

GitHub “Basic”

Total slides – 25

History and Document control

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- What is GitHub ?
- Create a new repository.
- Start and manage a new branch.
- Add files and push them to GitHub as commits.
- Open and merge a pull request.

*Note: "lab experience included"

What is it ?

- GitHub is a code hosting platform for version control and collaboration.
- It lets you and others work together on projects from anywhere.

Requirement for creating a new repository.

- You need a GitHub.com account.
- You need internet access.

Create a new repository

- A repository is usually used to organize a single project.
- Repositories can contain
 - ❑ folders
 - ❑ files,
 - ❑ images,
 - ❑ videos,
 - ❑ spreadsheets,
 - ❑ data sets
 - ❑ etc

Steps for creating a new repository.

- In the upper right corner, next to your avatar or identicon, click “+” and then select New repository.
- Name your repository “cloud-computing”.
- Write a short description.
- Select Initialize this repository with a README.

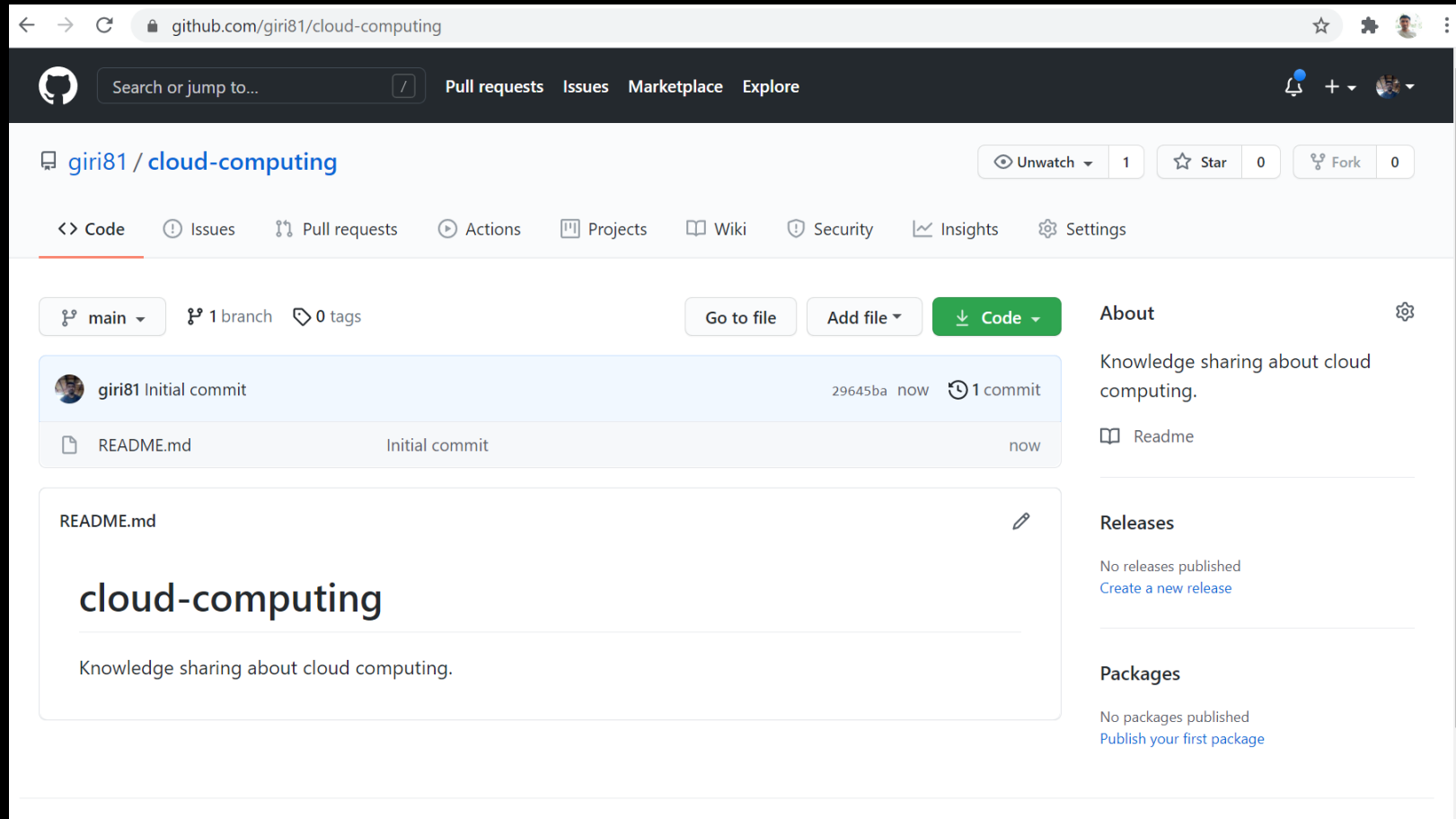
* Note: Lab experience included in this slide.

