Multibranch Pipeline with a Webhook on Jenkins

Sometimes it may be necessary to create a pipeline on Jenkins for each Git branch. In this case it could be difficult to create independent pipeline for each branch. Besides that what if we create or delete a branch in future? So someone has to take care of the pipelines on Jenkins whenever there is change in branches. that's where Multibranch pipeline comes into picture.

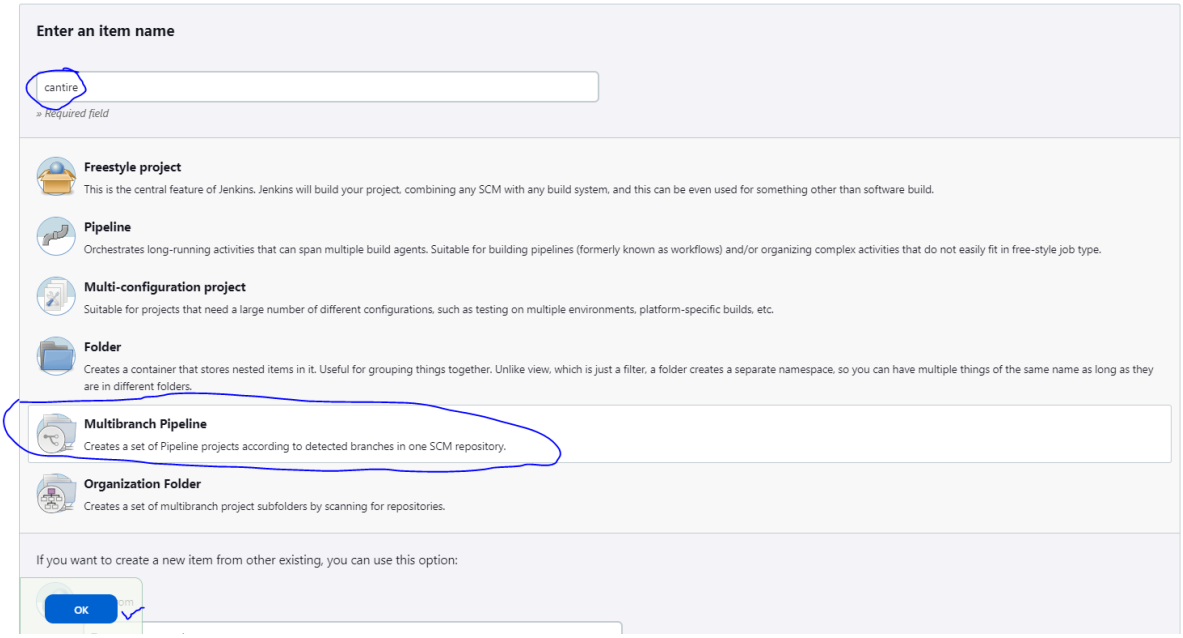
Through Multibranch pipeline we can create a pipeline for each branch in a repository and it also create or remove when there is a change in the branches.

Pre-Requisites:

