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INFT - A

Hands on Activity on Setting up a Continuous Integration Pipeline in Jenkins

Problem:

Automate the build and testing process for a Java application using Jenkins, Maven, and GitHub.

Set up Github webhooks to trigger a build automatically in Jenkins.

1. Create a New Job:

- 1. Go to Jenkins dashboard and click on **New Item**.
- 2. Choose **Freestyle project** and give it a name (e.g., GitHub-Maven-Build).
- 2. Configure GitHub Repository:
 - 1. Under Source Code Management, select Git.
 - 2. In the **Repository URL** field, enter your GitHub repository URL (e.g., https://github.com/your-user/your-repo.git).
 - 3. Under **Credentials**, select the GitHub credentials you created earlier.

3. Configure Build Triggers:

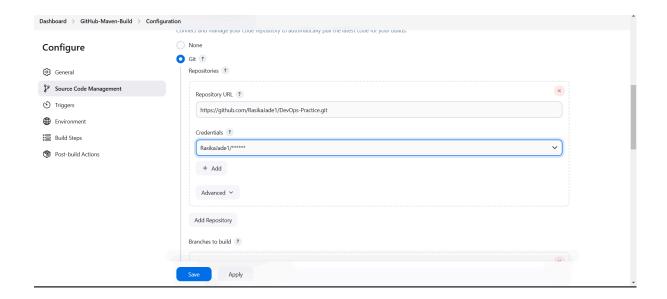
1. Under **Build Triggers**, select **GitHub hook trigger for GITScm polling**. This will allow Jenkins to trigger the build when a commit is pushed to GitHub.

4. Configure Build with Maven:

- 1. Under Build, select Invoke top-level Maven targets.
- 2. In the **Goals** field, enter the Maven goals you want to execute, e.g., clean install or clean test.
- 3. Ensure that Maven is correctly configured in Jenkins under **Manage Jenkins** > **Global Tool Configuration**.

5. **Post-build Actions** (Optional):

- 1. If you want Jenkins to send notifications, add post-build actions such as **Email Notification** or **Slack Notification**.
- 6. Save the Job.



Triggers

Set up automated actions that start your build based on specific events, like code changes or scheduled times

Trigger builds remotely (e.g., from scripts) ?

Build after other projects are built ?

Build periodically ?

GitHub hook trigger for GITScm polling ?

Environment

Poll SCM ?

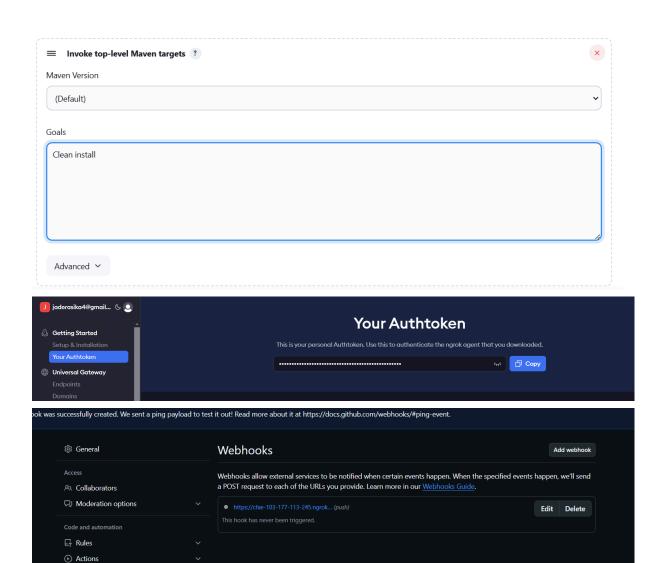
Configure settings and variables that define the context in which your build runs, like credentials, paths, and g

Delete workspace before build starts

Use secret text(s) or file(s) ?

Add timestamps to the Console Output

Inspect huild log for published huild scans



& Webhooks