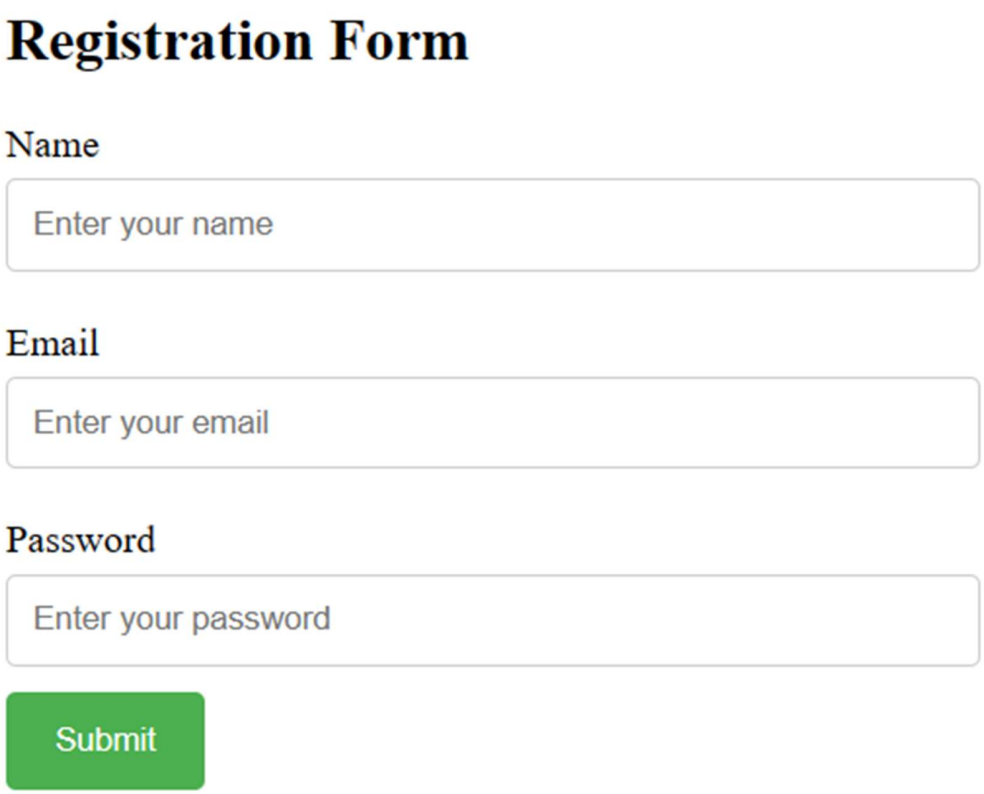
1. Write code for a simple user registration form for an event.

PROGRAM: -

```
<!DOCTYPE html>
<html>
<head>
    <title>Registration Form</title>
    <style>
        form {
            width: 400px;
        }
        input {
            width: 100%;
            padding: 10px;
            margin-bottom: 10px;
            border: 1px solid #ccc;
            border-radius: 4px;
            box-sizing: border-box;
        }
        button {
            background-color: #4CAF50;
            color: white;
            padding: 12px 20px;
            border: none;
            border-radius: 4px;
            cursor: pointer;
        }
    </style>
</head>
<body>
    <form>
        <h2>Registration Form</h2>
        <label for="name">Name</label>
        <input type="text" id="name" name="name" placeholder="Enter your name" required>
        <label for="email">Email</label>
        <input type="email" id="email" name="email" placeholder="Enter your email" required>
        <label for="password">Password</label>
        <input type="password" id="password" name="password" placeholder="Enter your
password" required>
        <button type="submit">Submit</button>
    </form>
</body>
</html>
```

OUTPUT: -



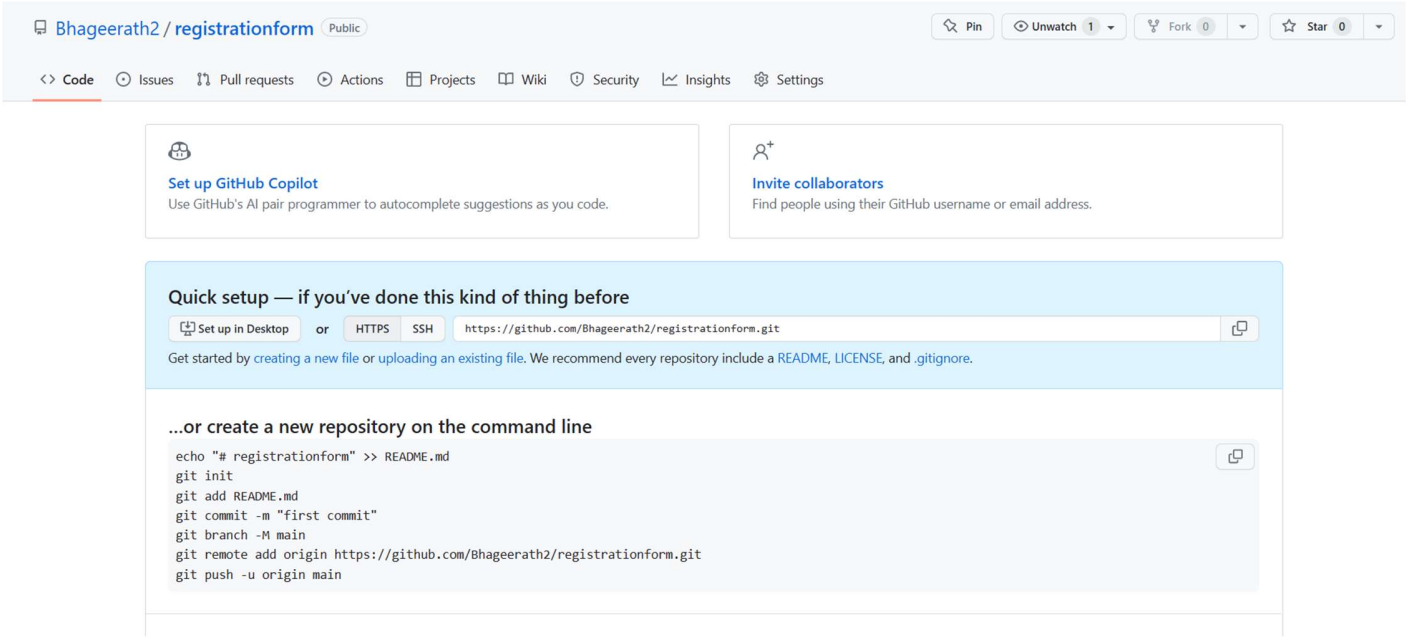
2. Explore Git and GitHub commands.

```
bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop (master)
$ mkdir reg

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop (master)
$ cd reg

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git init
Initialized empty Git repository in C:/Users/bhage/Desktop/reg/.git/

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git config --global user.name Bhageerath2

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git config --global user.email gbhageerathreddy_csm206621@mgit.ac.in
```

```
bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        main.html

nothing added to commit but untracked files present (use "git add" to track)

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git add main.html

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   main.html


bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git commit -a -m "added main.html"
[master (root-commit) 88f7d38] added main.html
 1 file changed, 50 insertions(+)
 create mode 100644 main.html

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git status
On branch master
nothing to commit, working tree clean

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ ls
main.html
```

