

# Source Code Management with Git

Handson Workbook



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## Activity 1

Install Git and Initial configuration of Git  
Scenario

To get started hands on for Git, we need to install GIT based on OS we use.

## Steps

1	<p><b>Installation Commands:</b></p> <p>Following table lists the commands to install Git in different operating systems:</p> <table><tr><th>Operating System</th><th>Command to Install</th></tr><tr><td>Linux</td><td>Run the following command: <code>sudo yum install git</code></td></tr><tr><td>Debian-based like Ubuntu</td><td>Run the following command: <code>sudo apt-get install git</code></td></tr><tr><td>Windows</td><td>Access the following link: <a href="https://git-scm.com">Git - Downloading Package (git-scm.com)</a>The download will start automatically. PFA doc. For git installing git instructions.</td></tr></table>	Operating System	Command to Install	Linux	Run the following command: <code>sudo yum install git</code>	Debian-based like Ubuntu	Run the following command: <code>sudo apt-get install git</code>	Windows	Access the following link: <a href="https://git-scm.com">Git - Downloading Package (git-scm.com)</a> The download will start automatically. PFA doc. For git installing git instructions.
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2	<p><b>Initial Configuration Setup:</b></p> <p>To set an identity, use the following commands:</p> <pre>git config --global user.name &lt;name&gt; git config --global user.email &lt;email&gt;</pre> <p>Example:</p> <pre>git config --global user.name Rakhi Parashar git config --global user.email rakhi.Parashar@accenture.com</pre> <pre>akhi.parashar@M2B-L-5296SMP MINGW32 ~ \$ git config --global user.name "Rakhi Parashar"  akhi.parashar@M2B-L-5296SMP MINGW32 ~ \$ git config --global user.email rakhi.parashar@accenture.com  akhi.parashar@M2B-L-5296SMP MINGW32 ~ \$</pre>								
3	<p><b>To view all the configurations, use the following command:</b></p> <pre>git config --list</pre>								

	<pre> rakhi.parashar@M2B-L-5296SMP MINGW32 ~ \$ git config --list core.symlinks=false core.autocrlf=true core.fscache=true color.diff=auto color.status=auto color.branch=auto color.interactive=true help.format=html rebase.autosquash=true http.sslcainfo=C:/Users/rakhi.parashar/AppData/Local/Programs/Git/mingw32/ssl/certs/ca-bundle.crt diff.astextplain.textconv=astextplain filter.lfs.clean=git-lfs clean -- %f filter.lfs.smudge=git-lfs smudge -- %f filter.lfs.required=true filter.lfs.process=git-lfs filter-process pack.packsizelimit=2g gui.recentrepo=C:/Users/rakhi.parashar/develop gui.recentrepo=C:/Devops/TestRakhi gui.recentrepo=C:/Devops/TestRakhi gui.recentrepo=C:/Data/DevopsAcademy/ExampleProject user.name=Rakhi Parashar user.email=rakhi.parashar@accenture.com  rakhi.parashar@M2B-L-5296SMP MINGW32 ~ </pre>
4	<p><b>Initializing Git repository:</b>  To initialize Git repository run the following commands:</p> <pre> git init </pre> <p>(to initialize git repository)</p> <pre> cd .git </pre> <p>(go to git directory and verifying GIT repository initialization)</p> <pre> dir </pre> <p>(to list all files and directories .git contains)</p> <pre> jaswanth.k.konduru@HDC2-L-F2AKE8B MINGW64 ~ \$ mkdir gitpractice  jaswanth.k.konduru@HDC2-L-F2AKE8B MINGW64 ~ \$ cd gitpractice/  jaswanth.k.konduru@HDC2-L-F2AKE8B MINGW64 ~/gitpractice \$ pwd /c/Users/jaswanth.k.konduru/gitpractice  jaswanth.k.konduru@HDC2-L-F2AKE8B MINGW64 ~/gitpractice \$ git init Initialized empty Git repository in C:/Users/jaswanth.k.konduru/gitpractice/.git/  jaswanth.k.konduru@HDC2-L-F2AKE8B MINGW64 ~/gitpractice (master) \$ cd .git  jaswanth.k.konduru@HDC2-L-F2AKE8B MINGW64 ~/gitpractice/.git (GIT_DIR!) \$ dir HEAD  config  description  hooks  info  objects  refs  jaswanth.k.konduru@HDC2-L-F2AKE8B MINGW64 ~/gitpractice/.git (GIT_DIR!) \$ ls -a ./  ../  HEAD  config  description  hooks/  info/  objects/  refs/ </pre>

