

Git Project (2.5 Hours)

Objective:

You will work on a project involving a simple website. You will learn and practice various Git concepts including branching, merging, handling merge conflicts, rebasing, pulling, versioning, and rolling back changes. This project is designed to be completed in 1 hour.

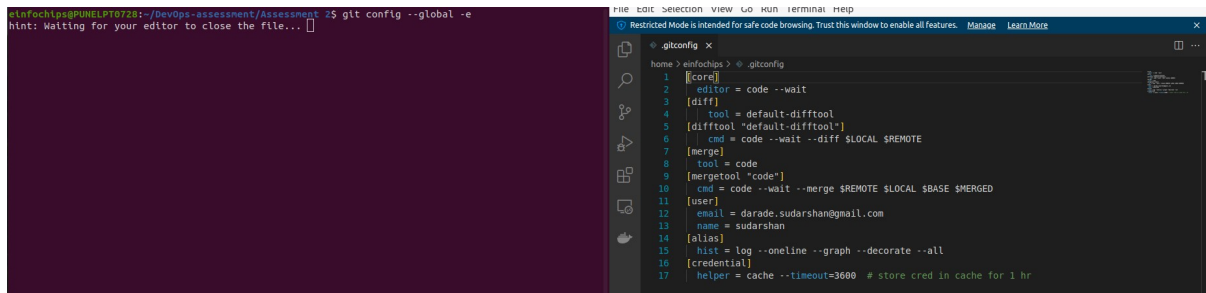
Project Setup (15 minutes)

1. **Install Git:** Ensure Git is installed on your system. Verify with `git --version`.

Set Up Git: Configure your Git username and email:

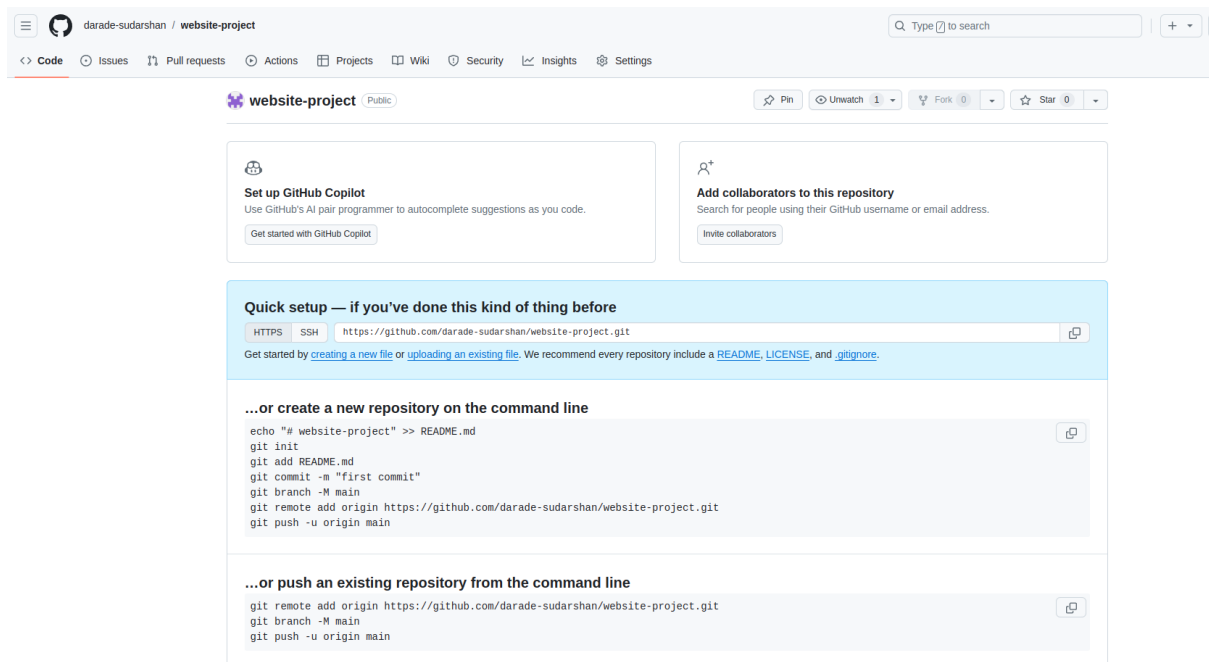
`git config --global user.name "Your Name"`

`git config --global user.email "your.email@example.com"`



Create a GitHub Repository:

Go to GitHub and create a new repository named `website-project`.



