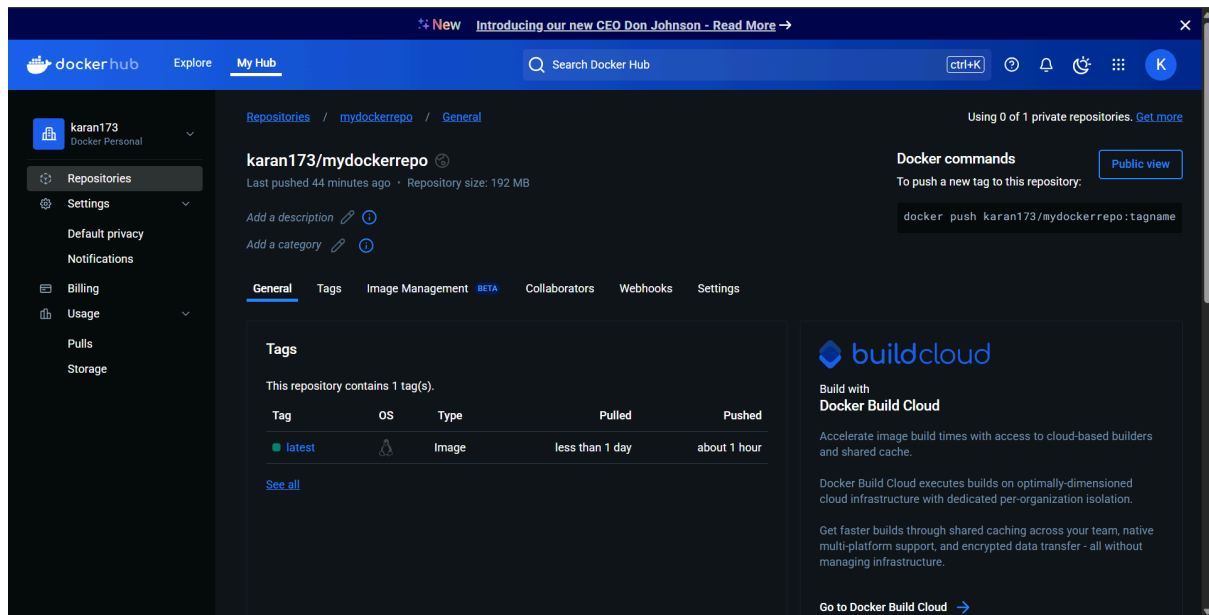1) Creating docker hub credentials:

2) Adding Pipeline script:

```
pipeline {
    agent any
    tools {
        jdk 'jdk17'
        nodejs 'node20'
    }

    stages {
        stage('Clean Workspace') {
            steps {
                script {
                    echo "Cleaning workspace..."
                    deleteDir() // Deletes everything in the Jenkins workspace before starting
                }
            }
        }


        stage('Git Checkout') {
            steps {
                script {
                    git branch: 'main',
                        credentialsId: 'github_seccred',
                        url: 'https://github.com/karan1735/Devops_Docker.git'
                }
            }
        }

        stage('Install Node') {
            steps {
```

```
        script {
            sh '''
            if [ -f package.json ]; then
                echo "package.json found. Running npm install..."
                npm install
            else
                echo "ERROR: package.json is missing. Skipping npm install."
                exit 1
            fi
            '''
        }
    }
}

stage('Docker Build & Push') {
    steps {
        script {
            withDockerRegistry(credentialsId: 'docker', toolName: 'docker') {
                def imageName = "karan173/mydockerrepo"
                def tag = "latest"

                sh "docker build -t ${imageName} ."
                sh "docker tag ${imageName} ${imageName}:${tag}"
                sh "docker push ${imageName}:${tag}"
            }
        }
    }
}
stage('Deploy Docker Container') {
    steps {
        script {
            // Stop and remove the existing container if it's running
            sh "docker stop mydockerrepo_container || true"
            sh "docker rm mydockerrepo_container || true"

            // Run the new container
            sh "docker run -d --name mydockerrepo_container -p 3001:3000
karan173/mydockerrepo:latest"
        }
    }
}

    }
}
```
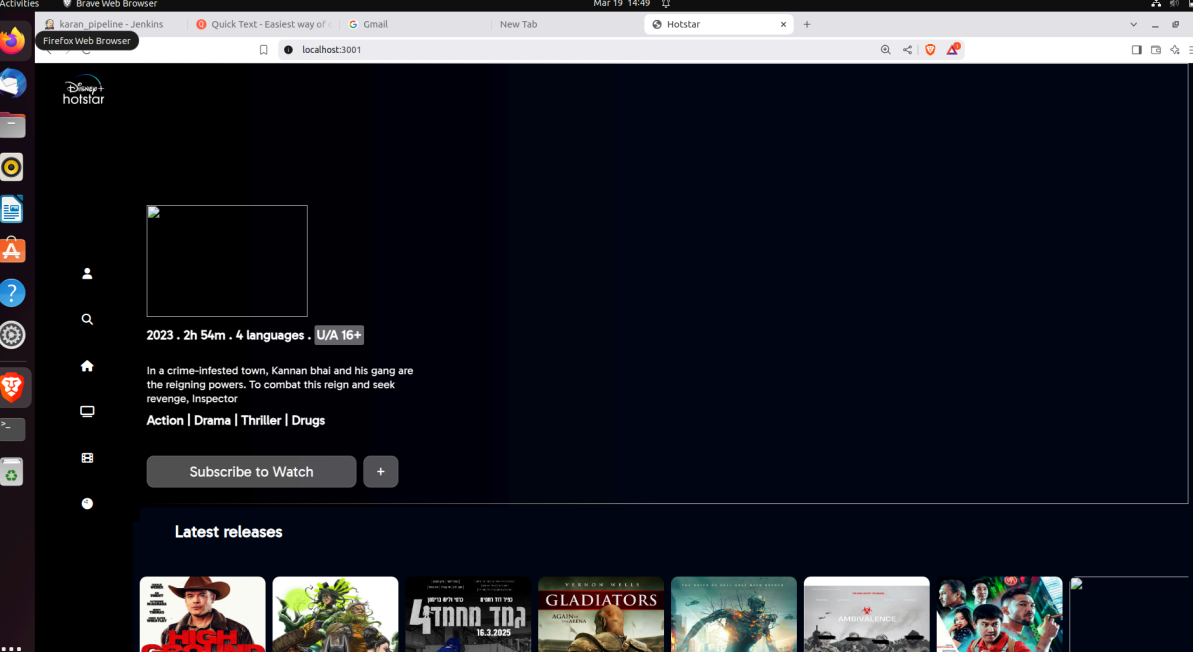
3) Creating the pipeline:

Dashboard > karan_pipeline

karan_pipeline   ✎ Add description

- 📄 Status
- </> Changes
- ▷ Build Now
- ⚙ Configure
- 🗑 Delete Pipeline
- 🔍 Full Stage View
- ⊟ Stages
- ✎ Rename
- ⑦ Pipeline Syntax

Stage View

	Declarative: Tool Install	Clean Workspace	Git Checkout	Install Node	Docker Build & Push	Deploy Docker Container
Average stage times:	1s	1s	7s	9min 13s	4min 28s	6s
#1 14:32 No Changes	1s	1s	7s	9min 13s	4min 28s	6s

Permalinks

Builds   ⋯ ⤢

No builds

Today

✓ #1 14:32   ⌄

REST API   Jenkins 2.501

Output :localhost:3001