TASK5

CI-CD PIPELINE

CI CD Pipeline Jenkins

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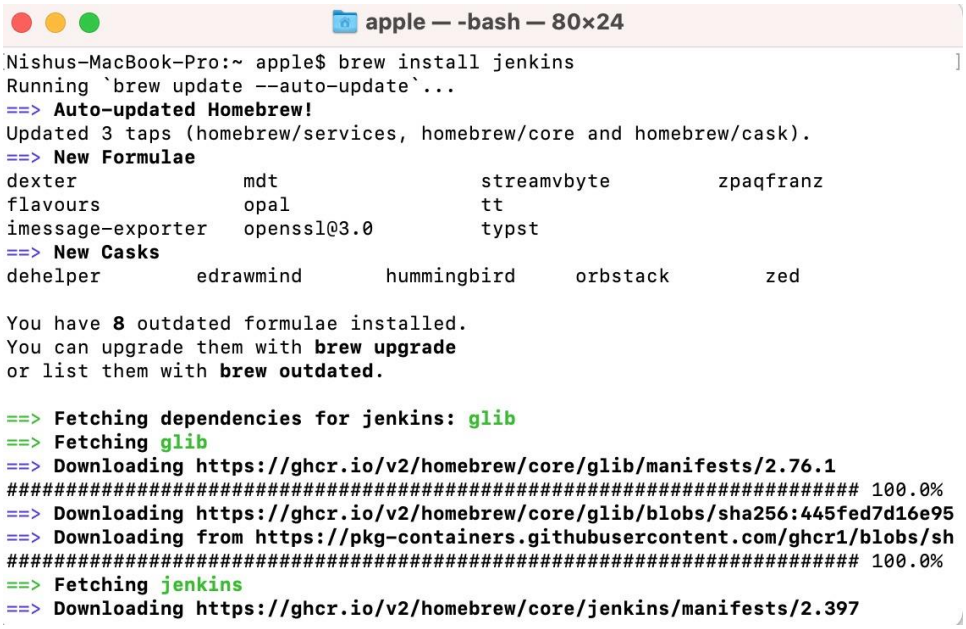
About The Project

The project involves implementing a CI/CD pipeline using Jenkins and Maven for a Java application. Jenkins will be used for continuous integration, automated testing, and continuous delivery/deployment. Maven will be used as a build tool to manage dependencies, compile, and package the application. The pipeline will involve several stages such as building the code, running tests, packaging the application, deploying to a test environment, and deploying to production. The pipeline is implemented in 2 ways, one with the direct script and other with help of scm and Git.The pipeline will automate the process of building, testing, and deploying the application, ensuring that any changes made to the code are thoroughly tested and validated before being released to production.

