**Software Engineering Tools Lab**

**Assignment No-3**

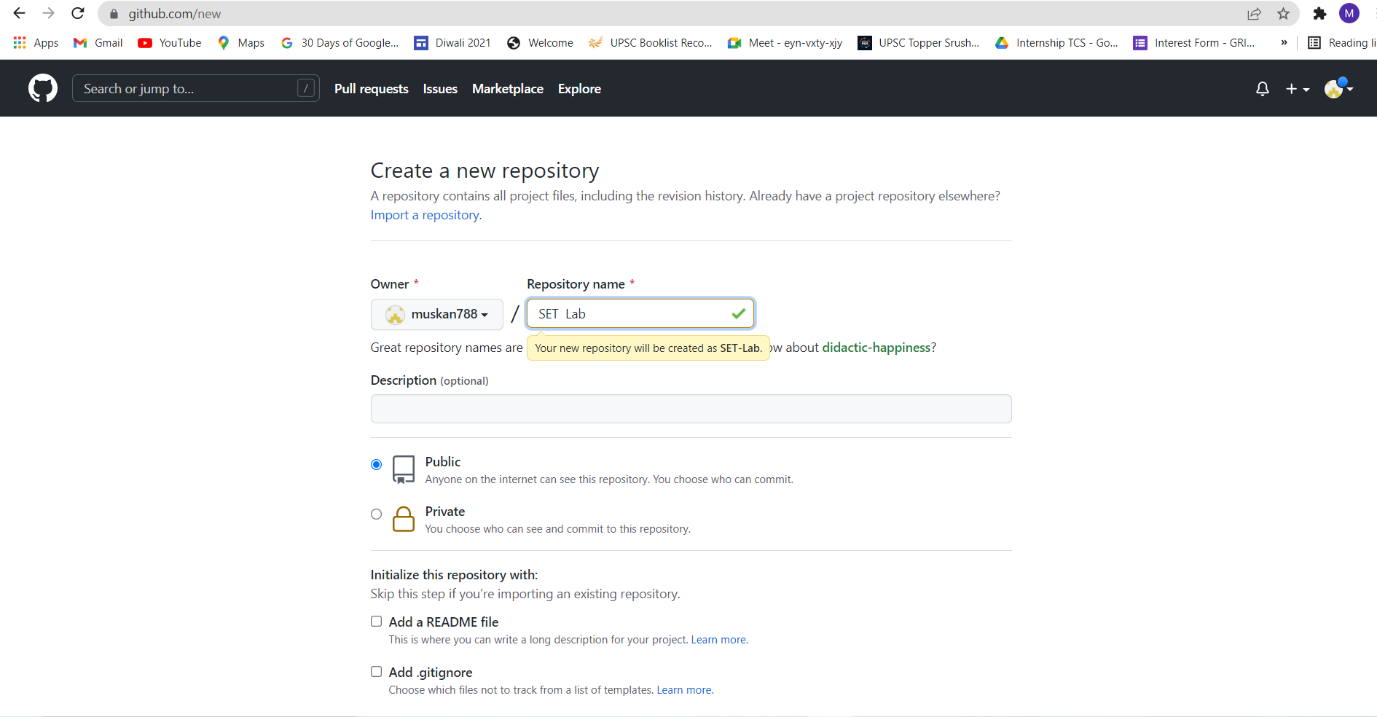
**(Module 3- GitHub)**

**Name: Muskan Raju Attar**

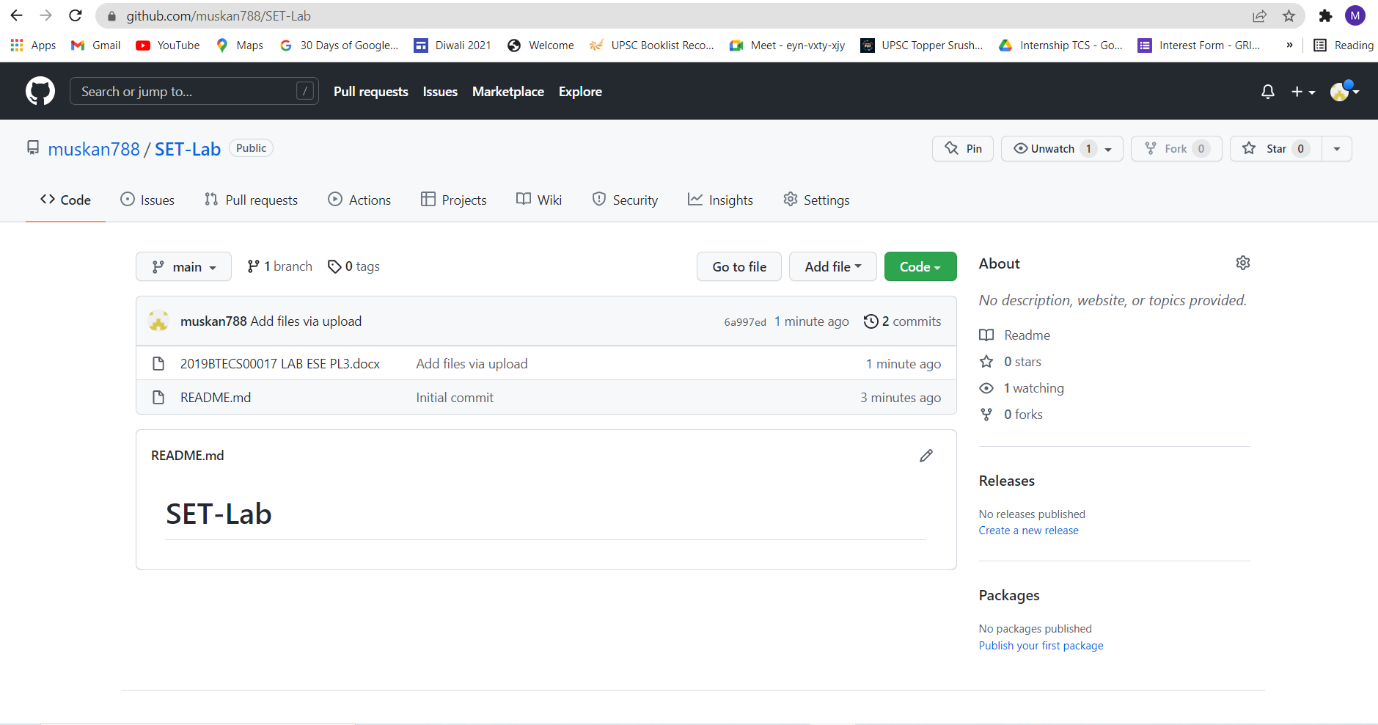
**PRN:2019BTECS00017**

**Batch:T1**

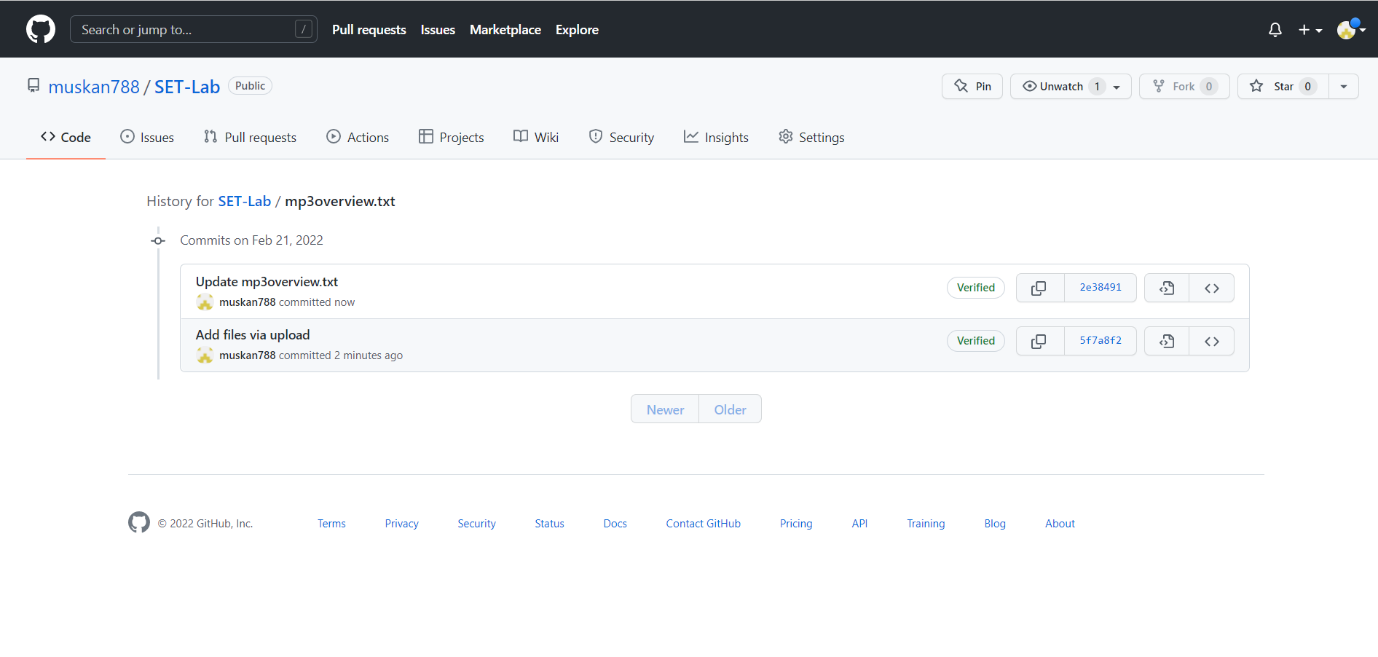
Q 1. Create a repository on GitHub named SET Lab and add files into it (you can add implementation files of previous assignment) perform below operations on it. (Add screenshot as an answer to every question)



