



## TechWrap'21

# Introduction to GIT and GITHUB

### 1. What is GITHUB-

- GitHub is a collaborative development platform for hosting projects using the Git version control system.
- At a high level, GitHub is a website and cloud-based service that helps developers store and manage their code, as well as track and control changes to their code.

### 2. Version Control-

- Keep a record of changes.
- Different users can make changes to the same shared documents at the same time.
- Revert the change to the previous state.
- It is ideal for tracking changes in any collaborative project.

*Resources- [git-scm](#)*

*[GFG](#)*

### 3. Repository-

- A repository is used as a container to organize projects.
- They can contain folders, files, images, videos, spreadsheets, etc., everything your project needs.

*Resources- [github](#)*

*[GFG](#)*

*[Creating first repo \(video tutorial\)](#)*



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### 4. Branch-

- Branches are the way to work different versions of a repository at the same time.
- By default, when a repository is created for the first time, the branch called Master is also created, which is considered the 'definitive branch'.

*Resources-* [github](#)

### 5. Pull request-

- Pull Requests are a mechanism for developers to notify team members that they have completed a feature.
- Once the functionality branch is ready, everyone involved knows that they must review the code and merge it with the master branch.

*Resource-* [github](#)

### 6. Merge-

- Merge consists of the union or fusion of the branches that we have worked towards the Master branch or with another active branch.

*Resource-* [github](#)

### 7. Commit-

- On GitHub, when we finish saving the changes in our Project, they are called 'Commits'.
- Each Commit is associated with a 'Commit Message', which describes the change that was made in some of the files of our Project.

*Resource-* [github](#)



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### 8. Fork-

- A fork is a copy of a repository.
- Forking a repository allows you to freely experiment with changes without affecting the original project.
- Most commonly, forks are used to either propose changes to someone else's project or to use someone else's project as a starting point for your own idea.

*Resource- [github](https://github.com)*

### 9. Watch-

- GitHub has made it easy to "watch" a project, which means you're notified whenever there are any updates or changes in the project.

### 10. Star-

- Users on the GitHub website are able to "star" other people's repositories, thereby saving them in their list of Starred Repos.
- Some people use "stars" to indicate that they like a project, other people use them as bookmarks so they can follow what's going on with the repo later.

### 11. GitHub Desktop-

- GitHub Desktop is an open-source tool that enables you to be more productive. GitHub Desktop encourages you and your team to collaborate using best practices with Git and GitHub.
- With GitHub Desktop you can:
  - Add changes to your commit interactively
  - Quickly add co-authors to your commit
  - Checkout branches with pull requests and view CI statuses
  - Compare changed images

*Resource- [github](https://github.com)*



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### 12. Further references-

- [Github documentation](#)
- [Git Handbook](#)
- [GFG Ultimate guide to github](#)
- Youtube playlists-
  - [Telusko](#)
  - [Codewithharry](#)
- [Udemy free course](#)

