Day: 6 Daily Assignments

Date: 01-Aug-2024

By: Parth Gurval

Assignment 1: Initialize a new Git repository in a directory of your choice. Add a simple text file to the repository and make the first commit.

Ans:

Objective: Initialize a new Git repository, add a simple text file, and make the first commit in Linux.

Step-by-Step Instructions

1. **Open the Terminal and Navigate to the Desired Directory**
    a. Open the terminal on your Linux system.
    b. Navigate to the directory where you want to create your new Git repository.
    c. Command:
        i. $ cd Desktop/
        ii. $ ls
        iii. $ mkdir testFile
        iv. $ cd testFile/
2. **Create a Simple Text File**
    a. Create a new text file and write some text inside it.
    b. Command:
        i. $ touch sampleTextFile.txt
        ii. $ echo “This is an sample Test File” > sampleTextFile.txt

3. **Check for Git Installation**
    a. Ensure Git is installed on your system.
    b. Commands:
        i. $ sudo apt update
        ii. $ git - - version

    c. If Git is not installed, install it using the following commands:
    d. Commands:
        i. $ sudo apt update
        ii. $ sudo apt install git

4. **Initialize a New Git Repository**
    a. Initialize a new Git repository in the current directory.
        i. $ git init

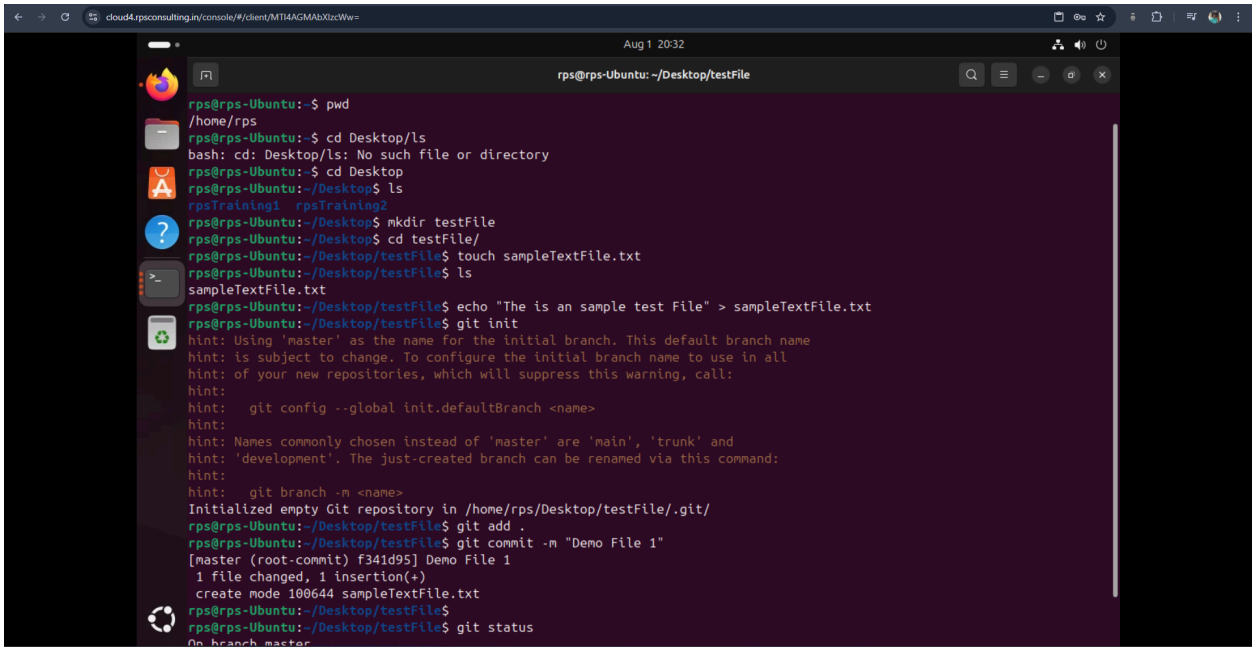
5. **Configure Git User Information**
    a. Set your email address and name for Git globally.
    b. Commands:
        i. $ git config --global user.email “userEmail@gmail.com”
        ii. $ git config --global user.name “userName”

6. **Add the File to the Staging Area**
    a. Add the newly created file to the staging area.
    b. Command:
        i. $ add .