Note!

- Recommendation from seniors.

Please include a README or a file with information about your project.

artifacts for you on repository.



Create a Branch.

- Branching is the way to work on different versions of a repository at one time.
- By default your repository has one branch named main.
- main is considered to be the definitive branch.
- We use branches to experiment and make edits before committing them to main.

Create a Branch.

Intense!

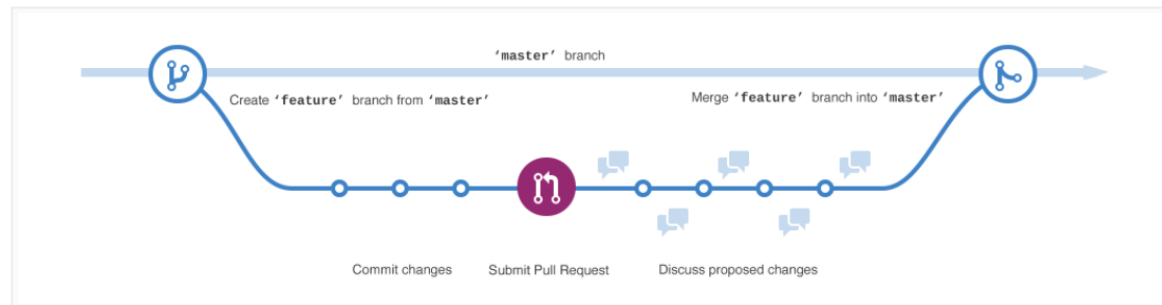
- When you create a branch off the main branch, you're making a copy, or snapshot, of main as it was at that point in time.
- If someone else made changes to the main branch while you were working on your branch, you could pull in those updates.

Create a Branch.

Intense!

This diagram shows:

- The `main` branch
- A new branch called `feature` (because we're doing 'feature work' on this branch)
- The journey that `feature` takes before it's merged into `main`



Create a Branch.

Easy now!

Have you ever saved different versions of a file? Something like:

- `story.txt`
- `story-joe-edit.txt`
- `story-joe-edit-reviewed.txt`

Branches accomplish similar goals in GitHub repositories.