Clone the repository to your local machine:

```
git clone https://github.com/your-username/website-project.git
```

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2. Initialize the Project:

Navigate to the project directory:

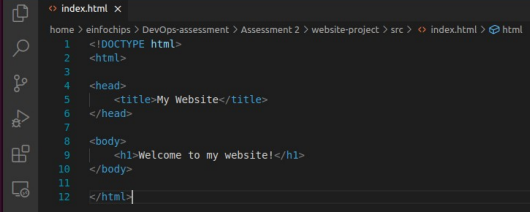
```
cd website-project
```

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Create initial project structure:

```
mkdir src
touch src/index.html
echo "<!DOCTYPE html><html><head><title>My
Website</title></head><body><h1>Welcome to my
website!</h1></body></html>" > src/index.html
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ mkdir src
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ ls
src
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ touch src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ code src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```



The screenshot shows a code editor with the following content in index.html:

```
1 <!DOCTYPE html>
2 <html>
3
4 <head>
5 | <title>My Website</title>
6 </head>
7
8 <body>
9 | <h1>Welcome to my website!</h1>
10 </body>
11
12 </html>
```

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Commit and push the initial project structure:

```
git add .
git commit -m "Initial commit: Added project structure and index.html"
git push origin main
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git add .
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git commit -m "Initial commit: Added project structure and index.html"
t: Added project structure and index.html
[master (root-commit) 3b3ea4e] Initial commit: Added project structure and index.html
1 file changed, 12 insertions(+)
create mode 100644 src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git branch
* master
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git push origin main
error: src refsPEC main does not match any
error: failed to push some refs to 'https://github.com/darade-sudarshan/website-project.git'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git branch -M main
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git branch
* main
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git push origin main
Username for 'https://github.com': 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
Password for 'https://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@github.com':
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 375 bytes | 375.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To https://github.com/darade-sudarshan/website-project.git
* [new branch]      main -> main
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

Exercise 1: Branching and Basic Operations (10 minutes)

Create a New Branch:

```
git checkout -b feature/add-about-page
```

- 1.
2. **Add a New Page:**

Create `about.html`:

```
touch src/about.html
echo "<!DOCTYPE html><html><head><title>About
Us</title></head><body><h1>About Us</h1></body></html>" >
src/about.html
```

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Commit and push changes:

```
git add src/about.html
git commit -m "Added about page"
git push origin feature/add-about-page
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git checkout -b feature/add-
about=page
Switched to a new branch 'feature/add-about=page'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ ls
src
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ touch src/about.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ code src/about.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git branch
* feature/add-about=page
  main
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git add src/about.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git commit -m "Added about p
age"
[feature/add-about=page 2d350d7] Added about page
1 file changed, 12 insertions(+)
create mode 100644 src/about.html
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git push origin feature/add-
about=page
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 387 bytes | 387.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'feature/add-about=page' on GitHub by visiting:
remote:   https://github.com/darade-sudarshan/website-project/pull/new/feature/add-about=page
remote:
To https://github.com/darade-sudarshan/website-project.git
 * [new branch]      feature/add-about=page -> feature/add-about=page
```

Exercise 2: Merging and Handling Merge Conflicts (15 minutes)

Create Another Branch:

```
git checkout main
git checkout -b feature/update-homepage
```

1. Update the Homepage:

Modify `index.html`:

```
echo "<p>Updated homepage content</p>" >> src/index.html
```

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Commit and push changes:

```
git add src/index.html
git commit -m "Updated homepage content"
git push origin feature/update-homepage
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git checkout main
Already on 'main'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git checkout -b feature/add-
update-homepage
Switched to a new branch 'feature/add-update-homepage'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ ls
src
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ code src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git add src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git commit -m "Updated homep
age content"
[feature/add-update-homepage 83088b3] Updated homepage content
 1 file changed, 1 insertion(+)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git push origin feature/add-
update-homepage
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (4/4), 360 bytes | 360.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'feature/add-update-homepage' on GitHub by visiting:
remote:   https://github.com/darade-sudarshan/website-project/pull/new/feature/add-update-homepage
remote:
To https://github.com/darade-sudarshan/website-project.git
 * [new branch]      feature/add-update-homepage -> feature/add-update-homepage
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

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2. Create a Merge Conflict:

Modify `index.html` on the `feature/add-about-page` branch:

```
git checkout feature/add-about-page
echo "<p>Conflict content</p>" >> src/index.html
git add src/index.html
git commit -m "Added conflicting content to homepage"
git push origin feature/add-about-page
```



```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git checkout feature/add-about=page
Switched to branch 'feature/add-about=page'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ code src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git add src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git commit -m Added conflicting content to homepage
> ^C
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git commit -m "Added conflicting content to homepage"
[feature/add-about=page bb1b169] Added conflicting content to homepage
1 file changed, 1 insertion(+), 1 deletion(-)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git push origin feature/add-about=page
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 390 bytes | 390.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/darade-sudarshan/website-project.git
2d350d7..bb1b169 feature/add-about=page -> feature/add-about=page
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

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3. Merge and Resolve Conflict:

Attempt to merge `feature/add-about-page` into `main`:

`git checkout main`

`git merge feature/add-about-page`

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git branch
* feature/add-about=page
  feature/add-update-homepage
  main
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git checkout main
Switched to branch 'main'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git merge feature/add-about=page
Updating 3b3ea4e..bb1b169
Fast-forward
 src/about.html | 12 ++++++++
 src/index.html | 2 +-
 2 files changed, 13 insertions(+), 1 deletion(-)
 create mode 100644 src/about.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

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Resolve the conflict in `src/index.html`, then:

`git add src/index.html`

`git commit -m "Resolved merge conflict in homepage"`

`git push origin main`

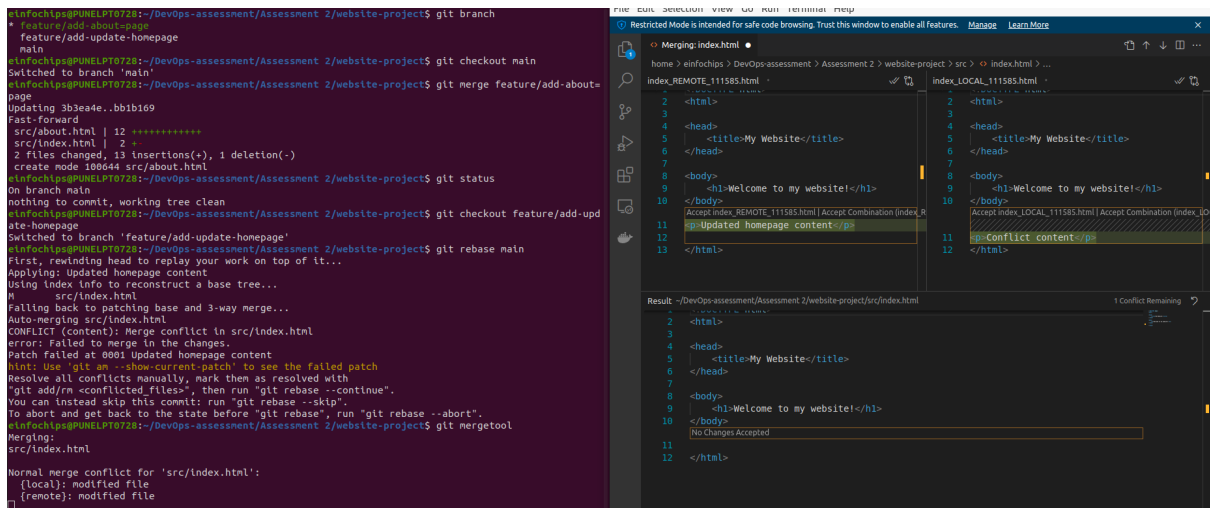
Exercise 3: Rebasing (10 minutes)

1. Rebase a Branch:

Rebase `feature/update-homepage` onto `main`:

`git checkout feature/update-homepage`
`git rebase main`

-
- Resolve any conflicts that arise during rebase.



```
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git branch
* feature/add-update-homepage
  feature/add-update-homepage
  main
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git checkout main
Switched to branch 'main'
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git merge feature/add-update-homepage
Updating 3b3ea4e..bb1b169
Fast-forward
 src/about.html | 12 ++++++
 src/index.html | 2 +-
 2 files changed, 13 insertions(+), 1 deletion(-)
 create mode 100644 src/about.html
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git status
nothing to commit, working tree clean
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git checkout feature/add-update-homepage
Switched to branch 'feature/add-update-homepage'
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git rebase main
First, rewinding head to replay your work on top of it...
Applying: Updated homepage content
Using index info to reconstruct a base tree...
H   src/index.html
falling back to patching base and 3-way merge...
Auto-merging src/index.html
CONFLICT (content): Merge conflict in src/index.html
error: failed to merge in the changes.
Patch failed at 0001 Updated homepage content
hint: Use 'git am --show-current-patch' to see the failed patch
Resolve all conflicts manually, mark them as resolved with
'git add/re <conflicted files>', then run 'git rebase --continue'.
You can instead skip this commit: run 'git rebase --skip'.
To abort and get back to the state before 'git rebase', run 'git rebase --abort'.
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git mergetool
Merging:
 src/index.html
Normal merge conflict for 'src/index.html':
 {local}: modified file
 {remote}: modified file
```

```
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git mergetool
Merging:
 src/index.html
Normal merge conflict for 'src/index.html':
 {local}: modified file
 {remote}: modified file
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git status
rebase in progress; onto bb1b169
You are currently rebasing branch 'feature/add-update-homepage' on 'bb1b169'.
(all conflicts fixed: run "git rebase --continue")
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   src/index.html
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    src/index.html.orig
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ ls
src
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ cd src/
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project/src$ ls
about.html  index.html  index.html.orig
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project/src$ rm index.html.orig
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project/src$ cd ..
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ cd ..
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2$ cd website-project/
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git status
rebase in progress; onto bb1b169
You are currently rebasing branch 'feature/add-update-homepage' on 'bb1b169'.
(all conflicts fixed: run "git rebase --continue")
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    modified:   src/index.html
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git rebase --continue
Applying: Updated homepage content
infochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

Push the Rebased Branch:

git push -f origin feature/update-homepage

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git push -f origin feature/add-update-homepage
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 392 bytes | 392.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/darade-sudarshan/website-project.git
+ 83088b3...fb0ee0a feature/add-update-homepage -> feature/add-update-homepage (forced update)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

Exercise 4: Pulling and Collaboration (10 minutes)

1. Pull Changes from Remote:

Ensure the `main` branch is up-to-date:

git checkout main
git pull origin main

git

2. Simulate a Collaborator's Change:

- Make a change on GitHub directly (e.g., edit `index.html`).

3. Pull Collaborator's Changes:

Pull the changes made by the collaborator:

git pull origin main