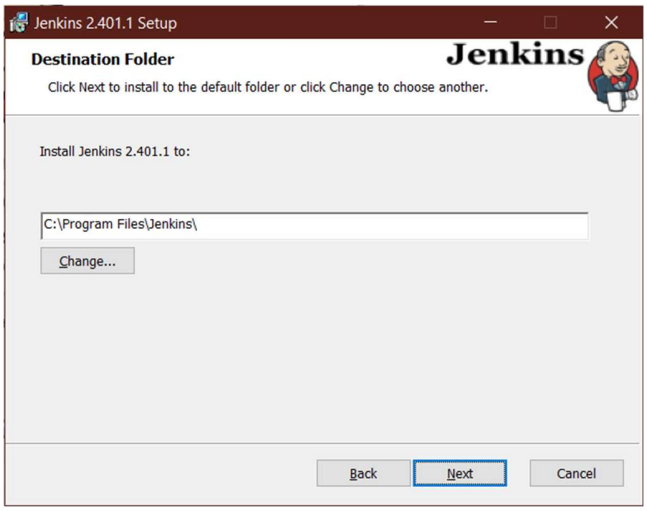
```
bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git log
commit 88f7d38520188f81fb7cb43864740ac4f37d31a2 (HEAD -> master)
Author: Bhageerath2 <gbhageerathreddy_csm206621@mgit.ac.in>
Date:   Wed May 3 21:39:50 2023 +0530

    added main.html
```

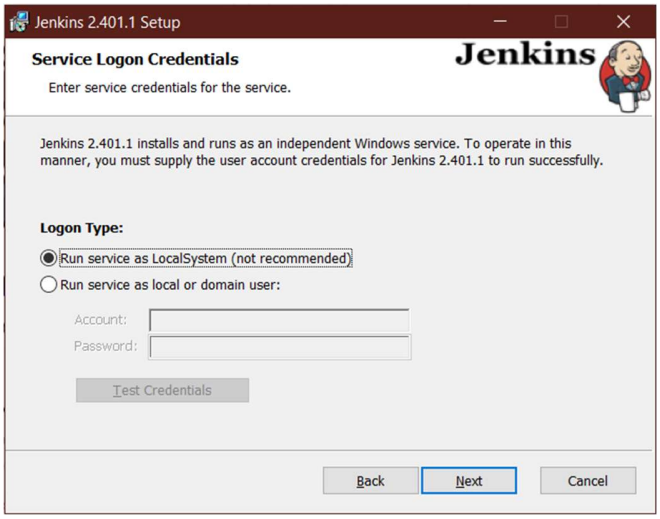
3. Practice Source code management on GitHub. Experiment with the source code written in exercise 1.

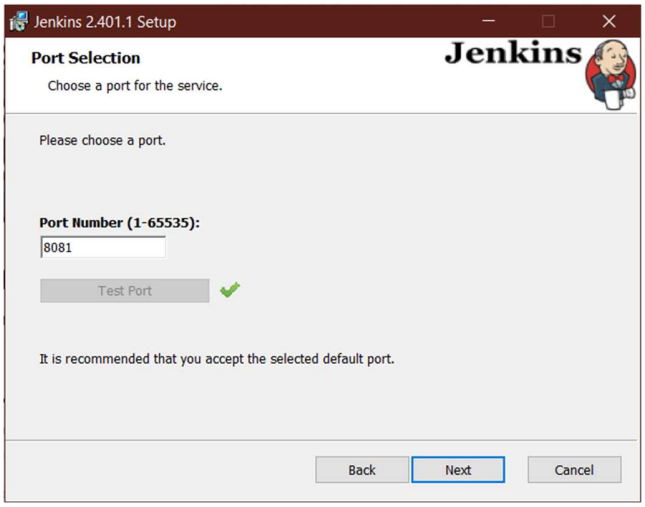


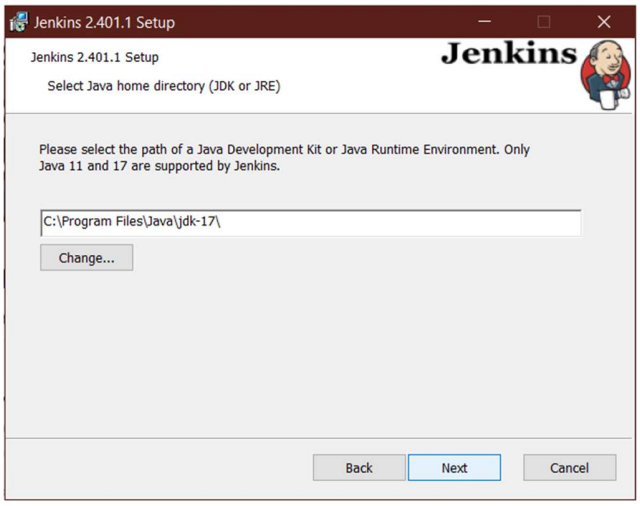

```
bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git remote add origin https://github.com/Bhageerath2/registrationform.git

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (master)
$ git branch -M main

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (main)
$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 695 bytes | 695.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/Bhageerath2/registrationform.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.

bhage@DESKTOP-FQ854C4 MINGW64 ~/Desktop/reg (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
```

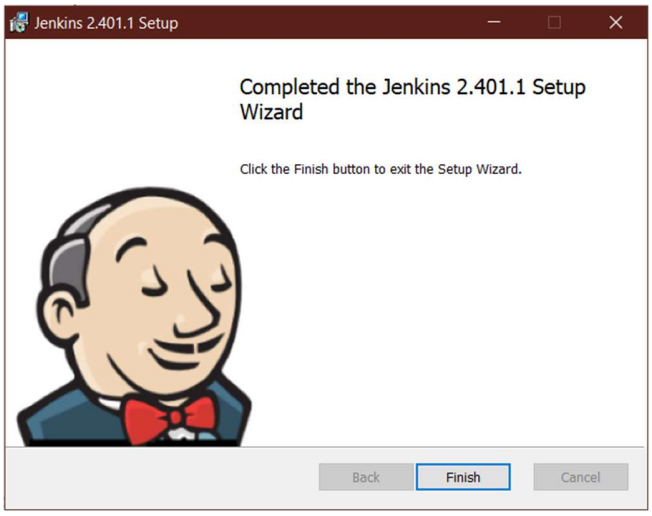
4. Jenkins installation and setup, explore the environment.