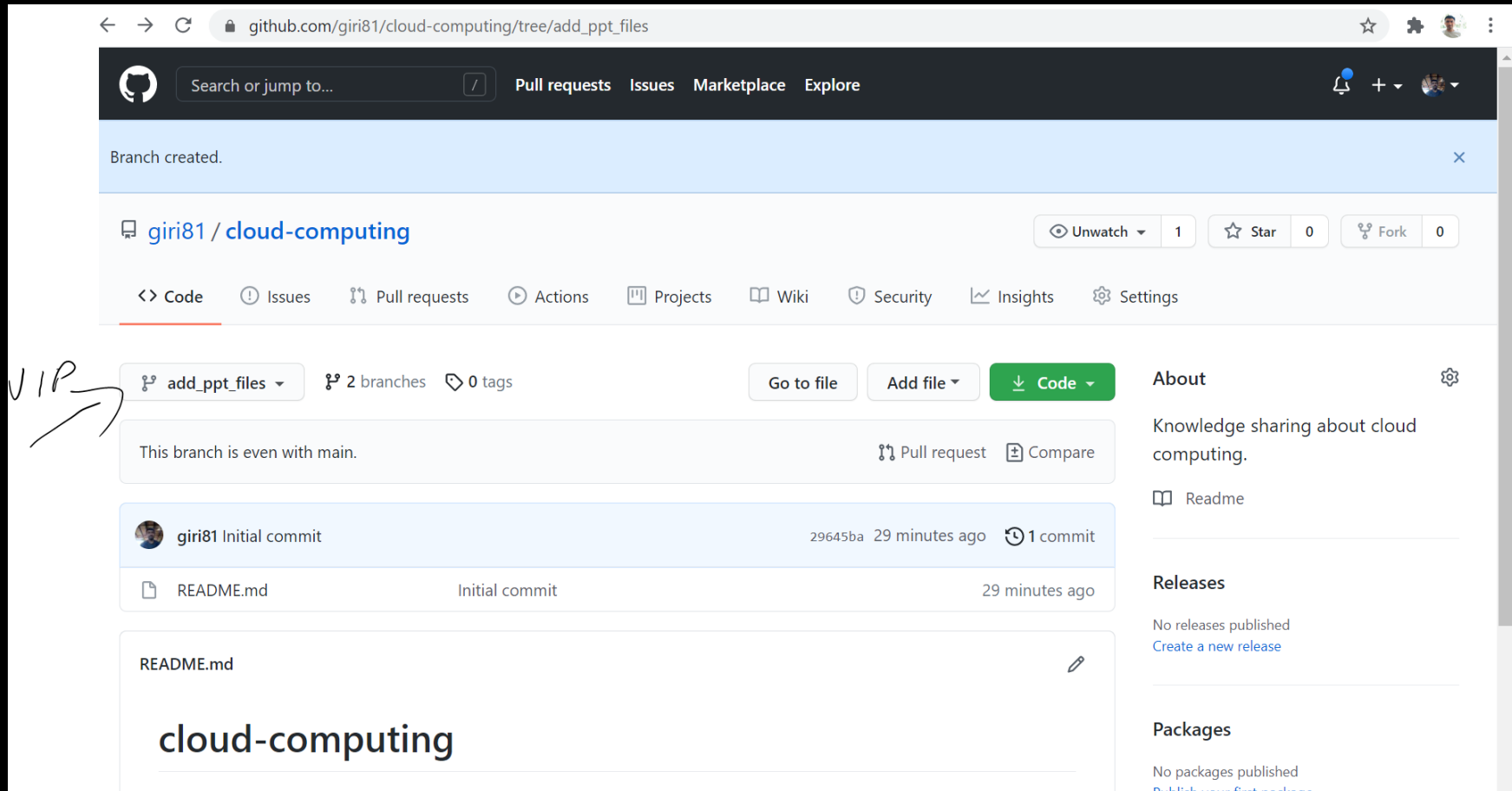
Here at GitHub, our developers, writers, and designers use branches for keeping bug fixes and feature work separate from our `main` (production) branch. When a change is ready, they merge their branch into `main`.

Thanks to
github.com

To create a new branch.

- Go to your new repository cloud-computing.
- Click the drop down at the top of the file list that says branch: main.
- Type a branch name, add_ppt_files, into the new branch text box.
- Select the blue Create branch box or hit “Enter” on your keyboard.

Artifacts for you on branch creation.