7. **Commit the File**
    a. Commit the file to the repository with a commit message.
    b. Command:
        i. $ git commit -m “My First File Commited”

8. **Check the Repository Status**
    a. Verify the status of your repository to ensure the commit was successful.
    b. Command:
        i. $ git status

9. **ScreenShot:**



Assignment 2: Branch Creation and Switching Create a new branch named 'feature' and switch to it. Make changes in the 'feature' branch and commit them.

Combined

Assignment 3: Feature Branches and Hotfixes _x000D_# Confidential - RP Assignment 3: Feature Branches and Hotfixes Create a 'hotfix' branch to fix an issue in the main code. Merge the 'hotfix' branch into 'main' ensuring that the issue is resolved

[Mergerd/ Combined Done Assignment]

[Here I have done Assignment 2 and 3 Combined]

Ans:

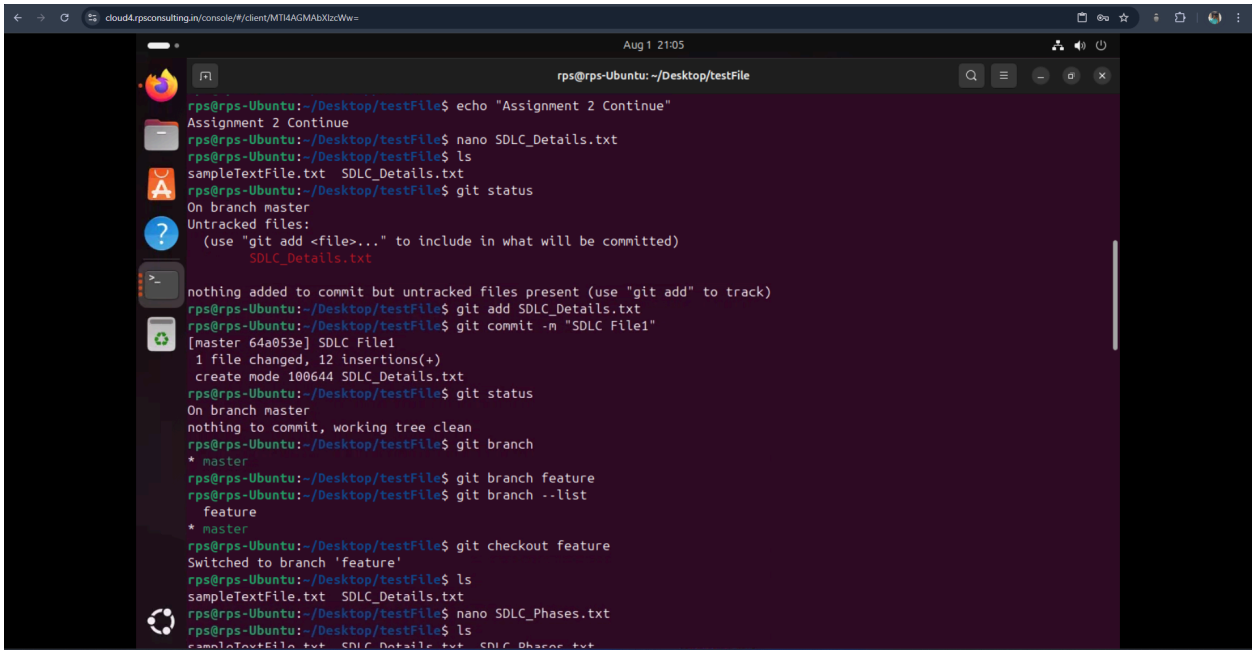
For the initial Set-up Follow the Above Commands to create an file and upload it on git repository and now we are going to follow from next step commands for creating branch and merging the content of the branch to main branch.