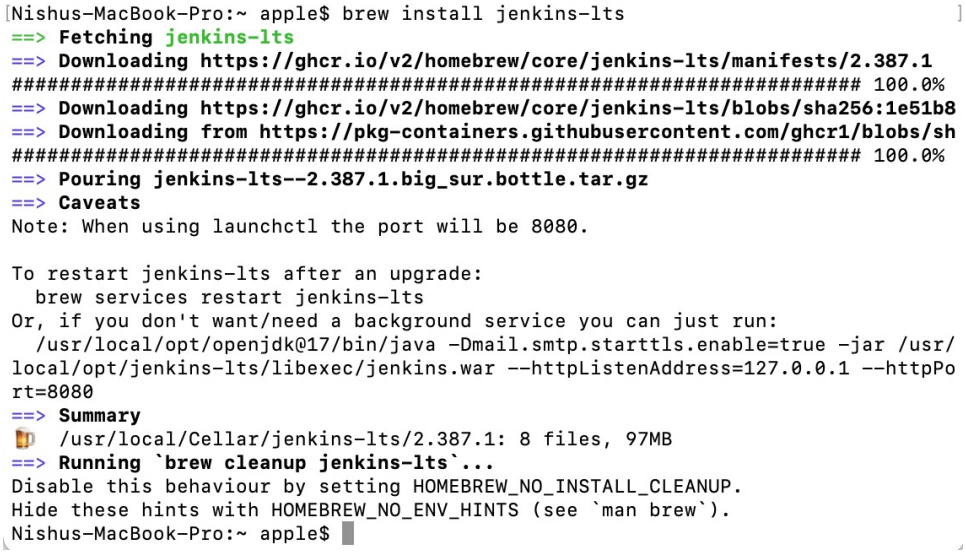
Steps With Results

1) Installing Jenkins

brew install jenkins



brew install jenkins-lts



brew services start jenkins-lts

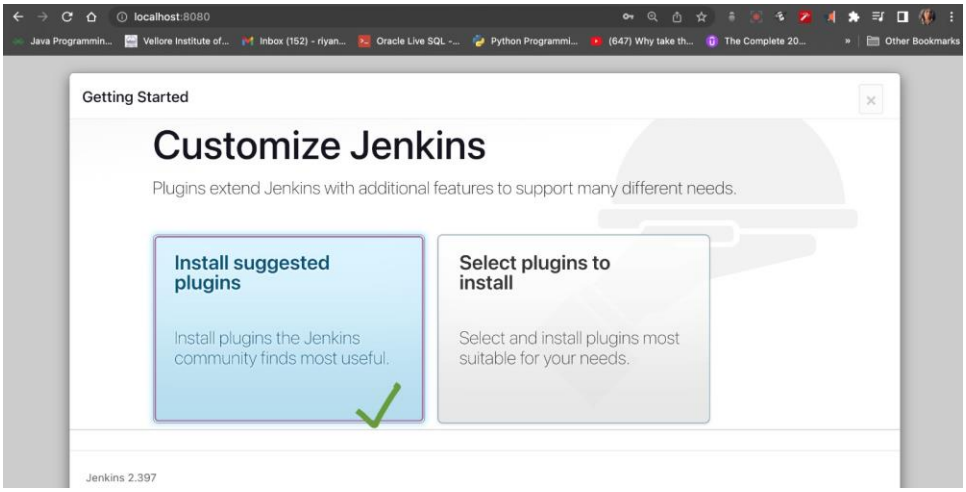
cat /Users/apple/.jenkins/secrets/initialAdminPassword

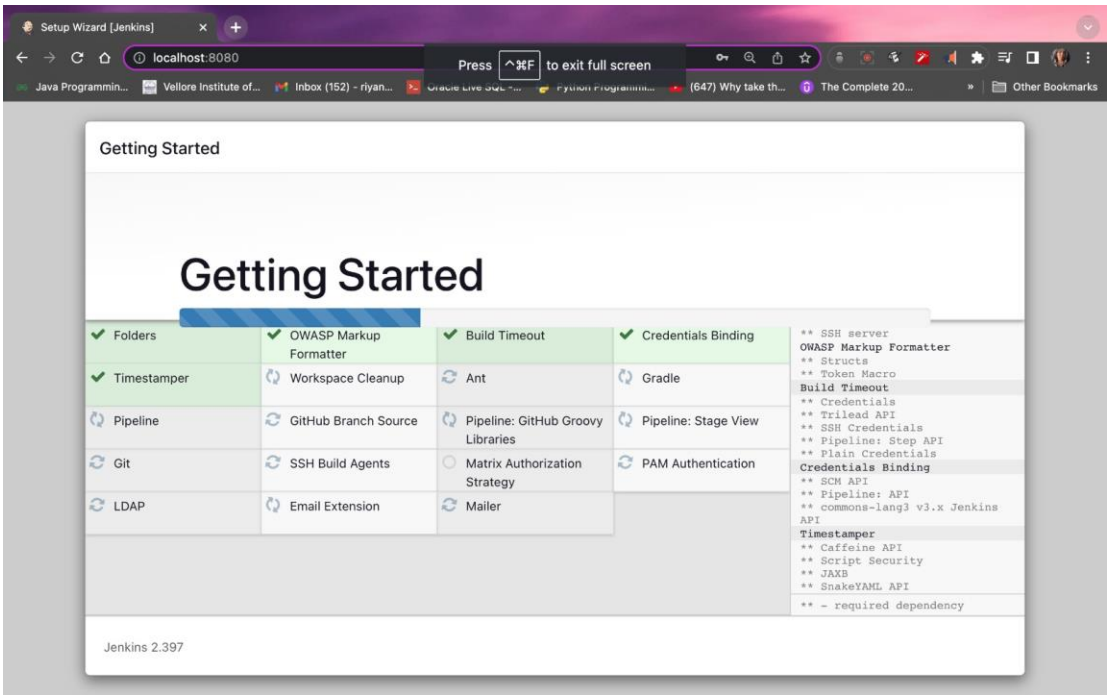
```
Nishus-MacBook-Pro:~ apple$ brew services start jenkins-lts
[Nishus-MacBook-Pro:~ apple$ cat /Users/apple/.jenkins/secrets/initialAdminPassword
6a4443f2788d42c68ec2977d14ffd3dd
Nishus-MacBook-Pro:~ apple$
```

