

Rushabh Pawnikar

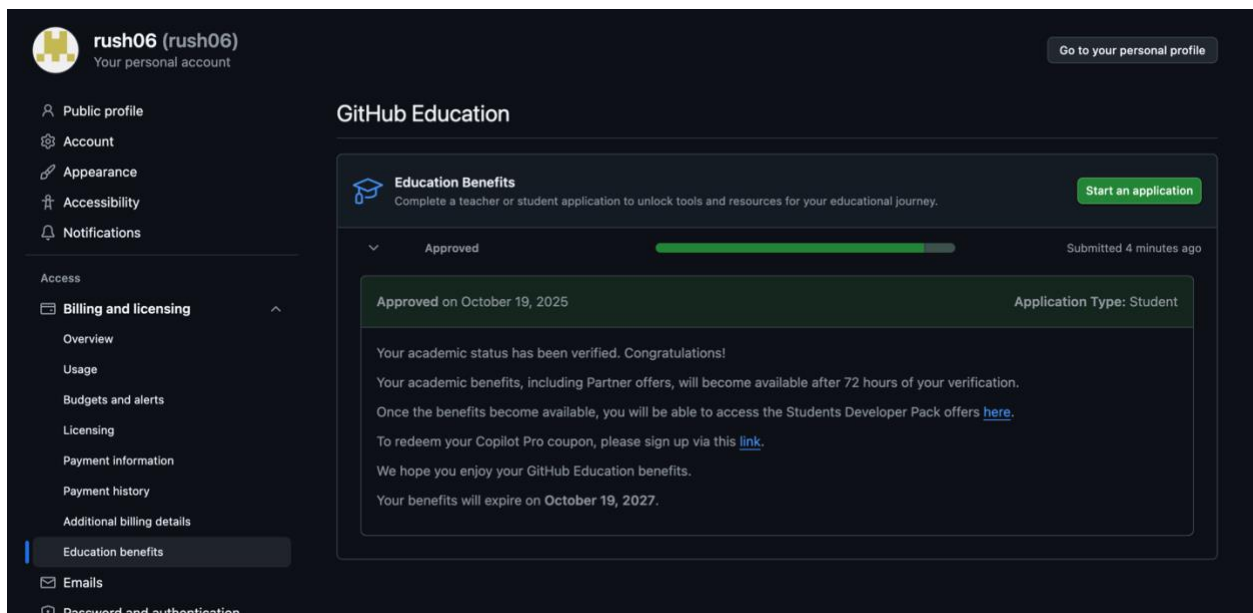
ASTE 404

Professor Depew

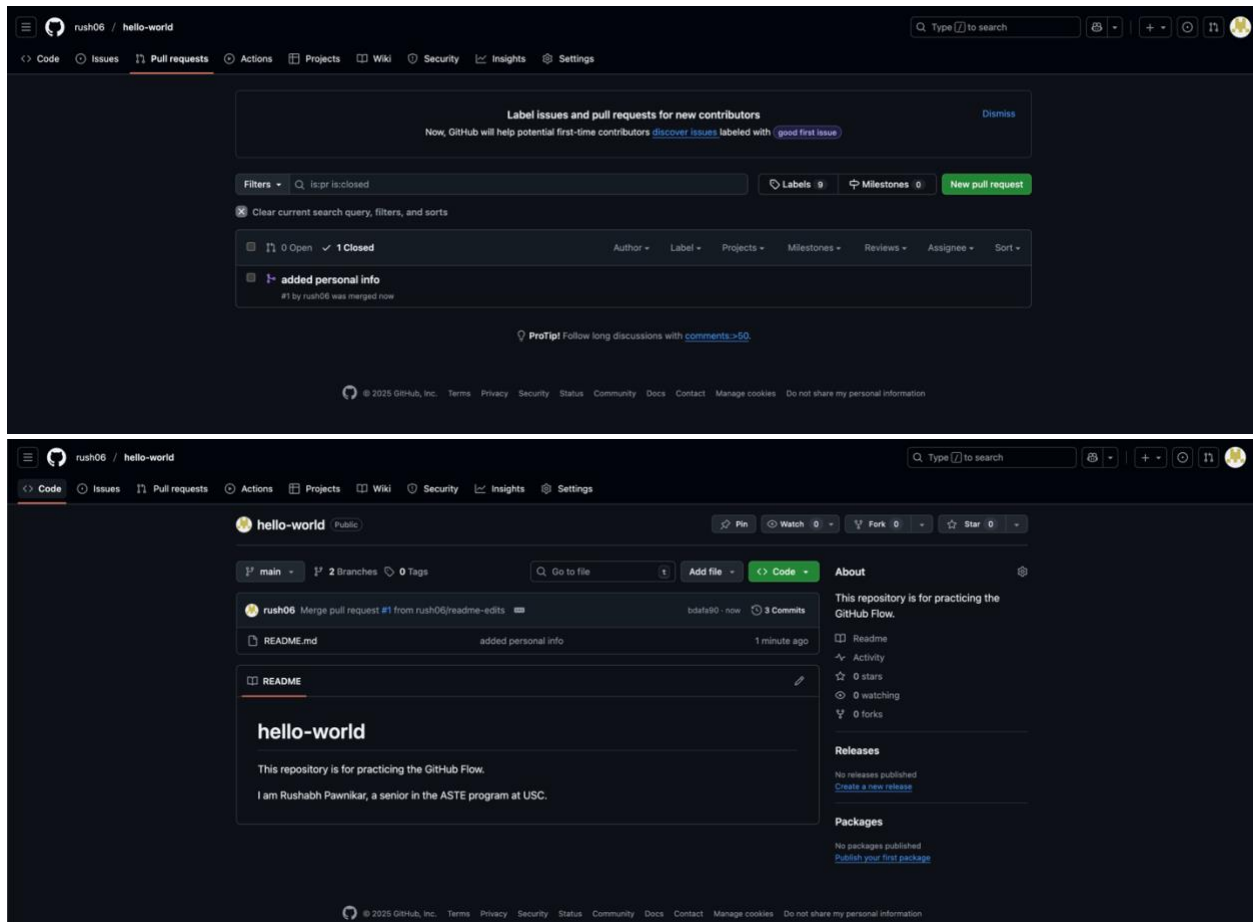
October 19<sup>th</sup>, 2025

## HW4 Report

1. GitHub + IDE Workflow
  - a. Education Application



- b. Tutorial



c. Notes on Version Control

- i. I've worked with git before at my internship at Ursa Major. They taught us how to use the internal repositories and how version control helps them track their testing.
- ii. Seeing a formalized definition of version control and its importance is good to read about. I know that it helped the workflow in my experience, but for CS and more adept coders than me, it's a lifesaver.

d. Command Line Setup

e. Clone Repo Locally

```
HW4 — -zsh — 80x24
Last login: Thu Oct  2 03:53:03 on ttys000
[(base) rushabh@Rushabhs-MacBook-Air ~ % cd '/Users/rushabh/Downloads/ASTE-404 Numerical Methods/HW4']
[(base) rushabh@Rushabhs-MacBook-Air HW4 % git clone https://github.com/rush06/hello-world.git
Cloning into 'hello-world'...
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (5/5), done.
remote: Total 7 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (7/7), done.
Resolving deltas: 100% (1/1), done.
[(base) rushabh@Rushabhs-MacBook-Air HW4 % ls
hello-world
(base) rushabh@Rushabhs-MacBook-Air HW4 %
```

#### f. Committing Changes

```
hello-world — -zsh — 80x24
Cloning into 'hello-world'...
remote: Enumerating objects: 7, done.
remote: Counting objects: 100% (7/7), done.
remote: Compressing objects: 100% (5/5), done.
remote: Total 7 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (7/7), done.
Resolving deltas: 100% (1/1), done.
[(base) rushabh@Rushabhs-MacBook-Air HW4 % ls
hello-world
[(base) rushabh@Rushabhs-MacBook-Air HW4 % git status
fatal: not a git repository (or any of the parent directories): .git
[(base) rushabh@Rushabhs-MacBook-Air HW4 % cd hello-worl
cd: no such file or directory: hello-worl
[(base) rushabh@Rushabhs-MacBook-Air HW4 % cd hello-world
[(base) rushabh@Rushabhs-MacBook-Air hello-world % git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    HW4.pdf

nothing added to commit but untracked files present (use "git add" to track)
(base) rushabh@Rushabhs-MacBook-Air hello-world %
```