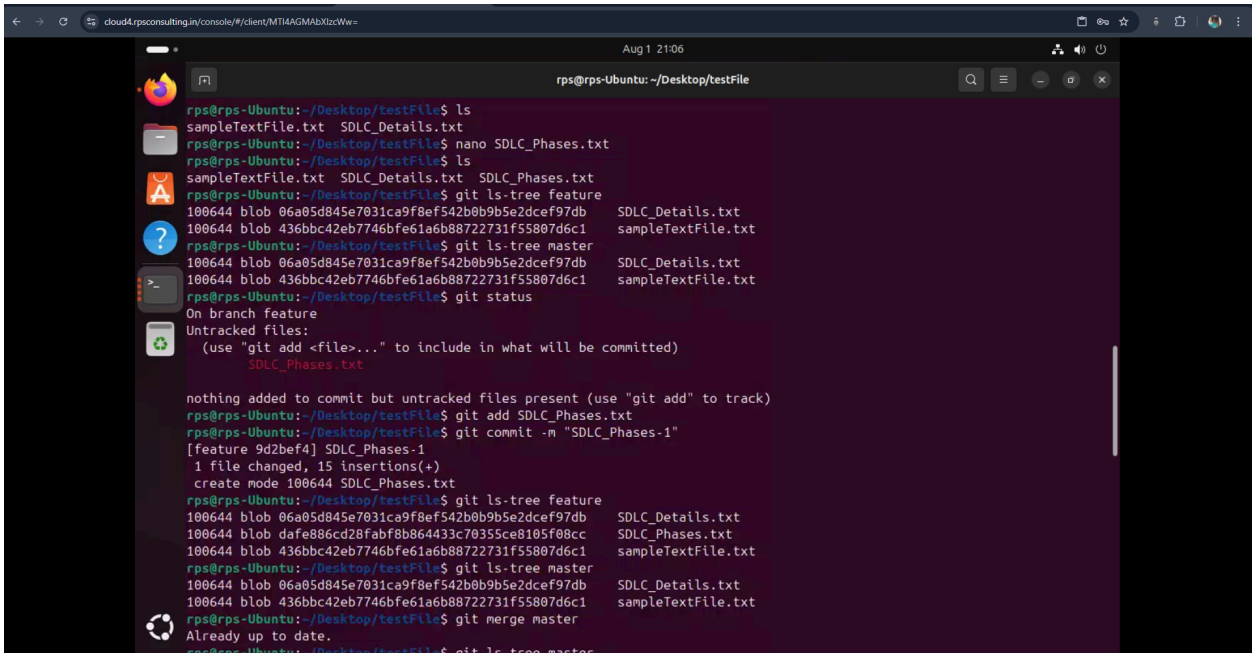
Steps:

