Assignment:Read the following (3) articles (links provided below) and in 700 words, summarize the use of git and github/bitbucket/gitlab. Do not forget to show the need of a git workflow in a software organization.

**GITHUB.**

GitHub provides the cloud hosting service to manage the repositories. Git allows you to share code snippets easily, tracking more project files, learn more commands. Local git can be connected to the remote git server, which is hosted git as service, these are publicly available for the creation of the repository and push the changes from local to the remote repository.

## A git branch is an independent development route, which can later be connected back to the main branch. We use  git branch command to **create**, **list**, **rename** and **delete**branches.

## A master branch holds the latest version of fully working code, which is the current code in production simply, it only tracks released code only.

## The Develop branch. This branch is created from the master branch - it complements the default master branch. It is the integration branch for features.

## When you begin a feature, you create a branch off the **develop**branch, and once the feature is done, you merge back to develop.

## Now that you have completed several features and are ready for a release, create a **release**branch off the **develop**branch. Because this is a release, create a suitable environment for testing purposes (it could be a testing server). If you discover **bugs/issues** while testing your release code, address it out immediately and merge any changes (**bug fixes**) back to develop branch (see greyed lines). When the code has been tested and is working okay, two things happen.

## Hotfixes branch.If an issue is detected on master (e.g. a severe bug), a hotfix branch is created off the master branch. Once the hotfix is complete, it is merged to both develop and master branches.

## A bugfix/issue. As mentioned earlier, if some issues were detected in a release branch while testing, you may want to use small branches to fix the issues. Such branches are merged back the release branch. More often, issues are assigned to developers, who may want to use bug fix branches.

### Git Tagging.The purpose of tagging is usually to take note of specific points in the repository history as being important. It is mostly used to mark **release points.**

Git tracking systems helps us to check with the modifications done by the individual user’s commit id and what is the change made with commit. Git provides us to create the local repository to track the change of the single user who created the local git server.

It allows us to:Create the repository in remote git server, Initialize the local git repository and add the remote repository URL, Give access to multiple contributors, Each contributor can Clone the repository to the local machine, Pull changes when other contributors update the remote repository, Push changes to the remote repository, It provides the facility to contribute multiple collaborators together to one single repo, Reset Back to the commit history as required.

The workflow is important to create patterns which can be easily traced and easily understood and when your [team](https://www.toptal.com/software) changes size, or your project develops its processes through continuous evaluation, don’t leave out evaluating your Git process too.