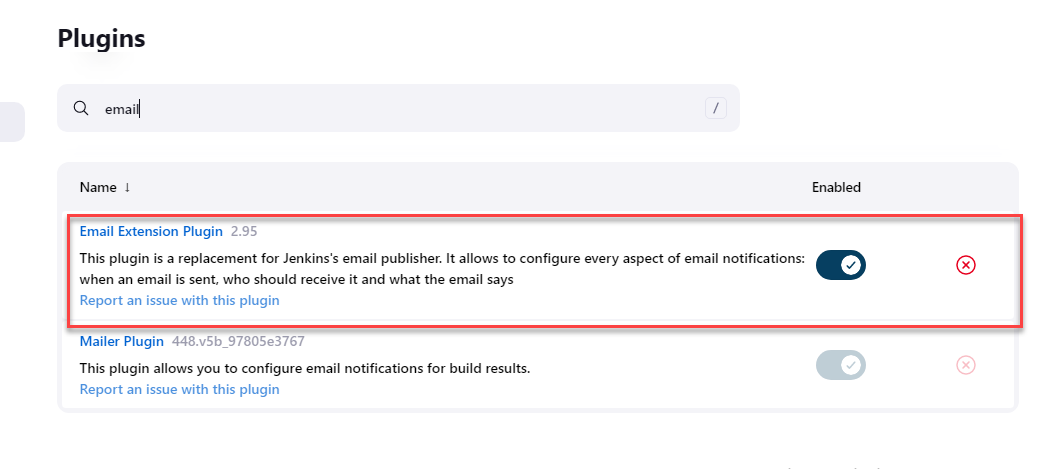


Step 26: Click on save

Step27: Create TestNg.xml file from project (eclipse)

Step 27: Click on project name and add click on build now for run project

Email Configuration

Step 1: Login to Jenkins website  
Step 2: Click on Manage Jenkins  
Step 3: Go to Manage Plug-ins  
Step 4: Click on available plug-ins then search for “Email Extension Plug-in”

Step 5: After that select that plug-in and click on “**install without restart**” button.

Step 6: Go to dashboard manage Jenkins and click on configure system.

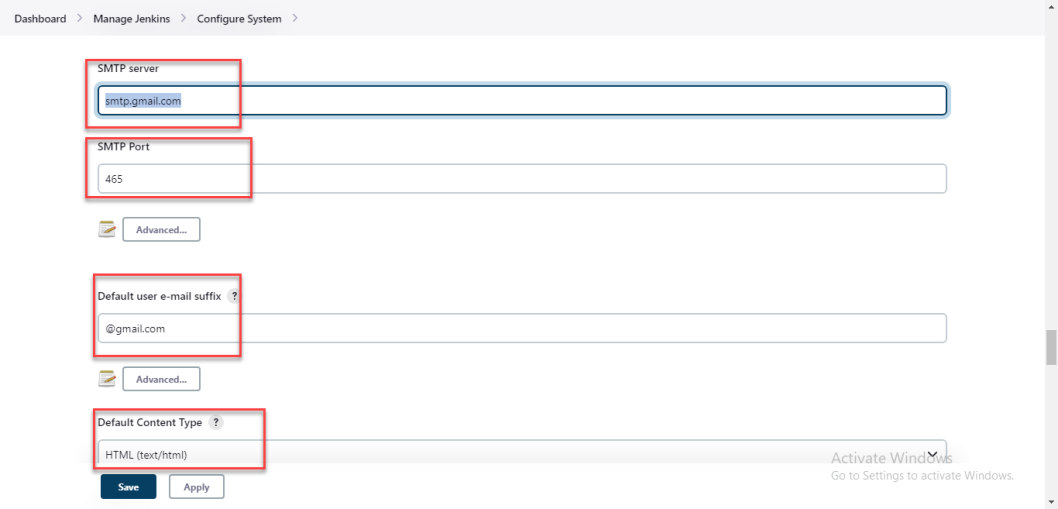
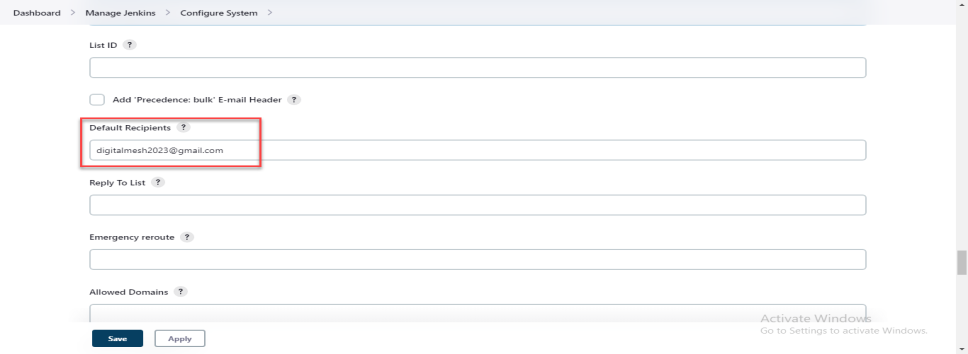
Step 7: Scroll down to **“Extended E-mail Notification”** section