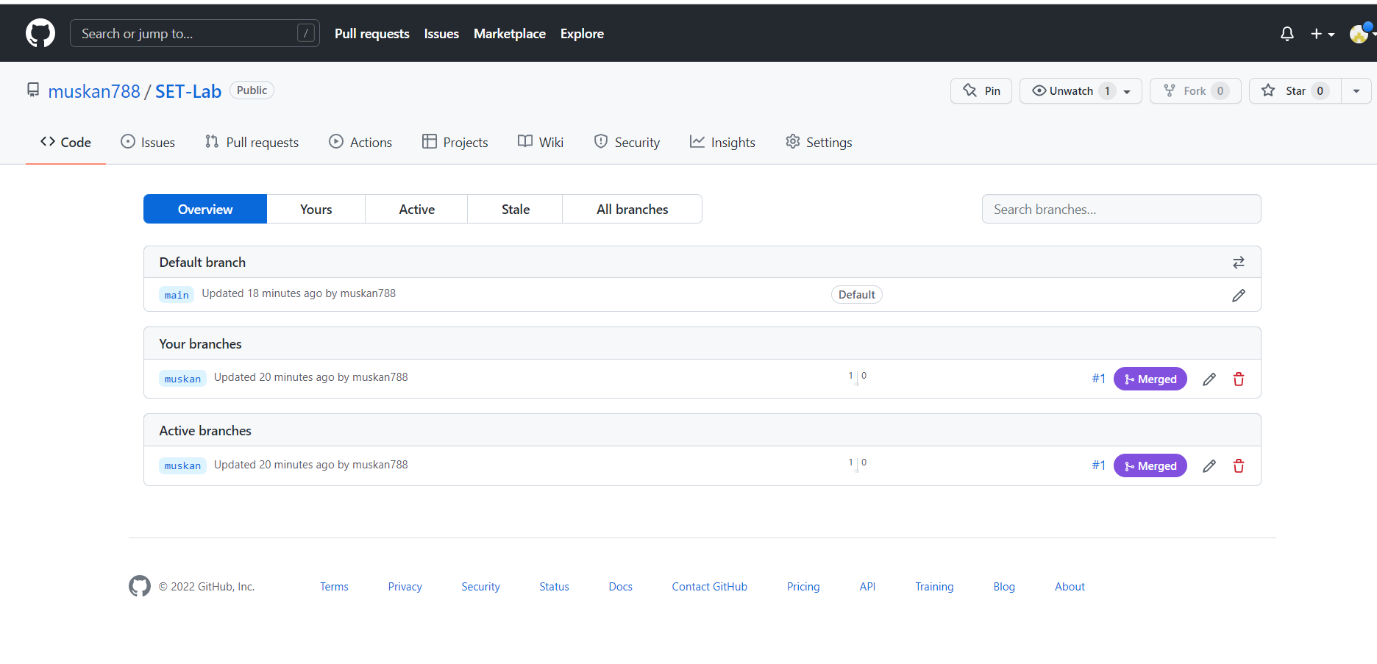
1.Perform commit on added files



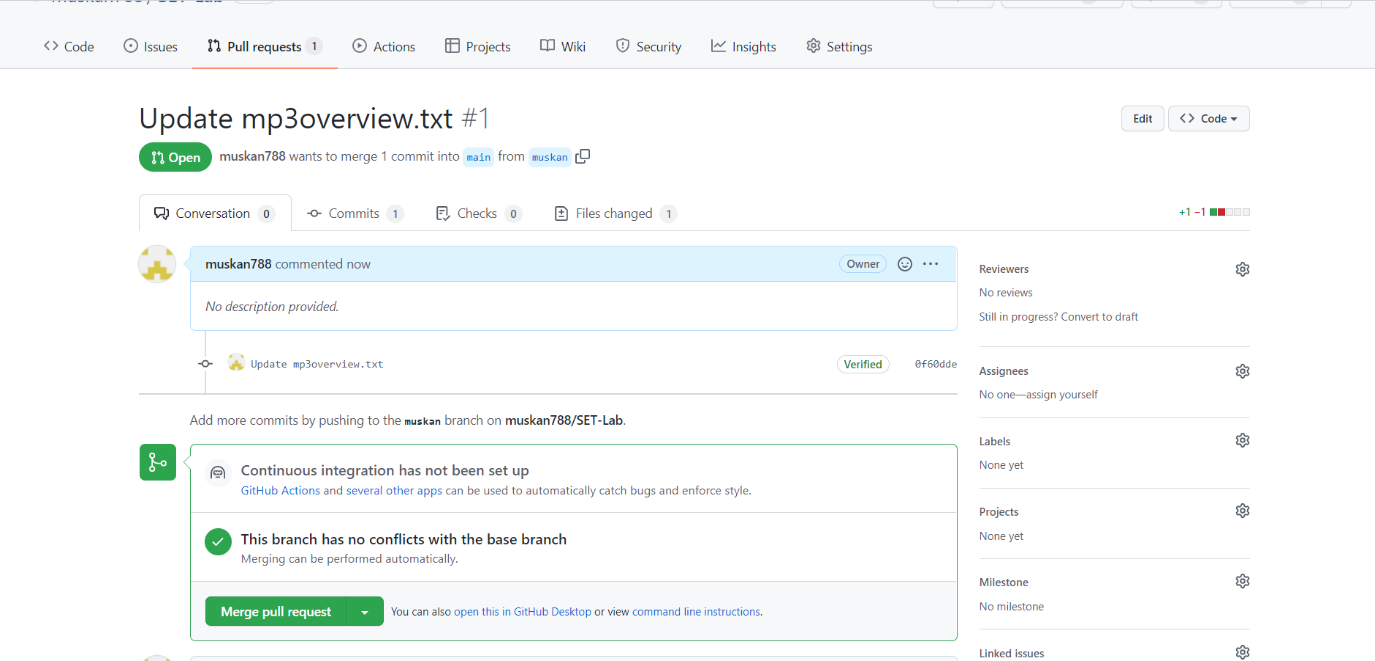
2.Perform update to the existing files (show history)