# Activity2

## Working in GitHub Scenario

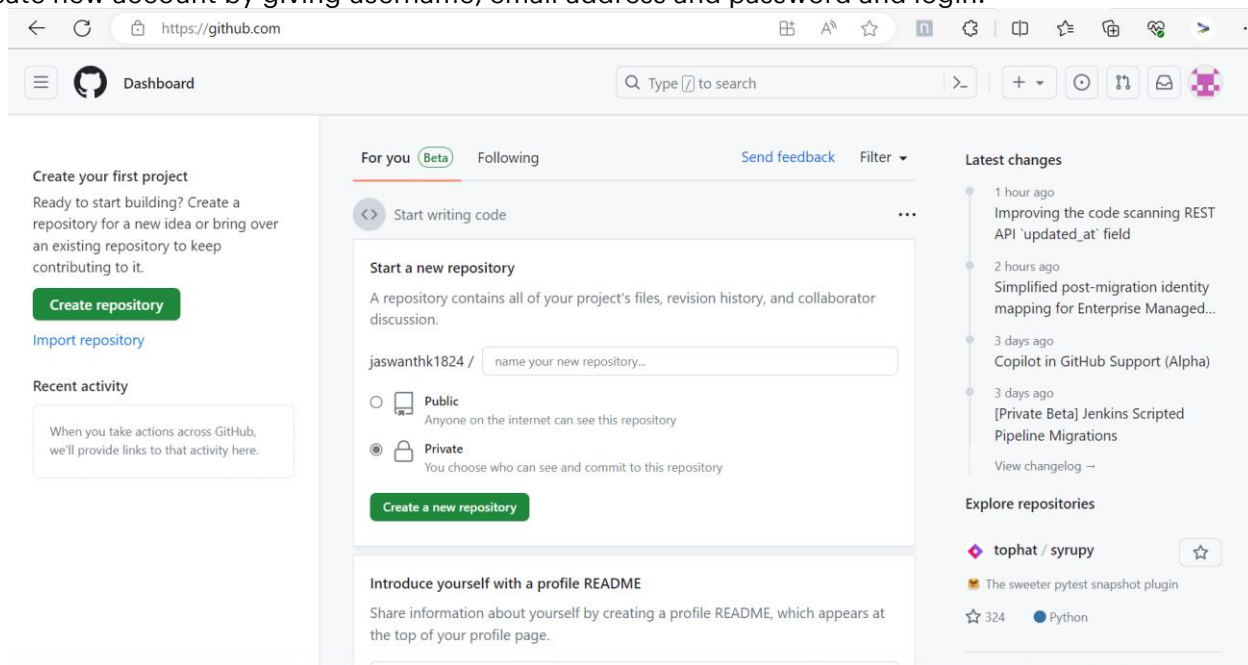
Create an account in GitHub. Login to the GitHub and create a new repository as NewProject and branch gitbash. Create and add the file to the project. Make some changes in the code and then commit your changes in the main as well as develop.

## Steps

1

### Creating a GitHub Account:

1. Login to <https://github.com/signup> in new browser.
2. Create new account by giving username, email address and password and login.



2

### Creating Github Repository:


1. Click **New repository** to create a repository.
2. Provide name of new Repository Example: **demoproject**.
3. Select for **Public** button.
4. Check **"Initialize this repository with a README"**
5. Click **Create repository**.

## Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk (\*).

Owner \*

 jaswanthk1824 ▾

Repository name \*

/ demoproject

✔ demoproject is available.

Great repository names are short and memorable. Need inspiration? How about [jubilant-dollop](#) ?

Description (optional)

☒  **Public**

Anyone on the internet can see this repository. You choose who can commit.

☐  **Private**

You choose who can see and commit to this repository.

Initialize this repository with:

☒ **Add a README file**

This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore

.gitignore template:None ▾

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

License:None ▾

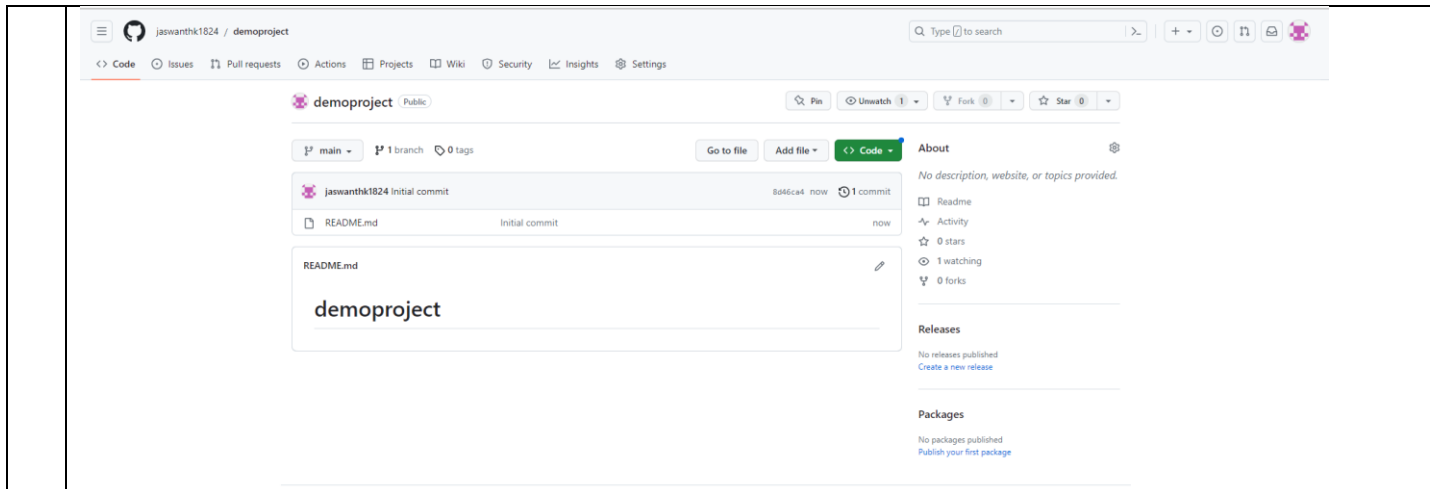
A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

This will set  **main** as the default branch. Change the default name in your [settings](#).