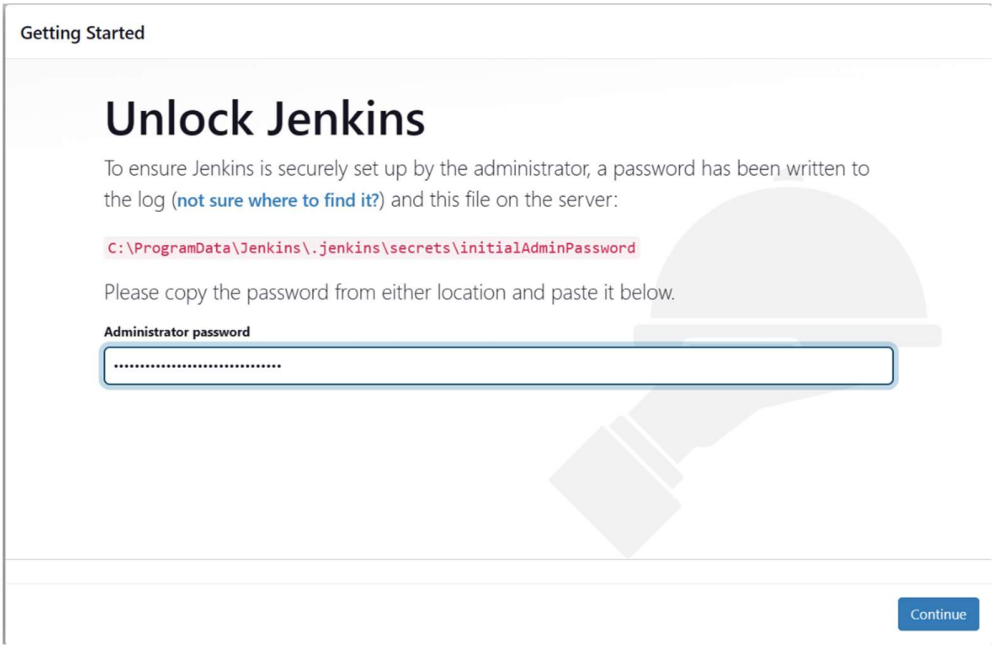


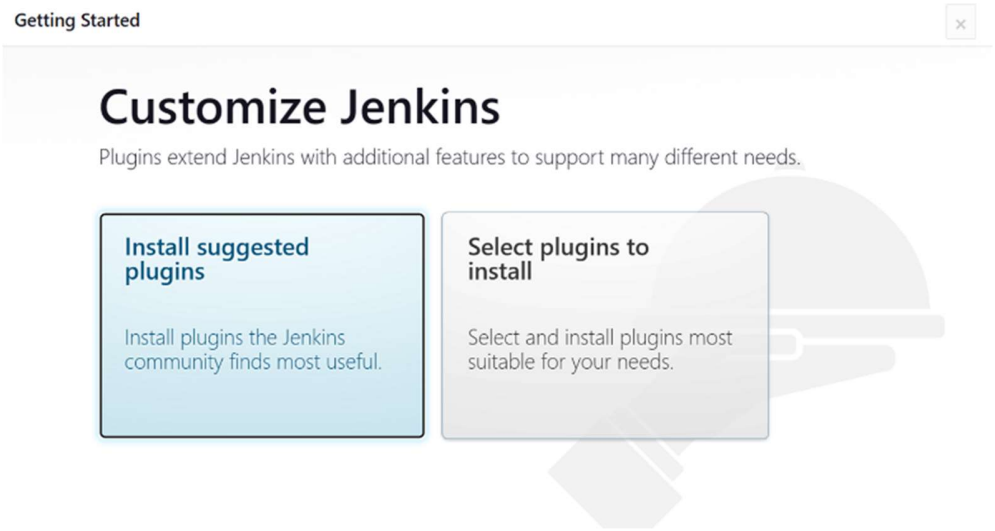


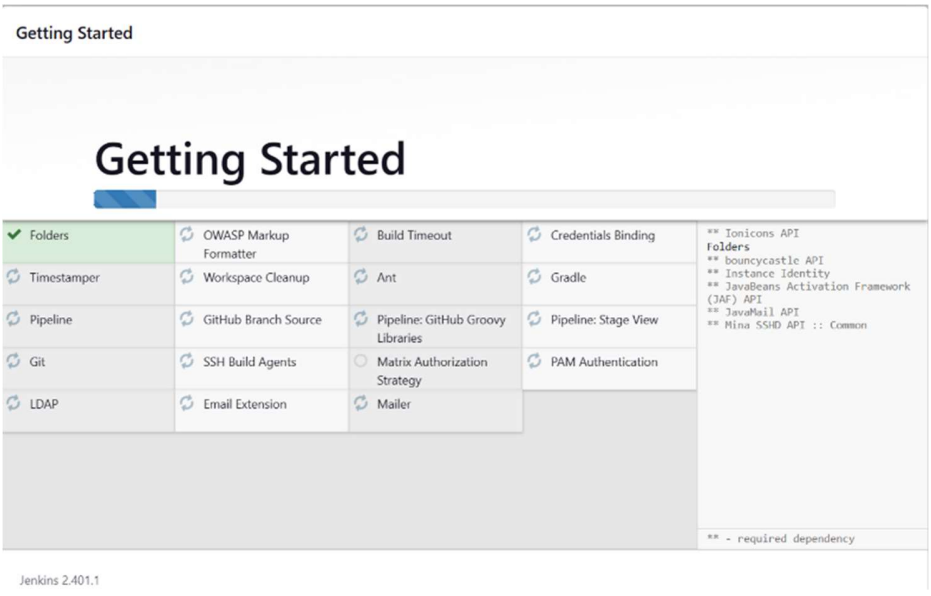


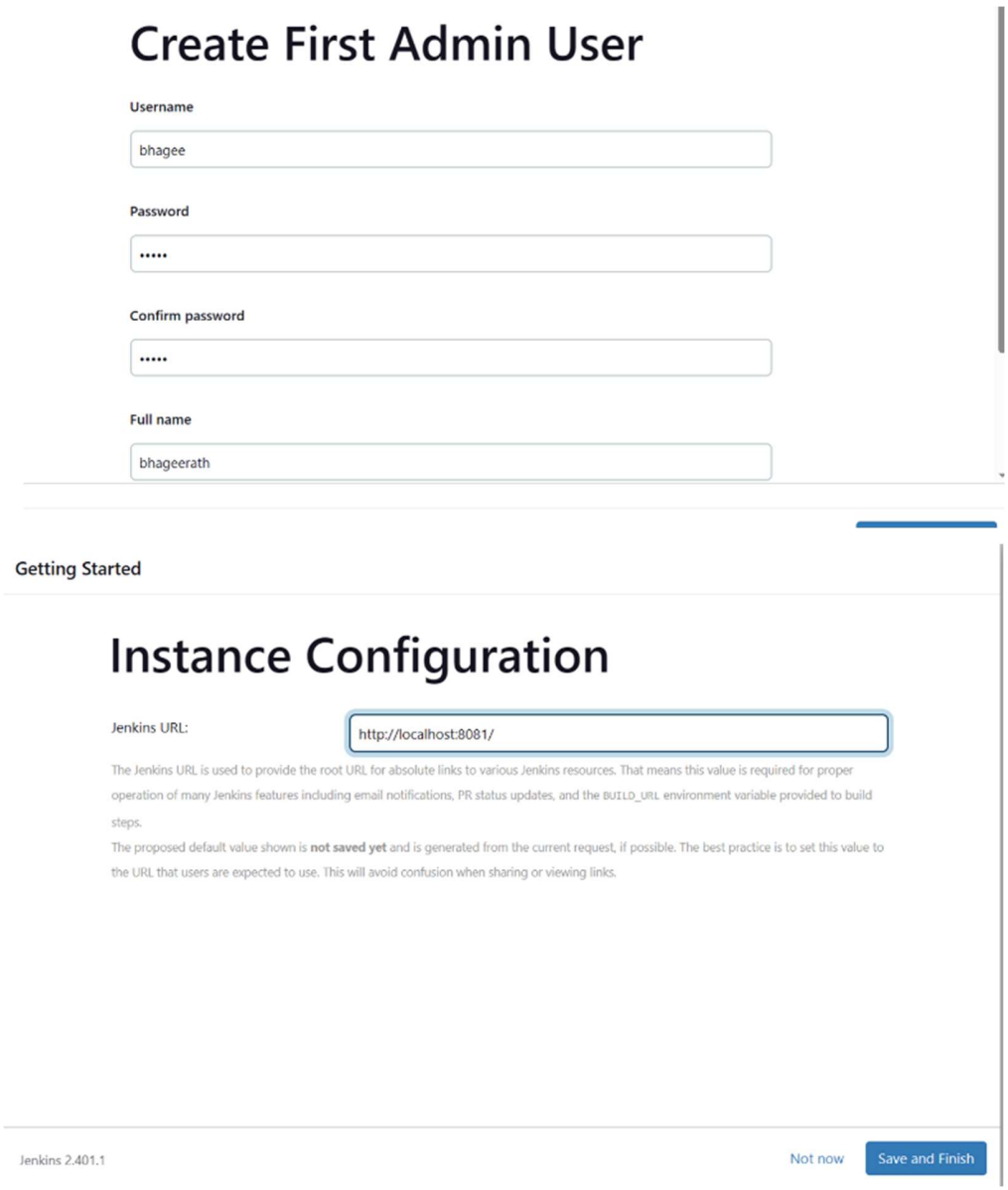


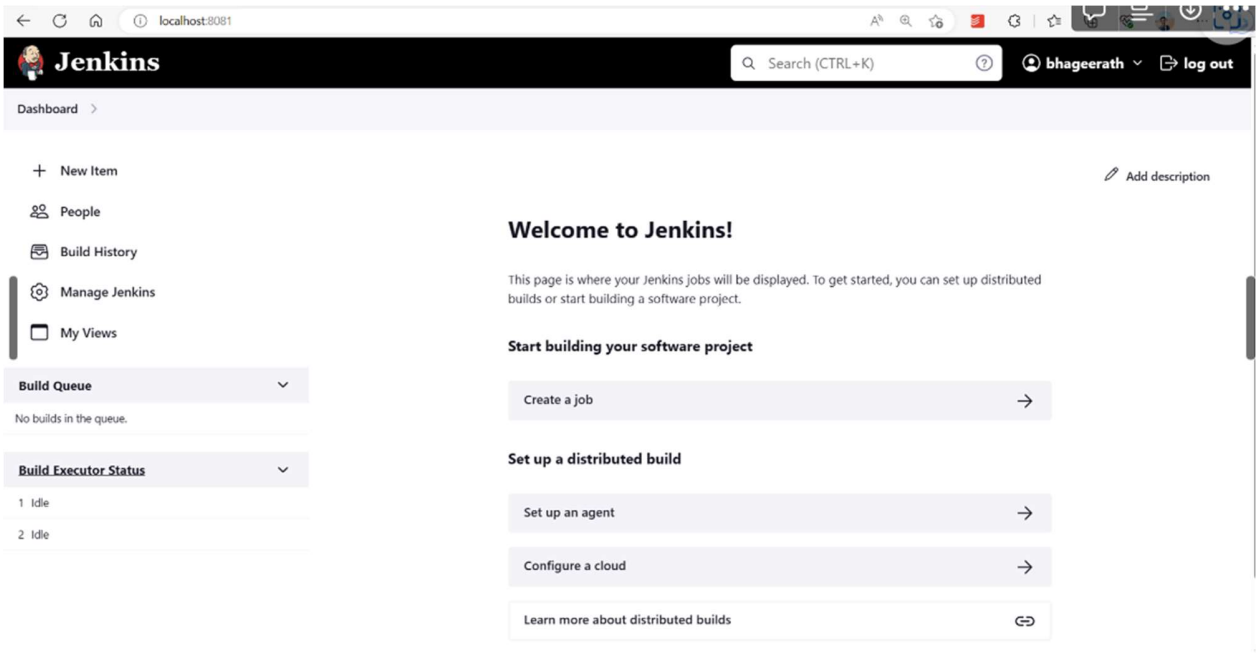



Getting Started
Unlock Jenkins
To ensure Jenkins is securely set up by the administrator, a password has been written to the log (not sure where to find it?) and this file on the server:
C:\ProgramData\Jenkins\.jenkins\secrets\initialAdminPassword
Please copy the password from either location and paste it below.
Administrator password
Continue