2) Configure Jenkins

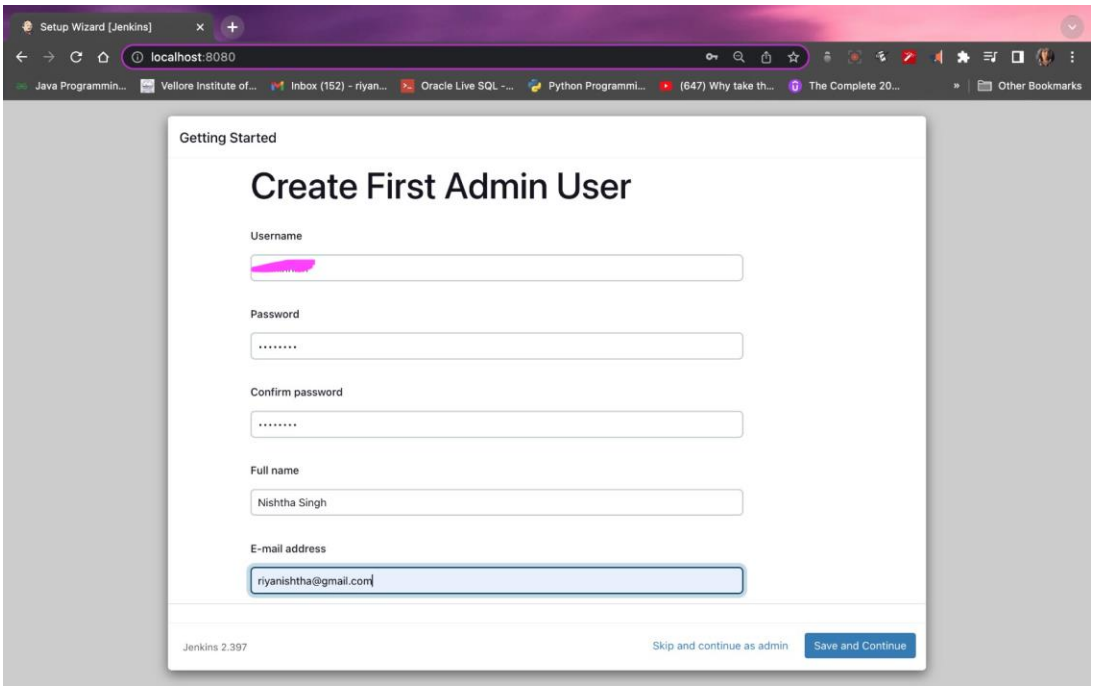
```
Nishus-MacBook-Pro:~ apple$ /usr/local/opt/jenkins/bin/jenkins --httpListenAddress=127.0.0.1 --httpPort=8080
Running from: /usr/local/Cellar/jenkins/2.397/libexec/jenkins.war
webroot: /Users/apple/.jenkins/war
2023-03-29 12:55:38.338+0000 [id=1]     INFO    winstone.Logger#logInternal: Beginning extraction from war file
2023-03-29 12:55:41.965+0000 [id=1]     WARNING o.e.j.s.handler.ContextHandler#setContextPath: Empty contextPat
h
2023-03-29 12:55:42.086+0000 [id=1]     INFO    org.eclipse.jetty.server.Server#doStart: jetty-10.0.13; built:
2022-12-07T20:13:20.134Z; git: 1c2636ea05c0ca8de1ffd6ca7f3a98ac084c766d; jvm 17.0.6+0
2023-03-29 12:55:42.672+0000 [id=1]     INFO    o.e.j.w.StandardDescriptorProcessor#visitServlet: NO JSP Suppor
t for /, did not find org.eclipse.jetty.jsp.JettyJspServlet
2023-03-29 12:55:42.793+0000 [id=1]     INFO    o.e.j.s.s.DefaultSessionIdManager#doStart: Session workerName=n
ode0
2023-03-29 12:55:43.839+0000 [id=1]     INFO    hudson.WebAppMain#contextInitialized: Jenkins home directory: /
Users/apple/.jenkins found at: $user.home/.jenkins
2023-03-29 12:55:45.354+0000 [id=1]     INFO    o.e.j.s.handler.ContextHandler#doStart: Started w.@76c52298{Jen
kins v2.397,/,file:///Users/apple/.jenkins/war/,AVAILABLE}{/Users/apple/.jenkins/war}
2023-03-29 12:55:45.390+0000 [id=1]     INFO    o.e.j.server.AbstractConnector#doStart: Started ServerConnector
@6304101a{HTTP/1.1, (http/1.1)}{127.0.0.1:8080}
2023-03-29 12:55:45.442+0000 [id=1]     INFO    org.eclipse.jetty.server.Server#doStart: Started Server@225129c
{STARTING}[10.0.13,sto=0] @7890ms
2023-03-29 12:55:45.445+0000 [id=27]    INFO    winstone.Logger#logInternal: Winstone Servlet Engine running: c
ontrolPort=disabled
2023-03-29 12:55:45.900+0000 [id=34]    INFO    jenkins.InitReactorRunner$1#onAttained: Started initialization
2023-03-29 12:55:46.007+0000 [id=33]    INFO    hudson.PluginManager#loadDetachedPlugins: Upgrading Jenkins. Th
```