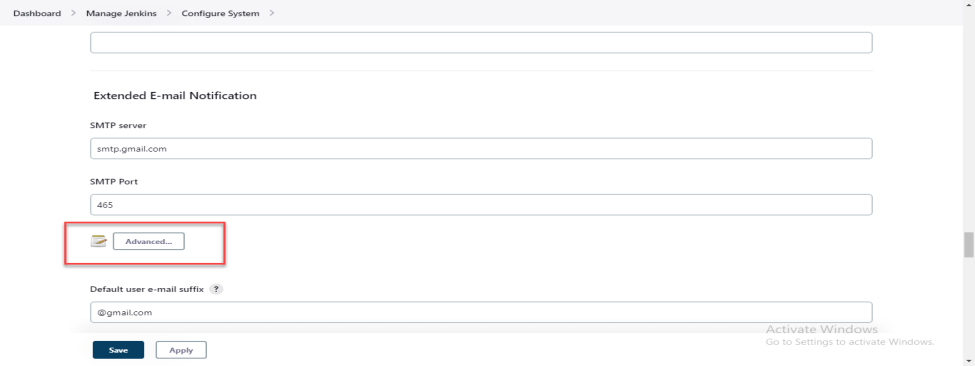
Step 8: Add “smtp.gmail.com” to SMTP Server

Step 9: Add SMTP Port number “465”

Step 10: Add default user e-mail suffix “@gmail.com”

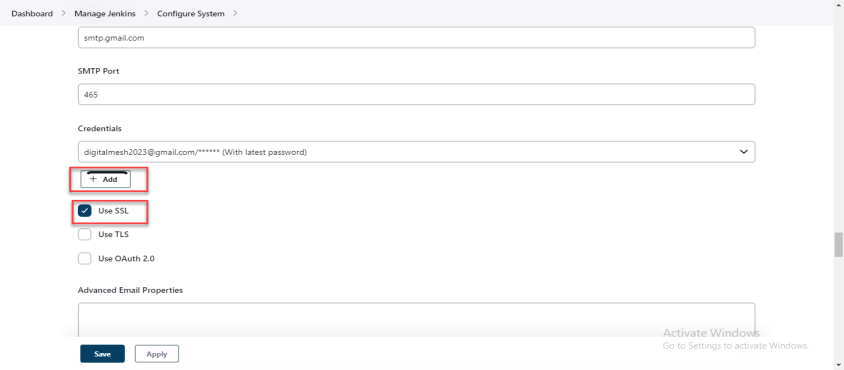
Step 11: Add default content type to “HTML (text/html)”