1. Expected a Jenkins server is already up and running
2. A Git repository with more than one branch

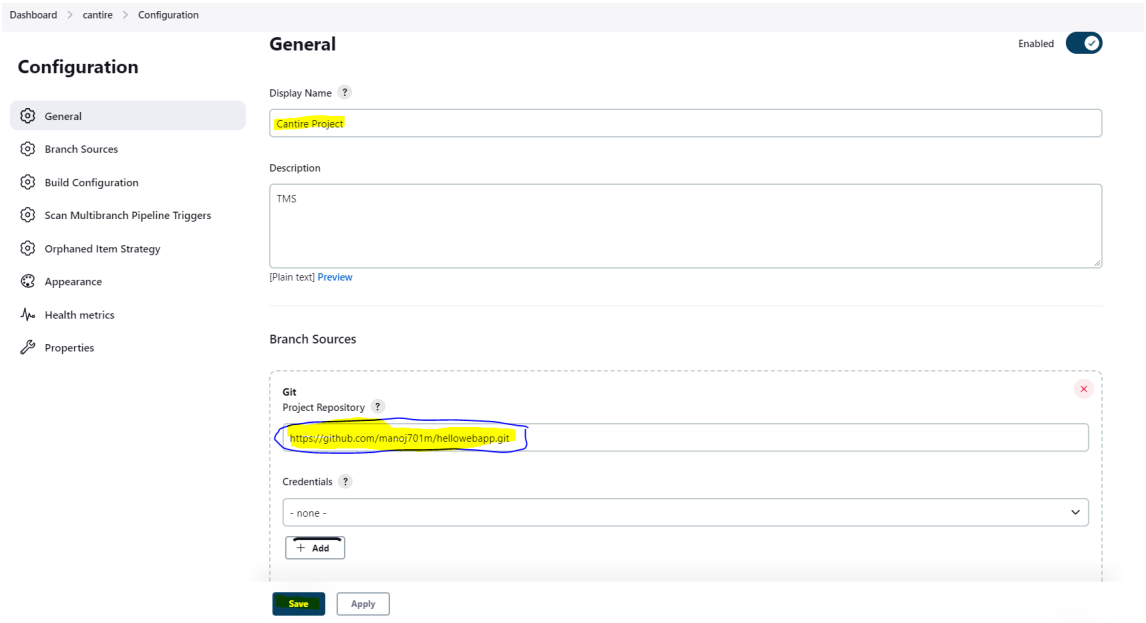
Create a Multibranch Pipeline

1. Login to Jenkins GUI
2. Click on “New Item” → Specify a job name → Select “Multibranch Pipeline option”

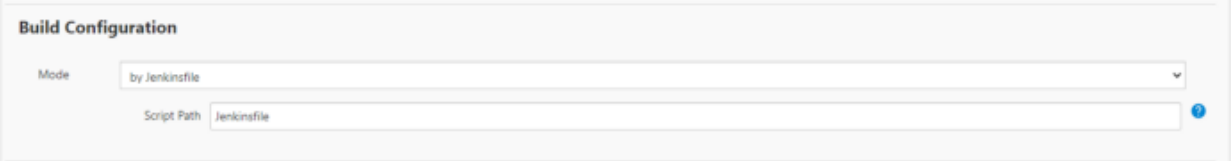


3. Give Display Name and Description

4. Under Branch Sources → Add source → Chose Git → and provide GitHub URL and Credentials (Credentials are optional if it is public repo)