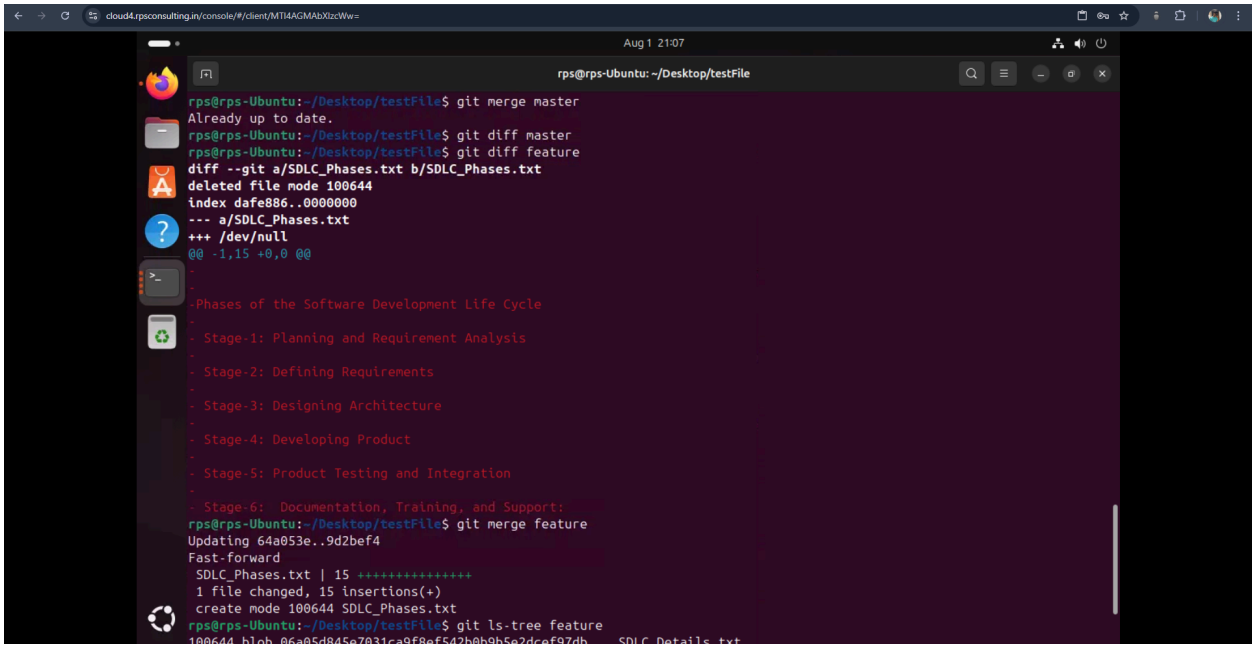
1. View How many branch you have
    a. Command:
        i. $ git branch –list
2. Create a new branch named “feature” in git
    a. Command:
        i. $ git branch feature (here feature is branch name)
3. Now Switch to newly created branch
    a. Command:
        i. $ git checkout feature

4. Make file or Folder and make changes in the branch
    a. Command:
        i. $ git nano SDLC_Phases.txt
5. Add changes to git
    a. Command
        i. $ git add .
6. Commit Change to git
    a. Command
        i. $ git commit -m “SDLC_Phases-1”
7. Check and Compare both branches
    a. Commands:
        i. $ git ls-tree main
        ii. $ git ls-tree feature
8. Shift to main branch
    a. Command:
        i. $ git checkout main
9. View the Merge and changes
    a. Commands:
        i. $ git ls-tree main
        ii. $ git ls-tree feature
        iii. $ git log - - online

10. Screenshots:


cloud4.rpsconsulting.in/console/#/client/MTI4AGMAbXlzcWw=
Aug 1 21:05
rps@rps-Ubuntu: ~/Desktop/testFile
rps@rps-Ubuntu:~/Desktop/testFile$ echo "Assignment 2 Continue"
Assignment 2 Continue
rps@rps-Ubuntu:~/Desktop/testFile$ nano SDLC_Details.txt
rps@rps-Ubuntu:~/Desktop/testFile$ ls
sampleTextFile.txt SDLC_Details.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git status
On branch master
Untracked files:
(use "git add <file>..." to include in what will be committed)
SDLC_Details.txt
nothing added to commit but untracked files present (use "git add" to track)
rps@rps-Ubuntu:~/Desktop/testFile$ git add SDLC_Details.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git commit -m "SDLC File1"
[master 64a053e] SDLC File1
1 file changed, 12 insertions(+)
create mode 100644 SDLC_Details.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git status
On branch master
nothing to commit, working tree clean
rps@rps-Ubuntu:~/Desktop/testFile$ git branch
* master
rps@rps-Ubuntu:~/Desktop/testFile$ git branch feature
rps@rps-Ubuntu:~/Desktop/testFile$ git branch --list
feature
* master
rps@rps-Ubuntu:~/Desktop/testFile$ git checkout feature
Switched to branch 'feature'
rps@rps-Ubuntu:~/Desktop/testFile$ ls
sampleTextFile.txt SDLC_Details.txt
rps@rps-Ubuntu:~/Desktop/testFile$ nano SDLC_Phases.txt
rps@rps-Ubuntu:~/Desktop/testFile$ ls


