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.

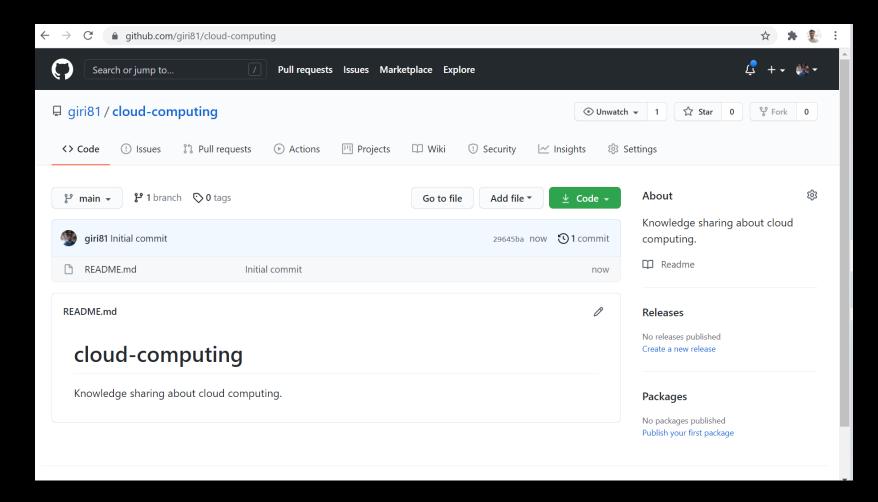- Select Initialize this repository with a README.

* Note: Lab experience included in this slide.

Note!

- Recommendation from seniors.

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

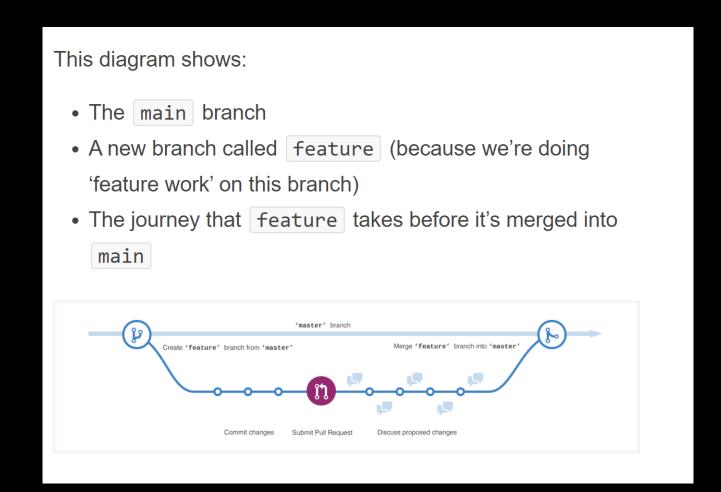# artifacts for you on repository.

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`

'master' branch

Create 'feature' branch from 'master'   Merge 'feature' branch into 'master'

Commit changes   Submit Pull Request   Discuss proposed changes

Create a Branch.
Easy now!

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

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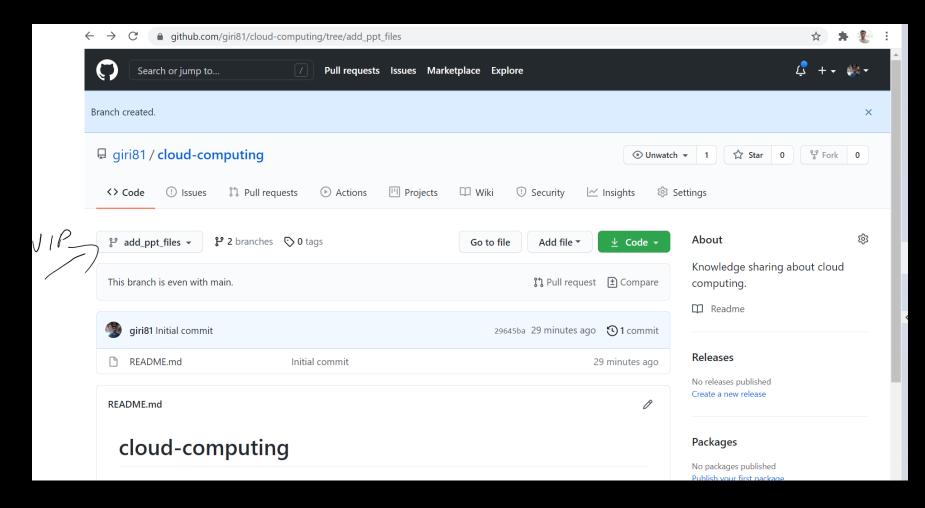- `story-joe-edit-reviewed.txt`