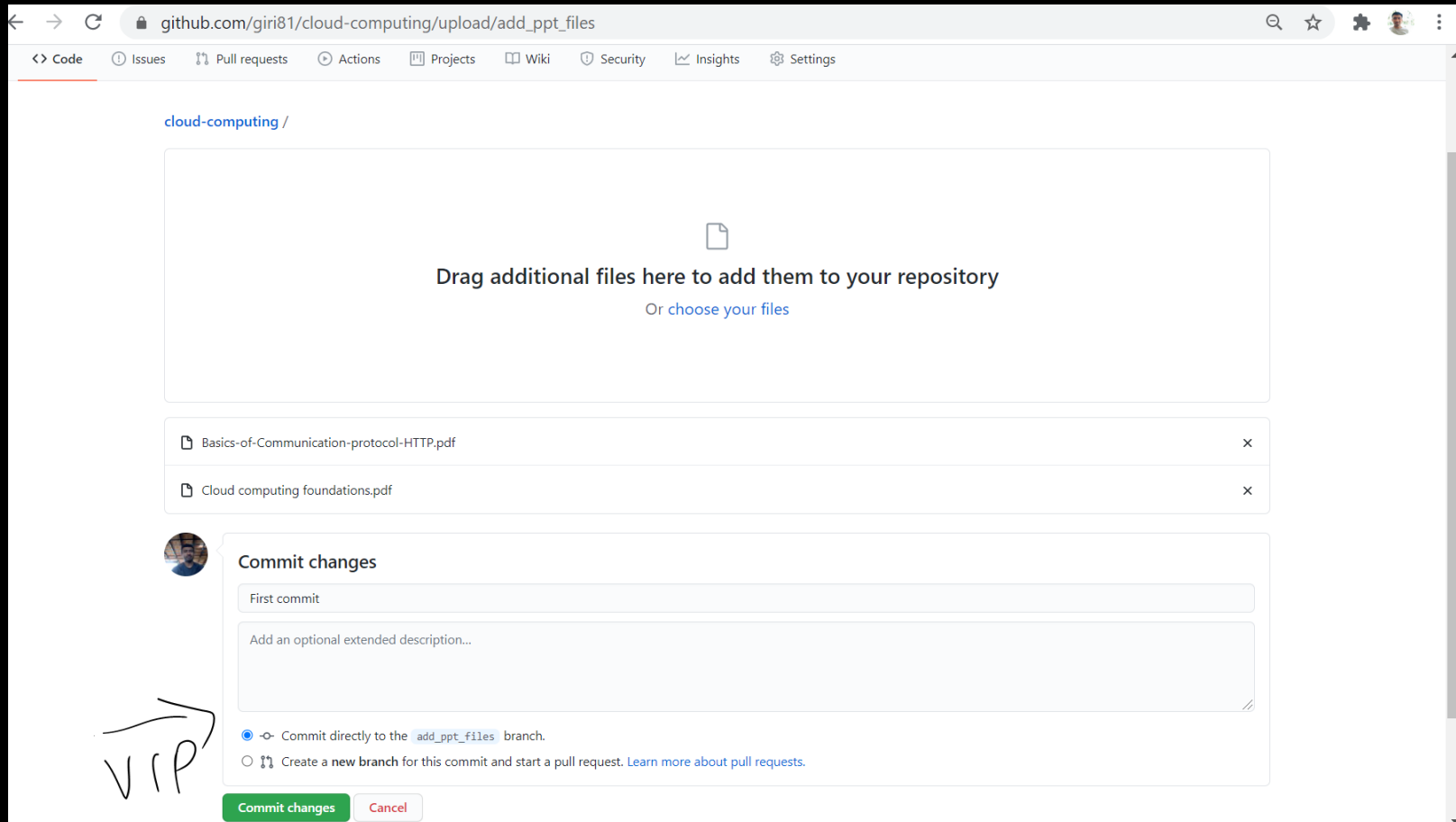
Where do we stand on branch ?

We have two branches.

- main.
- add_ppt_files.

Add the ppt files to branch.

Artifacts for you!



Add the ppt files to branch.

Artifacts for you!

The screenshot shows the GitHub interface for the repository 'giri81/cloud-computing'. The browser address bar shows the URL 'github.com/giri81/cloud-computing/tree/add_ppt_files'. The repository name 'giri81 / cloud-computing' is displayed at the top. Below the repository name, there are tabs for 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. The 'Code' tab is selected. A yellow banner at the top of the file list area states 'add_ppt_files had recent pushes less than a minute ago' with a 'Compare & pull request' button. Below this, there are buttons for 'Go to file', 'Add file', and 'Code'. The file list shows the current branch 'add_ppt_files' with 2 branches and 0 tags. A message indicates 'This branch is 1 commit ahead of main.' and provides links for 'Pull request' and 'Compare'. The commit history shows a single commit by 'giri81' titled 'First commit' with 2 commits in total. The file list includes 'Basics-of-Communication-protocol-H...', 'Cloud computing foundations.pdf', and 'README.md'. The 'README.md' file is expanded, showing the title 'cloud-computing' and the description 'Knowledge sharing about cloud computing.'.