cloud4.rpsconsulting.in/console/#/client/MTI4AGMAbXlzcWw=
Aug 1 21:06
rps@rps-Ubuntu: ~/Desktop/testFile
rps@rps-Ubuntu:~/Desktop/testFile$ ls
sampleTextFile.txt SDLC_Details.txt
rps@rps-Ubuntu:~/Desktop/testFile$ nano SDLC_Phases.txt
rps@rps-Ubuntu:~/Desktop/testFile$ ls
sampleTextFile.txt SDLC_Details.txt SDLC_Phases.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git ls-tree feature
100644 blob 06a05d845e7031ca9f8ef542b0b9b5e2dcef97db SDLC_Details.txt
100644 blob 436bbc42eb7746bfe61a6b88722731f55807d6c1 sampleTextFile.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git ls-tree master
100644 blob 06a05d845e7031ca9f8ef542b0b9b5e2dcef97db SDLC_Details.txt
100644 blob 436bbc42eb7746bfe61a6b88722731f55807d6c1 sampleTextFile.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git status
On branch feature
Untracked files:
(use "git add <file>..." to include in what will be committed)
SDLC_Phases.txt
nothing added to commit but untracked files present (use "git add" to track)
rps@rps-Ubuntu:~/Desktop/testFile$ git add SDLC_Phases.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git commit -m "SDLC_Phases-1"
[feature 9d2bef4] SDLC_Phases-1
1 file changed, 15 insertions(+)
create mode 100644 SDLC_Phases.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git ls-tree feature
100644 blob 06a05d845e7031ca9f8ef542b0b9b5e2dcef97db SDLC_Details.txt
100644 blob dafe886cd28fabf8b864433c70355ce8105f08cc SDLC_Phases.txt
100644 blob 436bbc42eb7746bfe61a6b88722731f55807d6c1 sampleTextFile.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git ls-tree master
100644 blob 06a05d845e7031ca9f8ef542b0b9b5e2dcef97db SDLC_Details.txt
100644 blob 436bbc42eb7746bfe61a6b88722731f55807d6c1 sampleTextFile.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git merge master
Already up to date.