 You are creating a public repository in your personal account.

Create repository

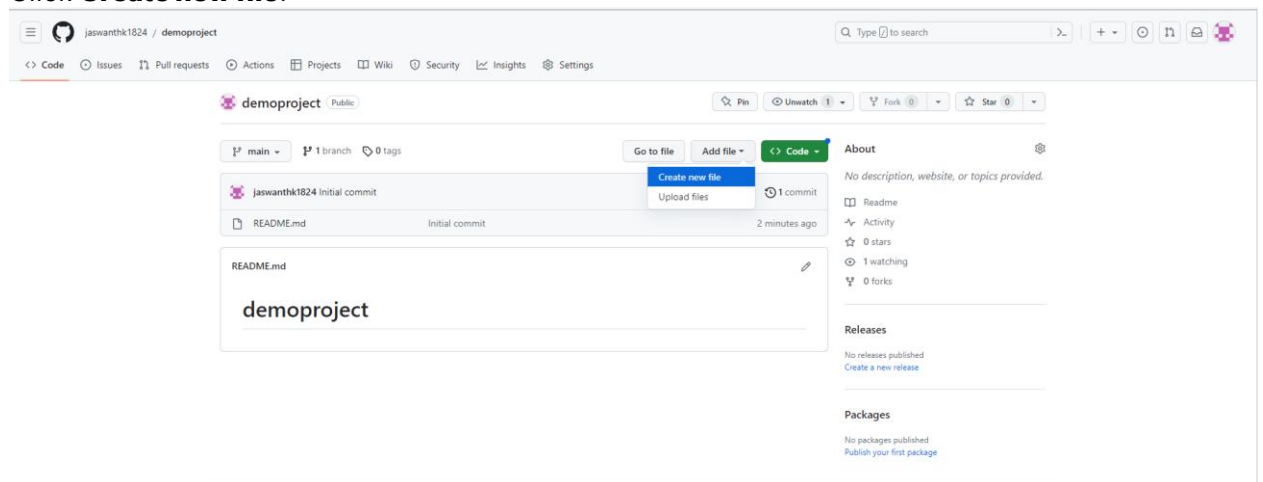
Please review your repository created as below:



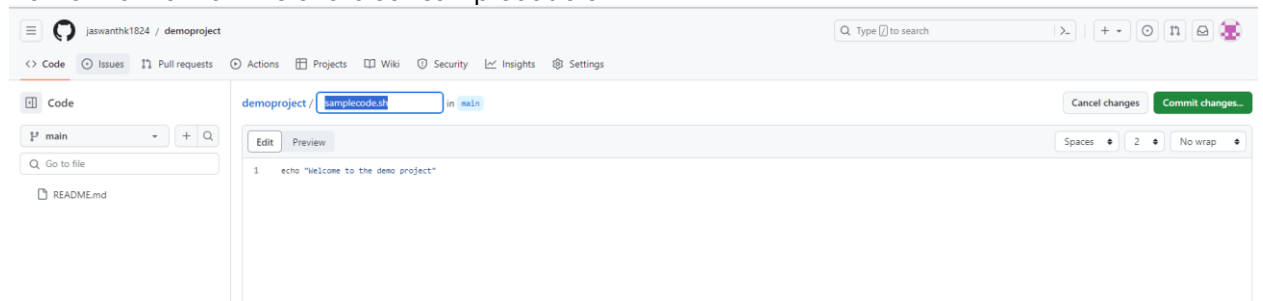
3

## Adding a new file

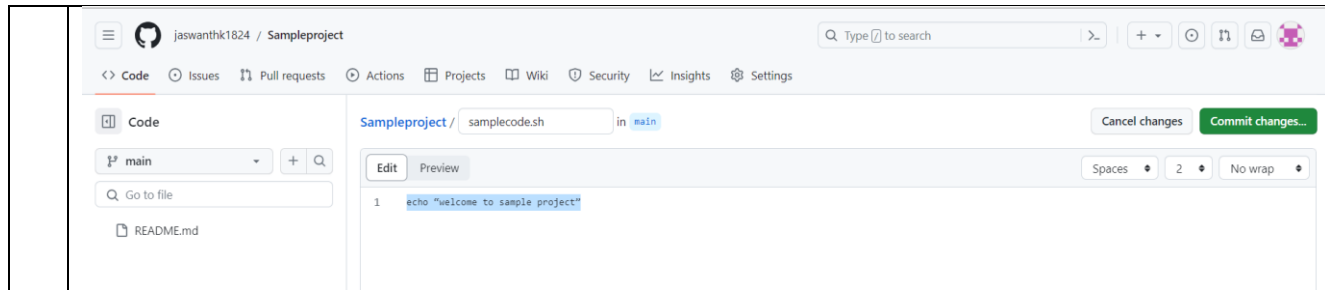
1. Click **Create new file**.