Step 12: Add recipients email address to default recipients S  
  
  
Step 13: Click on the Advanced Button

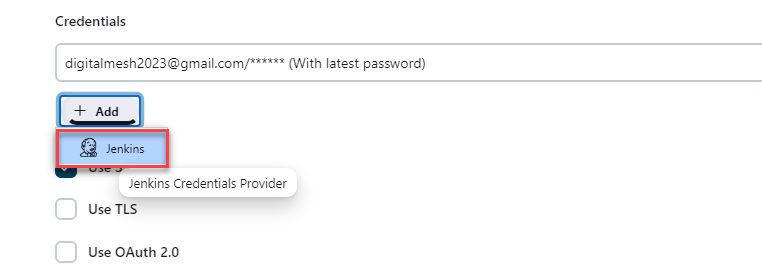


Step 14: Select the checkbox “Use SSL”

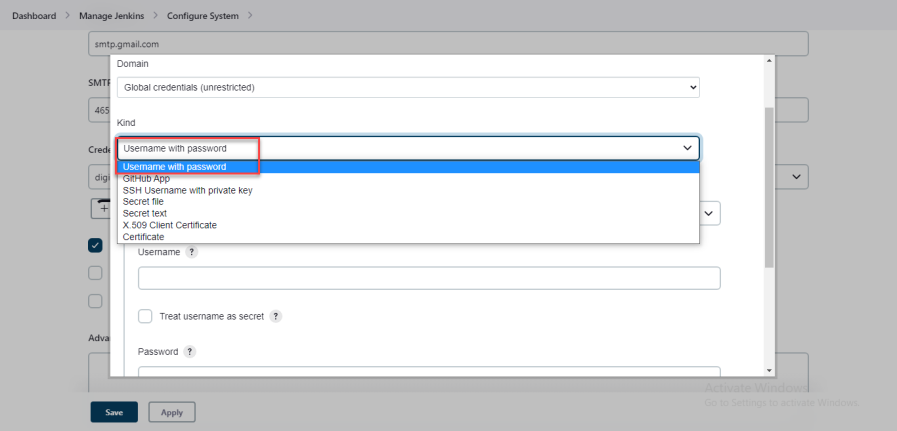
Step 15: Then Click on “+Add” button



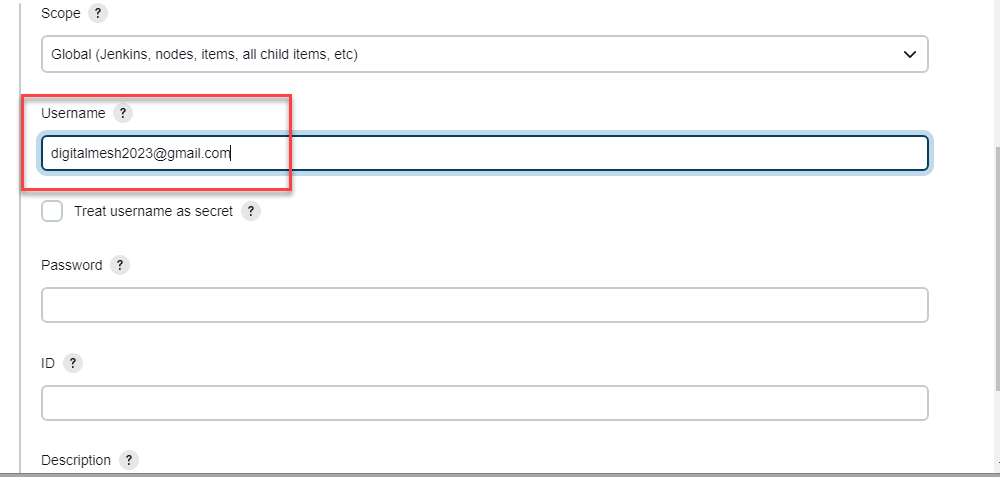
Step 16: Click on Jenkins button after clicking on add button to add credentials



