

## Lab Exercise 2

### Creating a Freestyle Build Job

**Objective:** Create a freestyle build job

**Tools required:** Git, GitHub, and Jenkins

**Prerequisite:** Make sure you have a Github Account available

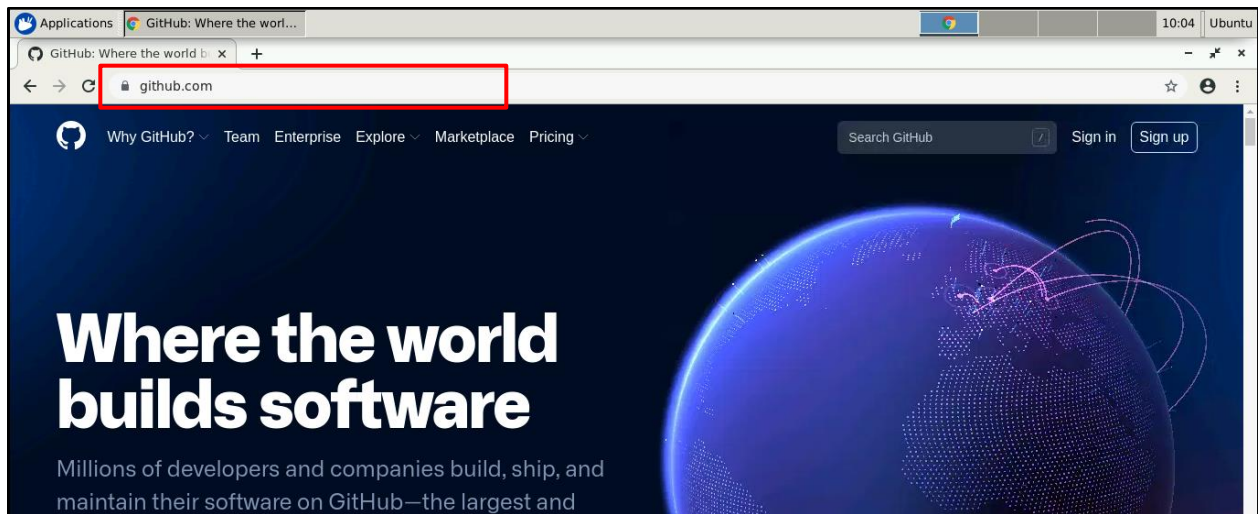
Steps to be followed:

1. Create a GitHub repository
2. Add a Java program to the repository
3. Create a freestyle build job in Jenkins
4. Build the Java program with Jenkins