```

einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git pull origin main
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (4/4), 999 bytes | 499.00 KiB/s, done.
From https://github.com/darade-sudarshan/website-project
* branch      main      -> FETCH_HEAD
   3b3ea4e..f920a5f  main    -> origin/main
Auto-merging src/index.html
CONFLICT (content): Merge conflict in src/index.html
Automatic merge failed; fix conflicts and then commit the result.
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git mergetool
Merging:
src/index.html

Normal merge conflict for 'src/index.html':
{local}: modified file
{remote}: modified file
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git status
On branch main
All conflicts fixed but you are still merging.
(use "git commit" to conclude merge)

Changes to be committed:
  modified:   src/index.html

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

einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ rm src/index.html.orig
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git status
On branch main
All conflicts fixed but you are still merging.
(use "git commit" to conclude merge)

Changes to be committed:
  modified:   src/index.html

einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git commit -m "resolved merge conflict between local and remote repo"
[main 3695d73] resolved merge conflict between local and remote repo

```

Exercise 5: Versioning and Rollback (15 minutes)

1. Tagging a Version:

Tag the current commit as **v1.0**:

```

git tag -a v1.0 -m "Version 1.0: Initial release"
git push origin v1.0

```

```

einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git tag -a v1.0 -m "Version 1.0 : Initial release"
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git push origin v1.0
Enumerating objects: 8, done.
Counting objects: 100% (8/8), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 504 bytes | 504.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To https://github.com/darade-sudarshan/website-project.git
* [new tag]          v1.0 -> v1.0
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$

```

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2. Make a Change that Needs Reversion:

Modify `index.html`:

```
echo "<p>Incorrect update</p>" >> src/index.html
git add src/index.html
git commit -m "Incorrect update"
git push origin main
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ code src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git status
On branch main
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   src/index.html

no changes added to commit (use "git add" and/or "git commit -a")
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git add src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git commit -m "Incorrect update"
[main c1e5532] Incorrect update
 1 file changed, 1 insertion(+), 1 deletion(-)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 373 bytes | 373.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/darade-sudarshan/website-project.git
   f920a5f..c1e5532  main -> main
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

3. Revert to a Previous Version:

Use `git revert` to undo the last commit:

```
git revert HEAD
git push origin main
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git revert HEAD
[main 3ef618f] Reverted "Incorrect update"
 1 file changed, 1 insertion(+), 1 deletion(-)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git push origin main
Username for 'https://github.com': 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
Password for 'https://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@github.com':
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 398 bytes | 398.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/darade-sudarshan/website-project.git
   c1e5532..3ef618f  main -> main
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

Alternatively, reset to a specific commit (use with caution):

```
git reset --hard v1.0
git push -f origin main
```

Extra Activities (10 minutes)

1. Stashing Changes:

Make some local changes without committing:

```
echo "<p>Uncommitted changes</p>" >> src/index.html
```

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Stash the changes:

```
git stash
```

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Apply the stashed changes:

```
git stash apply
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ echo "<p>Uncommitted changes
</p>" >> src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git stash
Saved working directory and index state WIP on main: 3ef618f Reverted"Incorrect update"
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git stash list
stash@{0}: WIP on main: 3ef618f Reverted"Incorrect update"
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git stash apply
On branch main
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   src/index.html

no changes added to commit (use "git add" and/or "git commit -a")
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git add .
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git status
On branch main
Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   src/index.html

einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git commit -m "committing st
ashed changes"
[main 8a2cd35] committing stashed changes
1 file changed, 1 insertion(+)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

2. Viewing Commit History:

Use `git log` to view commit history:

```
git log --oneline
```



```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git log --oneline
8a2cd35 (HEAD -> main) committing stashed changes
3ef618f (origin/main) Reverted"Incorrect update"
c1e5532 Incorrect update
3695d73 (tag: v1.0) resolved merge conflict between local and remote repo
f920a5f Update index.html
bb1b169 (origin/feature/add-about=page, feature/add-about=page) Added conflicting content to homepage
2d350d7 Added about page
3b3ea4e Initial commit: Added project structure and index.html
```