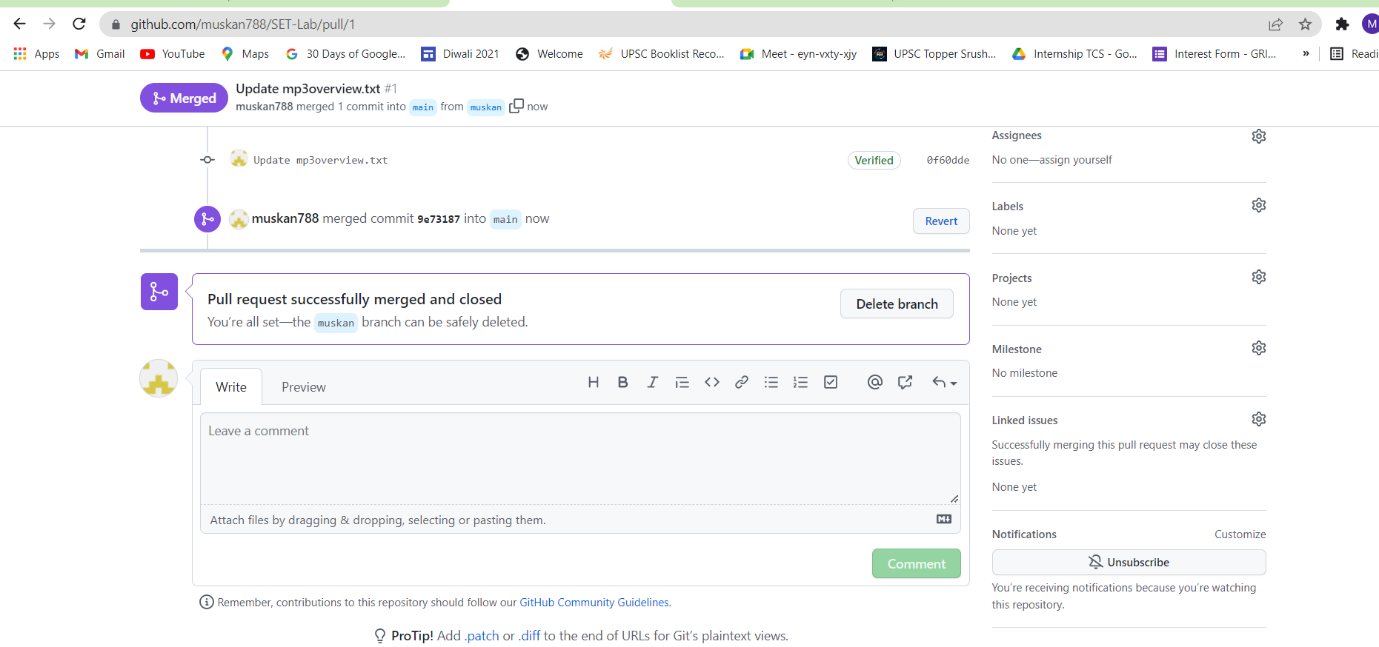
1. Create another branch



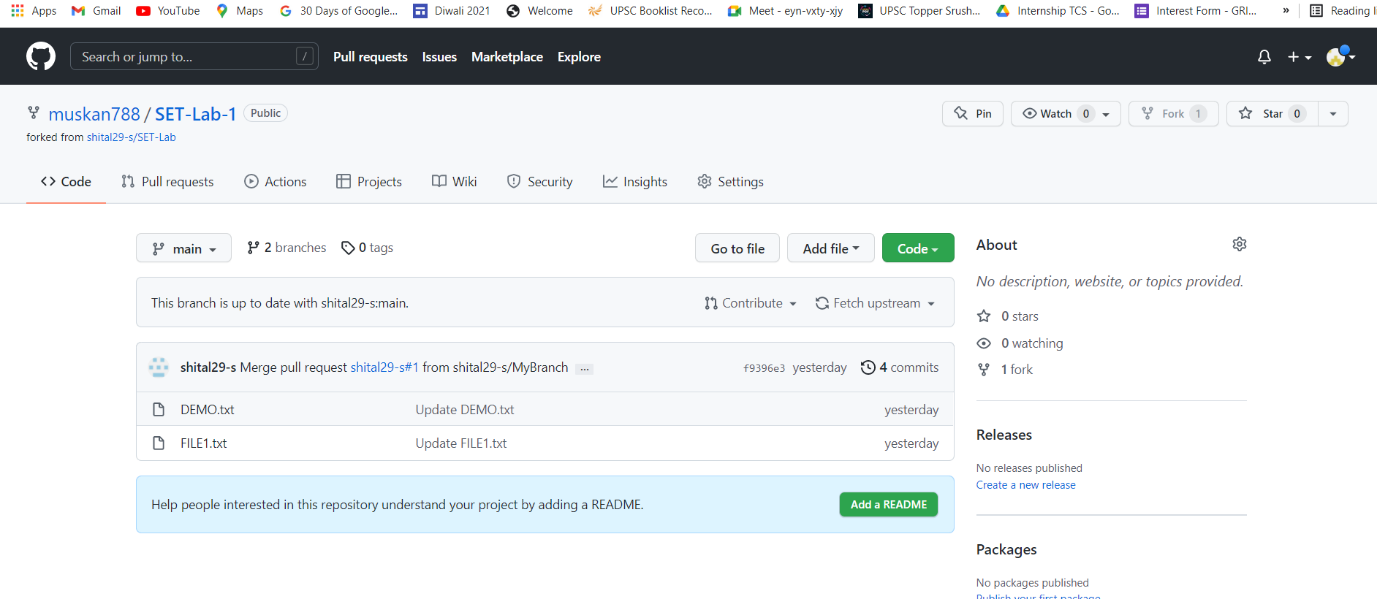
4.Create pull request

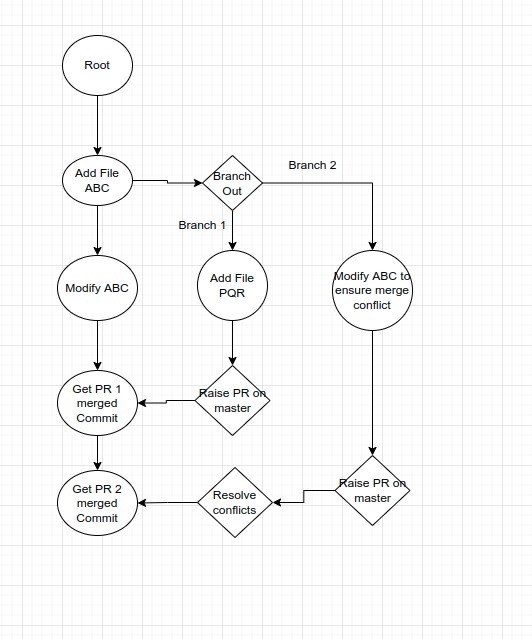


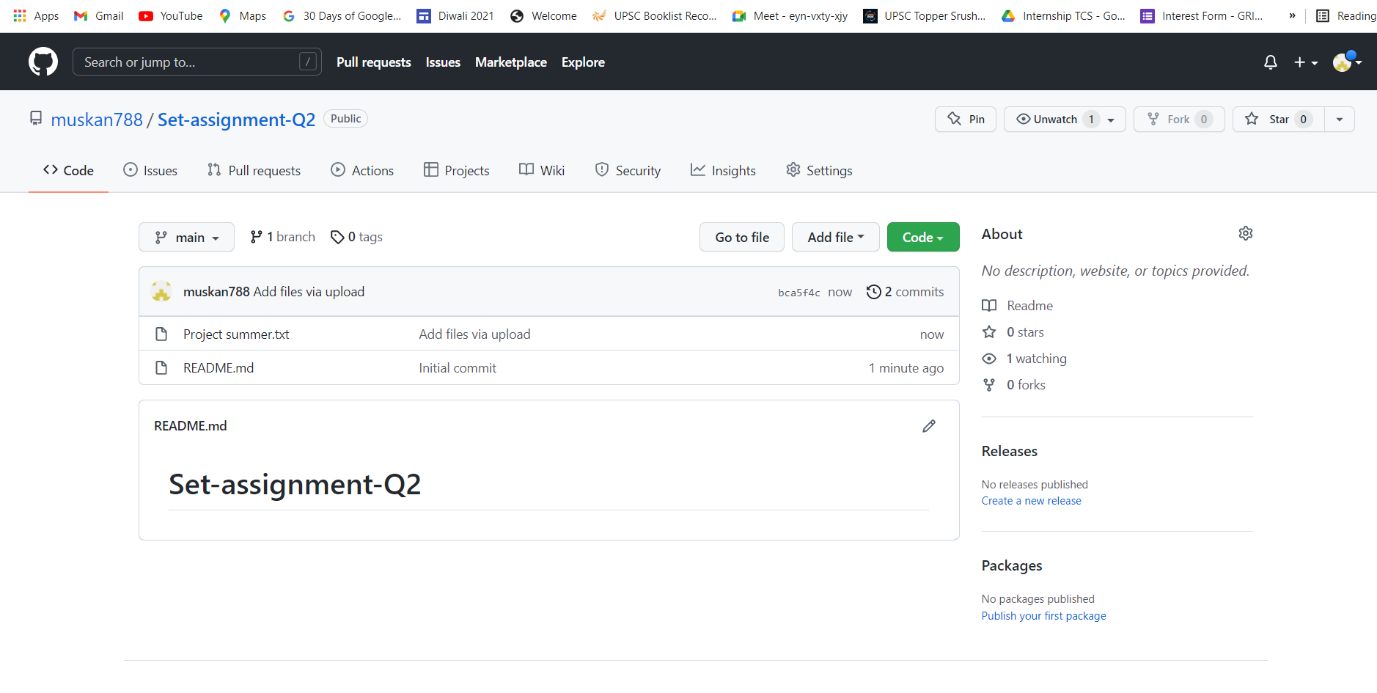
5.Perform merging of both branches

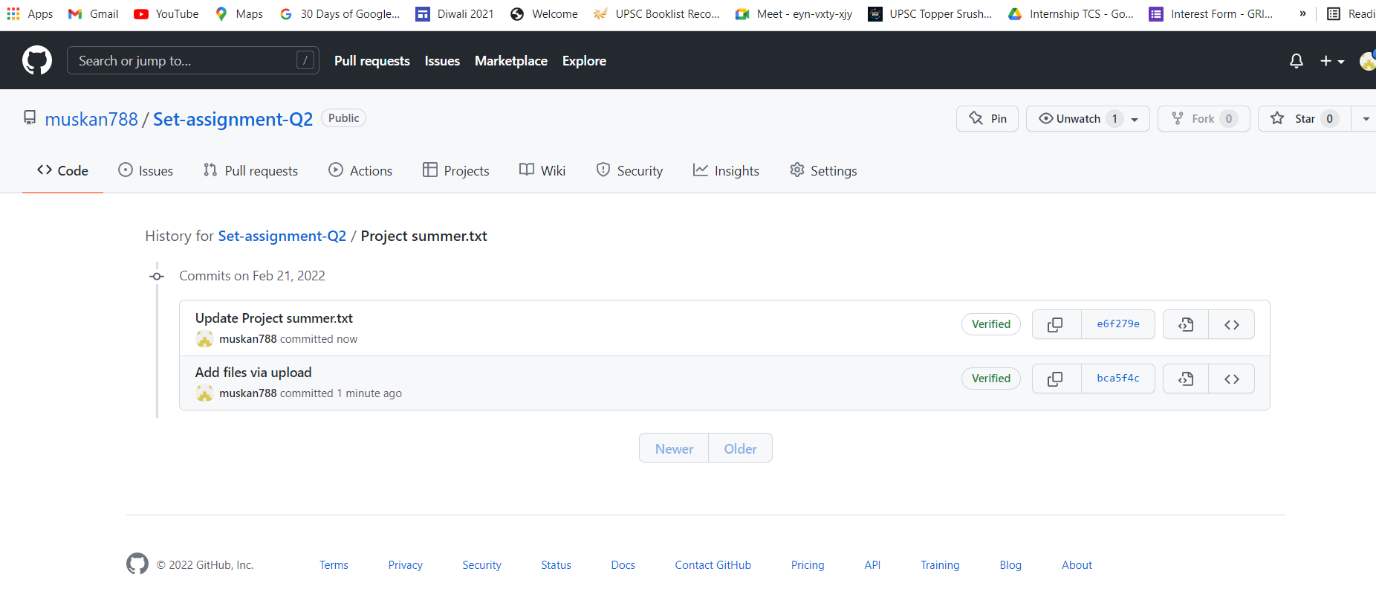


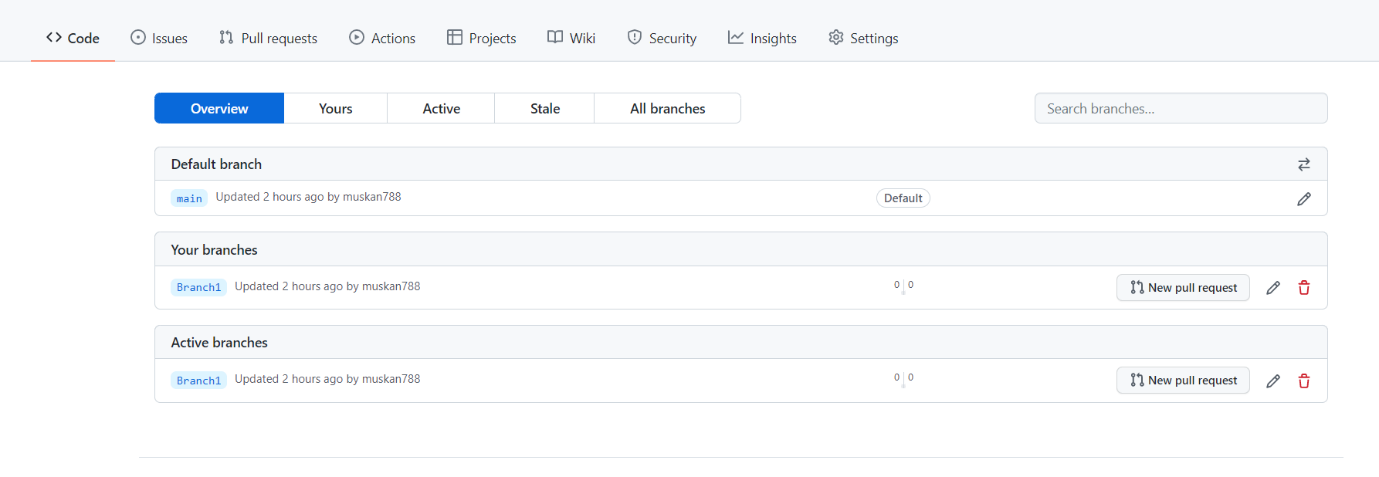
6.Perform Fork operation

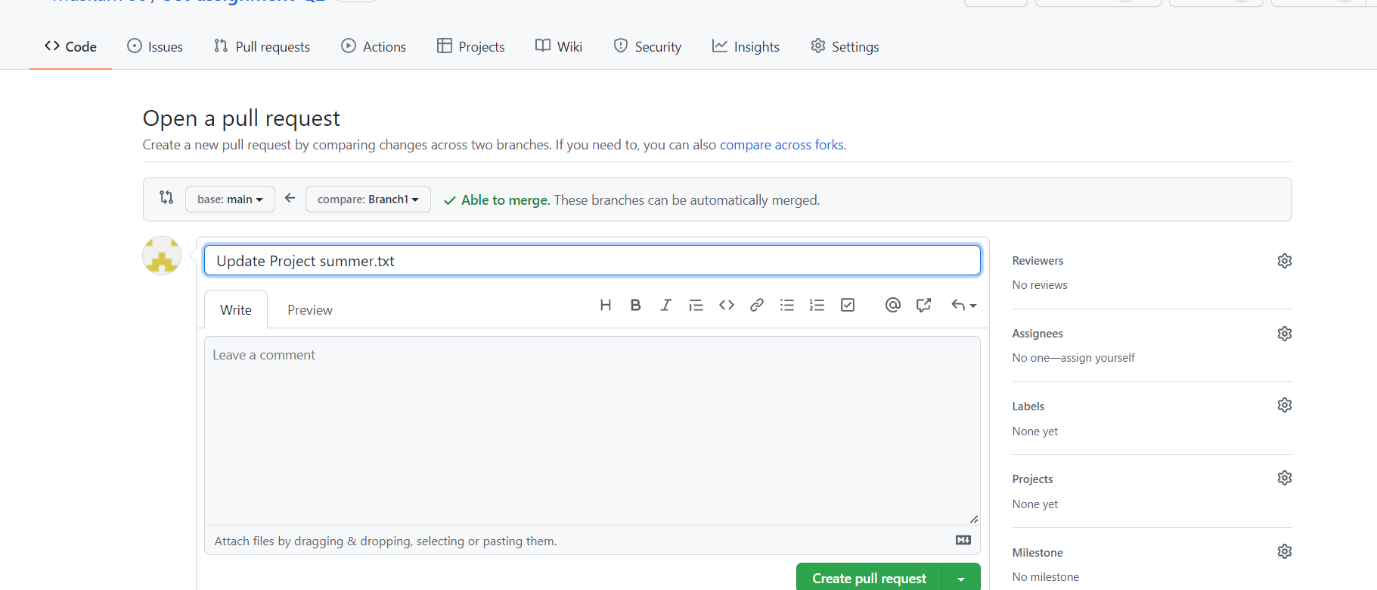


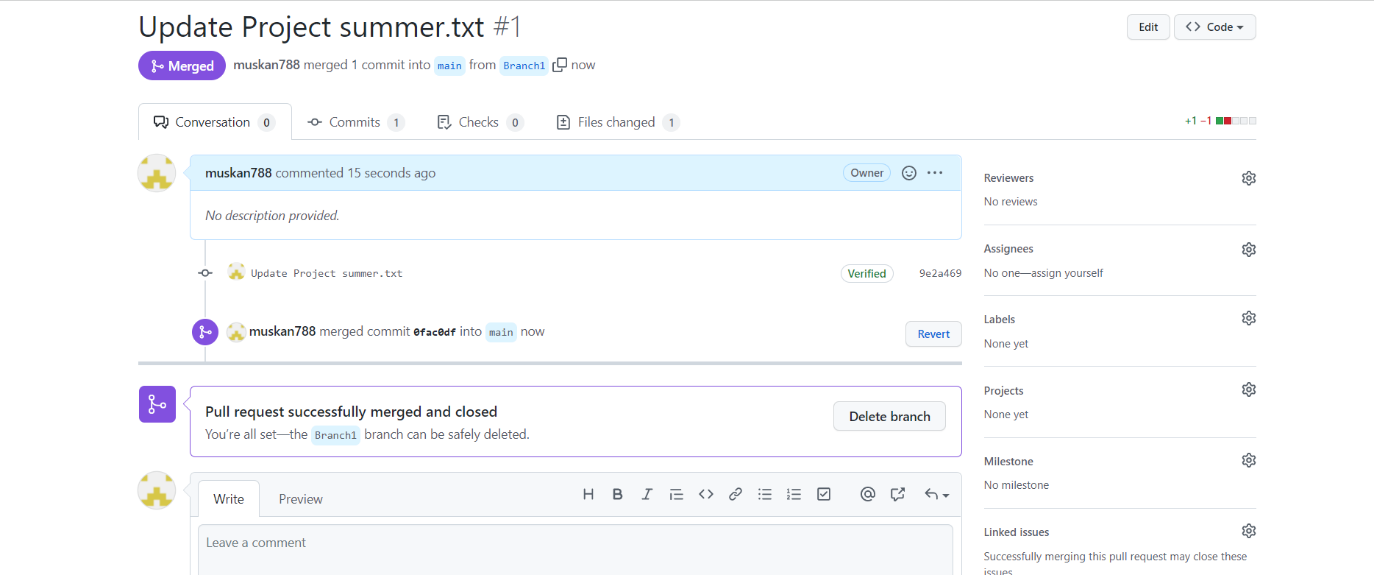
Q 2. For the diagram given below create a GitHub repository and perform operations given in the diagram. (Perform commit operations as given)(Add screenshots as an answer to this question)

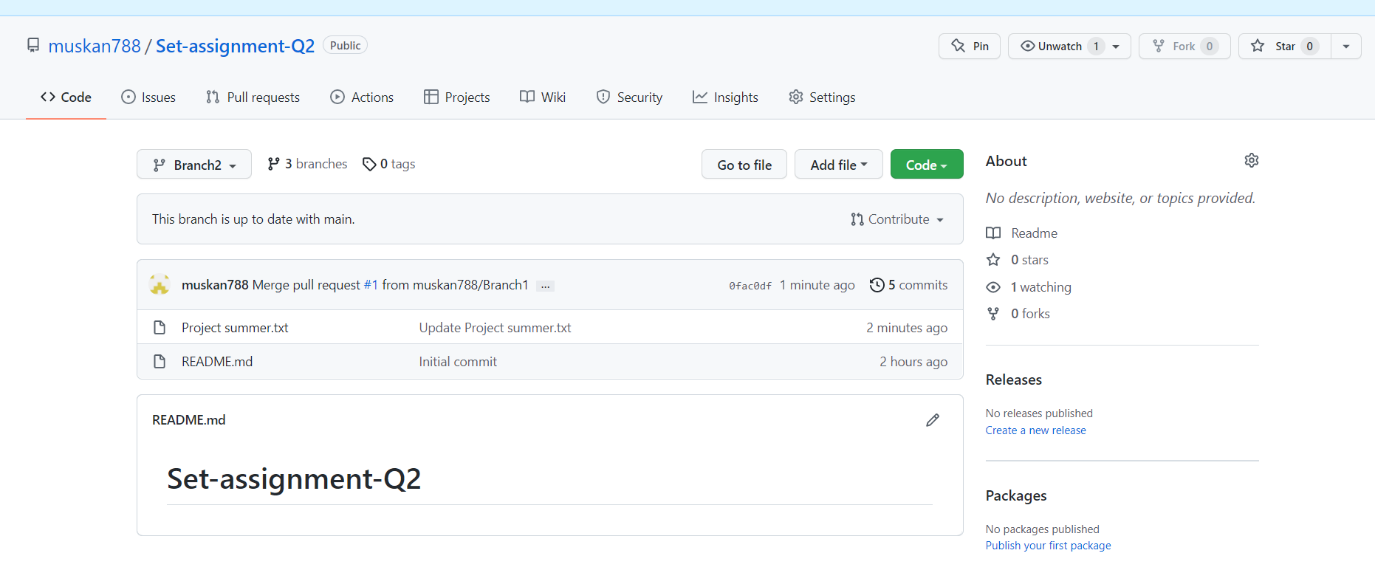


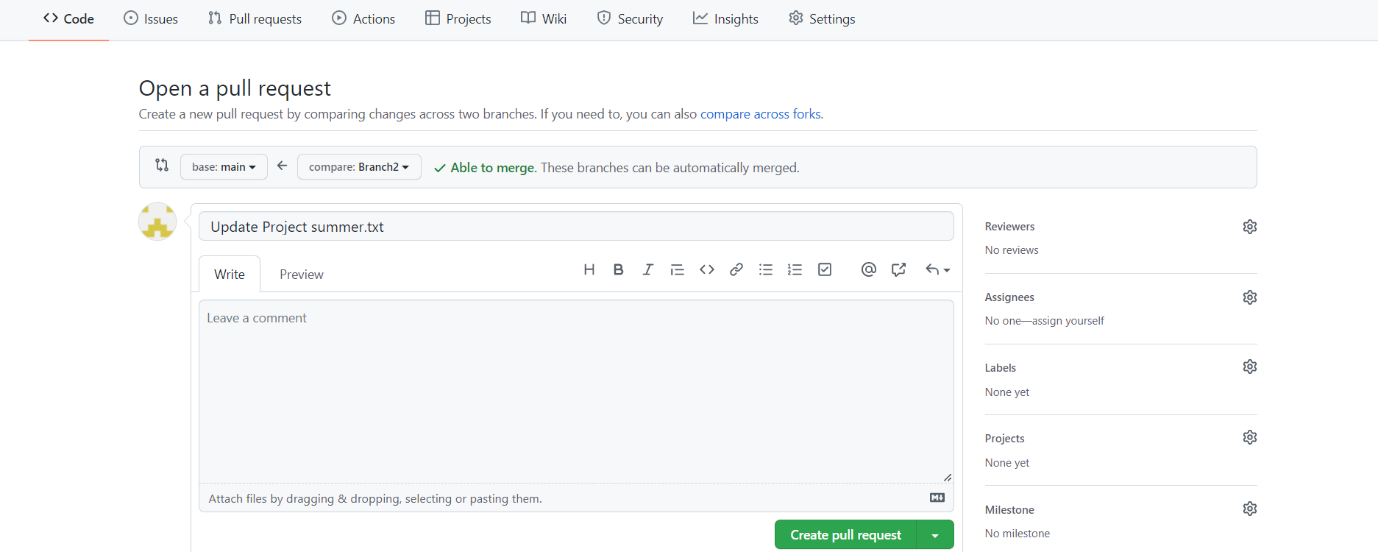


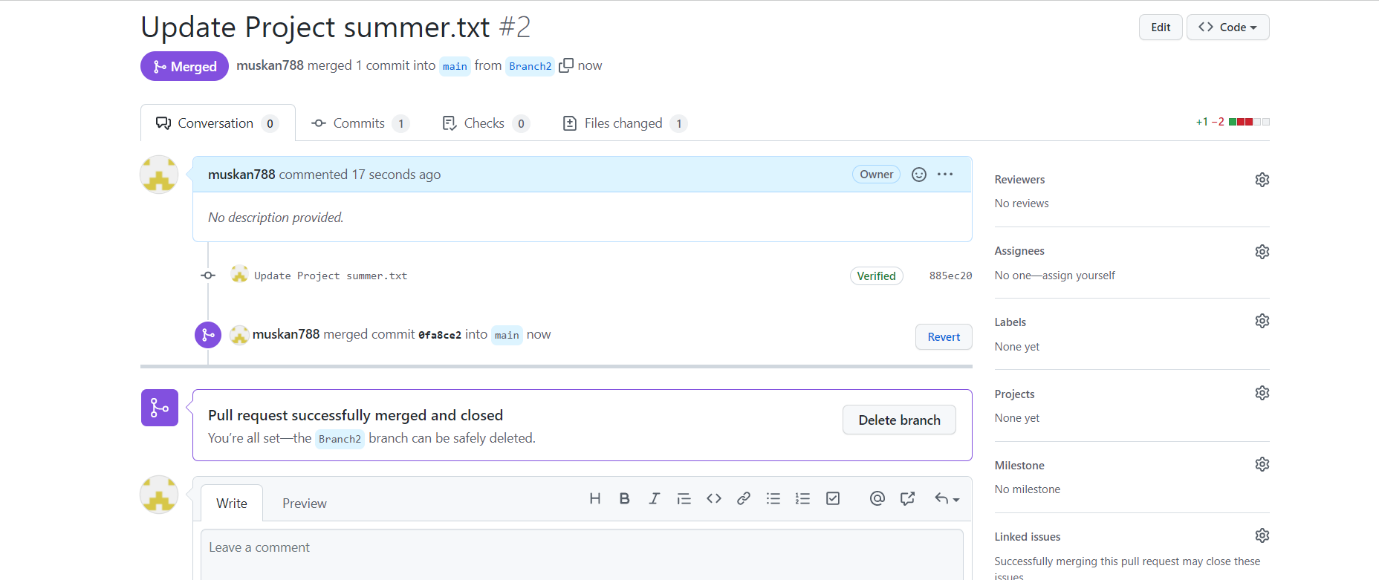


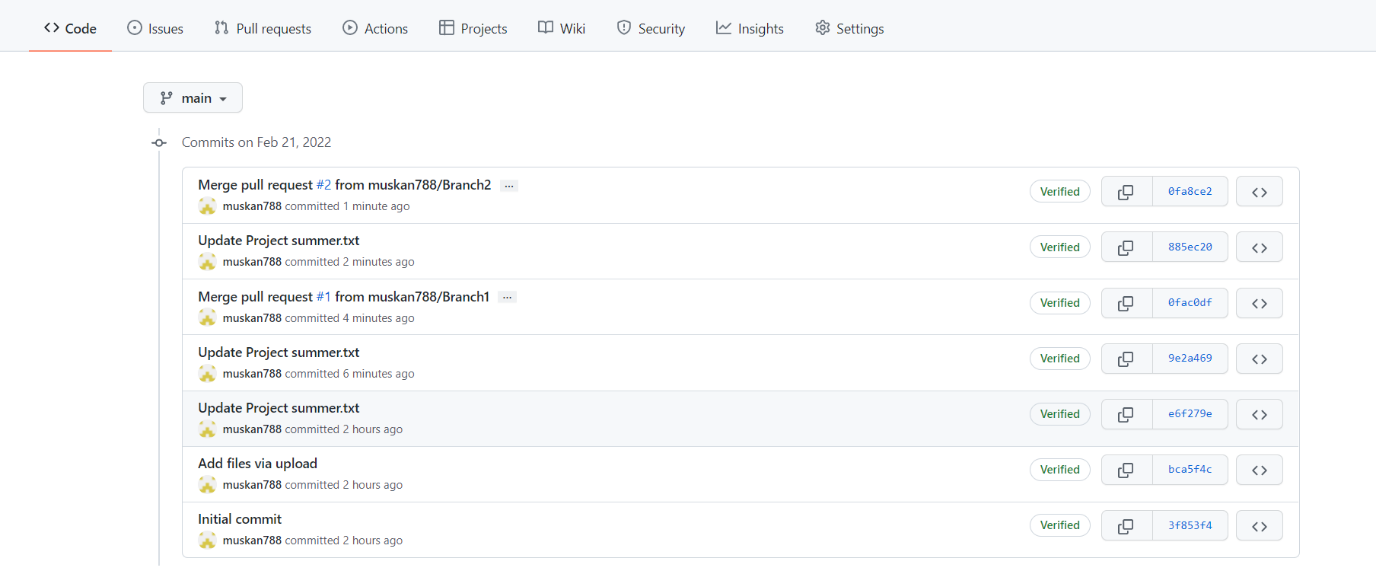










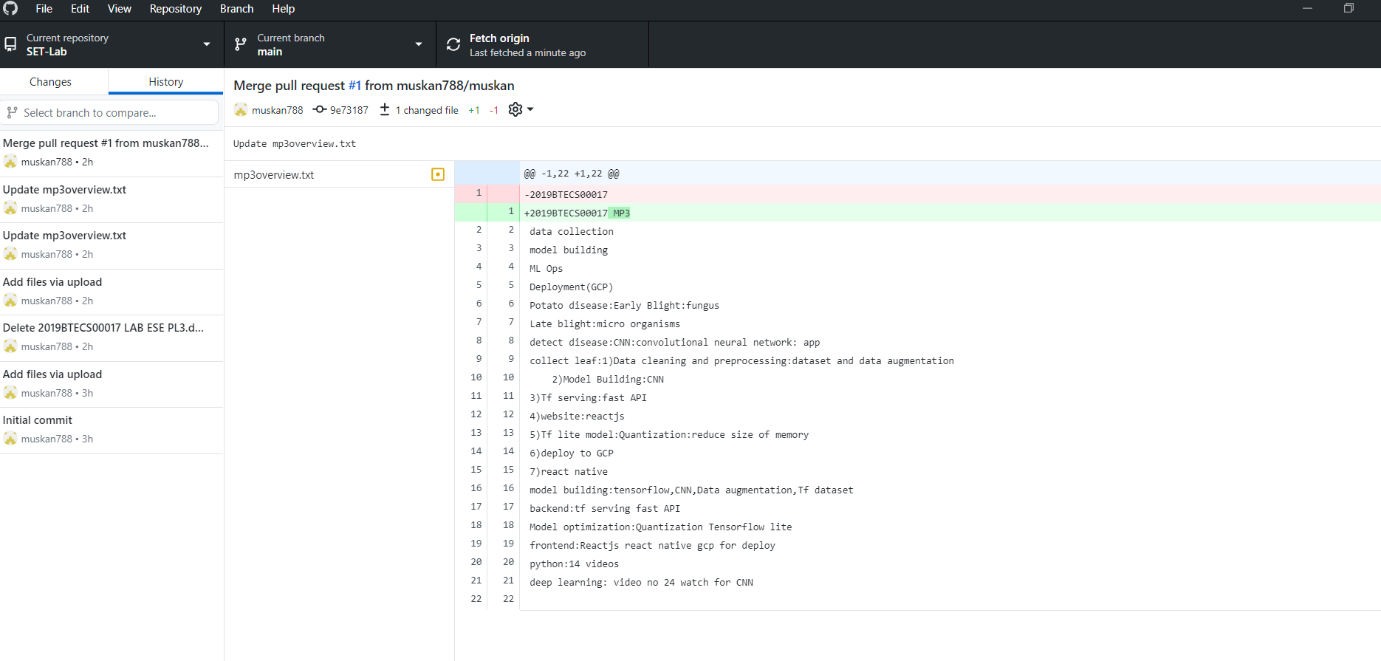


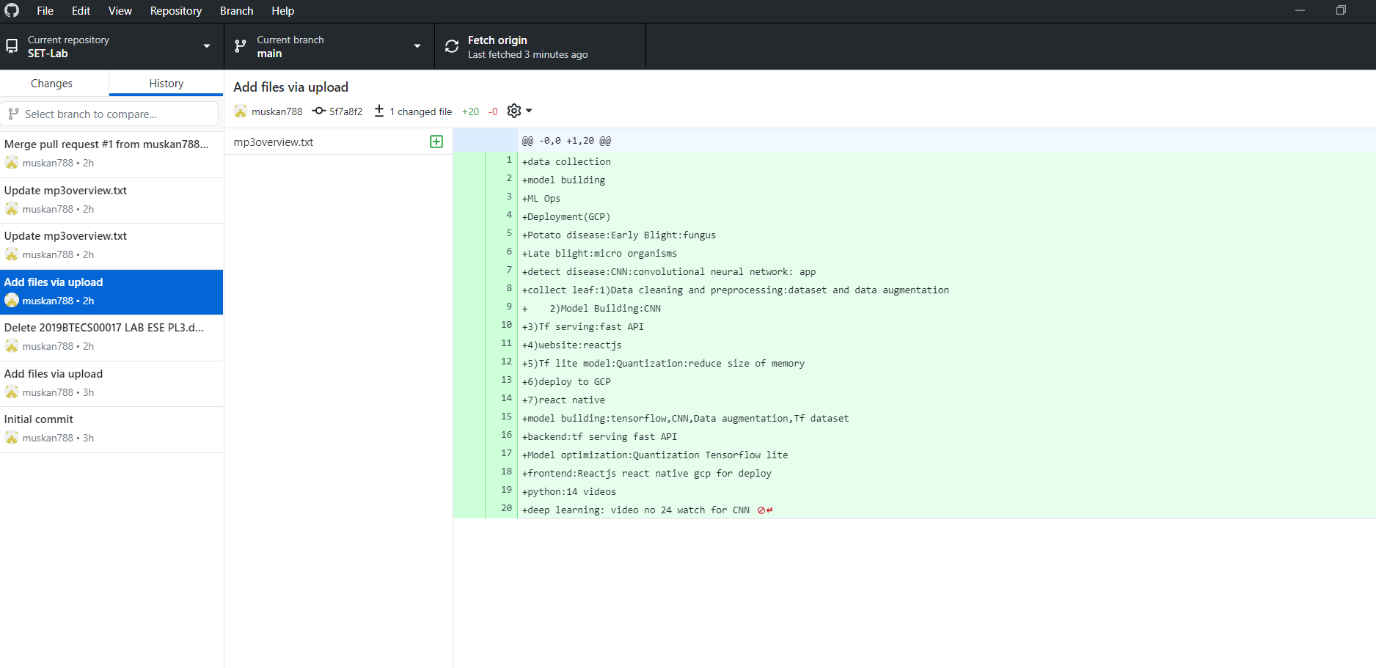
Q 3. What is GitHub desktop? How to install GitHub on local machine? Install GitHub on your local machine and access repository created in question no 1 (add screenshots).

GitHub Desktop: is an application that enables you to interact with GitHub using a GUI instead of the command line or a web browser.

The installation of GitHub Desktop is as simple as any other Windows application installation. All you need to do is:

1. Open a browser.
2. Visit [desktop.github.com](https://desktop.github.com/).
3. Click Download for Windows (64bit).
4. When prompted, click Run.