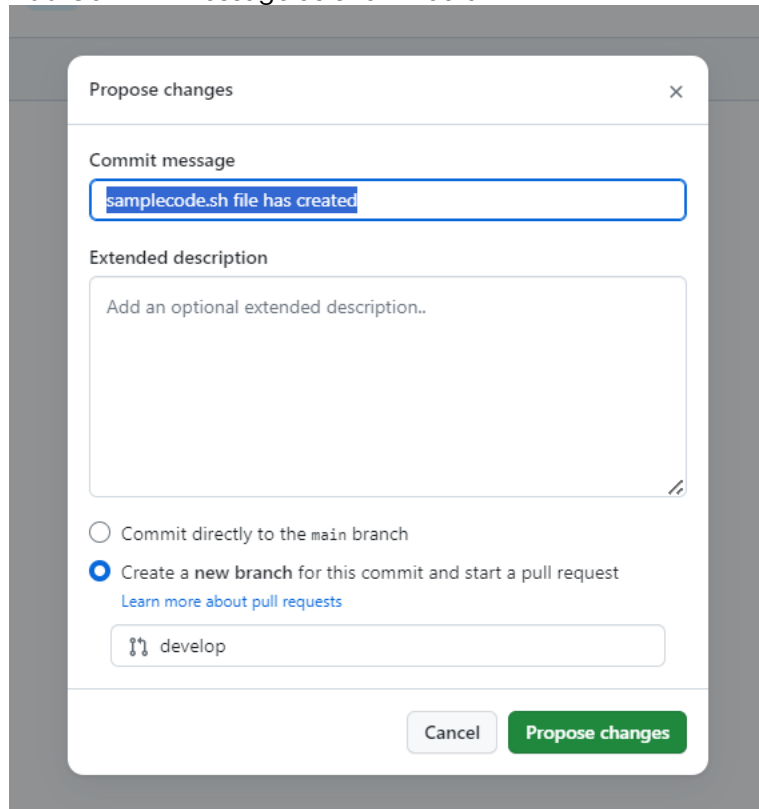
2. Name the file. For this exercise "samplecode.sh"



3. Add lines of code.  
For example:  
`echo "welcome to the demo project"`



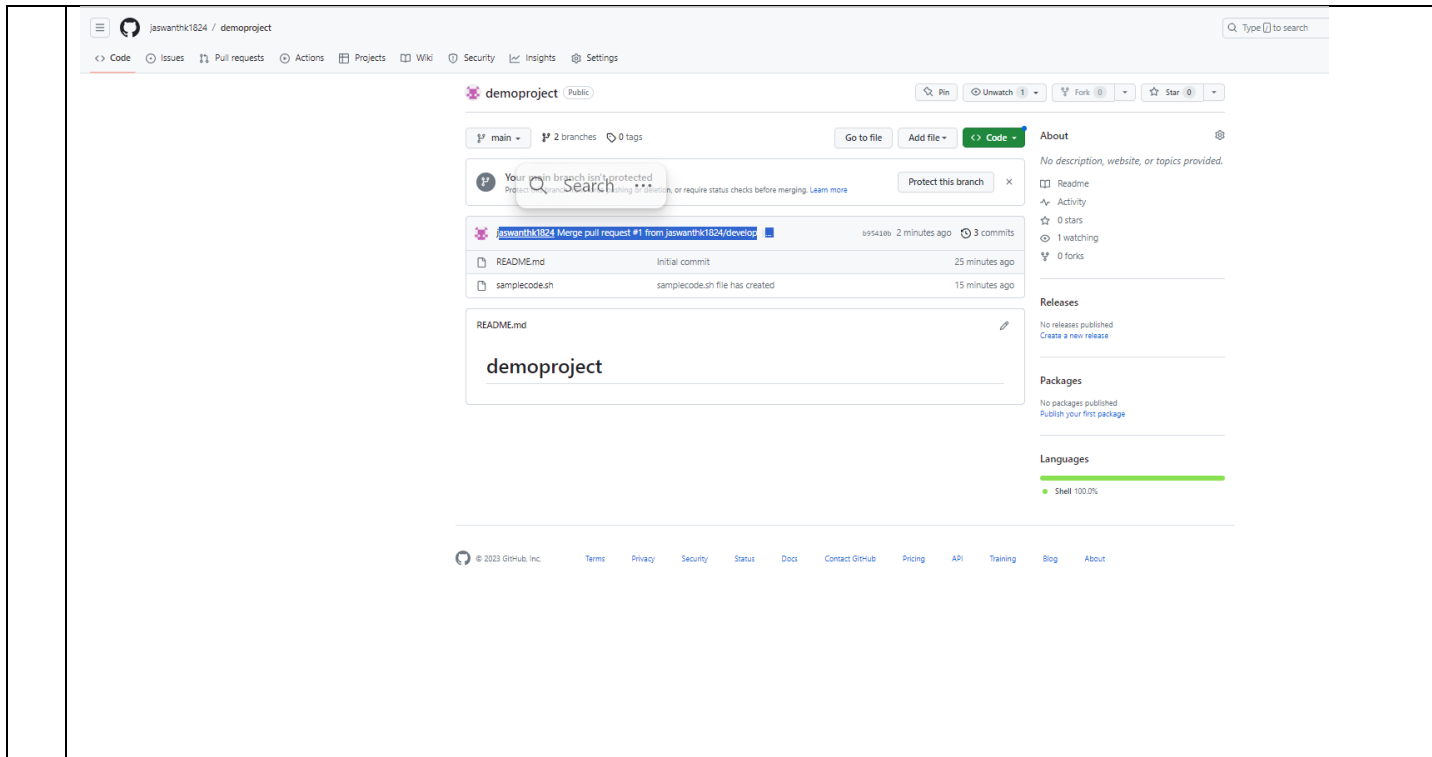
4. Click on **Commit Changes...**
5. Add Commit message as shown below.