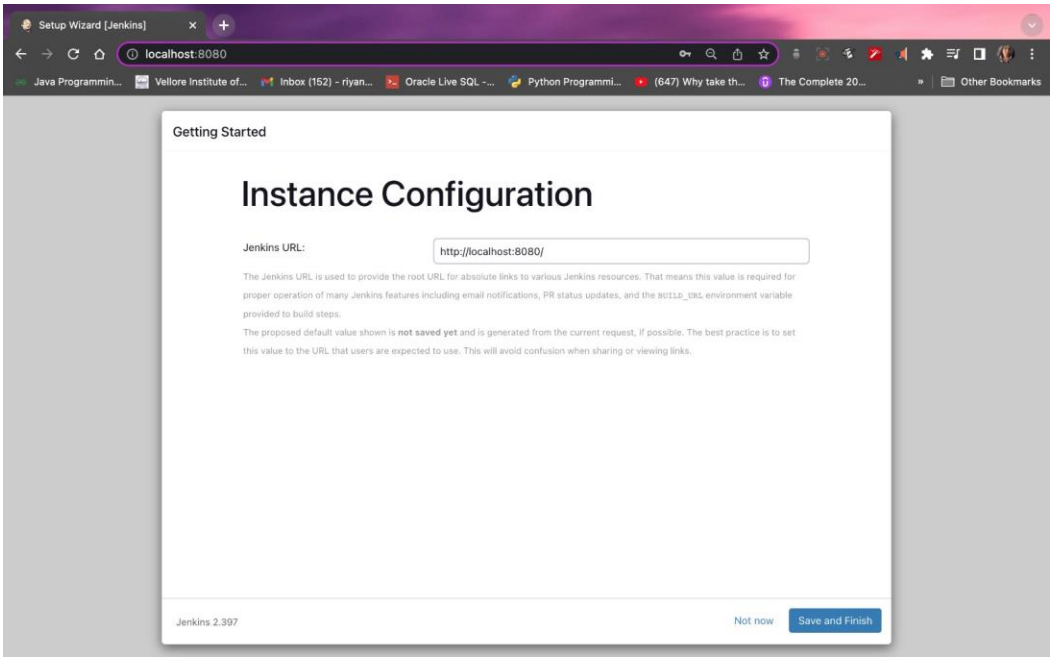
3) Install suggested plugins



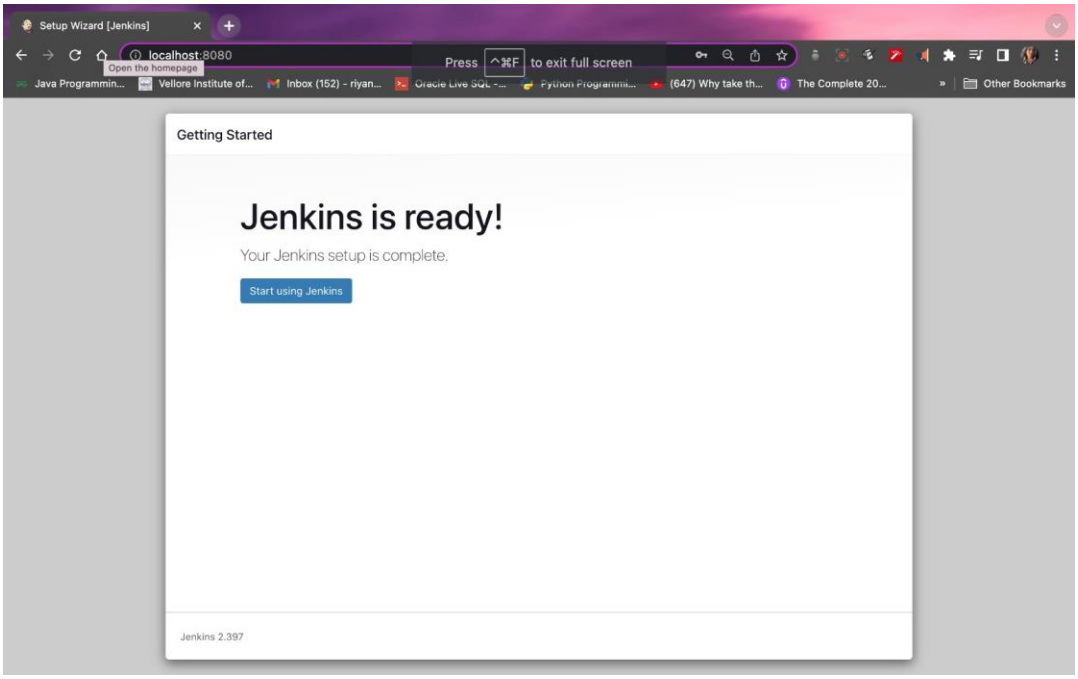


4) Create first admin user