5. Allow the installation to download and install.

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Q 4. Differentiate in between GitHub, Git and GitLab.

**Answer:**

**Git:** Git is a open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

It will manage and keep tacks your changes of your projects.

It has a command line and GUI tool for pushing , committing the projects to the github, bitbucket or gitlab.

**GitHub:** GitHub is a cloud based git repository hosting service.

Here you can manage and share your code with other and manage development teams as collaborators.

You can manage private repositories with 3 collaborators for a software development projects.

**Git Lab:**Git lab is a web-based devops life cycle tool provides a git repository manager provides wiki, issue tracking and CI/CD pipe line.

**Git Lab has advanced and different features than GitHub & Git:**

**Authentication Levels:** Git lab having features like adding and modifying people’s permissions according to their roles.

**Built-in CI/CD tool:**GitLab having the feature like automatically testing with CI/CD and no need of humans. It also integrates with external integration applications like jenkins, etc…

Q 5. Go to this <https://github.com/sidp1991/SETAssignment>

GitHub repository add your code file (question no 2 solved in assignment no 2) in this repository, then open file [Student assignment updates.txt](https://github.com/sidp1991/SETAssignment/blob/main/Student%20assignment%20updates.txt) present in above repository and update your details such as Name and PRN and then perform commit( need to create pull request with appropriate comments). (Attach screenshots of this activity)