6. Ensure that **create a new branch for this commit and start a pull request** and provide branch name as **develop** as shown above.
7. Click on **Propose Changes**
8. Now add comments and click on **create pull request**



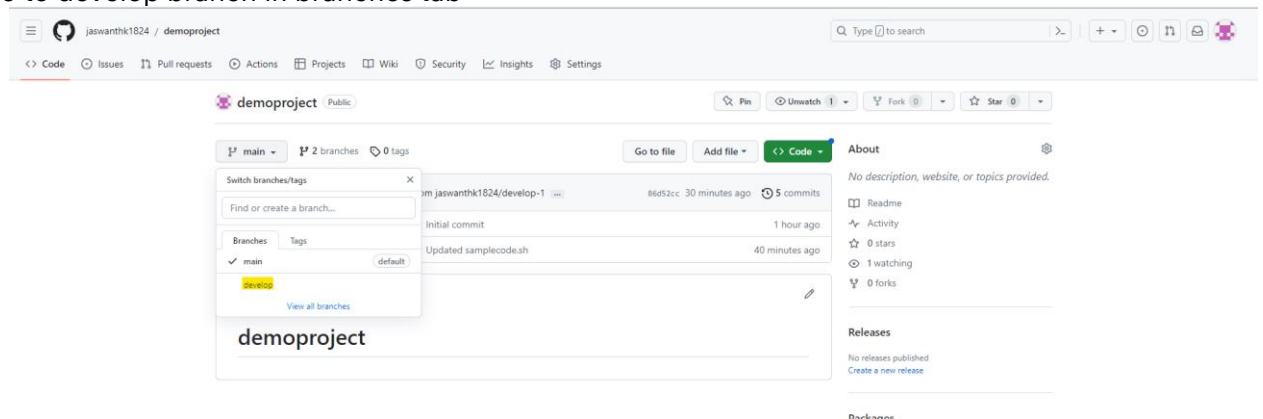




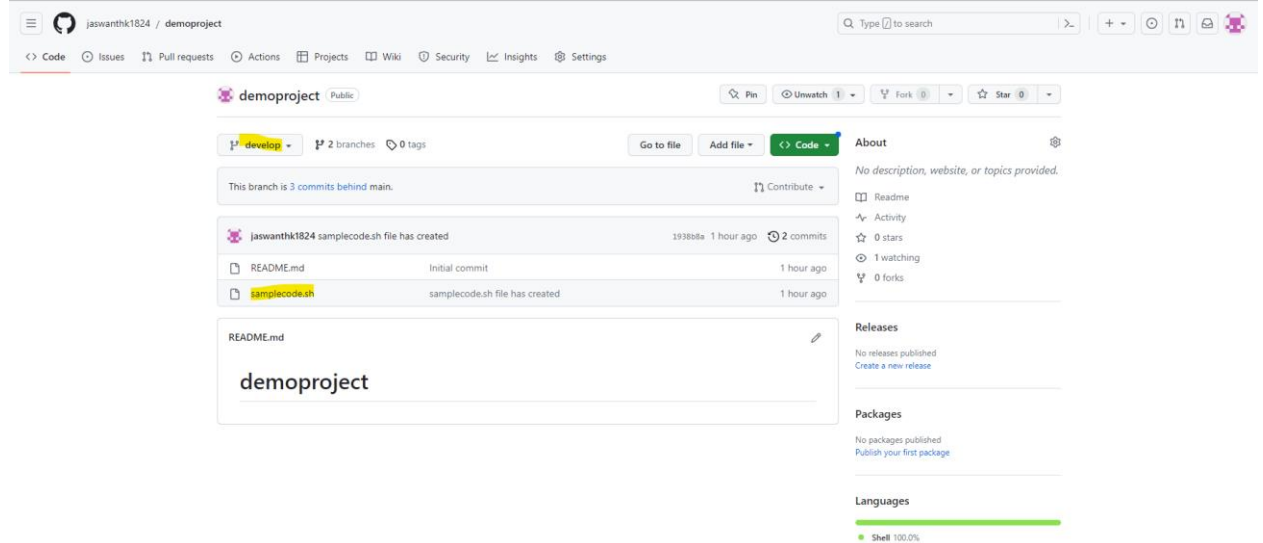
5

## Editing an existing file

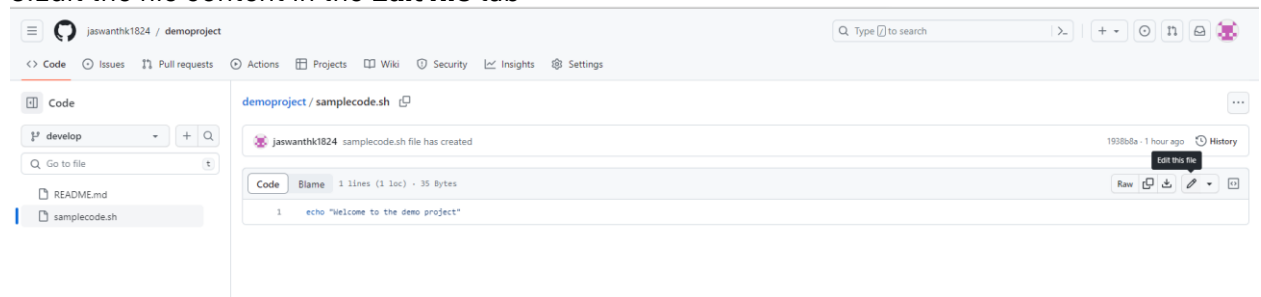