The screenshot displays the GitHub interface for a repository named "hello-world". At the top, the repository name and "Public" status are shown, along with buttons for Pin, Watch (0), Fork (0), and Star (0). Below this, the main branch is "main", with 2 branches and 0 tags. A search bar and buttons for "Add file" and "Code" are present.

The commit history section shows a single commit by "rush06" titled "add snapshot of report" at hash "f3806de", made 11 minutes ago, with 4 commits in total. Below this, a file list shows "HW4.pdf" (added 11 minutes ago) and "README.md" (added 43 minutes ago).

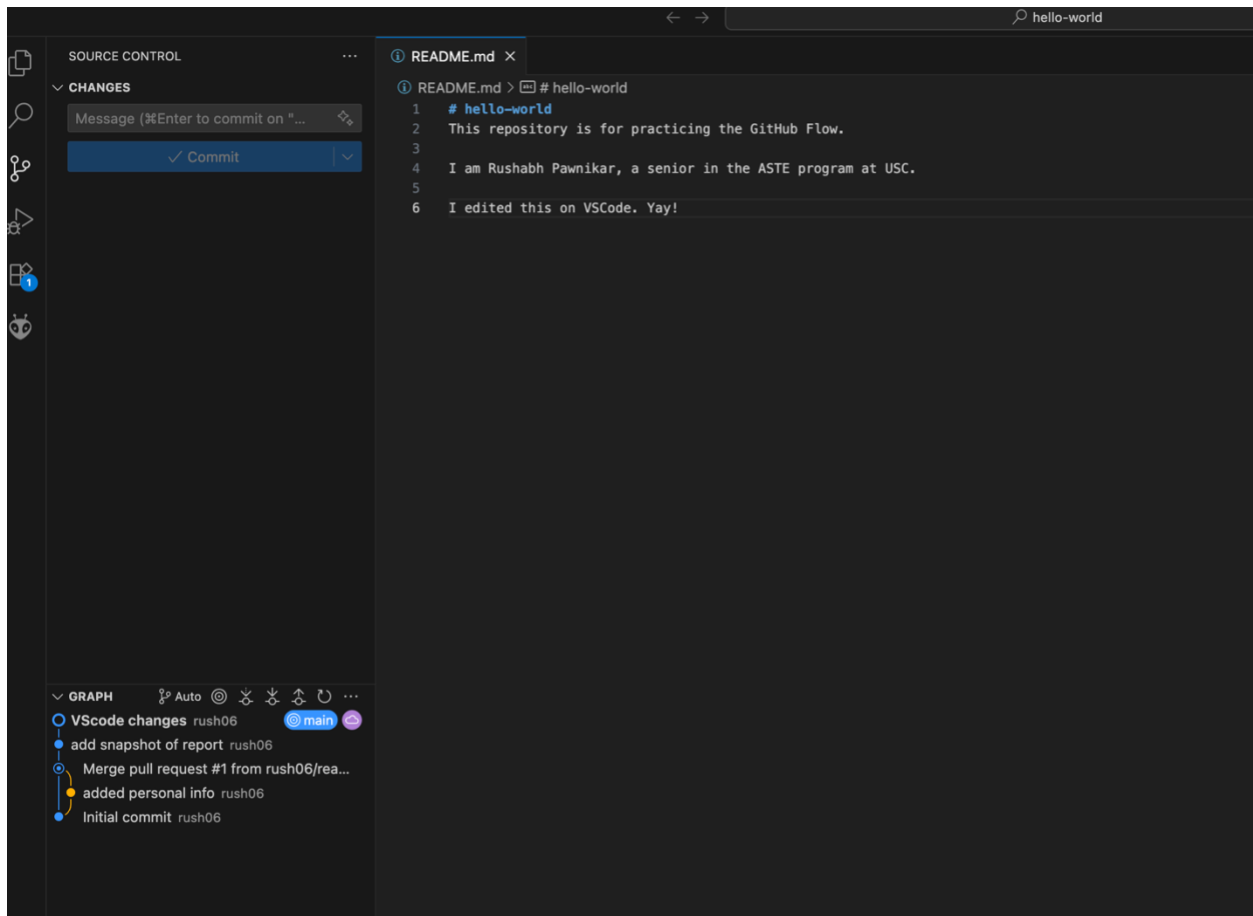
The README file is displayed, titled "hello-world". It contains the text: "This repository is for practicing the GitHub Flow." and "I am Rushabh Pawnikar, a senior in the ASTE program at USC."