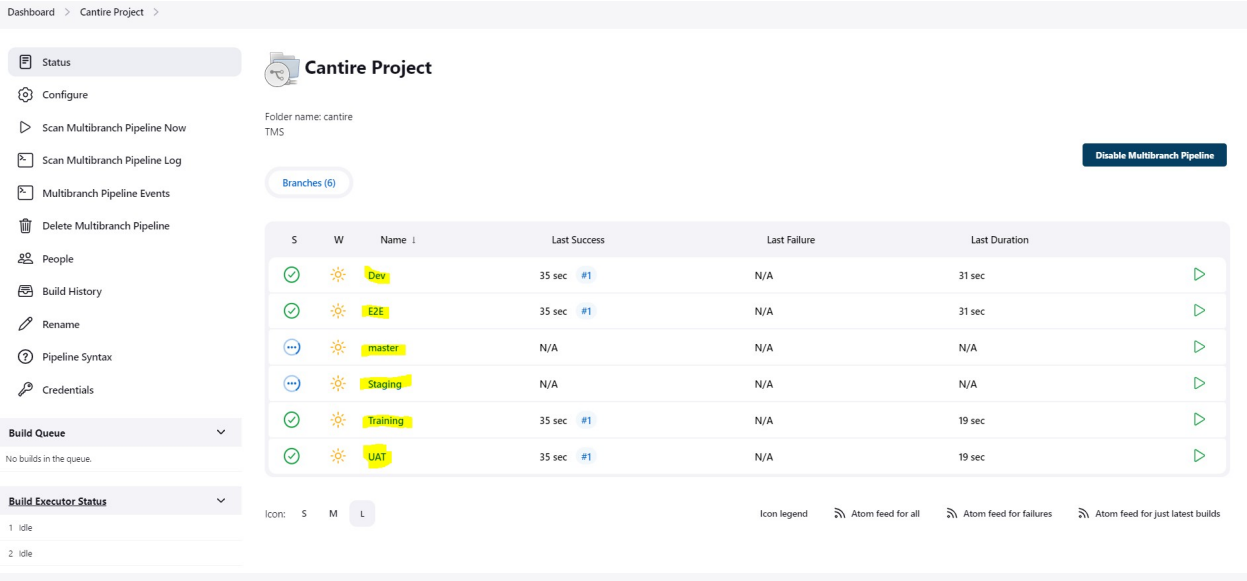


5. Under Build Configuration → chose Jenkinsfile path. Most of the case it will be under Repo root directory.



6. Apply and Save the job

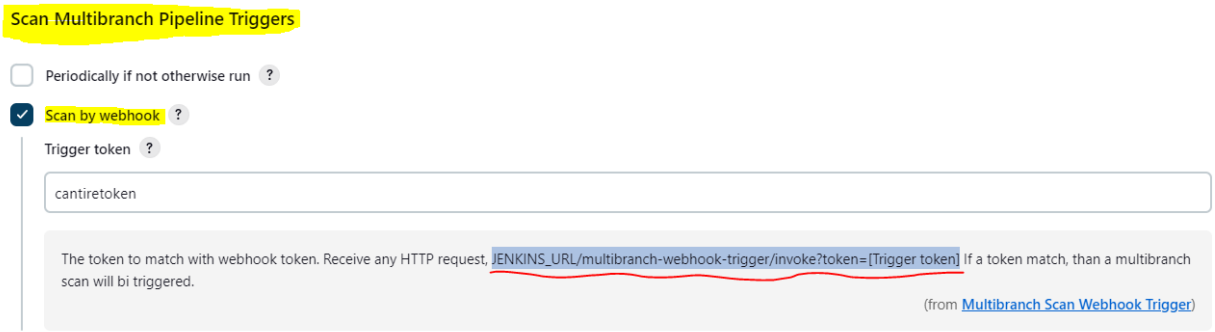
Now Jenkins automatically scans the repository and create a job for each branch wherever it finds a Jenkinsfile and initiate first build.



Using Webhook

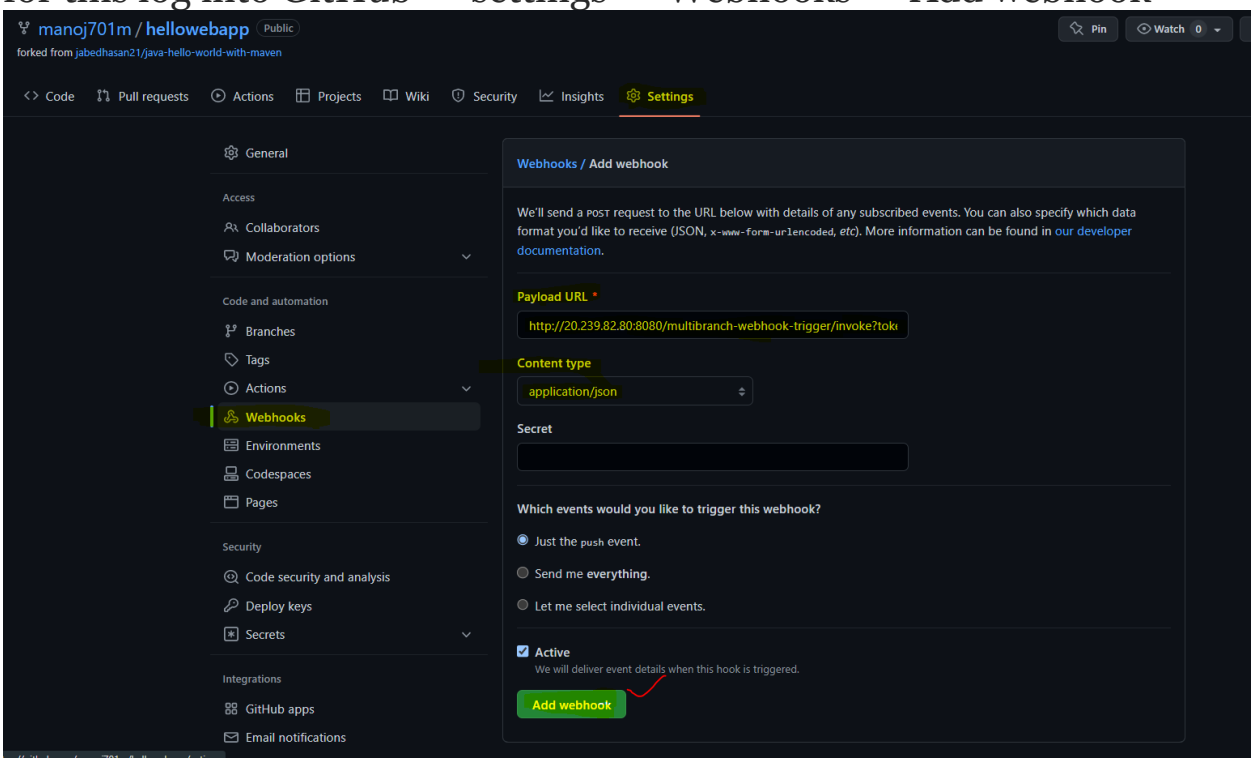
If you wish to automate the build process in the multibranch pipeline we can use Webhook. This feature is not enabled until we install “Multibranch Scan Webhook Trigger” plugin. This enables an

