

## **Jenkins CI Setup Report**

For this assignment, Jenkins was installed locally on a Windows machine and exposed to the internet using ngrok to allow webhook integration from GitHub. The NodeJS plugin was configured through Jenkins' global tools with version 23 set as the active runtime. A new Jenkins pipeline job was created and configured to use a Jenkinsfile from a GitHub repository, with the branch set to main.

The pipeline was designed with three clearly defined stages: Clone, Install, and Test. Each push to the GitHub repository automatically triggers the pipeline using a GitHub webhook. The pipeline clones the repository, installs dependencies using `npm install`, and runs tests using `npm run check`. Test results are displayed in the Jenkins console output, and the pipeline is marked as successful or failed depending on the results. This setup ensures a fully functioning CI workflow tailored for a Node.js application.