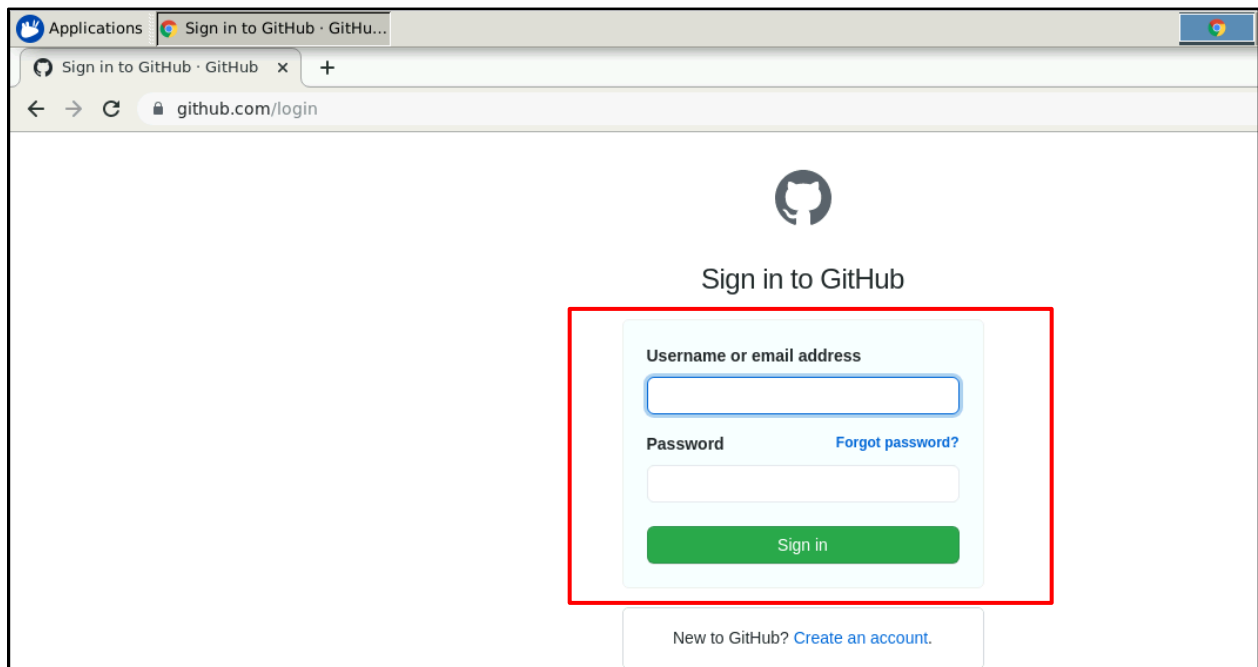
#### Step 1: Create a GitHub repository

1.1 Open the browser in your lab.

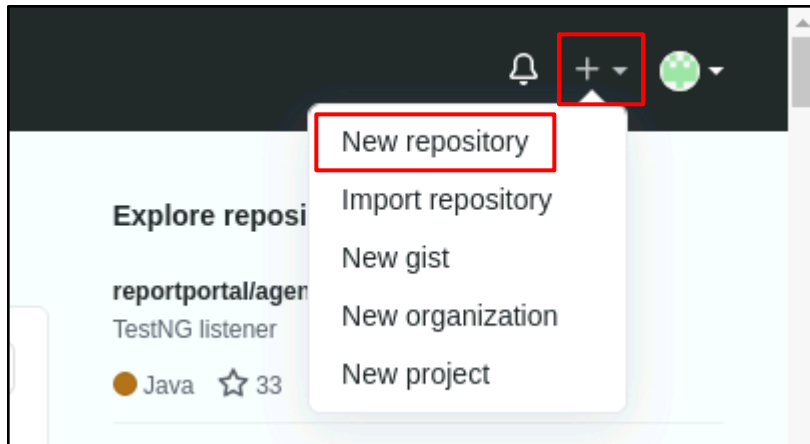
1.2 Go to <https://github.com/> link.



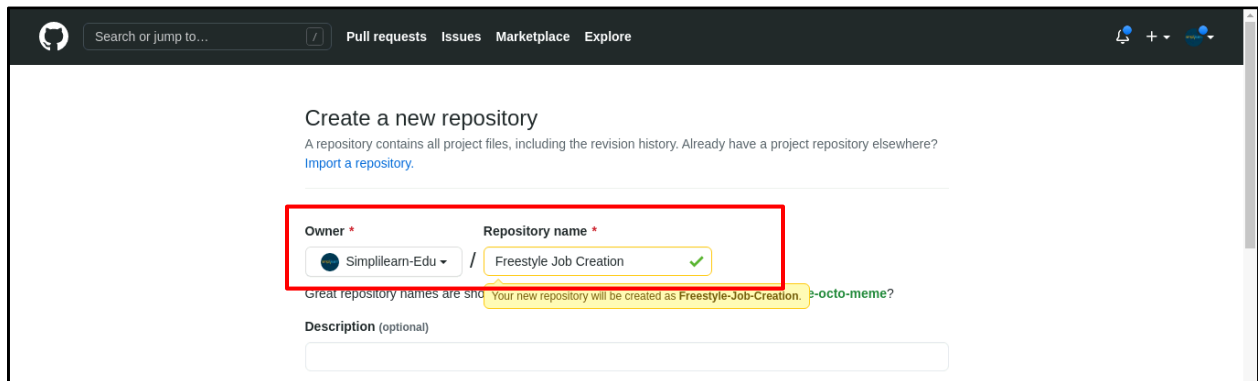
1.3 Click on **Sign in** and enter the credentials of your GitHub account to login.