3. Cherry-Picking Commits:

Create a new branch and cherry-pick a commit from another branch:

```
git checkout -b feature/cherry-pick
git cherry-pick <commit-hash>
git push origin feature/cherry-pick
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git cherry-pick --continue
On branch feature/cherry-pick
You are currently cherry-picking commit 3ef618f.
(all conflicts fixed: run "git cherry-pick --continue")
(use "git cherry-pick --skip" to skip this patch)
(use "git cherry-pick --abort" to cancel the cherry-pick operation)

nothing to commit, working tree clean
The previous cherry-pick is now empty, possibly due to conflict resolution.
If you wish to commit it anyway, use:

    git commit --allow-empty

Otherwise, please use 'git cherry-pick --skip'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git status
On branch feature/cherry-pick
You are currently cherry-picking commit 3ef618f.
(all conflicts fixed: run "git cherry-pick --continue")
(use "git cherry-pick --skip" to skip this patch)
(use "git cherry-pick --abort" to cancel the cherry-pick operation)

nothing to commit, working tree clean
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git commit --allow-empty
[feature/cherry-pick c88c239] Reverted"Incorrect update"
Date: Fri Jul 12 21:53:54 2024 +0530
```

4. Interactive Rebase:

Use interactive rebase to squash commits:

```
git checkout main
git rebase -i HEAD~3
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git status
interactive rebase in progress; onto 3695d73
Last command done (1 command done):
  pick 3ef618f Reverted"Incorrect update"
Next command to do (1 remaining command):
  pick 8a2cd35 committing stashed changes
  (use "git rebase --edit-todo" to view and edit)
You are currently rebasing branch 'main' on '3695d73'.
  (all conflicts fixed: run "git rebase --continue")

nothing to commit, working tree clean
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git rebase --edit-todo
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git rebase --edit-todo
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git rebase --continue
The previous cherry-pick is now empty, possibly due to conflict resolution.
If you wish to commit it anyway, use:

    git commit --allow-empty

Otherwise, please use 'git cherry-pick --skip'
interactive rebase in progress; onto 3695d73
Last commands done (2 commands done):
  pick 3ef618f Reverted"Incorrect update"
  pick 3ef618f Reverted"Incorrect update"
Next command to do (1 remaining command):
  reword 8a2cd35 committing stashed changes
  (use "git rebase --edit-todo" to view and edit)
You are currently rebasing branch 'main' on '3695d73'.
  (all conflicts fixed: run "git rebase --continue")

nothing to commit, working tree clean
Could not apply 3ef618f... Reverted"Incorrect update"
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$ git rebase --continue
[detached HEAD 5549697] committing stashed changes
Date: Fri Jul 12 21:59:24 2024 +0530
1 file changed, 1 insertion(+)
Successfully rebased and updated refs/heads/main.
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/website-project$
```

Collaborative Blogging Platform

Objective:

You will work on a project to collaboratively develop a simple blogging platform. You will practice various Git concepts including branching, merging, handling merge conflicts, rebasing, pulling, versioning, rolling back changes, stashing, and cherry-picking commits. The project is designed to be completed in 1.5 Hours

1. Create a GitHub Repository:

- Go to GitHub and create a new repository named **blogging-platform**.

Clone the repository to your local machine:

```
git clone https://github.com/your-username/blogging-platform.git
```

○

2. Initialize the Project:

Navigate to the project directory:

```
cd blogging-platform
```

○

Create initial project structure:

```
mkdir src
```

```
touch src/index.html
```

```
echo "<!DOCTYPE html><html><head><title>Blogging  
Platform</title></head><body><h1>Welcome to the Blogging  
Platform!</h1></body></html>" > src/index.html
```

○

Commit and push the initial project structure:

```
git add .
```

```
git commit -m "Initial commit: Added project structure and index.html"
```

```
git push origin main
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2$ git clone https://github.com/darade-sudarshan/blogging-platform.git
Cloning into 'blogging-platform'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 881 bytes | 881.00 KiB/s, done.
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2$ ls
blogging-platform  'Day 2.docx'  website-project
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2$ cd blogging-platform/
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ ls
README.md
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ mkdir src
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ touch src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ ls
README.md  src
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ code src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git add .
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git commit -m "Initial commit: Added project structure and index.html"
[main be8298c] Initial commit: Added project structure and index.html
 1 file changed, 13 insertions(+)
   create mode 100644 src/index.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git push origin main
Username for 'https://github.com': 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
Password for 'https://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@github.com':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 476 bytes | 476.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
To https://github.com/darade-sudarshan/blogging-platform.git
   9feaad1..be8298c  main -> main
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$
```

Exercise 1: Branching and Adding Features (20 minutes)

Create a New Branch for Blog Post Feature:

```
git checkout -b feature/add-blog-post
```