option “scan by webhook” under “Scan Multibranch Pipeline Triggers”. Here we should give a token.



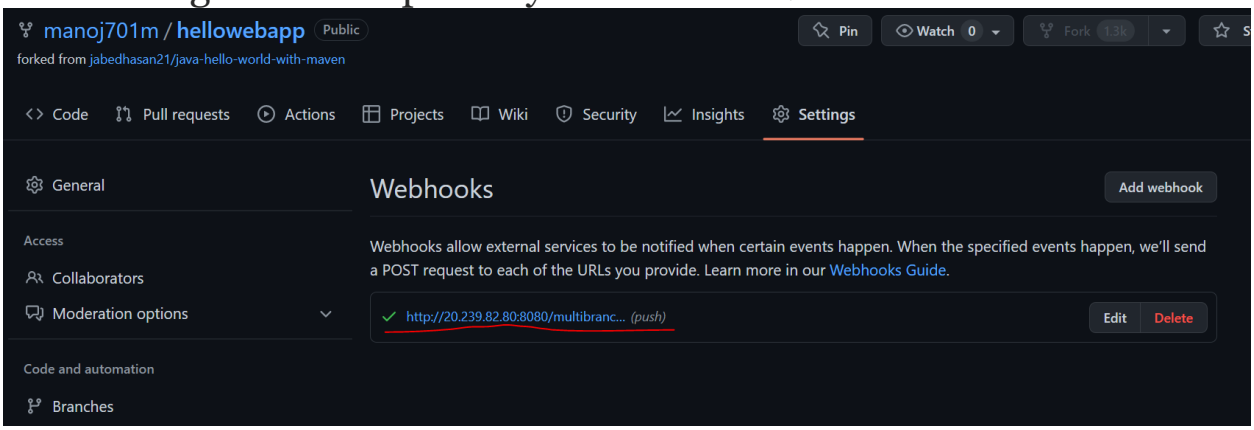
Now to enable auto build process we should provide Jenkins URL with token in the GitHub. http://20.239.82.80:8080/multibranch-webhook-trigger/invoke?token=cantiretoken

