**GitHub Exercise**

**Case Study**: Git and GitHub Workflow Exercise

**1. How will you set up the project for version control and push it to GitHub?**

* mkdir sample-project
* cd sample-project
* git init

Initialized empty Git repository in

* touch index.html
* touch style.css
* git add .
* git commit -m "Initial Comment"

master (root-commit) 7f16296] Initial Comment

2 files changed, 0 insertions(+), 0 deletions(-)

create mode 100644 index.html

create mode 100644 style.css

git branch -M main

git remote add origin <https://github.com/NikhilCyberk/sample_project_git.git>

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), 249 bytes | 124.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

To https://github.com/NikhilCyberk/sample\_project\_git.git

\* [new branch] main -> main

branch 'main' set up to track 'origin/main'.

**2. What steps will you take to create, push, and manage branches effectively?**

git checkout -b feature/update-readme

Switched to a new branch 'feature/update-readme'

touch README.md

git add README.md

git commit -m "Add README with project description"

feature/update-readme 29395cf] Add README with project description

1 file changed, 8 insertions(+)

create mode 100644 README.md

git push -u origin feature/update-readme

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 8 threads

Compressing objects: 100% (3/3), done.

Writing objects: 100% (3/3), 529 bytes | 529.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

remote:

remote: Create a pull request for 'feature/update-readme' on GitHub by visiting:

remote: https://github.com/NikhilCyberk/sample\_project\_git/pull/new/feature/update-readme

remote:

To https://github.com/NikhilCyberk/sample\_project\_git.git

\* [new branch] feature/update-readme -> feature/update-readme

branch 'feature/update-readme' set up to track 'origin/feature/update-readme'.

**3. How will you ensure the changes in the feature branch are merged into the main branch?**

git checkout main

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

git merge feature/update-readme

Updating 7f16296..29395cf

Fast-forward

README.md | 8 ++++++++

1 file changed, 8 insertions(+)

create mode 100644 README.md

git push origin main

Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)

To https://github.com/NikhilCyberk/sample\_project\_git.git

7f16296..29395cf main -> main

**4. What commands will you use to clean up unused branches locally and remotely?**

git branch -d feature/update-readme

Deleted branch feature/update-readme (was 29395cf).

git push origin --delete feature/update-readme

To https://github.com/NikhilCyberk/sample\_project\_git.git

- [deleted] feature/update-readme

git status

On branch main

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean