**DevOps Task-4 – Version-Controlled Workflow**

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**Objective:**

Manage a DevOps project using Git best practices such as:

- Creating and using branches (main, dev, feature/\*)

- Using Pull Requests (PRs)

- Adding a .gitignore file

- Tagging releases

- Documenting tasks using markdown

**Tools Used:**

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- Git

- GitHub

- Terminal or Git Bash

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**Step-by-Step Instructions**

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**1. Initialize Git Repository**

Open terminal and run:

mkdir Devops task project

cd Devops task project

git init

**2. Create .gitignore File**

Create the file:

touch .gitignore

**3. Create README File:**

touch README.txt

Add basic project info:

DevOps Git Project

This project follows Git best practices with branching, PRs, and versioning.

**4. Make Initial Commit**

git add .

git commit -m "Initial commit with README and .gitignore"

**5. Create GitHub Repository and Push Code**

- Go to https://github.com

- Create new repo: devops-project

- DO NOT add README or .gitignore on GitHub

Connect your local repo to GitHub:

git remote add origin https://github.com/arjumandshafi/devops-task4

git branch -M main

git push -u origin main

**6. Create and Push dev and feature Branches:**

git checkout -b dev

git push -u origin dev

git checkout -b feature

git push -u origin feature

**7. Work on the Feature Branch**

Add new feature:

Cat >> README.md

Inside README file modify some changes

git add README.md

git commit -m "modify"

git push

**8. Create Pull Request (PR) from feature/login to dev**

- Go to GitHub

- Click "Compare & Pull Request"

- Base: dev, Compare: feature

- Add title and description

- Click "Create Pull Request"

- Click "Merge Pull Request"

**9. Merge dev into main**

- Go to GitHub

- Create PR from dev to main

- Review and merge the PR

**10. Add a Version Tag (v1.0)**

git checkout main

git pull

git tag v1.0

git push origin v1.0