1. Go to develop branch in branches tab



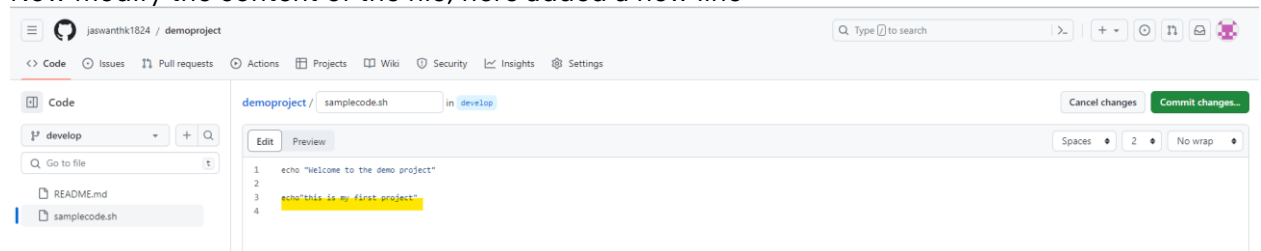
2. click on the **samplecode.sh** file



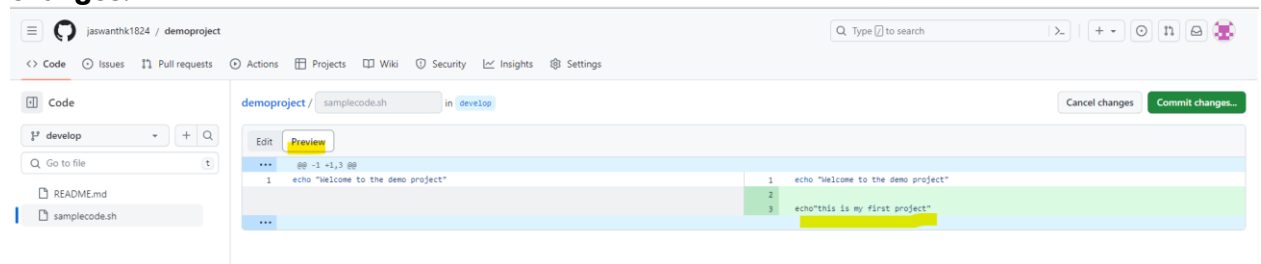
### 3. Edit the file content in the **Edit file** tab



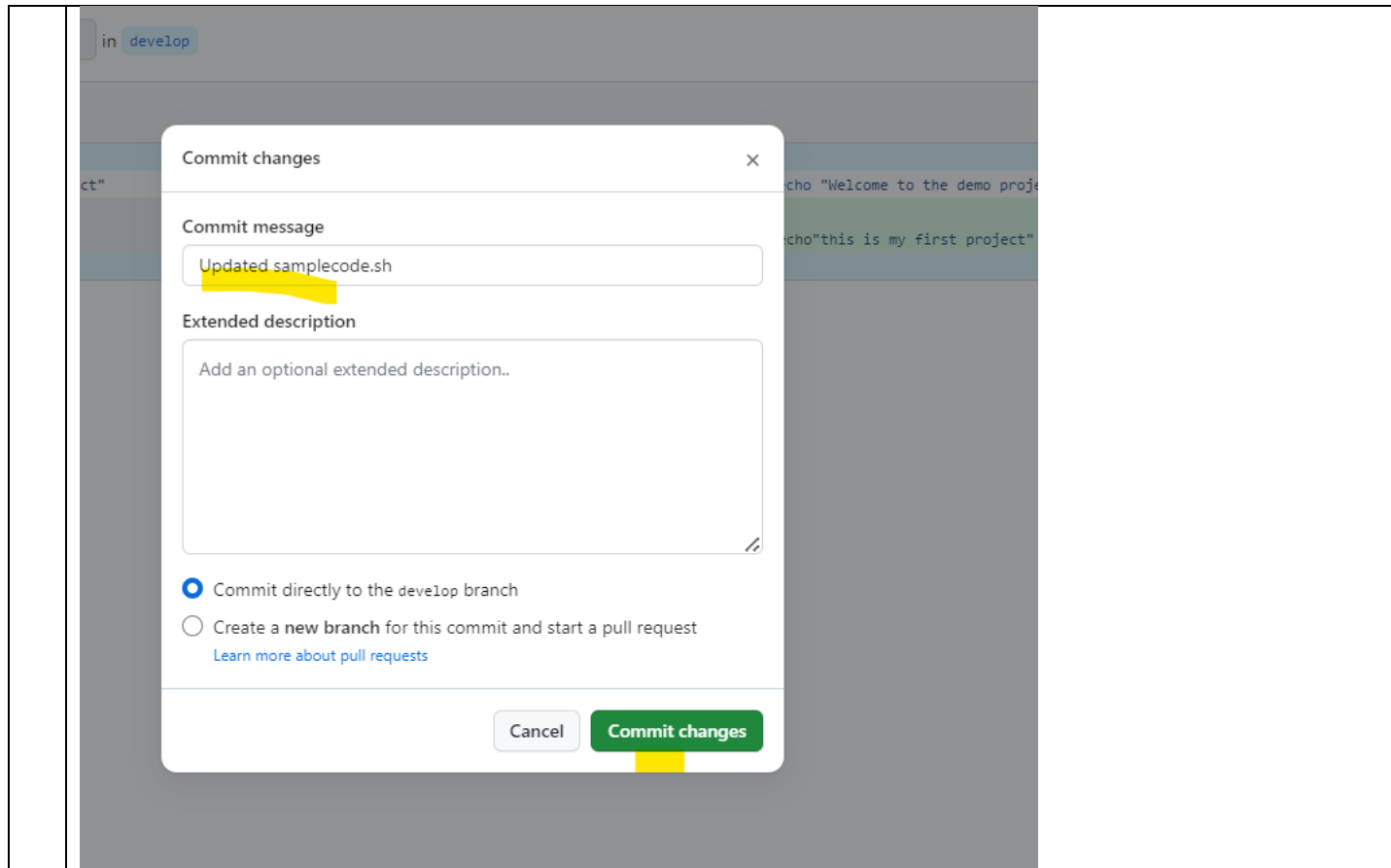
Now modify the content of the file, here added a new line