github.com/giri81/cloud-computing/tree/add_ppt_files

Search or jump to... Pull requests Issues Marketplace Explore

giri81 / cloud-computing

Unwatch 1 Star 0 Fork 0

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

add_ppt_files had recent pushes less than a minute ago Compare & pull request

add_ppt_files 2 branches 0 tags Go to file Add file Code

This branch is 1 commit ahead of main. Pull request Compare

giri81 First commit 16078ac now 2 commits

Basics-of-Communication-protocol-H...	First commit	now
Cloud computing foundations.pdf	First commit	now
README.md	Initial commit	41 minutes ago

README.md

cloud-computing

Knowledge sharing about cloud computing.

About Knowledge sharing about cloud computing. Readme

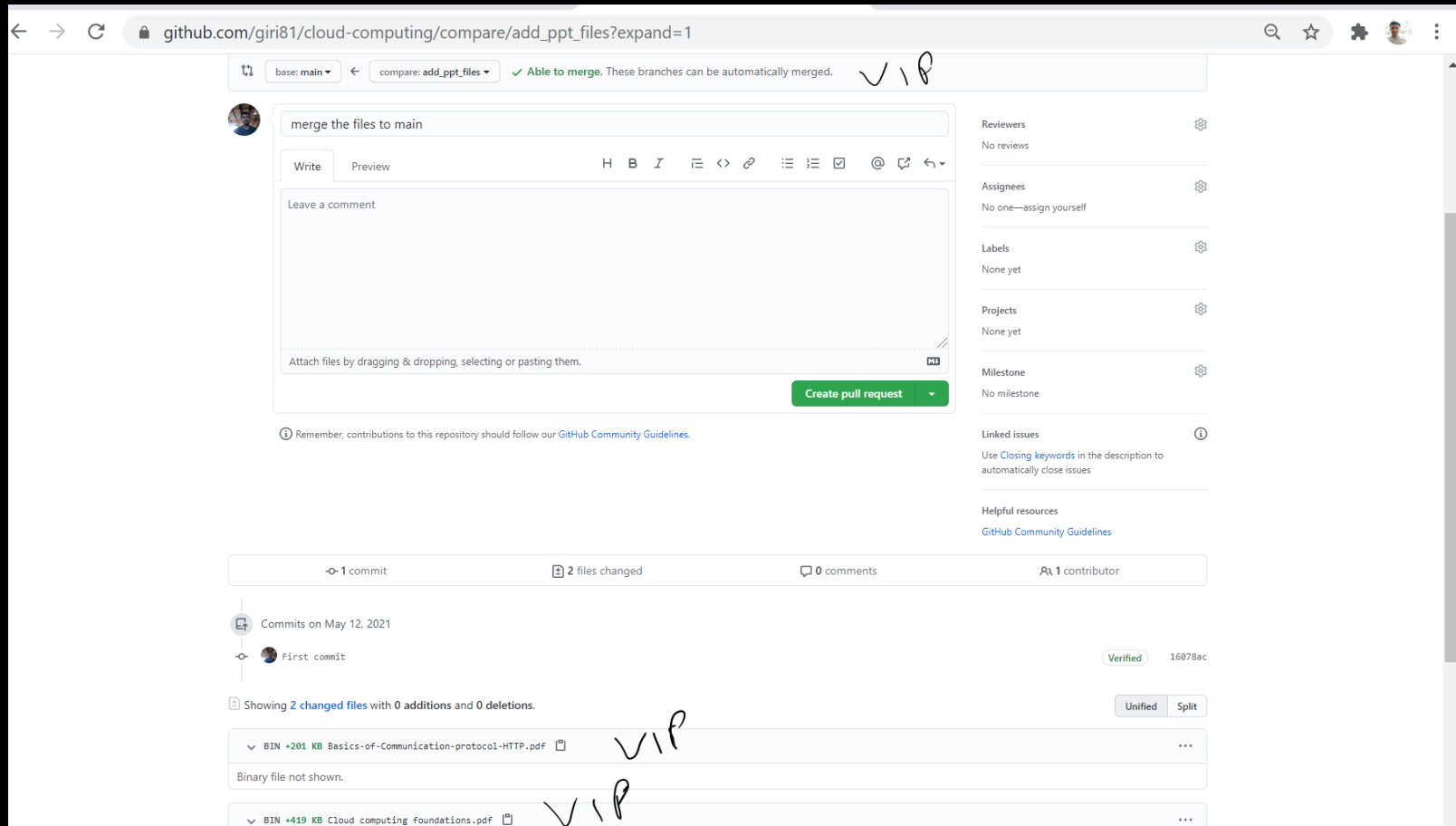
Releases No releases published Create a new release