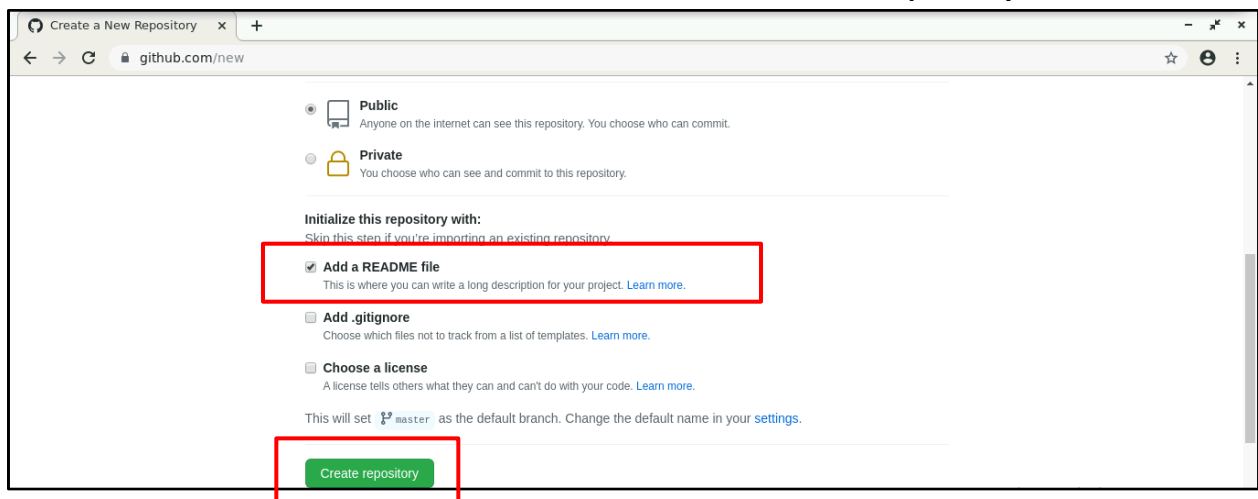
1.4 Click on + symbol and select **New repository**.



1.5 Provide the repository name.



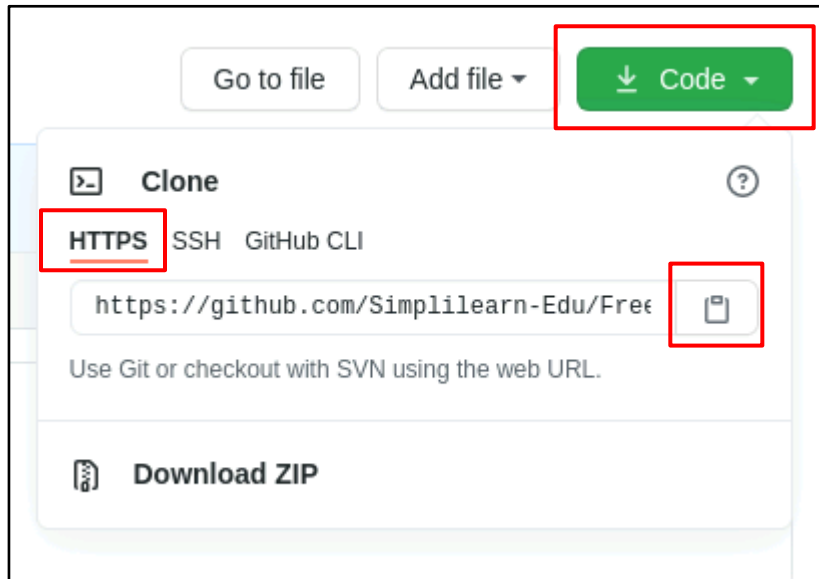
1.6 Select the check box of **ADD a README file** and click on **Create repository**.