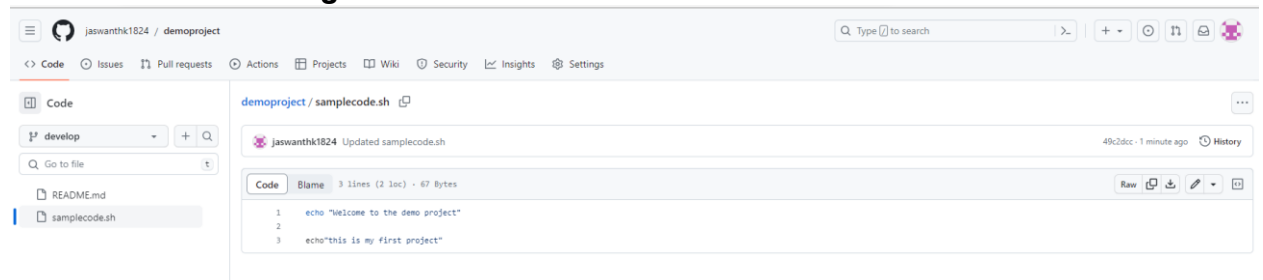
### 4. Click on **Preview** to view the changes. The new content will be displayed in Green, click on **commit changes**.



### 5. Give a meaningful comment when committing which explains the changes made to the file.

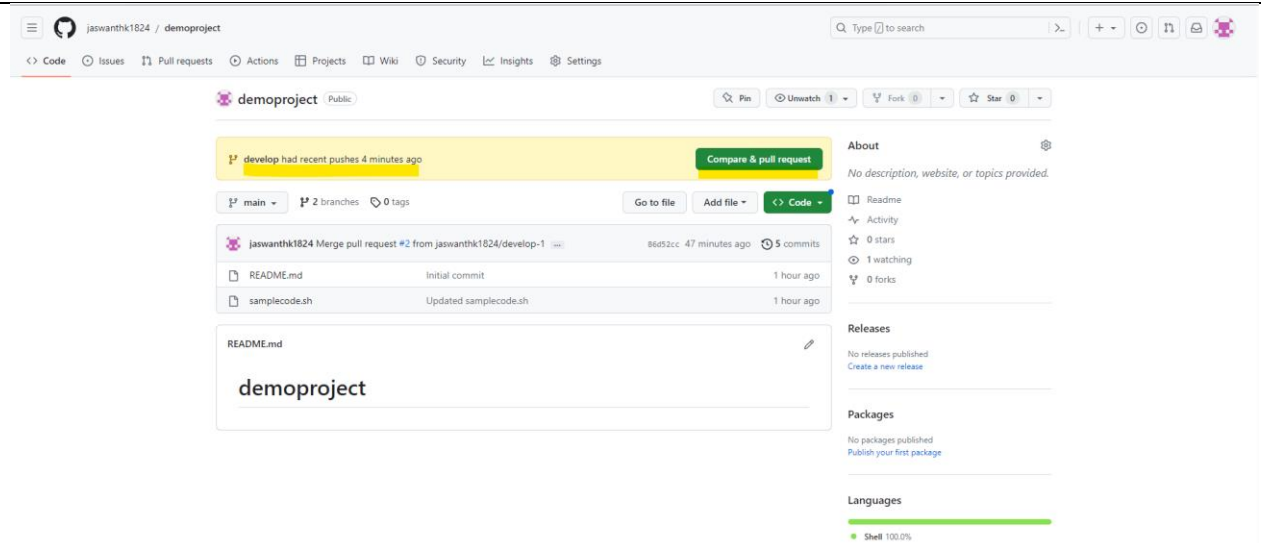


## 6. Click on **commit Changes**

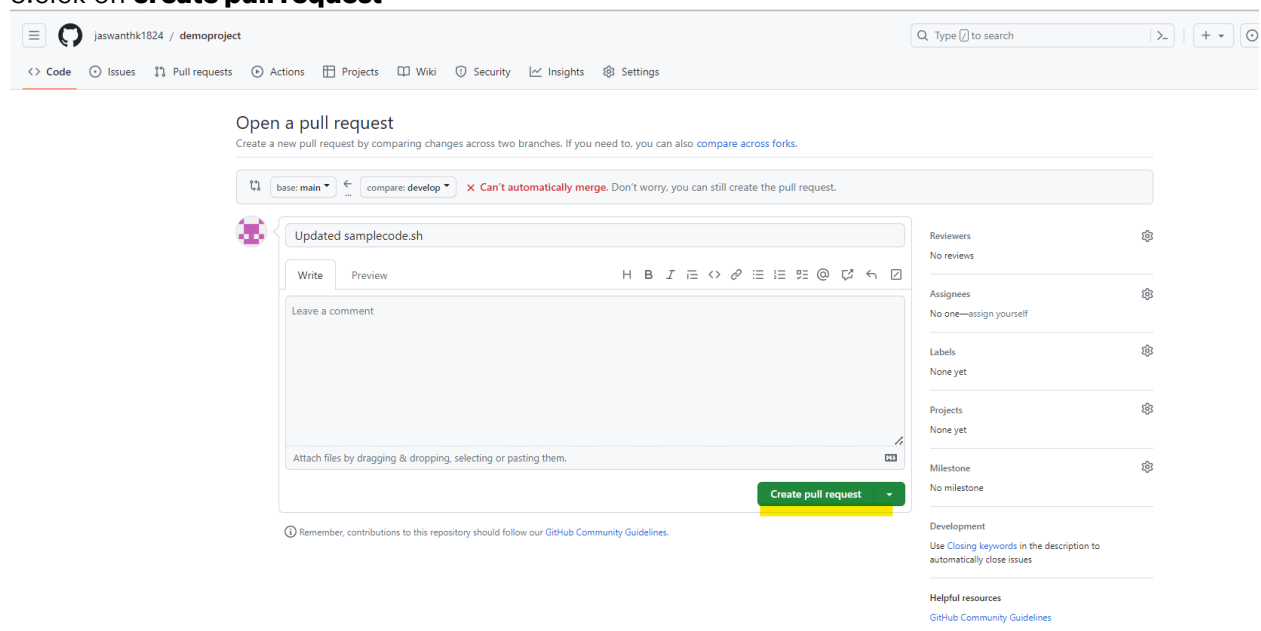


7. Navigate to main branch and **create pull request** to merge changes from develop branch into main branch

8. click on **compare & pull request** and confirm merge



## 8.click on **create pull request**



## 9.click on **merge pull request** and **confirm merge**

## Updated samplecode.sh #3

Edit <> Code

Open jaswanthk1824 wants to merge 2 commits into main from develop

Conversation 0 Commits 2 Checks 0 Files changed 1 +1 -1

**jaswanthk1824** commented 2 minutes ago Owner

No description provided.

**jaswanthk1824** added 2 commits 11 minutes ago

- Updated samplecode.sh Verified 49c2dcc
- Merge branch 'main' into develop Verified 2f1376e

**Reviewers**

No reviews

Still in progress? Convert to draft

**Assignees**

No one—assign yourself

**Labels**

None yet

**Projects**

None yet

**Milestone**

No milestone

**Development**

Successfully merging this pull request may close these issues.

None yet

Add more commits by pushing to the **develop** branch on **jaswanthk1824/demoproject**.

Continuous integration has not been set up  
GitHub Actions and several other apps can be used to automatically catch bugs and enforce style.

**This branch has no conflicts with the base branch**  
Merging can be performed automatically.

**Merge pull request** You can also open this in GitHub Desktop or view command line instructions.

Write Preview

Leave a comment

**Notifications** Customize

Unsubscribe

You're receiving notifications because you're watching

## Updated samplecode.sh #3

Edit <> Code

Open jaswanthk1824 wants to merge 2 commits into main from develop