Packages No packages published Publish your first package

Open a Pull Request.

- you have changes in a branch off of main, you can open a pull request.
- Pull Requests are the heart of collaboration on GitHub.
- When you open a pull request, you're proposing your changes .
- Pull requests show diffs, or differences, of the content from both branches.

Artifacts for you on create pull request!



Artifacts for you on merge pull request!

The screenshot shows a GitHub pull request page for the repository 'giri81/cloud-computing'. The pull request is titled 'merge the files to main #1' and is owned by 'giri81'. It shows 1 commit from the 'add_ppt_files' branch to the 'main' branch. The pull request is in a state where it can be merged, with a green checkmark indicating 'This branch has no conflicts with the base branch'. The page includes a comment section with a comment from 'giri81' stating 'No description provided.' and a commit history section showing a single commit. The right sidebar contains sections for 'Reviewers', 'Assignees', 'Labels', 'Projects', 'Milestone', and 'Linked issues'. The bottom of the page features a green 'Merge pull request' button and a note about opening the pull request in GitHub Desktop or viewing command line instructions. Handwritten 'VIP' marks are visible in the top right, bottom left, and next to the conflict status message.

merge the files to main #1

giri81 wants to merge 1 commit into `main` from `add_ppt_files`

Conversation 0 Commits 1 Checks 0 Files changed 2

giri81 commented now

No description provided.

First commit

Verified 16078ac

Add more commits by pushing to the `add_ppt_files` branch on `giri81/cloud-computing`.

Continuous integration has not been set up
GitHub Actions and several other apps can be used to automatically catch bugs and enforce style.

This branch has no conflicts with the base branch
Merging can be performed automatically.

Merge pull request

You can also open this in GitHub Desktop or view command line instructions.