1.7 Click on **Code**.

1.8 Click on **HTTPS**.

1.9 Copy the repository URL.



## Step 2: Add a Java program to the repository

2.1 Open the terminal.

2.2 Run ***mkdir hello-world*** to create a directory.

2.3 Navigate to the hello-world directory. Run ***cd hello-world*** command.

2.4 Run ***vi HelloWorld.java*** to open the java file in a text editor.

```
manikumar.simpli@ip-172-31-71-23:~$ mkdir hello-world
manikumar.simpli@ip-172-31-71-23:~$ cd hello-world
manikumar.simpli@ip-172-31-71-23:~/hello-world$ vi HelloWorld.java
```

2.5 Paste the code below into the file:

```
public class HelloWorld {
    public static void main(String[] args) {
        System.out.println("Hello, World");
    }
}
```

```
public class HelloWorld {  
    public static void main(String[] args) {  
        System.out.println("Hello, World");  
    }  
}
```

2.6 Save the file and exit the text editor.

2.7 Run the **git init** command.

2.8 Run **git add .** command.

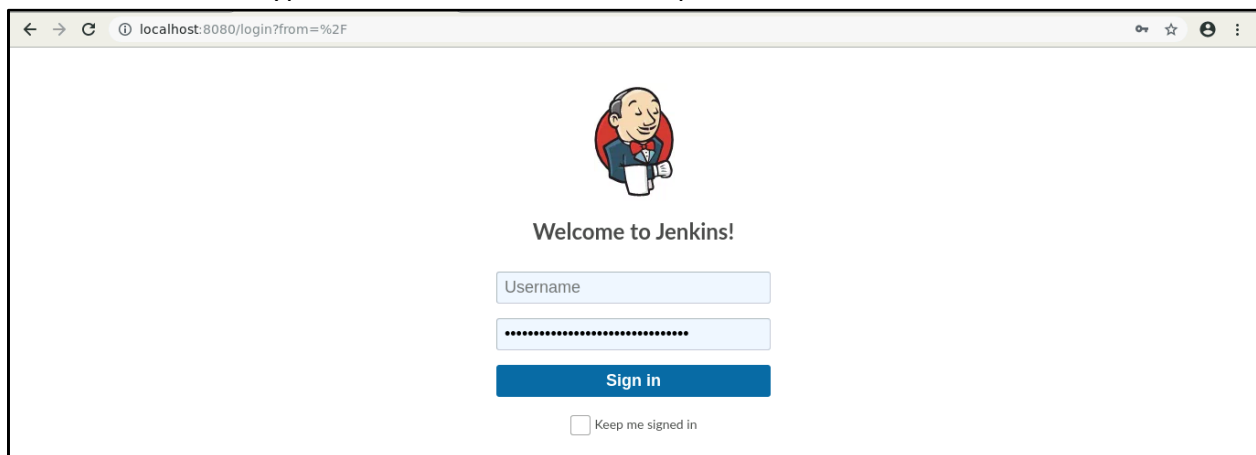
2.9 Run **git commit -m "Add new files"** command.

