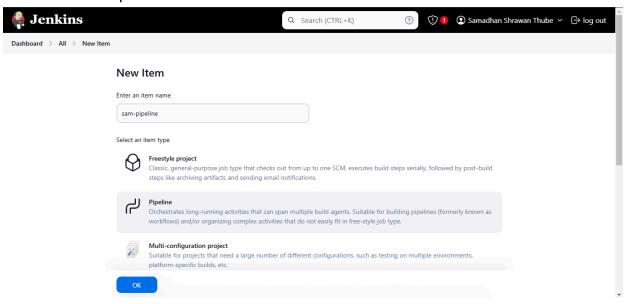
Steps to create a New Pipeline Project in Jenkins

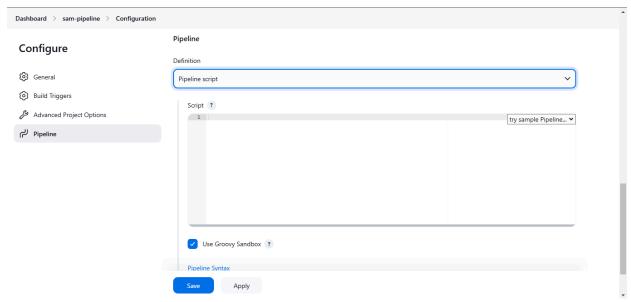
Create New Job

- From the Jenkins dashboard, click on New Item.
- Enter a name for your job (e.g., DjangoAppPipeline).
- Select Pipeline and click OK.



Configure Pipeline Script

- In the job configuration page, scroll down to the Pipeline section.
- Choose Pipeline script from the Definition dropdown.



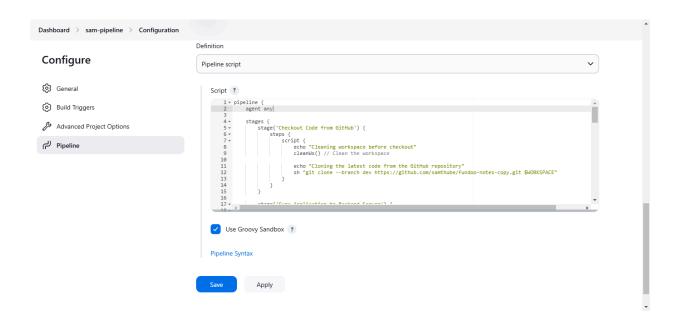
Enter Pipeline Script

Here's the basic pipeline script for our Django application

```
pipeline {
  agent any
  stages {
     stage('Checkout Code from GitHub') {
       steps {
          script {
            echo "Cleaning workspace before checkout"
            cleanWs() // Clean the workspace
            echo "Cloning the latest code from the GitHub repository"
            sh "git clone --branch dev
https://github.com/samthube/fundoo-notes-copy.git $WORKSPACE"
     }
     stage('Sync Application to Backend Server') {
       steps {
          script {
            echo "Syncing the application to backend/app server"
            sh """
```

```
rsync -avz $WORKSPACE/
samthube@20.204.101.130:/tmp/sam-freestyle
         }
       }
     }
     stage('Copy Files to Destination Directory') {
       steps {
          script {
            echo "Copying files to the destination directory on the app server"
            sh """
              ssh samthube@20.204.101.130 'cp -rfv
/tmp/sam-freestyle/fundoo notes/* /home/samthube/fundoo-notes-copy/'
         }
       }
     }
     stage('Install Dependencies') {
       steps {
          script {
            echo "Installing dependencies on the app server"
            sh """
              ssh samthube@20.204.101.130 '
                 source /home/samthube/myenv/bin/activate &&
                 pip install -r /home/samthube/fundoo-notes-copy/requirements.txt &&
                 pip install django
         }
     }
     stage('Run Migrations') {
       steps {
          script {
            echo "Running database migrations"
            sh """
               ssh samthube@20.204.101.130 '
```

```
source /home/samthube/myenv/bin/activate &&
                 python /home/samthube/fundoo-notes-copy/manage.py
makemigrations &&
                 python /home/samthube/fundoo-notes-copy/manage.py migrate
            .....
         }
       }
    }
    stage('Start Django Server') {
       steps {
         script {
            echo "Starting Django server on port 8000"
            sh """
              ssh samthube@20.204.101.130 'sudo systemctl restart
fundoo notes.service'
    }
    stage('Check Server Status') {
       steps {
         script {
            echo "Checking the status of the Django server"
            sh """
              ssh samthube@20.204.101.130 'sudo systemctl status
fundoo notes.service'
       }
    }
  }
```



Save and Build

- Click on the Save button at the bottom of the configuration page.
- To run your job, go back to the job page and click on Build Now.
- Monitor the build process by clicking on the build number in the build history.