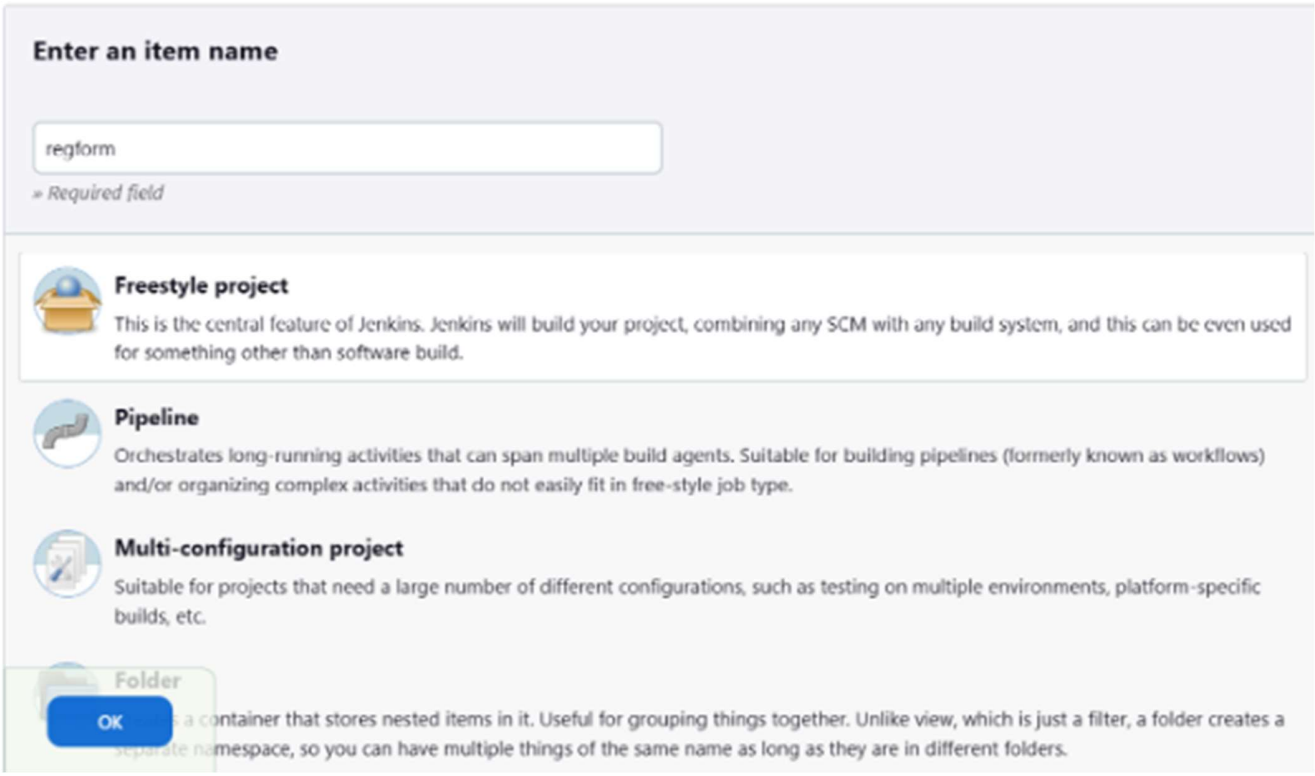

Getting Started
Customize Jenkins
Plugins extend Jenkins with additional features to support many different needs.
Install suggested plugins
Install plugins the Jenkins community finds most useful.
Select plugins to install
Select and install plugins most suitable for your needs.

