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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.**

Dashboard > GitHub-Maven-Build > Configuration

Configure

General

Source Code Management

Triggers

Environment

Build Steps

Post-build Actions

None

Git

Repositories

Repository URL

https://github.com/RasikaJade1/DevOps-Practice.git

Credentials

RasikaJade1/*****

+ Add

Advanced

Add Repository

Branches to build

Save

Apply

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
- ☐ Poll SCM

Environment

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

- ☐ Delete workspace before build starts
- ☐ Use secret text(s) or file(s)
- ☐ Add timestamps to the Console Output
- ☐ Inspect build log for published build scans

☰ Invoke top-level Maven targets ?

×

Maven Version

(Default) ▾

Goals

Clean install

Advanced ▾

j jaderasika4@gmail... 🌙 👤

Getting Started

- Setup & Installation
- Your Authtoken

Universal Gateway

- Endpoints
- Domains

Your Authtoken

This is your personal Authtoken. Use this to authenticate the ngrok agent that you downloaded.

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Copy

ook was successfully created. We sent a ping payload to test it out! Read more about it at <https://docs.github.com/webhooks/#ping-event>.

⚙️ General

Access

👤 Collaborators

🗨️ Moderation options ▾

Code and automation

📄 Rules ▾

🕒 Actions ▾

🔔 Webhooks

Webhooks

Add webhook

Webhooks allow external services to be notified when certain events happen. When the specified events happen, we'll send a POST request to each of the URLs you provide. Learn more in our [Webhooks Guide](#).

• <https://cfae-103-177-113-245.ngrok...> (push)

Edit Delete

This hook has never been triggered.