

**DEPARTMENT OF COMPUTER SCIENCE
INSTITUTE OF MANAGEMENT AND RESEARCH, JALGAON**

Name Kawale Roshani Vasant

Expt. Title Set up a Github account & send an email message to friend telling to your friend about the account.

Class FRMCA Batch B2

Roll No. 48 Expt. No. 48 1

Remarks _____

Performed on _____

Submitted on _____

Returned on _____

*** What is GitHub?**

GitHub is a Git repository hosting service. GitHub is an American company. GitHub also facilitates with many of its features, such as access control and collaboration. It provides a web-based graphical interface.

It hosts source code of your project the form of different programming languages and keeps track of the various changes made by programmers. It offers both distributed version control and source code management (scm) functionality of Git.

*** Features of GitHub:-**

GitHub is a place where programmers and designers work together. They collaborate, contribute and fix bugs together.

Some of its significant features are as follows:

- 1) Collaboration
- 2) Integrated issue and bug tracking
- 3) Graphical representation of branches
- 4) Git repositories hosting
- 5) Project Management
- 6) Team Management
- 7) Code hosting
- 8) Track and design tasks
- 9) conversations
- 10) Wikisc

*** Benefits of GitHub:-**

The key benefits of GitHub are as follows:-

1) It is easy to contribute to open-source projects via GitHub.

2) It helps to create an excellent document.

3) You can attract recruiter by showing of your work.

If you have a profile on GitHub, you will have a

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higher chance of being recruited.

- 4) It allows your work to get out there in front of the public.
- 5) You can track changes in your code across versions.

* Advantages of GitHub :-

- 1) Similar to other online report services, GitHub comes with a big benefit to have the content inputted in such a format without having to know another system.
- 2) Flavoured markdown is another benefit of using GitHub.
- 3) Collaboration is another benefit of using GitHub. For people who do not remain in the same physical location.
- 4) You do not need to connect with your company's VPN as it is easier to dump with the collaboration feature of GitHub.

* Disadvantages of GitHub :-

- 1) GitHub does not come with private repositories. This is one of the disadvantages.
- 2) Some employers and clients can only allow code on their private secure internal git as far as the matter of policy is concerned.
- 3) Pricing is another potential drawback of GitHub.
- 4) Some of the features and online repositories happen to be locked behind a saas paywall.

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Name Kawale Roshani Vasant

Expt. Title Clone the repository at <https://github.com/KBCNMU>.

Class EXMCA Batch B2 Performed on _____

Roll No. 48 Expt. No. 2 Submitted on _____

Remarks _____ Returned on _____

★ Introduction of Git :-

Git is an open-source distributed version control system. It is designed to handle minor to major projects with high speed and efficiency. It is developed to coordinate the work among the developers. The version control allows us to track and work together with our team members at the same workspace.

Git is foundation of many services like GitHub and GitLab, but we can use git without any other Git services. Git can be used privately and publically.

★ Features of Git :-

1) Open Source :-

Git is an open-source tool. It is released under the GPL (General Public License) license.

2) Scalable

3) Distributed

4) Security

5) Speed

6) Supports non-linear development

7) Branching and Merging

8) Data Assurance

9) Staging Area

10) Maintain the clean history.

★ Benefits of Git :-

1) Saves Time :-

Git is lightning fast technology. Each commands takes only a few seconds to execute so we can save a lot of time as compared to login to a GitHub account and find out its features.

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2) Offline Working:-

One of the most important benefits of Git is that it supports offline working. If we are facing internet connectivity issues, it will not affect our work.

3) Undo Mistakes:-

One additional benefit of Git is we can undo mistakes. Sometimes the undo can be a savior option for us.

★ What does Git do?

- Manage projects with Repositories
- clone a project to work on a local copy.
- control and track changes with staging and committing.
- Pull the latest version of a project to a local copy.
- Push local updates to the main project.

★ Commands :-

1) Version :- This command is used to list the version history for the current branch.

Syntax:- \$ git --version.

2) Help :- This command is used to display all the information about git.

syntax:- \$git --help.

3) clone :- Git allows making a copy of only particular branch from a repository. You can make a directory for the individual branch by using the git clone command. It creates a copy of an existing Git repository. Cloning is the most common way for developers to obtain a working copy of a central repository.

Syntax:-

\$git clone <Repository Url>

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Name Kawale Roshani Vasant

Expt. Title Use git add to add that file to the repository. Use git commit to commit your change.

Class FYMCA Batch B2 Performed on _____

Roll No. 48 Expt. No. 3 Submitted on _____

Remarks _____ Returned on _____

Introduction of clone, add and commit command:-

1) git clone :-

clone command is used to create a copy of an existing git repository. and cloning is the most common way for developers to obtain a working copy of a central repository.

Syntax:- \$ git clone <Repository Url>

2) git add :-

The git add command adds a change in the working directory to the staging area. It tells git that you want to include updates to a particular file in the next commit. However, git add doesn't really affect the repository in any significant way changes are not actually recorded until you run git commit.

Syntax:- \$ git add [Filename].txt

3) git commit :-

The git commit command is one of the core primary functions of Git. Prior use of the git add command is required to select the changes that will be stage for the next commit. Then git commit is used to create a "snapshot" of staged changes along a timeline of a git projects history.

Syntax:- git commit -m "message"

Whereas, The commit command performs a commit, and the -m "message" adds a message in that file.

Complete for :

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