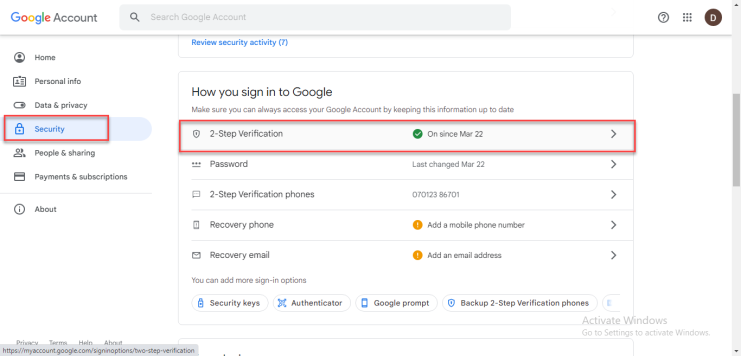
Step 17: Select “User Name and Password” option from Kind Checkbox

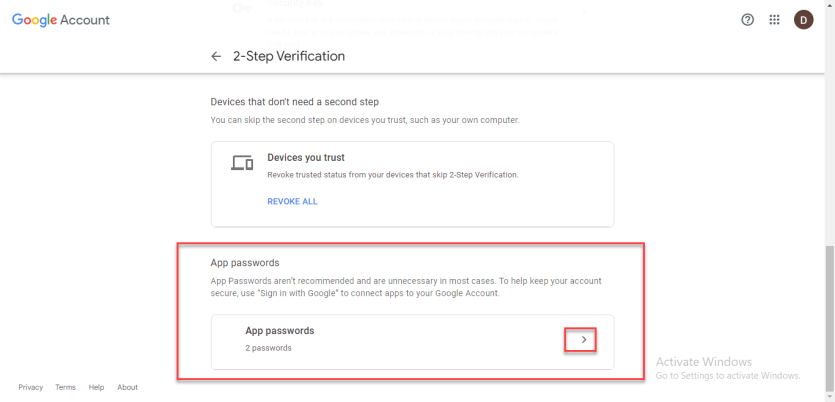


Step 18: Then Enter User Name for example : digitalmesh2023@gmail.com

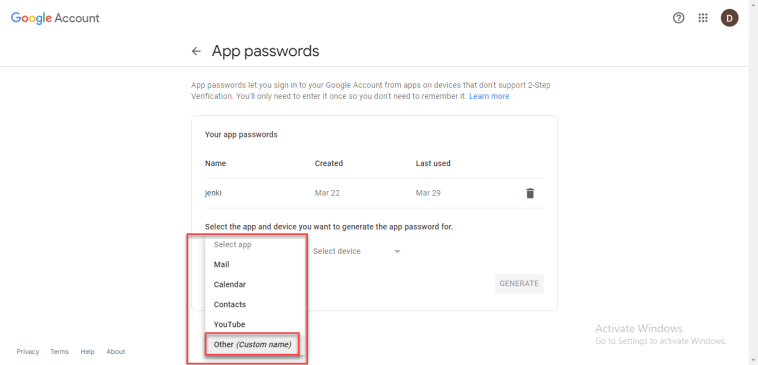


Step 19: Password Creation – For that first go to g-mail account then click on account settings then go to security after that go to two step verification.

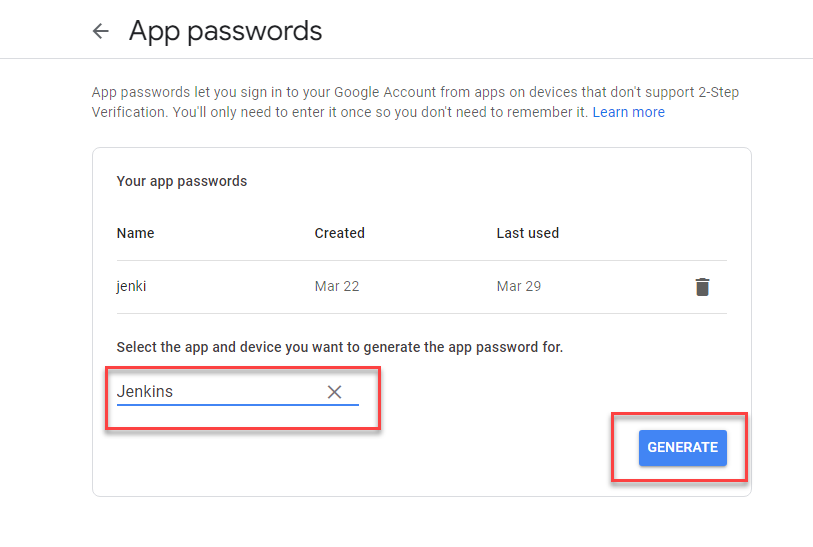


Step 20: Scroll down and click on “App Passwords” settings then click on next button at app passwords settings.  


