

# **Introduction to GitHub**

Git Hub is a service which provides remote repositories. Git hub will provide both public as well as private repositories.

## **Remote Repository:**

Remote repository is a central server / place where we store our versions of code. Remote repositories are hosted on the internet and they are present somewhere.

There are many services which provides remote repositories such as Git hub, Bit Bucket and Git lab.

## **What is Git Hub?**

- Git Hub is a web-based repository hosting service.
- Git Hub provides easy management of code.
- It is an Open-source service.
- It provides Effective communication and collaboration.
- Git hub was invented by Scott Chacon, Chris Wanstrath, Tom Preston in the year 2008.

## **Why Git Hub?**

### **1. Track Changes:**

Git hub will track each and every change and modification of the files which are pushed by the developers and stores the code according to the commits done.

### **2. Maintains History:**

Git hub will maintain the history of commits which is pushed by the developers.

### **3. Collaboration**

Git hub will provide effective collaboration between the developers, as all the developers are integrating the code in the remote repository.

### **4. Security:**

Git hub will provide security to the both public and private repositories.

## **Difference Between GitHub, GitLab and BitBucket**

<b>Git Hub</b>	<b>Git Lab</b>	<b>Bit Bucket</b>
	Open-source Service. 1. It is an open-source service	1. It is not an Open-source service.
2. Git hub will support git.	2. Git lab will support git.	2. Bit bucket will support only Mercurial, but latest version is supporting Git.
3. Git hub will provide Public and Private repositories.	3. Git lab is famous for Private repositories but it will also provide public repositories.	3. Bit bucket is also famous for private repositories.
4. Git hub will support major projects with the high efficiency.	4. Git lab is used only for critical projects.	4. Bit bucket is used for any type of projects.
5. Companies like Microsoft, IBM, Google are using Git hub	5. Companies like Sony and Facebook are using Git lab.	5. Companies like Accenture and few foreign countries are using Bit bucket.

## **Difference Between Git and Git Hub**

<b>Git</b>	<b>Git Hub</b>
1. Git is a tool which follows Distributed Version Control System.	1. Git hub is a service which provides remote repositories.
2. Git will save the versions of our code to local repository and helps to send the code to the remote repository.	2. Git hub will save the versions of code in remote repository and manages the code
3. Git is invented in the year 2005 by Linus Torvalds.	3. Git hub is invented in the year 2008 by Scott Chacon, Chris Wanstrath and Tom Preston.

4. Git is a Command line interface.	4. Git hub is a Graphical user interface.
5. Git can be used without Git hub	5. Git is mandatory to use Git hub.
6. Internet is not needed to use Git.	6. Internet is mandatory to use Git Hub.

## Commands:

- To Connect the Git hub repository to git  
**git remote add alias <url of remote repository>**
- To push the files from local repository to git hub  
**git push alias <branch name>**
- To copy the code present in remote repository to local repository  
**git pull alias <branch name>**