cloud4.rpsconsulting.in/console/#/client/MTI4AGMAbXIzcWw=
Aug 1 21:07
rps@rps-Ubuntu: ~/Desktop/testFile
rps@rps-Ubuntu:~/Desktop/testFile$ git merge master
Already up to date.
rps@rps-Ubuntu:~/Desktop/testFile$ git diff master
rps@rps-Ubuntu:~/Desktop/testFile$ git diff feature
diff --git a/SDLC_Phases.txt b/SDLC_Phases.txt
deleted file mode 100644
index dafe886..0000000
--- a/SDLC_Phases.txt
+++ /dev/null
@@ -1,15 +0,0 @@
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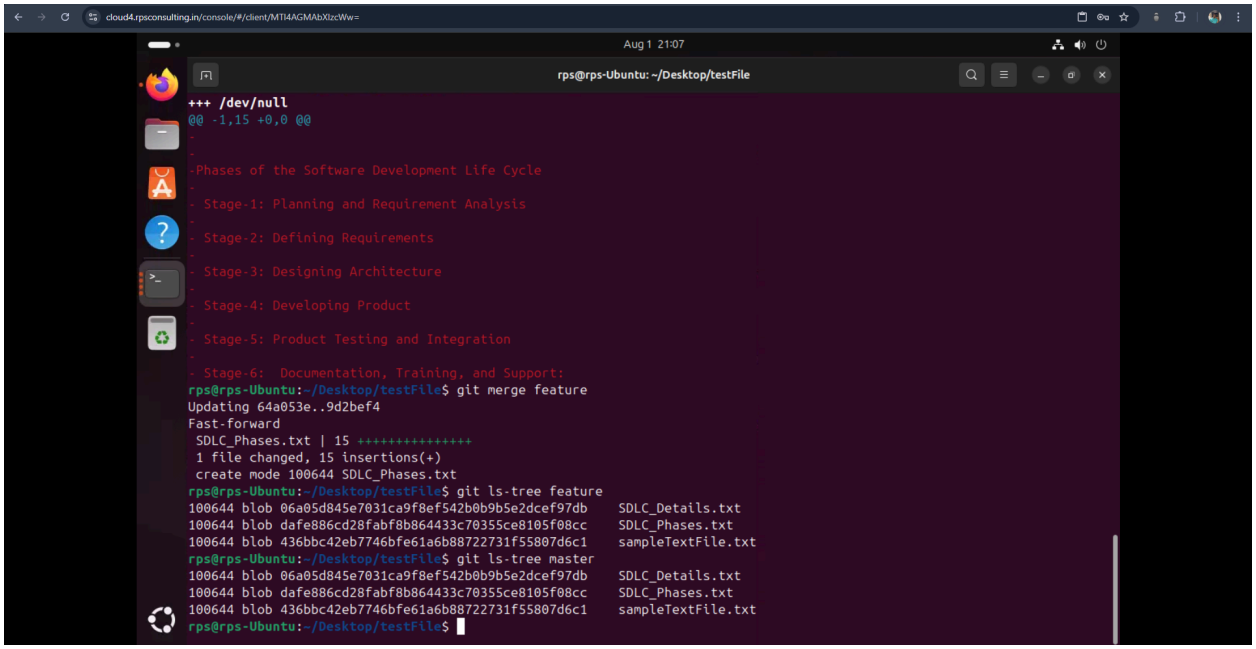
-Phases of the Software Development Life Cycle
-
- Stage-1: Planning and Requirement Analysis
-
- Stage-2: Defining Requirements
-
- Stage-3: Designing Architecture
-
- Stage-4: Developing Product
-
- Stage-5: Product Testing and Integration
-
- Stage-6: Documentation, Training, and Support:
rps@rps-Ubuntu:~/Desktop/testFile$ git merge feature
Updating 64a053e..9d2bef4
Fast-forward
 SDLC_Phases.txt | 15 +++++++++++++++
 1 file changed, 15 insertions(+)
 create mode 100644 SDLC_Phases.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git ls-tree feature


cloud4.rpsconsulting.in/console/#/client/MTI4AGMAbXIzcWw=
Aug 1 21:07
rps@rps-Ubuntu: ~/Desktop/testFile
+++ /dev/null
@@ -1,15 +0,0 @@
-
-
-Phases of the Software Development Life Cycle
-
- Stage-1: Planning and Requirement Analysis
-
- Stage-2: Defining Requirements
-
- Stage-3: Designing Architecture
-
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-
- Stage-5: Product Testing and Integration
-
- Stage-6: Documentation, Training, and Support:
rps@rps-Ubuntu:~/Desktop/testFile$ git merge feature
Updating 64a053e..9d2bef4
Fast-forward
 SDLC_Phases.txt | 15 +++++++++++++++
 1 file changed, 15 insertions(+)
 create mode 100644 SDLC_Phases.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git ls-tree feature
100644 blob 06a05d845e7031ca9f8ef542b0b9b5e2dcef97db   SDLC_Details.txt
100644 blob dafe886cd28fabf8b864433c70355ce8105f08cc   SDLC_Phases.txt
100644 blob 436bbc42eb7746bfe61a6b88722731f55807d6c1   sampleTextFile.txt
rps@rps-Ubuntu:~/Desktop/testFile$ git ls-tree master
100644 blob 06a05d845e7031ca9f8ef542b0b9b5e2dcef97db   SDLC_Details.txt
100644 blob dafe886cd28fabf8b864433c70355ce8105f08cc   SDLC_Phases.txt
100644 blob 436bbc42eb7746bfe61a6b88722731f55807d6c1   sampleTextFile.txt
rps@rps-Ubuntu:~/Desktop/testFile$