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

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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.
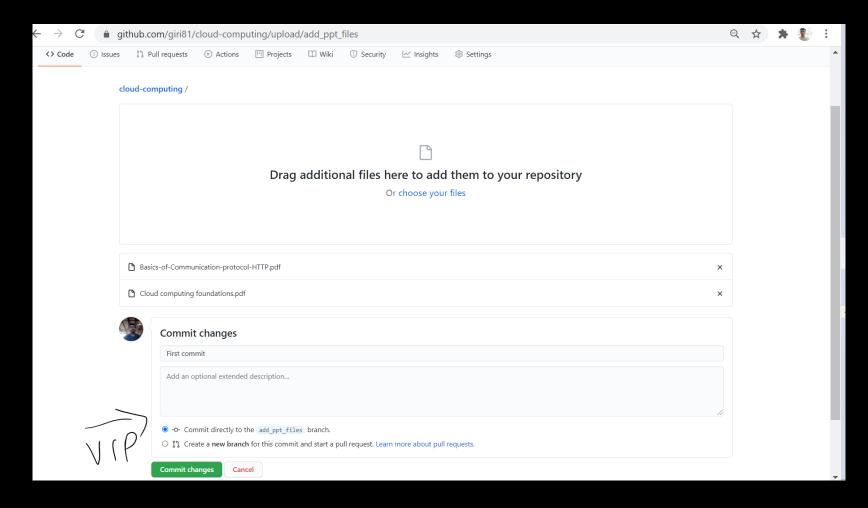
Artifacts for you on branch creation.

Where do we stand on branch ?
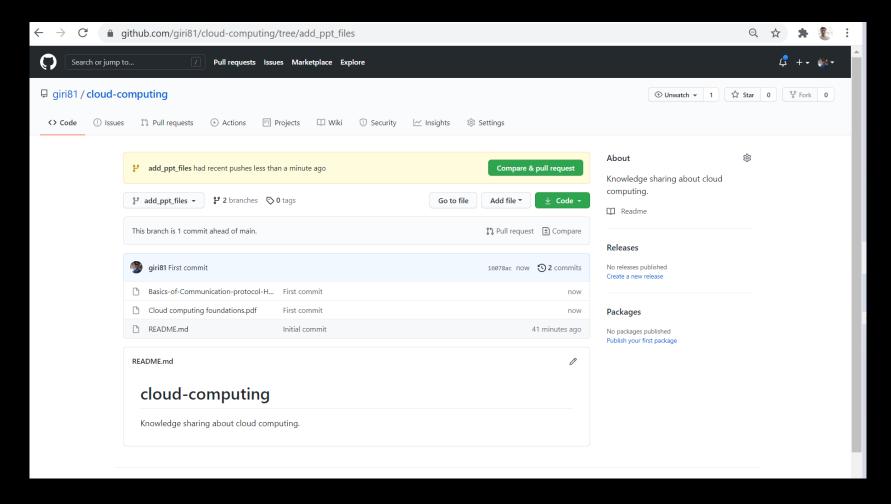
We have two branches.

- main.

- add_ppt_files.

Add the ppt files to branch.
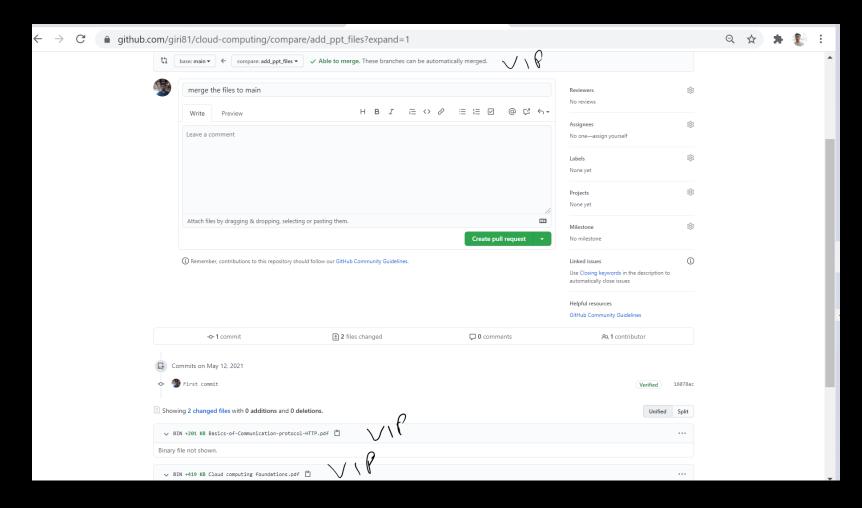
Artifacts for you!
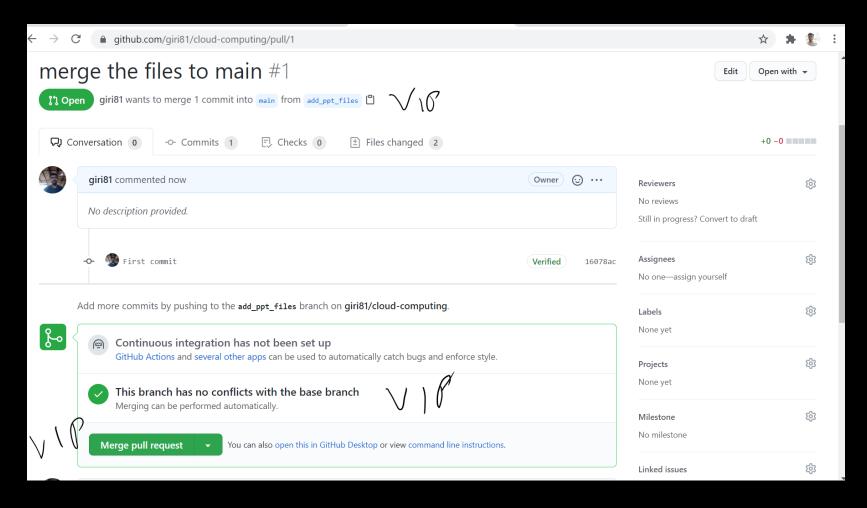
Add the ppt files to branch.