Reviewers
No reviews
Still in progress? Convert to draft

Assignees
No one—assign yourself

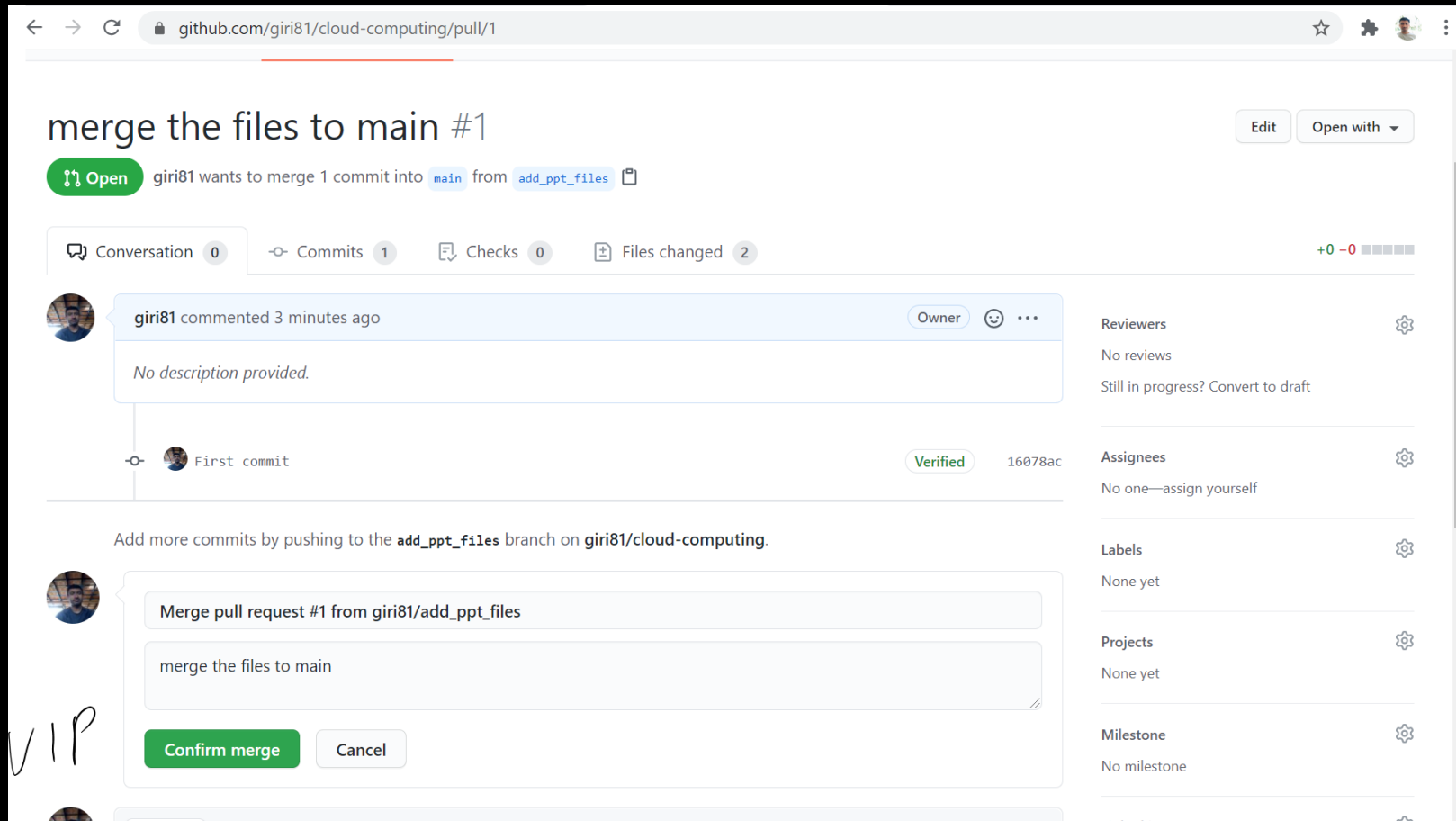
Labels
None yet

Projects
None yet

Milestone
No milestone

Linked issues

Artifacts for you on confirm merge!



Artifacts for you on merge status!

The screenshot displays a GitHub pull request interface for the repository `giri81/cloud-computing`. The pull request title is "merge the files to main #1". A purple "Merged" badge is visible, indicating the pull request has been successfully merged. The merge summary states: "giri81 merged 1 commit into `main` from `add_ppt_files` now".

Below the merge summary, there are tabs for "Conversation" (0), "Commits" (1), "Checks" (0), and "Files changed" (2). The "Conversation" tab is active, showing a comment from "giri81" stating "No description provided." and a commit history section. The commit history shows a "First commit" (Verified, 16078ac) and a merge commit "giri81 merged commit 9feb326 into `main` now".

A purple notification box indicates: "Pull request successfully merged and closed. You're all set—the `add_ppt_files` branch can be safely deleted." with a "Delete branch" button.

On the right side, there are sections for "Reviewers" (No reviews), "Assignees" (No one—assign yourself), "Labels" (None yet), "Projects" (None yet), "Milestone" (No milestone), and "Linked issues" (Successfully merging this pull request may close these issues).

At the bottom, there is a "Write" tab and a "Preview" tab. The "Write" tab is active, showing a text input field with the placeholder "Leave a comment".

What I did in summary!

- Logged into github account.
- Created repository cloud-computing.
- Created a branch add_ppt_files.
- Added files “Basics-of-Communication-protocol-HTTP.pdf”, “Cloud computing foundations.pdf” using upload.
- Created a pull request.
- Merged successfully to main branch.

Cheers!