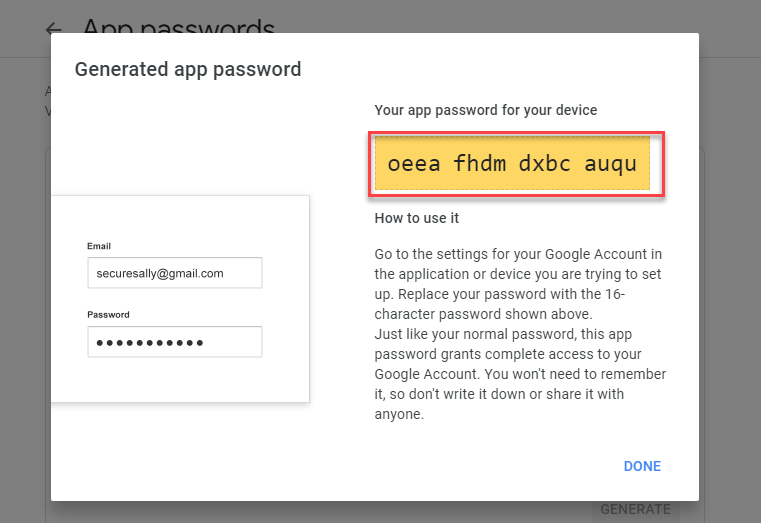
Step 21: Then click on select app and click on “other (custom name)”



Step 22: After that enter custom name and click on “generate” button

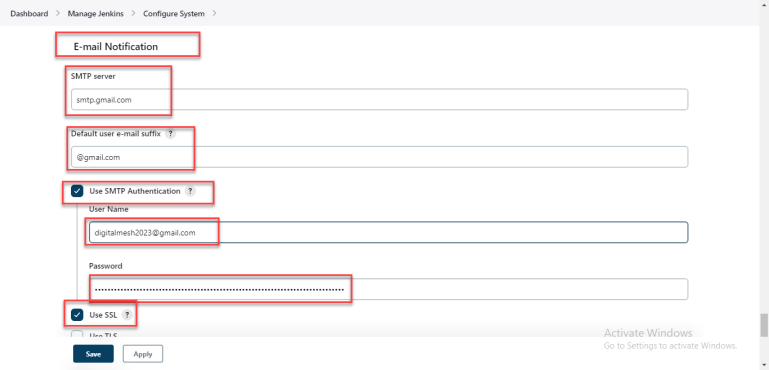


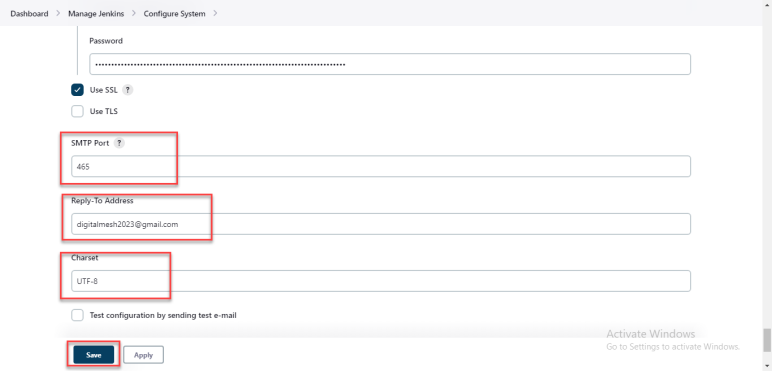
Step 23: After that copy the password shown and use this password for email in Jenkins. Then click on add button.