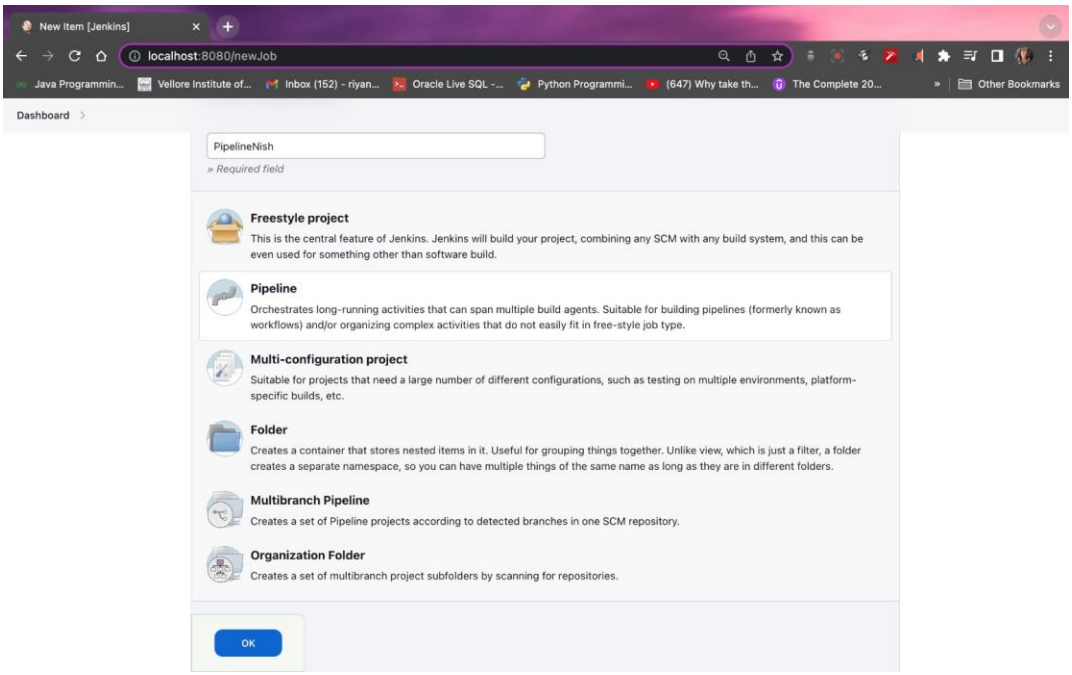




Setup is complete

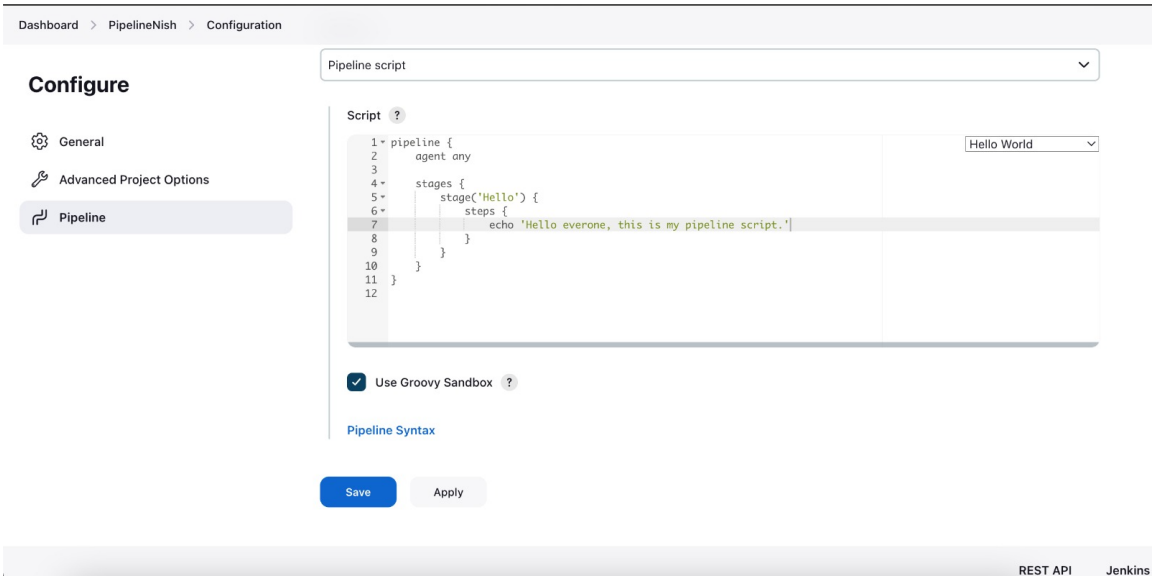


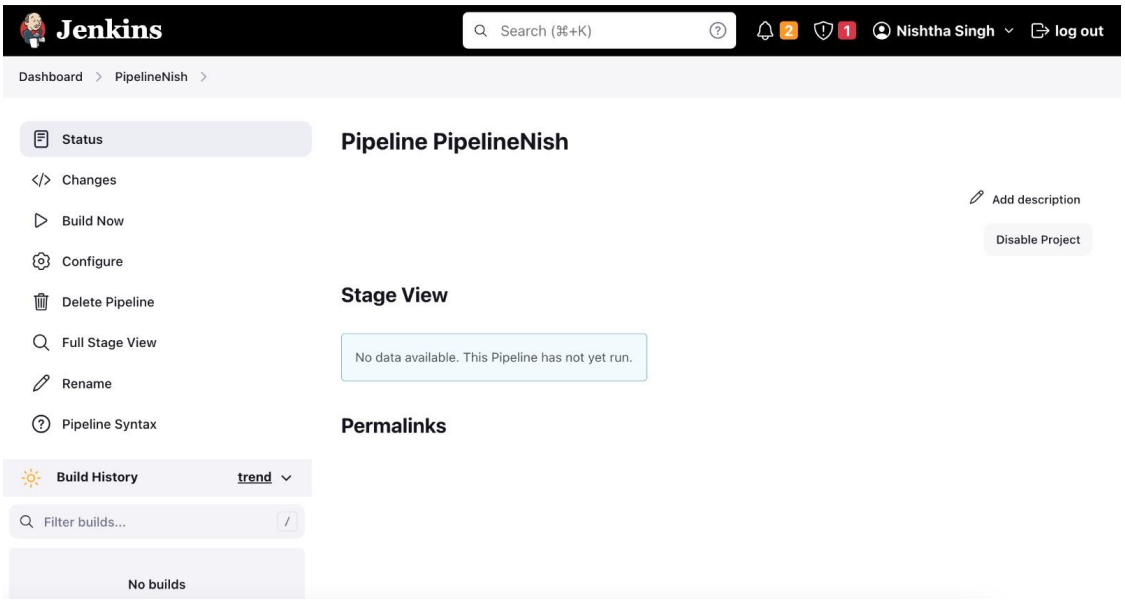
5) Now create a job