2.10 Run **git remote add origin <Repository\_URL>** command.

2.11 Run **git push -u origin master** command.

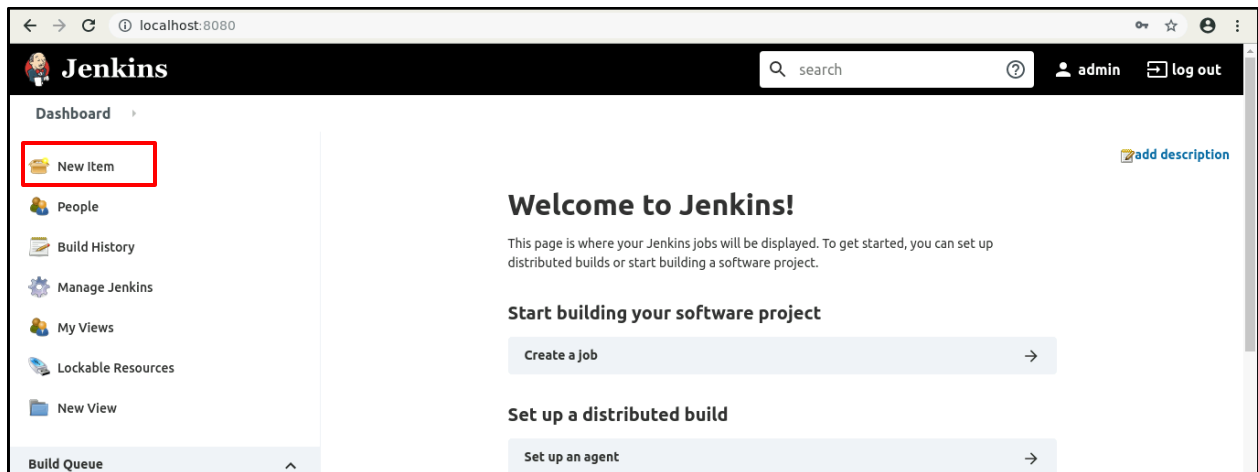
### Step 3: Create a freestyle build job in Jenkins

3.1 In the browser, type **localhost:8080** and it will open Jenkins.



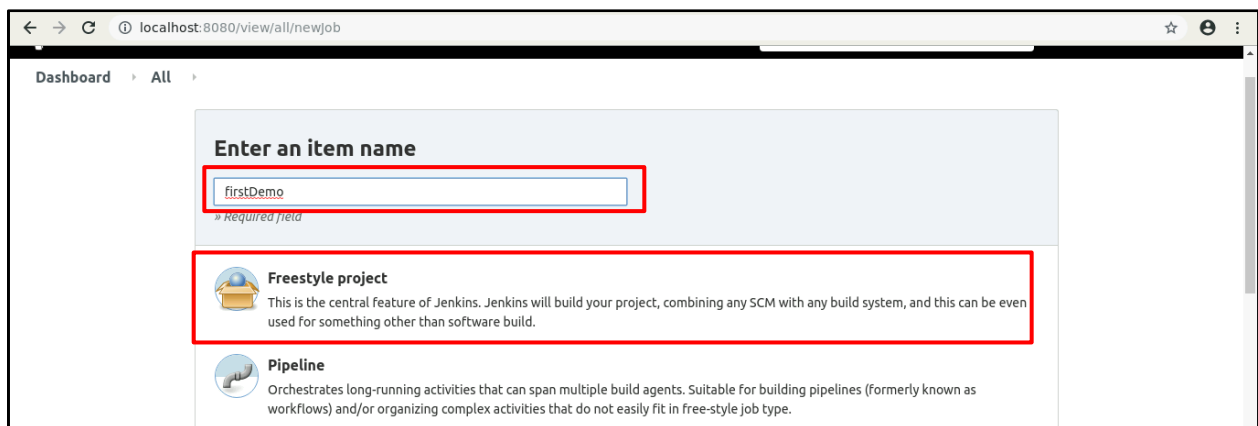
3.2 Provide the credentials and click on **Sign in**.