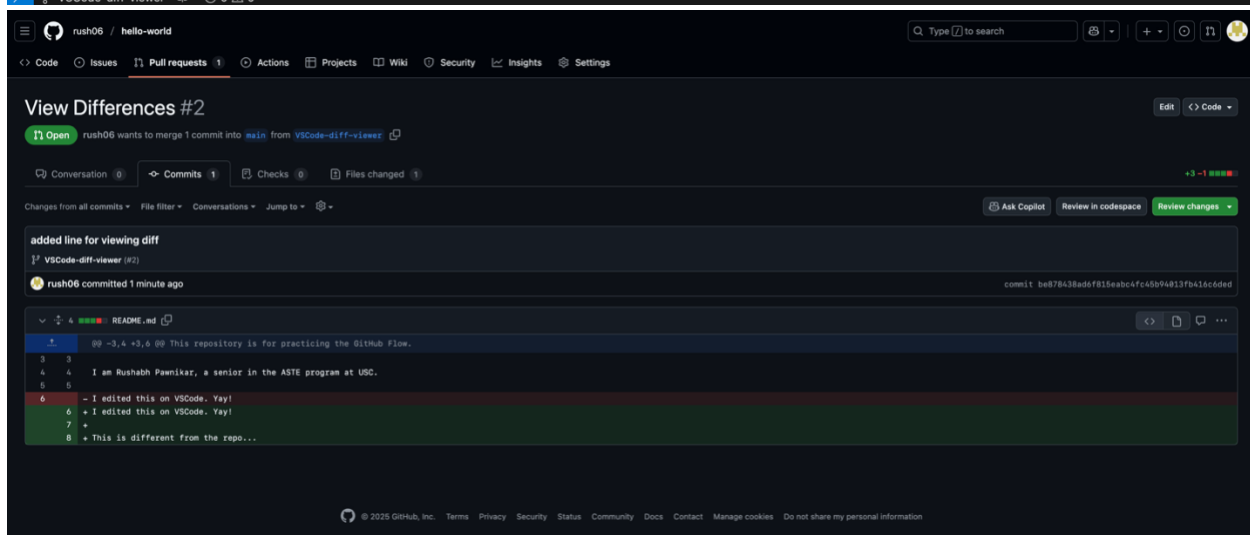
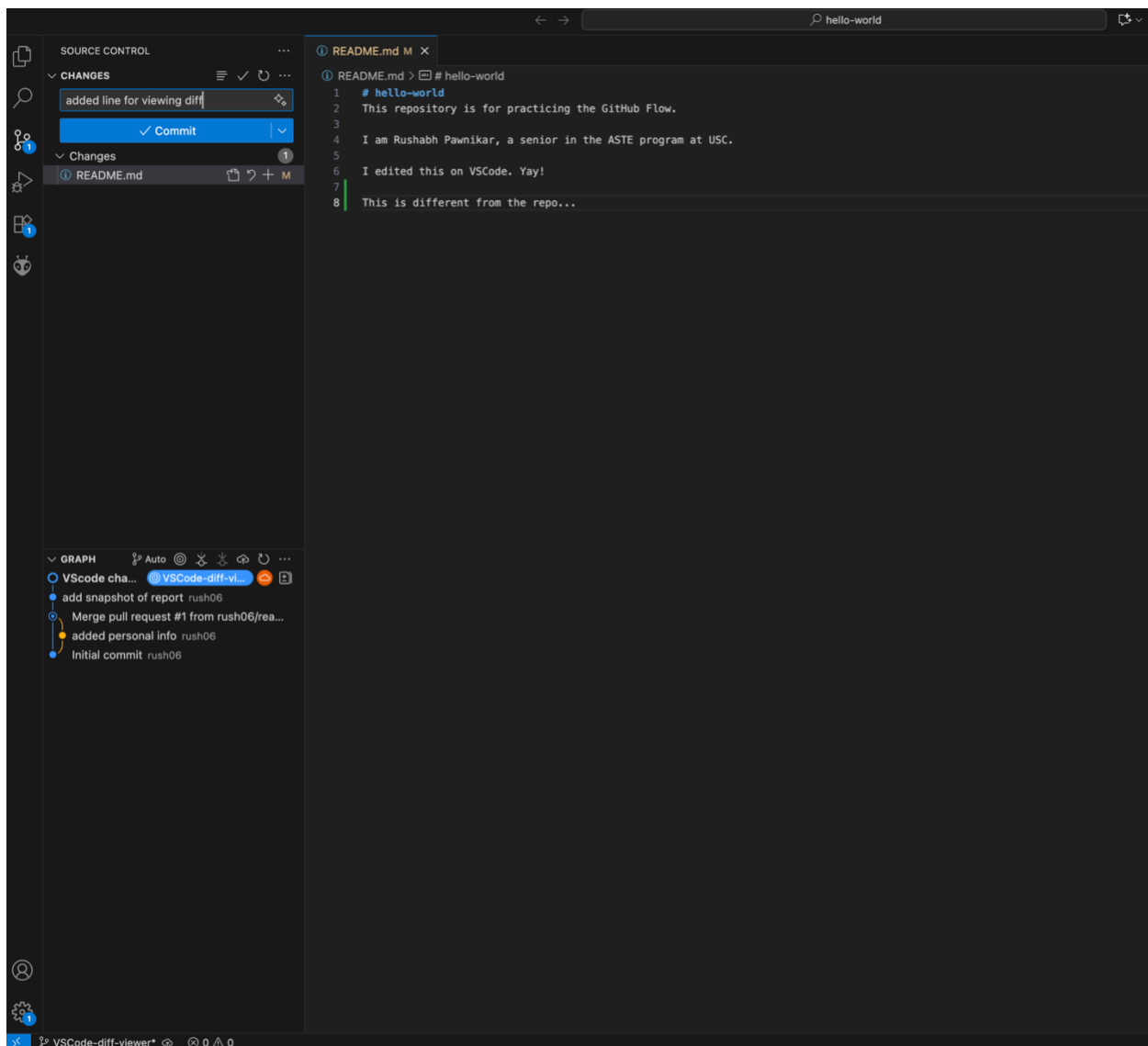
On the right side, a terminal window titled "hello-world — zsh — 80x24" shows the output of a "git push origin main" command. The output includes the username "rush06", password prompt, and progress bars for enumerating, counting, compressing, and writing objects, ending with the commit hash "bdafe99..f3806de" and the branch "main".

At the bottom right, the "Packages" section states "No packages published" and provides a link to "Publish your first package".

The footer of the page includes the GitHub logo, copyright notice "© 2025 GitHub, Inc.", and links for Terms, Privacy, Security, Status, Community, Docs, Contact, and Manage cookies, along with a note "Do not share my personal information".

## g. IDE Integration





## h. Update ReadMe

### hello-world

This repository is for practicing the GitHub Flow.

## A. GitHub + IDE Workflow

Signed up for GitHub Education



## B. GitHub Tutorial from the Web UI

Followed links and videos for initial intro.



## C. Why Use Git and Version Control?