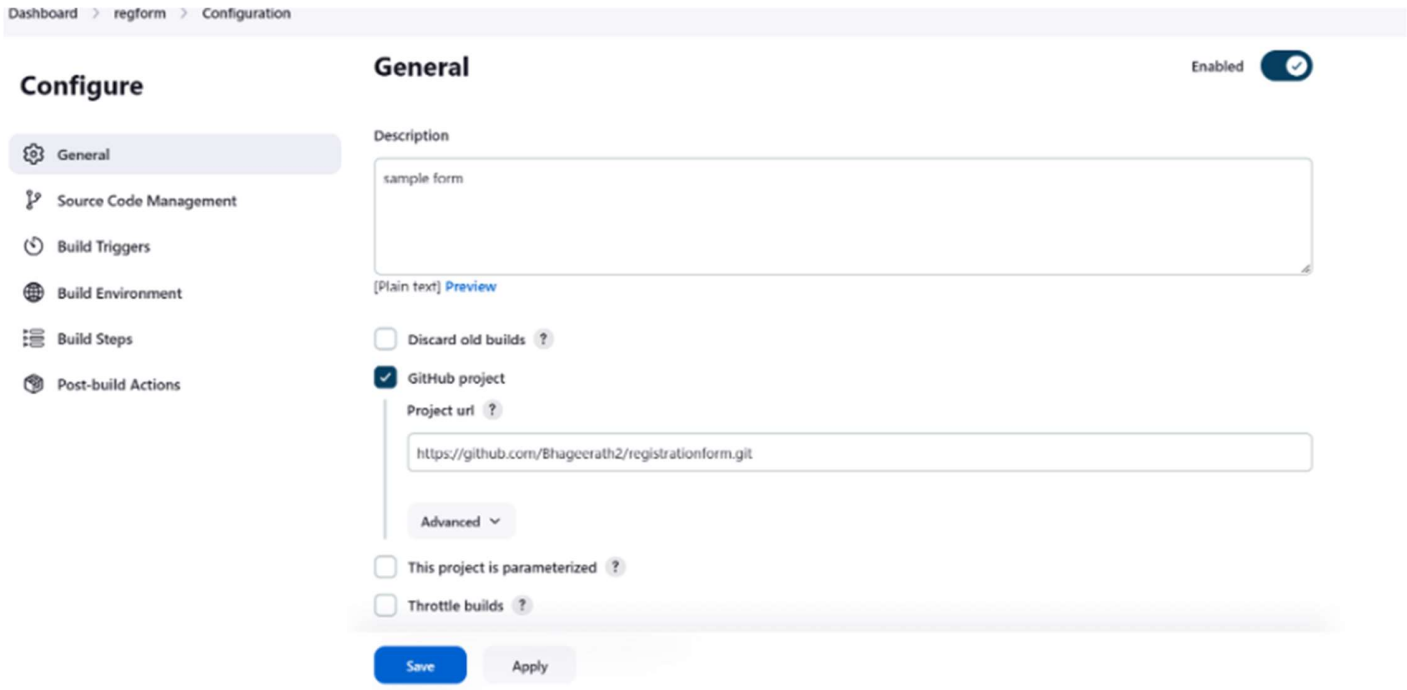

Getting Started
Getting Started
Folders
OWASP Markup Formatter
Build Timeout
Credentials Binding
Timestamper
Workspace Cleanup
Ant
Gradle
Pipeline
GitHub Branch Source
Pipeline: GitHub Groovy Libraries
Pipeline: Stage View
Git
SSH Build Agents
Matrix Authorization Strategy
PAM Authentication
LDAP
Email Extension
Mailer
** Ionicons API
Folders
** bouncycastle API
** Instance Identity
** JavaBeans Activation Framework (JAF) API
** JavaMail API
** Mina SSHD API :: Common
** - required dependency
Jenkins 2.401.1

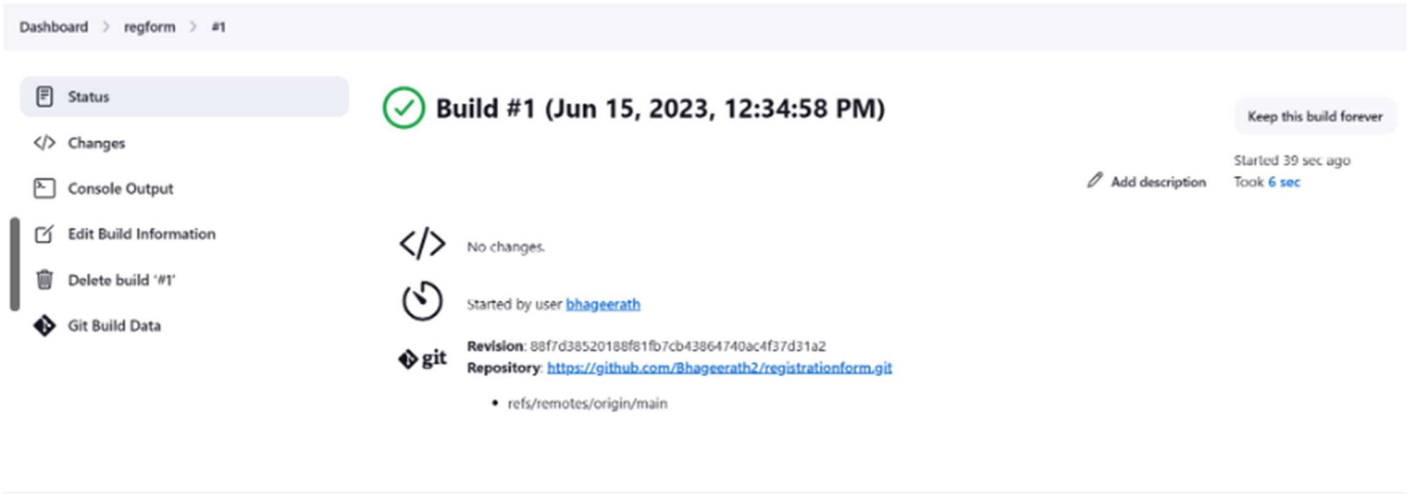

Create First Admin User
Username
bhagee
Password
Confirm password
Full name
bhageerath
Getting Started
Instance Configuration
Jenkins URL:
http://localhost:8081/
The Jenkins URL is used to provide the root URL for absolute links to various Jenkins resources. That means this value is required for proper operation of many Jenkins features including email notifications, PR status updates, and the BUILD_URL environment variable provided to build steps.
The proposed default value shown is not saved yet and is generated from the current request, if possible. The best practice is to set this value to the URL that users are expected to use. This will avoid confusion when sharing or viewing links.
Jenkins 2.401.1
Not now
Save and Finish

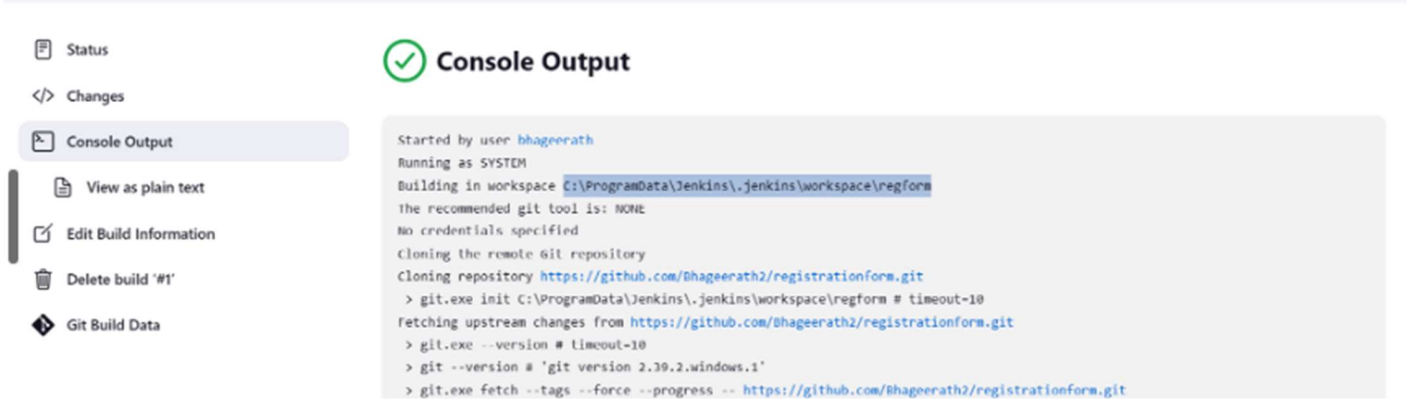

localhost:8081
Jenkins
Search (CTRL+K)
bhageerath
log out
Dashboard
New Item
People
Build History
Manage Jenkins
My Views
Add description
Welcome to Jenkins!
This page is where your Jenkins jobs will be displayed. To get started, you can set up distributed builds or start building a software project.
Start building your software project
Create a job
Set up a distributed build
Set up an agent
Configure a cloud
Learn more about distributed builds
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle