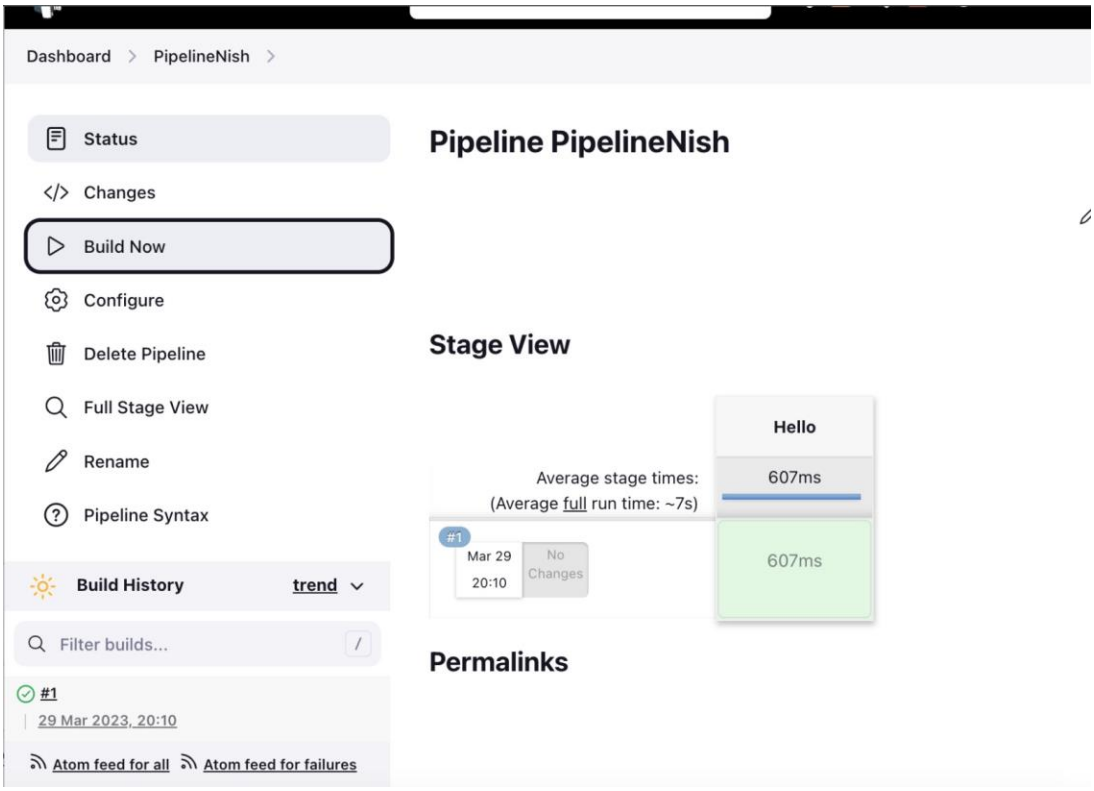


PIPELINE WITH DIRECT SCRIPT

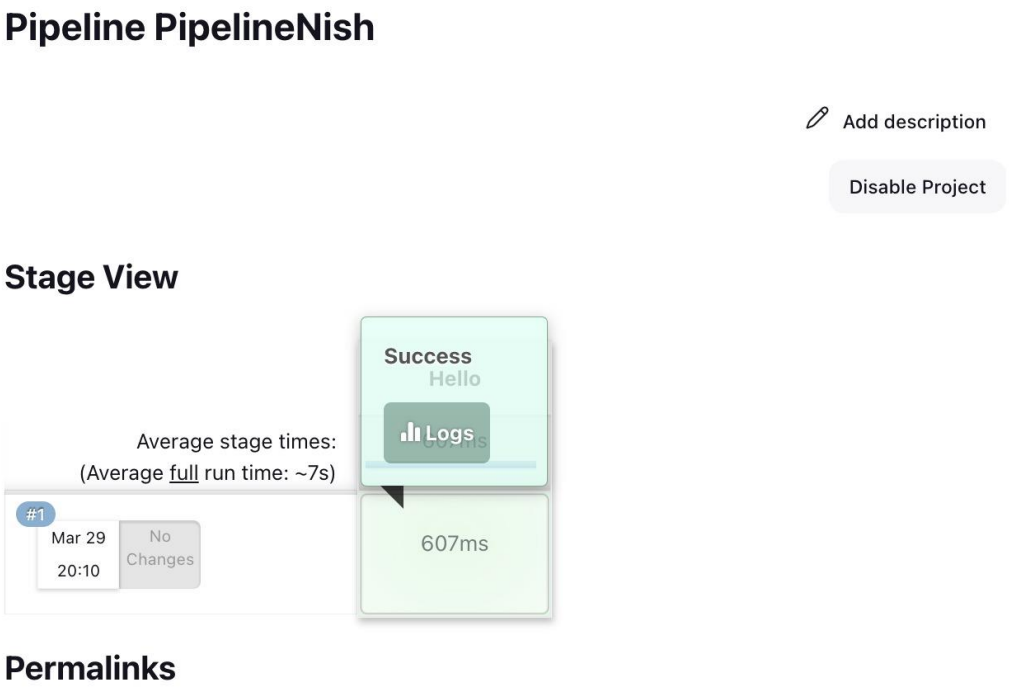
GITHUB REPO USED:-
https://github.com/NishthaSingh7/BasicJavaMavenApp

