

Case Study 1: New Project Version Control Setup Scenario: You are assigned to develop a Library Management System. Before coding, your team decides to enable version control. Tasks: - Create a project folder and open it in VS Code - Initialize a Git repository - Create a Python file and track it using Git - Commit the initial version

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows two projects: "Welcome" and "391111". The "sum.py" file under "391111" is selected and has three changes (indicated by the number 3).
- Code Editor:** Displays the content of "sum.py":

```
1 int a=input("enter a")
2 int b=input("enter b")
3 int sum=a+b
4 print([sum])
```

- Terminal:** Shows the command-line output of a git push operation:

```
To https://github.com/palaksharmah/lab2
! [rejected]          master -> master (fetch first)
error: failed to push some refs to 'https://github.com/palaksharmah/lab2'
hint: Updates were rejected because the remote contains work that you do not
hint: have locally. This is usually caused by another repository pushing to
hint: the same ref. If you want to integrate the remote changes, use
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.
PS C:\Users\batch1.VITUNIVERSITY\Desktop\391111> git remote remove origin
PS C:\Users\batch1.VITUNIVERSITY\Desktop\391111> git remote add origin https://github.com/palaksharmah/assignment.git
PS C:\Users\batch1.VITUNIVERSITY\Desktop\391111> git push origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 20 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 261 bytes | 261.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/palaksharmah/assignment.git
 * [new branch]      master -> master
PS C:\Users\batch1.VITUNIVERSITY\Desktop\391111>
```

The screenshot shows a GitHub repository page for 'palaksharmah/assignment'. The repository is public and contains one file, 'sum.py', which was committed by 'palaksharmah' 12 minutes ago. The repository has no stars, 0 forks, and 0 releases. It uses Python 100% of the time. A suggested workflow for 'Python Package using Anaconda' is shown.

Code

Issues **Pull requests** **Actions** **Projects** **Wiki** **Security** **Insights**

assignment **Public**

Code

master

sum.py **finally** **12 minutes ago**

README

Add a README

Help people interested in this repository understand your project.

Add a README

About

No description, website, or topics provided.

Activity

0 stars

0 watching

0 forks

Releases

No releases published

[Create a new release](#)

Packages

No packages published

[Publish your first package](#)

Languages

Python 100.0%

Suggested workflows

Based on your tech stack

Python Package using Anaconda

Case Study 2: Tracking Daily Code Changes Scenario: You are working on a Student Registration Module. You make small updates daily and need to record them. Tasks: - Modify an existing file - Check file differences - Stage and commit changes - View commit history

The screenshot shows a GitHub repository page for 'palaksharmah/assignment'. The repository is public and contains one file, 'sum.py', which was last updated by 'palaksharmah' on 'secondddd' at 'd78b07f · now'. The page features a 'Code' tab, a 'README' section with a 'Add a README' button, and various repository statistics like 0 stars, 0 forks, and 0 releases. It also includes sections for suggested workflows, such as 'Python application'.

palaksharmah/assignment

Code Issues Pull requests Actions Projects Wiki Security Insights

assignment Public

master Go to file + <> Code

palaksharmah secondddd d78b07f · now

sum.py secondddd now

README

Add a README

About

No description, website, or topics provided.

Activity 0 stars 0 watching 0 forks

Releases

No releases published Create a new release

Packages

No packages published Publish your first package

Languages

Python 100.0%

Suggested workflows

Based on your tech stack

Python application Configure

Create and test a Python application.

Case Study 3: Feature Development Using Branches Scenario: A new Login feature must be developed without disturbing main code. Tasks: - Create a new branch - Add login-related code - Commit changes - Switch between branches

The screenshot shows the GitHub 'Branches' page for the repository 'palaksharmah/assignment'. The 'Code' tab is selected. The 'Default' branch is 'master', which was updated 5 minutes ago. There is one pull request pending for the 'login' branch, which was updated 'now'. A green 'New branch' button is visible in the top right.

Branch	Updated	Check status	Behind	Ahead	Pull request
master	5 minutes ago	Default			

Branch	Updated	Check status	Behind	Ahead	Pull request
login	now		0	1	

Branch	Updated	Check status	Behind	Ahead	Pull request
login	now		0	1	

Case Study 4: Merging Feature into Main Code Scenario: The login feature is tested and approved.
Tasks: - Switch to main branch - Merge feature branch - Verify merged content

GitHub repository page for `palaksharmah/assignment`

The repository has the following details:

- Code**: master branch
- Issues**: 0
- Pull requests**: 1 (Merge pull request #1 from pa... by palaksharmah, 1 minute ago)
- Actions**: 0
- Projects**: 0
- Wiki**: 0
- Security**: 0
- Insights**: 0

Files (Recent activity):

File	Commit Message	Time Ago
login.py	login added	5 minutes ago
sum.py	secondddd	9 minutes ago

README

Add a README

Help people interested in this repository understand your project.

Add a README

About

No description, website, or topics provided.

Activity

0 stars

0 watching

0 forks

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

Languages

Python 100.0%

Suggested workflows

Based on your tech stack

Python Package

Publish a Python Package to GitHub Packages