for this log into GitHub → settings → Webhooks → Add webhook

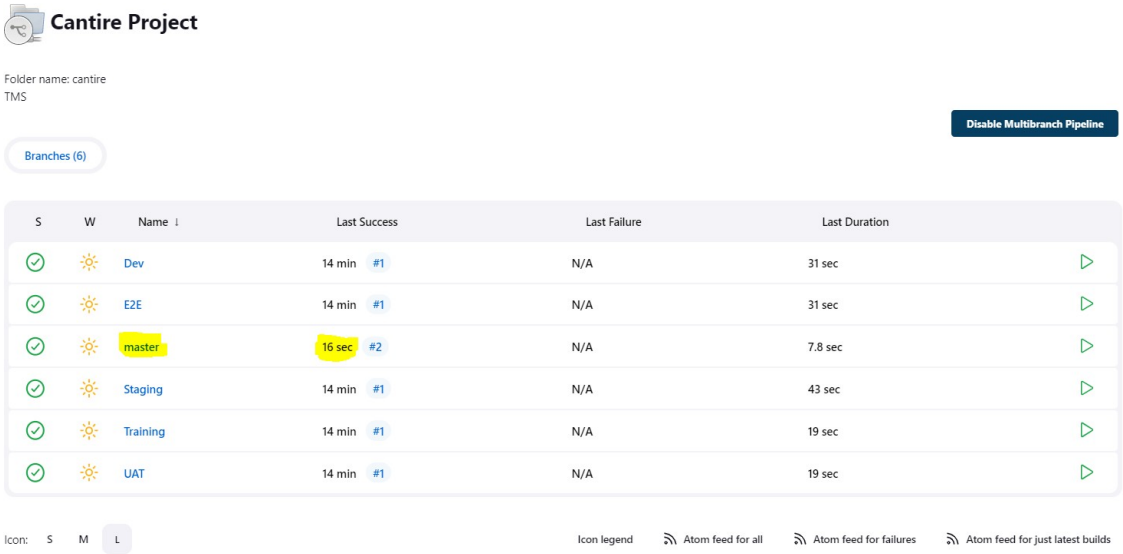


Provide Payload URL as “**http://20.239.82.80:8080/multibranch-webhook-trigger/invoke?token=cantiretoken**” and Content type as “**application/json**” and click on Add webhook

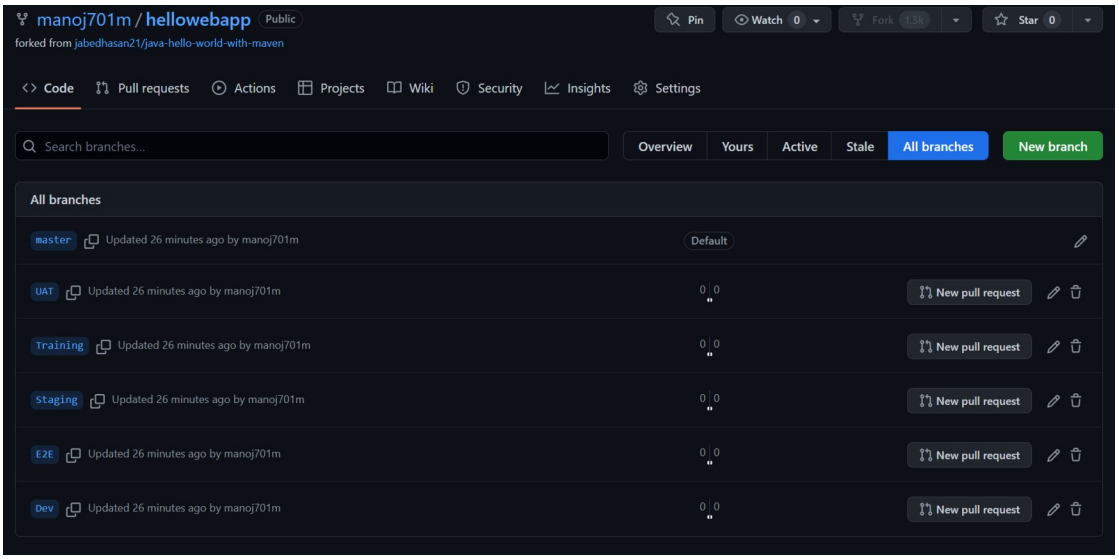
Once this is done you can see a new webhook and its time to do some changes in the repository to test the webhook connection.



In this, Now push the changes onto remote repo (master). Now you could see a build has been triggered automatically on Jenkins and it scan and create a job for the new branch as well.



Branches :


manoj701m / hellowebapp
Public
forked from jabedhasan21/java-hello-world-with-maven
Pin
Watch 0
Fork 13k
Star 0
Code
Pull requests
Actions
Projects
Wiki
Security
Insights
Settings
Search branches...
Overview
Yours
Active
Stale
All branches
New branch
All branches
master
Updated 26 minutes ago by manoj701m
Default
UAT
Updated 26 minutes ago by manoj701m
0 | 0
New pull request
Training
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New pull request
Staging
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0 | 0
New pull request
E2E
Updated 26 minutes ago by manoj701m
0 | 0
New pull request
Dev
Updated 26 minutes ago by manoj701m
0 | 0
New pull request