Conversation 0 Commits 2 Checks 0 Files changed 1 +1 -1

**jaswanthk1824** commented 5 minutes ago Owner

No description provided.

**jaswanthk1824** added 2 commits 14 minutes ago

- Updated samplecode.sh Verified 49c2dcc
- Merge branch 'main' into develop Verified 2f1376e

**Reviewers**

No reviews

Still in progress? Convert to draft

**Assignees**

No one—assign yourself

**Labels**

None yet

**Projects**

None yet

**Milestone**

No milestone

**Development**

Successfully merging this pull request may close these issues.

None yet

Add more commits by pushing to the **develop** branch on **jaswanthk1824/demoproject**.

**Merge pull request #3 from jaswanthk1824/develop**

Updated samplecode.sh

This commit will be authored by 141658360+jaswanthk1824@users.noreply.github.com

**Confirm merge** Cancel

Write Preview

Leave a comment

**Notifications** Customize

Unsubscribe

You're receiving notifications because you're watching this repository.

- Now pull request is successfully merged and closed,
- Navigate to main branch and click on file to see the updated content.

jaswanthk1824 / demoproject

<> Code

Issues

Pull requests

Actions

Projects

Wiki

Security

Insights

Settings

demoproject

Public

Pin

Unwatch 1

Fork 0

Star 0

main 3 branches 0 tags

Go to file

Add file

<> Code

About

Your main branch isn't protected

Protect this branch from force pushing or deletion, or require status checks before merging. [Learn more](#)

Protect this branch

jaswanthk1824 Merge pull request #2 from jaswanthk1824/develop-1

86d52cc 1 minute ago 5 commits

README.md Initial commit 1 hour ago

samplecode.sh Updated samplecode.sh 10 minutes ago

README.md

demoproject

About

No description, website, or topics provided.

Readme

Activity

0 stars

1 watching

0 forks

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

Languages

Shell 100.0%

----- End of Exercise -----

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