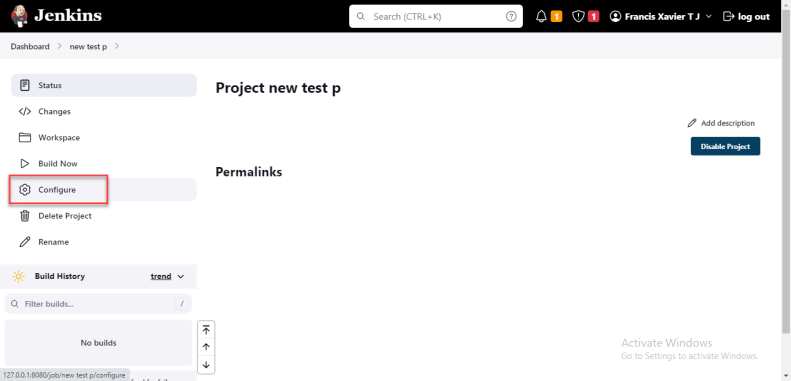
Step 22: Then scroll down to “E-mail Notification” then enter these details   
1. SMTP server: smtp.gmail.com  
2. Default user email suffix:@gmail.com  
3. Select checkbox “User SMTP Authentication”  
4. Enter User Name eg: digitalmesh2023@gmail.com  
5. Enter Password: \*\*\*\*\*\*\* (same password used in step 23)  
6. Select Checkbox “Use SSL”  
7. Enter value “465” to field SMTP Port  
8. Enter email id to field “Reply-To Address”  
9. Set Charset field to “UTF-8”



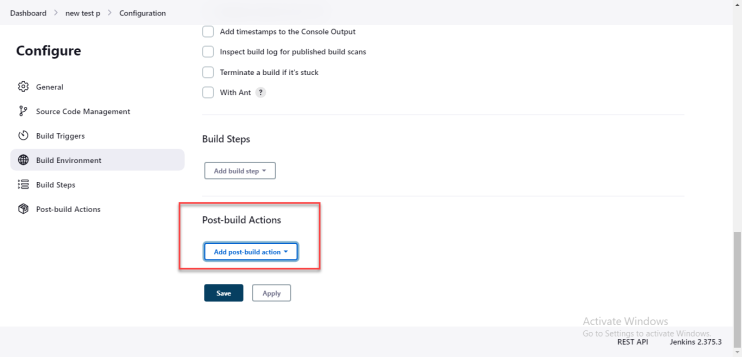


Step 23: Click on save button

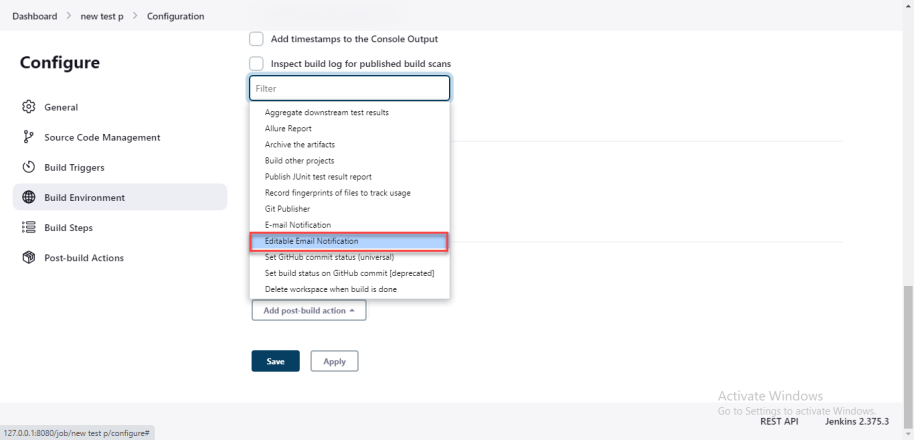
Step 24: Then go to dashboard after that click on project name and click on configure button



