Placement Empowerment Program

Cloud Computing and DevOps Centre

Set up Git Branching

"Create a new branch in your Git repo for testing. Add a new feature and merge it."

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Introduction

Git branching allows developers to work on new features, fixes, or experiments without affecting the main project. It helps maintain a clean and organized workflow while enabling collaborative development.

Overview

This guide walks through the process of **creating** a new Git branch, **adding** a feature, and **merging** it back into the main branch.

Objective

The primary objectives of this POC are:

- Understand Git branching.
- Create a new branch for testing.
- Add a new feature.
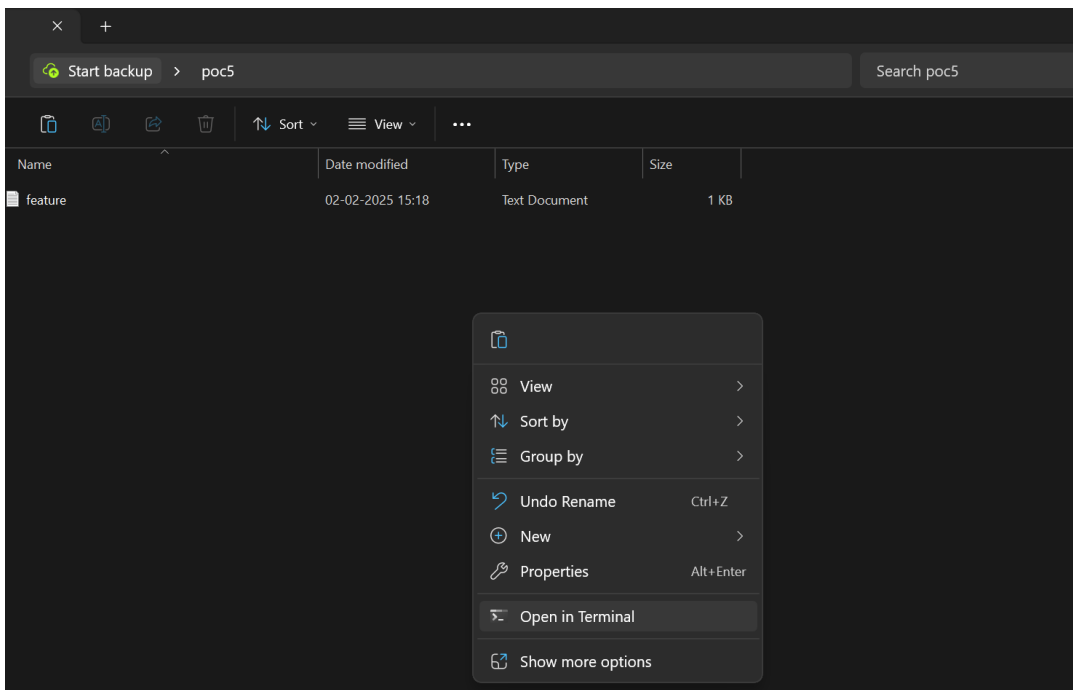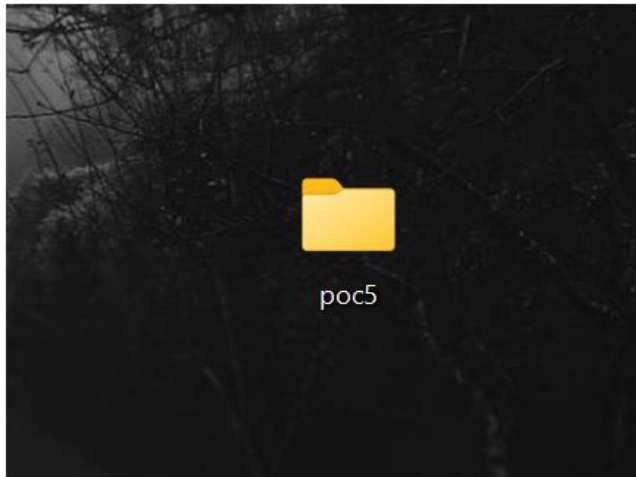- Merge the branch into the main branch

Important Concepts

- Allows multiple developers to work on different features simultaneously.
- Prevents unstable code from affecting the main branch.
- Enhances code organization and version control

Step-by-Step Overview

Step 1:

- Create folder in your desktop and
- Open terminal inside the folder

Step 2:

Initialize or Navigate to a Git Repository

If you don't have a repository, initialize one using the below command

git init

Step 3 :

Ensure you're on the main branch:

Git branch

Step 4:

Create a new branch named feature-branch:

git checkout -b feature-branch

Step 5:

Add a New Feature

Make changes to a file or create a new file:

echo "New feature added" > feature.txt

Stage and commit the changes:

git add feature.txt

git commit -m "Added new feature"

Step 6:

Switch Back to the Main Branch

Step 7:

Merge feature-branch into main

git merge feature-branch

```
PS C:\Users\Dell\Desktop\poc5> git checkout main
Switched to branch 'main'
PS C:\Users\Dell\Desktop\poc5> git merge feature-branch
Already up to date.
```

Expected Outcome:

By completing this POC, you will:

- A new branch is successfully created.

- A new feature is added and committed.

- The feature branch is merged into the main branch.

- The repository remains clean and organized.

This process ensures efficient code management and collaboration using Git.