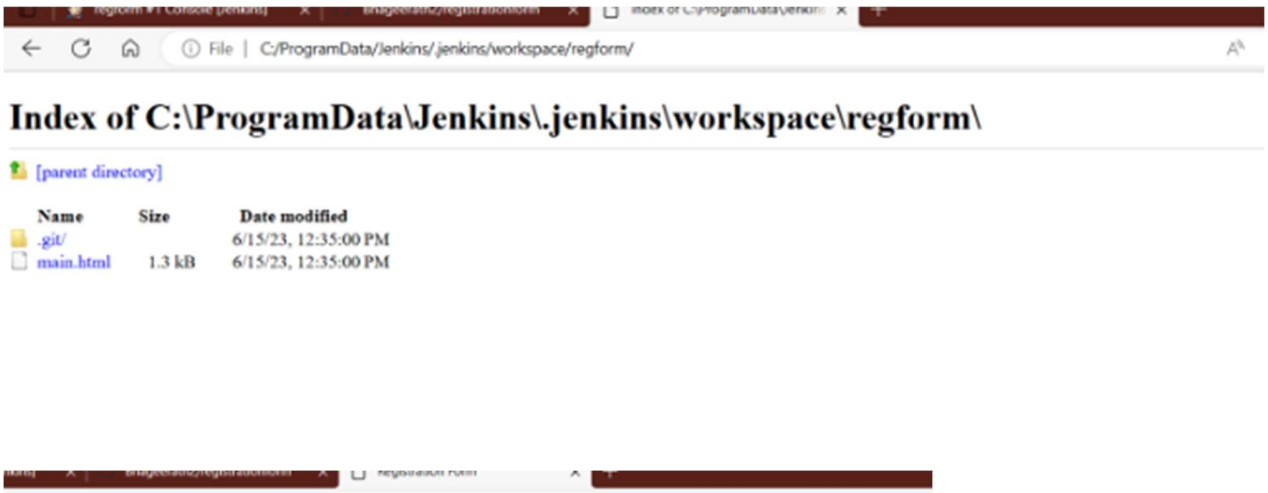
5. Jenkins installation and setup, explore the environment.