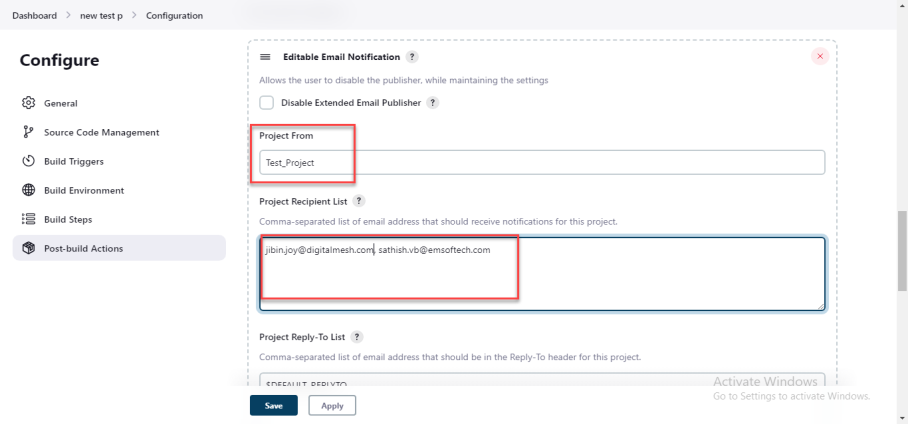
Step 25: Go to post build actions and click on add post-build action



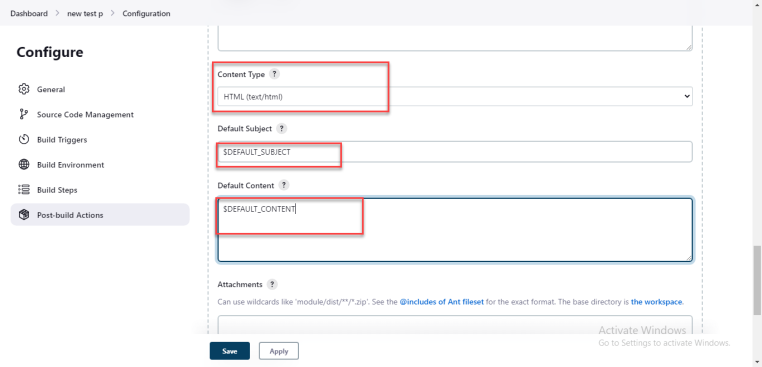
Step 26: From the list shown select “Editable Email Notification”



Step 27: After that enter a name (without space) at field “Project From”  
Step 28: Then add email id of recipients at “Project Recipient List” field.



Step 29: Select content type “HTML (text/html)” then if you want to change subject and content then it is possible to change.



Example for content used in my project:

<html>

<body>

<B>Dear James,

<p>

$PROJECT\_NAME - Test Automation Report For Build # $BUILD\_NUMBER - $BUILD\_STATUS: </B>

<p>

Please click on the below button to see allure results

<p>

<b>Allure Report URL :</b> http://127.0.0.1:8080/job/BTL\_Demo/$BUILD\_NUMBER/allure/#behaviors