Artifacts for you!

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 .

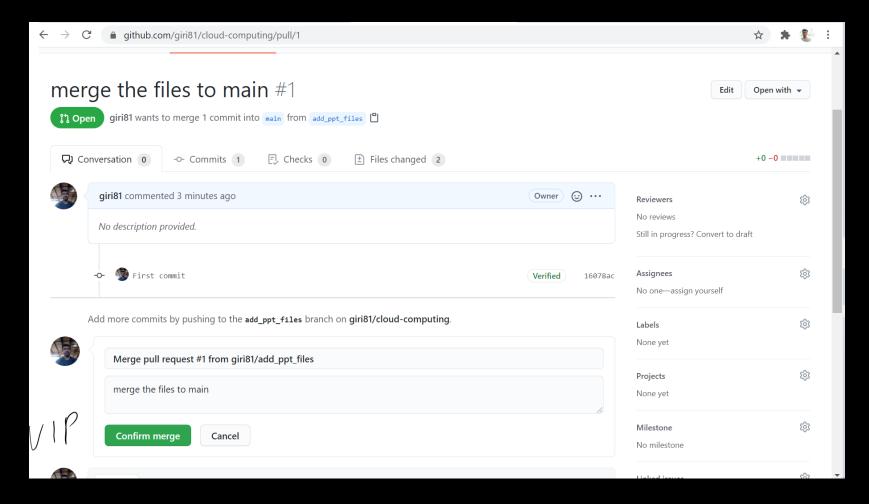- Pull requests show diffs, or differences, of the content from both branches.
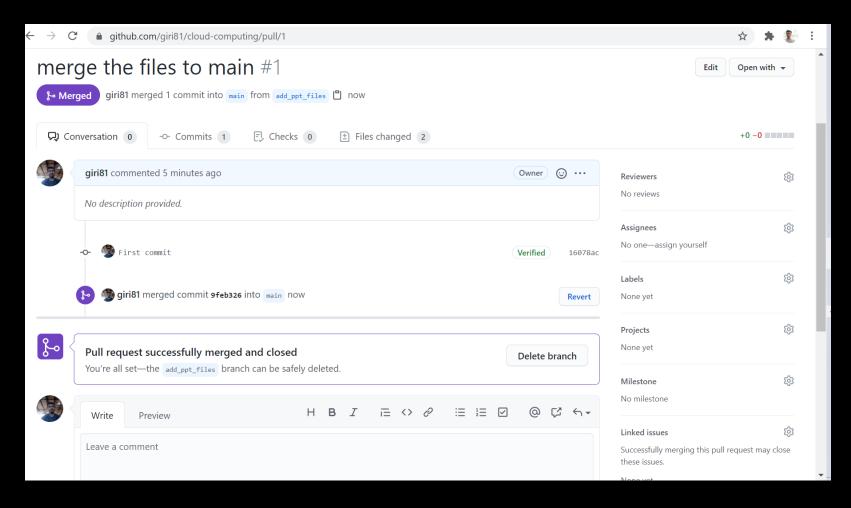
Artifacts for you on create pull request!

Artifacts for you on merge pull request!

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Artifacts for you on confirm merge!

Artifacts for you on merge status!

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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!