1. Add a Blog Post Page:

Create `blog.html`:

```
touch src/blog.html
```

```
echo "<!DOCTYPE html><html><head><title>Blog  
Post</title></head><body><h1>My First Blog Post</h1></body></html>" >  
src/blog.html
```

○

Commit and push changes:

```
git add src/blog.html
```

```
git commit -m "Added blog post page"
```

```
git push origin feature/add-blog-post
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git checkout -b feature/ad  
d-blog-post  
Switched to a new branch 'feature/add-blog-post'  
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ touch src/blog.html  
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ code src/blog.html  
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git add src/blog.html  
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git commit -m "Added blog  
post page "  
[feature/add-blog-post a6e85df] Added blog post page  
1 file changed, 12 insertions(+)  
create mode 100644 src/blog.html  
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git push origin feature/ad  
d-blog-post  
Enumerating objects: 6, done.  
Counting objects: 100% (6/6), done.  
Delta compression using up to 12 threads  
Compressing objects: 100% (4/4), done.  
Writing objects: 100% (4/4), 440 bytes | 440.00 KiB/s, done.  
Total 4 (delta 0), reused 0 (delta 0)  
remote:  
remote: Create a pull request for 'feature/add-blog-post' on GitHub by visiting:  
remote: https://github.com/darade-sudarshan/blogging-platform/pull/new/feature/add-blog-post  
remote:  
To https://github.com/darade-sudarshan/blogging-platform.git  
* [new branch] feature/add-blog-post -> feature/add-blog-post
```

Exercise 2: Collaborating with Merging and Handling Merge Conflicts (25 minutes)

Create Another Branch for Author Info:

```
git checkout main
```

```
git checkout -b feature/add-author-info
```

- 1.
2. **Add Author Info to Blog Page:**

Modify `blog.html`:

```
echo "<p>Author: John Doe</p>" >> src/blog.html
```

○

Commit and push changes:

```
git add src/blog.html
```

```
git commit -m "Added author info to blog post"
```

```
git push origin feature/add-author-info
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git checkout -b feature/add-author-info
Switched to a new branch 'feature/add-author-info'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ touch blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ ls
blog.html  README.md  src
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ rm blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ touch src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ code src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git add src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git commit -m " Added author info to blog post "
[feature/add-author-info 8b56533] Added author info to blog post
 1 file changed, 1 insertion(+)
 create mode 100644 src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git push origin feature/add-author-info
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 12 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (4/4), 388 bytes | 388.00 KiB/s, done.
Total 4 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'feature/add-author-info' on GitHub by visiting:
remote:   https://github.com/darade-sudarshan/blogging-platform/pull/new/feature/add-author-info
remote:
To https://github.com/darade-sudarshan/blogging-platform.git
 * [new branch]      feature/add-author-info -> feature/add-author-info
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$
```

3. **Create a Merge Conflict:**

Modify `blog.html` on the `feature/add-blog-post` branch:

```
git checkout feature/add-blog-post
```

```
echo "<p>Published on: July 10, 2024</p>" >> src/blog.html
```

```
git add src/blog.html
```

```
git commit -m "Added publish date to blog post"
```

```
git push origin feature/add-blog-post
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$ git checkout feature/add-b
log-post
Switched to branch 'feature/add-blog-post'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$ echo "<p>Published on: Jul
y 10, 2024</p>" >> src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$ git add src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$ git commit -m "Added publi
sh date to blog post"
[feature/add-blog-post de26c85] Added publish date to blog post
1 file changed, 1 insertion(+), 1 deletion(-)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$ git push origin feature/ad
d-blog-post
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 425 bytes | 425.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/darade-sudarshan/bloggging-platform.git
a6e85df..de26c85 feature/add-blog-post -> feature/add-blog-post
```

4. Merge and Resolve Conflict:

Attempt to merge `feature/add-blog-post` into `main`:

`git checkout main`

`git merge feature/add-blog-post`

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$ git merge feature/add-blo
g-post
Updating be8298c..de26c85
Fast-forward
 src/blog.html | 12 ++++++++
1 file changed, 12 insertions(+)
create mode 100644 src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$
```

Resolve the conflict in `src/blog.html`, then:

`git add src/blog.html`

`git commit -m "Resolved merge conflict in blog post"`

`git push origin main`

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$ git merge feature/add-blo
g-post
Updating be8298c..de26c85
Fast-forward
 src/blog.html | 12 ++++++++
1 file changed, 12 insertions(+)
create mode 100644 src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggging-platform$ git push origin main
Total 0 (delta 0), reused 0 (delta 0)
To https://github.com/darade-sudarshan/bloggging-platform.git
be8298c..de26c85 main -> main
```

Exercise 3: Rebasing and Feature Enhancement (25 minutes)

1. **Rebase a Branch for Comment Feature:**

Rebase `feature/add-author-info` onto `main`:

`git checkout feature/add-author-info`

`git rebase main`

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git rebase main
First, rewinding head to replay your work on top of it...
Applying: Added author info to blog post
Using index info to reconstruct a base tree...
Falling back to patching base and 3-way merge...
CONFLICT (add/add): Merge conflict in src/blog.html
Auto-merging src/blog.html
error: Failed to merge in the changes.
Patch failed at 0001: Added author info to blog post
hint: Use 'git am --show-current-patch' to see the failed patch
Resolve all conflicts manually, mark them as resolved with
"git add/rm <conflicted_files>", then run "git rebase --continue".
You can instead skip this commit: run "git rebase --skip".
To abort and get back to the state before "git rebase", run "git rebase --abort".
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git mergetool
Merging:
src/blog.html

Normal merge conflict for 'src/blog.html':
  {local}: created file
  {remote}: created file
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git rebase --continue
Applying: Added author info to blog post
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$
```

- Resolve any conflicts that arise during rebase.

2. **Add Comment Section:**

Modify `blog.html` to add a comment section:

`echo "<h2>Comments</h2><p>No comments yet.</p>" >> src/blog.html`

`git add src/blog.html`

`git commit -m "Added comment section"`

`git push origin feature/add-author-info`


```

einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git add src/blog.html.orig
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git status
On branch feature/add-author-info
All conflicts fixed but you are still merging.
(use "git commit" to conclude merge)

Changes to be committed:
  modified:   src/blog.html
  new file:   src/blog.html.orig
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git rm src/blog.html.orig
error: the following file has changes staged in the index:
  src/blog.html.orig
(use --cached to keep the file, or -f to force removal)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git rm -f src/blog.html.orig
rm 'src/blog.html.orig'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git status
On branch feature/add-author-info
All conflicts fixed but you are still merging.
(use "git commit" to conclude merge)

Changes to be committed:
  modified:   src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git commit -m "resolved conflict while pulling"
[feature/add-author-info ec93043] resolved conflict while pulling
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git pull origin feature/add-author-info
From https://github.com/darade-sudarshan/blogging-platform
* branch          feature/add-author-info -> FETCH_HEAD
Already up to date.
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git push origin feature/add-author-info
Enumerating objects: 18, done.
Counting objects: 100% (18/18), done.
Delta compression using up to 12 threads
Compressing objects: 100% (12/12), done.
Writing objects: 100% (12/12), 1.13 KiB | 576.00 KiB/s, done.
Total 12 (delta 3), reused 0 (delta 0)
remote: Resolving deltas: 100% (3/3), completed with 1 local object.
To https://github.com/darade-sudarshan/blogging-platform.git
 8b56533..ec93043  feature/add-author-info -> feature/add-author-info

```

Exercise 4: Pulling and Simulating Collaboration (20 minutes)

1. Pull Changes from Remote:

Ensure the **main** branch is up-to-date:

```
git checkout main
```

```
git pull origin main
```

○

2. Simulate a Collaborator's Change:

- Make a change on GitHub directly (e.g., edit **blog.html** to add a new comment).

3. Pull Collaborator's Changes:

Pull the changes made by the collaborator:

```
git pull origin main
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git pull origin main
From https://github.com/darade-sudarshan/blogging-platform
* branch      main      -> FETCH_HEAD
Already up to date.
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git pull origin main
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 4 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (4/4), 1.01 KiB | 518.00 KiB/s, done.
From https://github.com/darade-sudarshan/blogging-platform
* branch      main      -> FETCH_HEAD
   de26c85..901e2a4  main      -> origin/main
Updating de26c85..901e2a4
Fast-forward
 src/blog.html | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$
```

Exercise 5: Versioning and Rollback (30 minutes)

1. Tagging a Version:

Tag the current commit as **v1.0**:

```
git tag -a v1.0 -m "Version 1.0: Initial release"
```

```
git push origin v1.0
```

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git tag -a v1.0 -m "Version 1.0: Initial release"
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git push origin v1.0
Enumerating objects: 1, done.
Counting objects: 100% (1/1), done.
Writing objects: 100% (1/1), 174 bytes | 174.00 KiB/s, done.
Total 1 (delta 0), reused 0 (delta 0)
To https://github.com/darade-sudarshan/blogging-platform.git
* [new tag]      v1.0 -> v1.0
```

2. Make a Change that Needs Reversion:

Modify **blog.html**:

```
echo "<p>Incorrect comment</p>" >> src/blog.html
```

```
git add src/blog.html
```

```
git commit -m "Incorrect comment update"
```

```
git push origin main
```