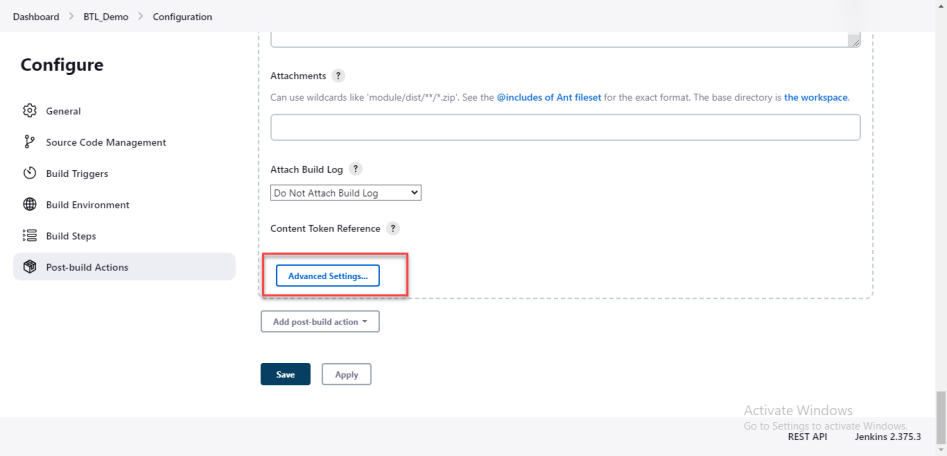
<p>

Check console output at $BUILD\_URL

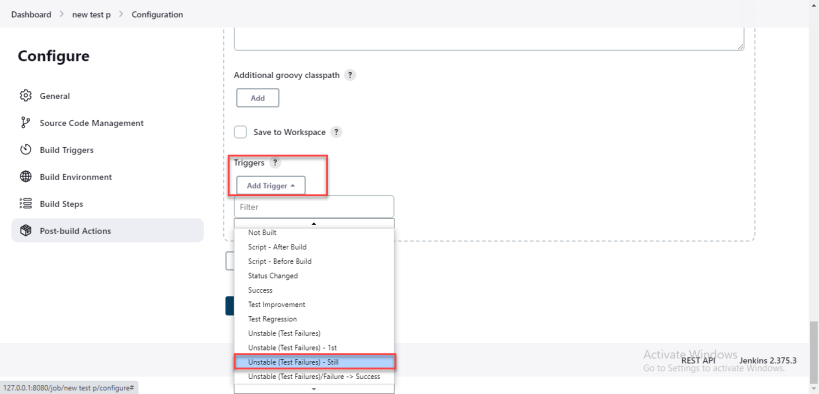
</body>

</html>

Step 30: Click on advanced settings

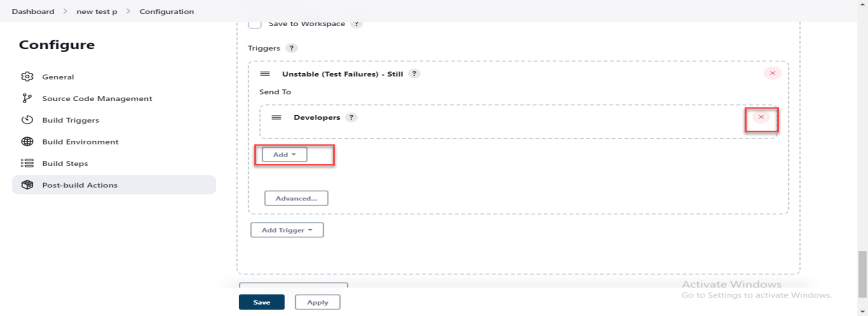


Step 31: Click on Add Trigger then select the trigger you want to send mail

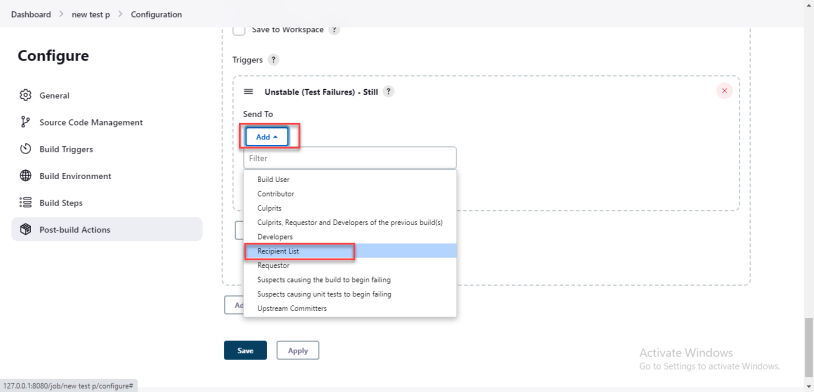


In this screen shot, Trigger selected is Unstable (Test Failure-Still) when a test fails this trigger and sends mail to mail id given ad recipient list.

Step 32: After selecting trigger from list then click on delete button to remove developers



Step 33: Then click on Add button then select “Recipient list” from the list shown.



Step 33: After that click on save button.

Now Jenkins setup is completed and possible to run code from Git, possible to show Allure reports and possible to send email notification.