3.3 Click on **New Item** in the Jenkins dashboard.



3.4 Enter a name for your project.

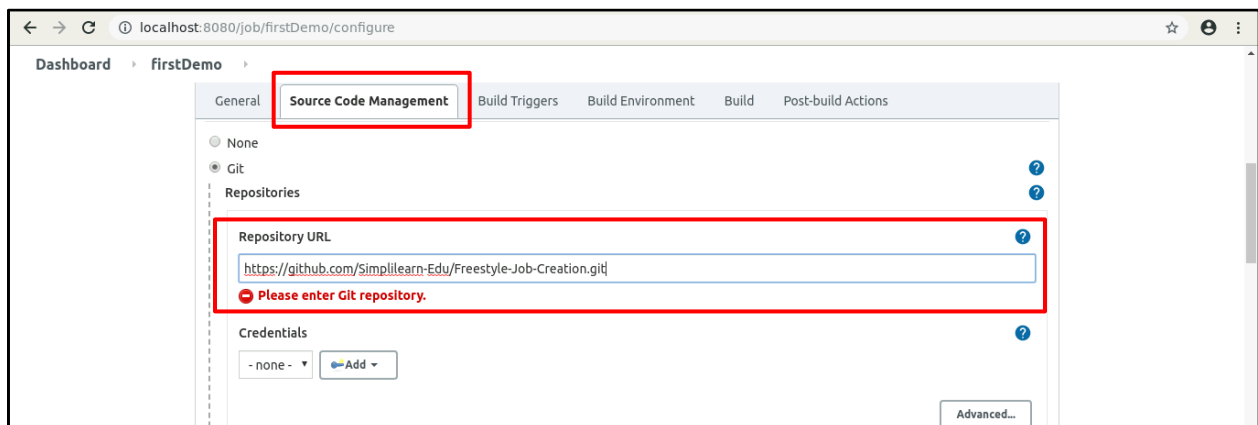
3.5 Select **Freestyle project** as the build job type.



3.6 Click on **OK**.

3.7 Scroll down to the **Source Code Management** section and select **Git**.

3.8 Enter the repository URL.

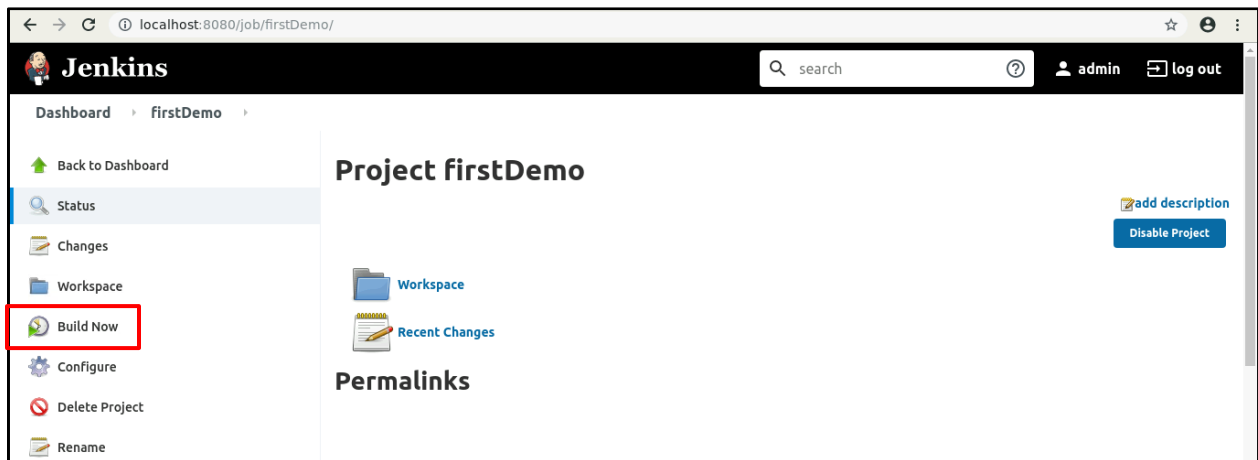


3.9 Click on **Save**.

## Step 4: Build the Java program with Jenkins

4.1 Click on the project name in the Jenkins dashboard.

4.2 Click **Build Now** in the project window. Jenkins will now build your project.



4.3 Click on **Build History** to view the build results.

4.4 Click on the **Console Output** to view the build logs.