3. Revert to a Previous Version:

Use **git revert** to undo the last commit:

```
git revert HEAD
```

git push origin main

○

Alternatively, reset to a specific commit (use with caution):

git reset --hard v1.0

git push -f origin main

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ echo "<p>Incorrect comment
</p>" >> src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git add src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git commit -m "Incorrect c
omment update"
[main f1f28da] Incorrect comment update
 1 file changed, 1 insertion(+)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 411 bytes | 411.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/darade-sudarshan/blogging-platform.git
   901e2a4..f1f28da  main -> main
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git revert HEAD
[main 0240fad] Revert "Incorrect comment update"
 1 file changed, 1 deletion(-)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 413 bytes | 413.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/darade-sudarshan/blogging-platform.git
   f1f28da..0240fad  main -> main
```

Extra Activities (25 minutes)

1. Stashing Changes:

Make some local changes without committing:

echo "<p>Uncommitted changes</p>" >> src/blog.html

Stash the changes:

git stash

Apply the stashed changes:

git stash apply

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ echo "<p>Uncommitted changes</p>" >> src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git stash
Saved working directory and index state WIP on main: 0240fad Revert "Incorrect comment update"
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git stash list
stash@{0}: WIP on main: 0240fad Revert "Incorrect comment update"
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git stash apply
On branch main
Your branch is up to date with 'origin/main'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   src/blog.html

no changes added to commit (use "git add" and/or "git commit -a")
```

2. Viewing Commit History:

Use `git log` to view commit history:

`git log --oneline`

```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git log --oneline
* 578a9c9 (refs/stash) WIP on main: 0240fad Revert "Incorrect comment update"
|
| * 0721a48 index on main: 0240fad Revert "Incorrect comment update"
|/
* 0240fad (HEAD -> main, origin/main, origin/HEAD) Revert "Incorrect comment update"
* fif28da Incorrect comment update
* 901e2a4 (tag: v1.0) Update blog.html
| * ec93043 (origin/feature/add-author-info, feature/add-author-info) resolved conflict while pulling
|/
| | * 8b56533 Added author info to blog post
| | * e5218ff Added comment section
| | * 1fa010e Added author info to blog post
|/
| * de26c85 (origin/feature/add-blog-post, feature/add-blog-post) Added publish date to blog post
| * a6e85df Added blog post page
|/
* be8298c Initial commit: Added project structure and index.html
* 9feaad1 Initial commit
```

3. Cherry-Picking Commits:

Create a new branch and cherry-pick a commit from another branch:

`git checkout -b feature/cherry-pick`

`git cherry-pick <commit-hash>`

`git push origin feature/cherry-pick`

```

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   src/blog.html

no changes added to commit (use "git add" and/or "git commit -a")
The previous cherry-pick is now empty, possibly due to conflict resolution.
If you wish to commit it anyway, use:

        git commit --allow-empty

Otherwise, please use 'git cherry-pick --skip'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggng-platform$ git cherry-pick --continue

On branch feature/cherry-pick
You are currently cherry-picking commit 901e2a4.
  (all conflicts fixed: run "git cherry-pick --continue")
  (use "git cherry-pick --skip" to skip this patch)
  (use "git cherry-pick --abort" to cancel the cherry-pick operation)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   src/blog.html

no changes added to commit (use "git add" and/or "git commit -a")
The previous cherry-pick is now empty, possibly due to conflict resolution.
If you wish to commit it anyway, use:

        git commit --allow-empty

Otherwise, please use 'git cherry-pick --skip'
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggng-platform$ git add src/blog.html
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggng-platform$ git cherry-pick --continue

[feature/cherry-pick 8711005] Update blog.html
Author: darade-sudarshan <132735074+darade-sudarshan@users.noreply.github.com>
Date: Sat Jul 13 00:48:14 2024 +0530
1 file changed, 1 insertion(+)
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggng-platform$ git push origin feature/ch
erry-pick
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 12 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 446 bytes | 446.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'feature/cherry-pick' on GitHub by visiting:
remote:   https://github.com/darade-sudarshan/bloggng-platform/pull/new/feature/cherry-pick
remote:
To https://github.com/darade-sudarshan/bloggng-platform.git
 * [new branch]      feature/cherry-pick -> feature/cherry-pick
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/bloggng-platform$ █

```

4. Interactive Rebase:

Use interactive rebase to squash commits:

```
git checkout main
```

```
git rebase -i HEAD~3
```



```
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git rebase -i HEAD~3
interactive rebase in progress; onto de26c85
Last commands done (3 commands done):
    drop f1f28da Incorrect comment update
    reword 0240fad Revert "Incorrect comment update"
    (see more in file .git/rebase-merge/done)
No commands remaining.
You are currently rebasing branch 'main' on 'de26c85'.
  (all conflicts fixed: run "git rebase --continue")

nothing to commit, working tree clean
Could not apply 0240fad... Revert "Incorrect comment update"
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$ git rebase --continue
Successfully rebased and updated refs/heads/main.
einfochips@PUNELPT0728:~/DevOps-assessment/Assessment 2/blogging-platform$
```