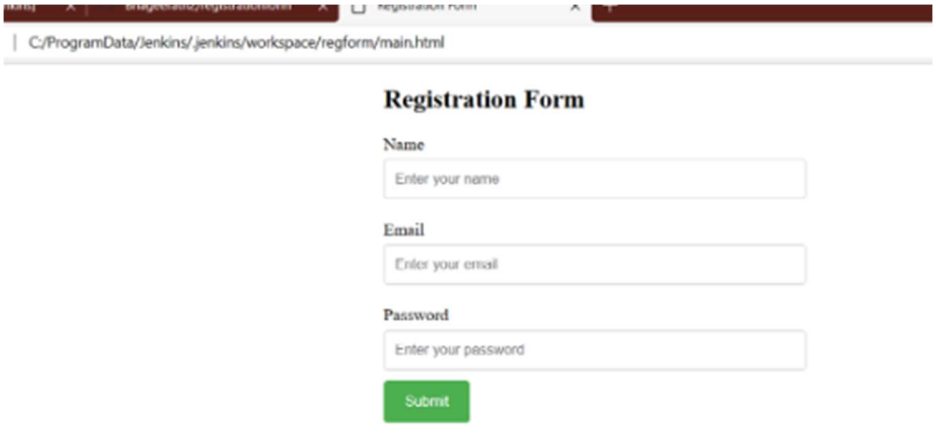


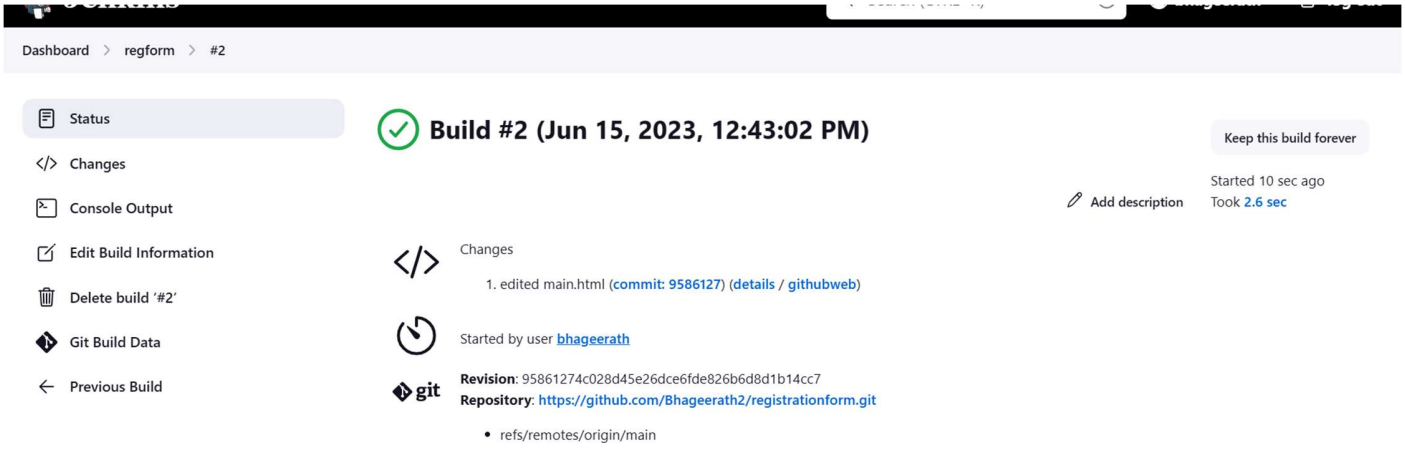


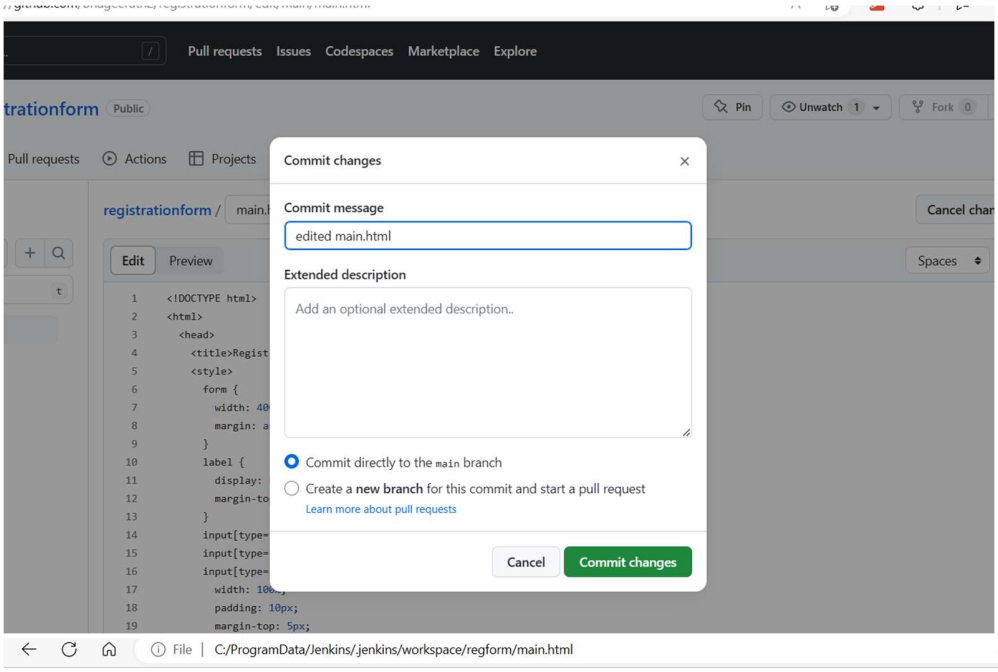

Dashboard > regform > #1
Status
Changes
Console Output
Edit Build Information
Delete build '#1'
Git Build Data
Build #1 (Jun 15, 2023, 12:34:58 PM)
Keep this build forever
Add description
Started 39 sec ago
Took 6 sec
No changes.
Started by user bhageerath
git
Revision: 88f7d38520188f81fb7cb43864740ac4f37d31a2
Repository: https://github.com/Bhageerath2/registrationform.git
refs/remotes/origin/main

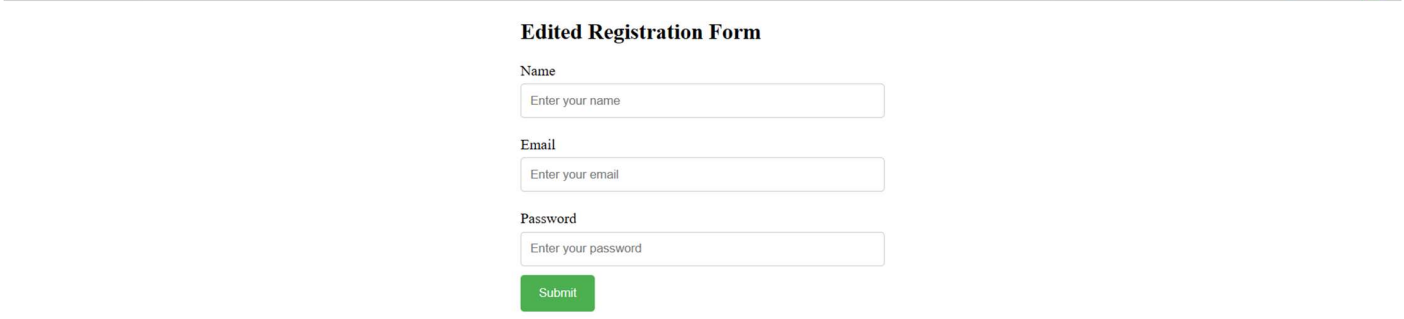

Status
Changes
Console Output
View as plain text
Edit Build Information
Delete build '#1'
Git Build Data
Console Output
Started by user bhageerath
Running as SYSTEM
Building in workspace C:\ProgramData\Jenkins\.jenkins\workspace\regform
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/Bhageerath2/registrationform.git
> git.exe init C:\ProgramData\Jenkins\.jenkins\workspace\regform # timeout=10
Fetching upstream changes from https://github.com/Bhageerath2/registrationform.git
> git.exe --version # timeout=10
> git --version # 'git version 2.39.2.windows.1'
> git.exe fetch --tags --force --progress -- https://github.com/Bhageerath2/registrationform.git


File | C:/ProgramData/Jenkins/.jenkins/workspace/regform/
Index of C:\ProgramData\Jenkins\.jenkins\workspace\regform\
[parent directory]
Name Size Date modified
.git/ 6/15/23, 12:35:00 PM
main.html 1.3 kB 6/15/23, 12:35:00 PM


C:/ProgramData/Jenkins/.jenkins/workspace/regform/main.html
Registration Form
Name
Enter your name
Email
Enter your email
Password
Enter your password
Submit


Dashboard > regform > #2
Status
Changes
Console Output
Edit Build Information
Delete build '#2'
Git Build Data
Previous Build
Build #2 (Jun 15, 2023, 12:43:02 PM)
Keep this build forever
Started 10 sec ago
Took 2.6 sec
Add description
Changes
1. edited main.html (commit: 9586127) (details / githubweb)
Started by user bhageerath
Revision: 95861274c028d45e26dce6fde826b6d8d1b14cc7
Repository: https://github.com/Bhageerath2/registrationform.git
refs/remotes/origin/main


Pull requests
Issues
Codespaces
Marketplace
Explore
Public
Pin
Unwatch 1
Fork 0
Pull requests
Actions
Projects
Commit changes
Commit message
edited main.html
Extended description
Add an optional extended description..
Commit directly to the main branch
Create a new branch for this commit and start a pull request
Learn more about pull requests
Cancel
Commit changes
registrationform
Edit
Preview
Spaces


File | C:/ProgramData/Jenkins/.jenkins/workspace/regform/main.html
Edited Registration Form
Name
Enter your name
Email
Enter your email
Password
Enter your password
Submit

6. Explore Docker commands for content management.

Docker pull: Pull an image or a repository from a registry.

```
Using default tag: latest
latest: Pulling from library/hello-world
Digest: sha256:c2e23624975516c7e27b1b25be3682a8c6c4c0cea011b791ce98aa423b5040a0
Status: Image is up to date for hello-world:latest
docker.io/library/hello-world:latest
```

Docker run: Run a command in a new container.

```
➜  ~ docker run hello-world

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
    executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
    to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docker ID:
 https://hub.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/get-started/
```

Docker images: List images.

```
➜  ~ docker images
REPOSITORY    TAG       IMAGE ID       CREATED         SIZE
nginx         latest    eb4a57159180   7 days ago      187MB
hello-world   latest    9c7a54a9a43c   6 weeks ago     13.3kB
ubuntu        latest    08d22c0ceb15   3 months ago    77.8MB
hello-world   <none>    feb5d9fea6a5   21 months ago   13.3kB
```

Docker ps: List containers.

```
CONTAINER ID   IMAGE     COMMAND                  CREATED          STATUS          PORTS     NAMES
ba63b93f2c1a   nginx     "/docker-entrypoint.…"   19 seconds ago   Up 17 seconds   80/tcp    heuristic_swirles
```