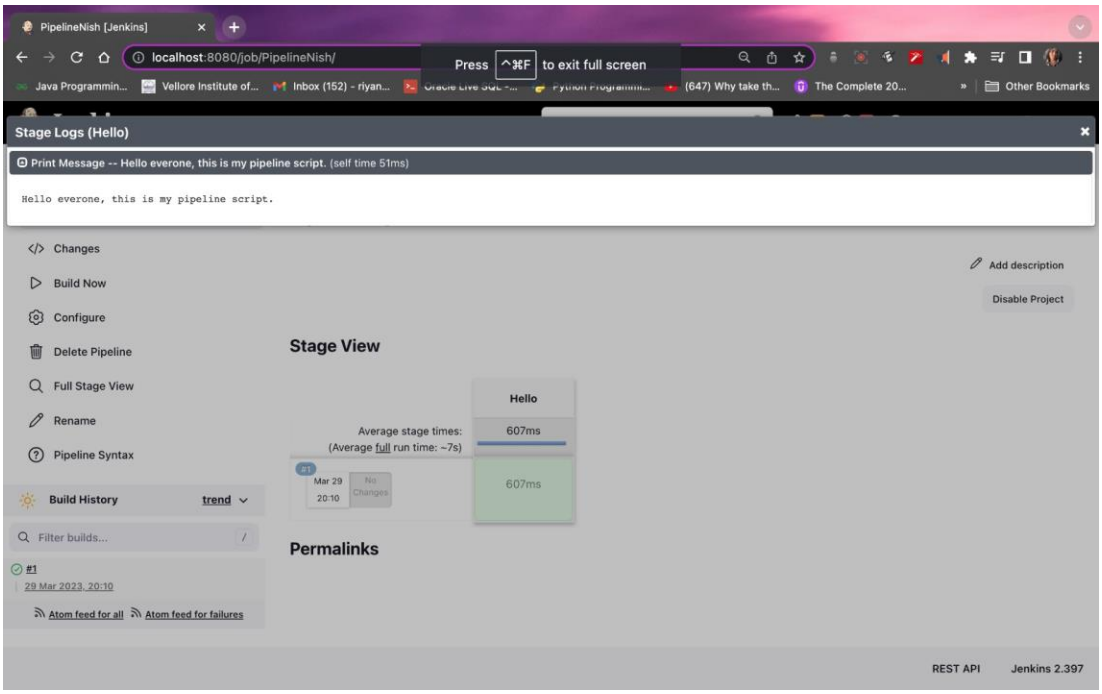






CHECK LOG FOR STAGE MESSAGES



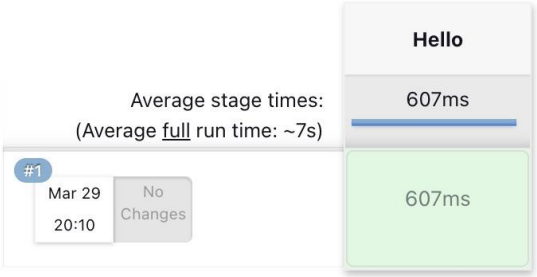


Pipeline PipelineNish

Add description

Disable Project

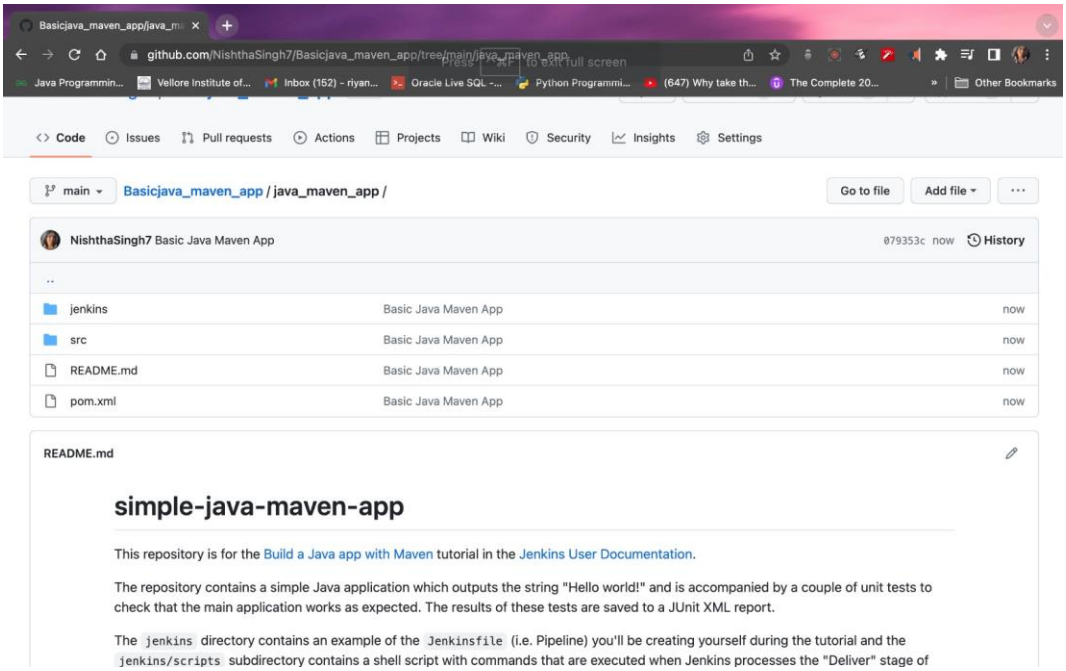
Stage View

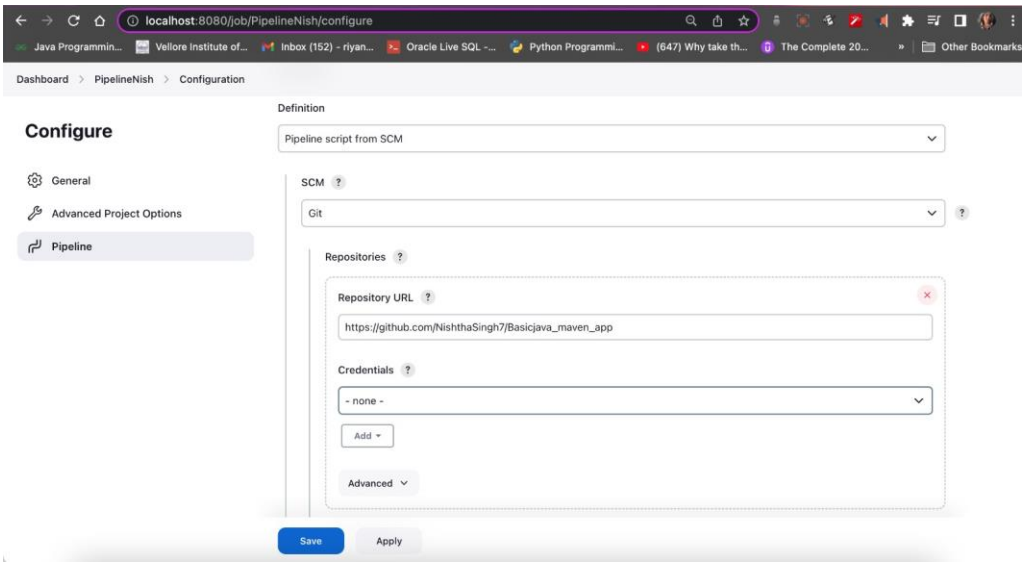


Permalinks

- Last build (#1), 8 min 24 sec ago
- Last stable build (#1), 8 min 24 sec ago
- Last successful build (#1), 8 min 24 sec ago
- Last completed build (#1), 8 min 24 sec ago

PIPELINE WITH SCM SCRIPT USING GITHUB REPO





BUILD NOW IS CREATING SOME PROBLEM