

SESSION 5

GITHUB AS A PROJECT REPOSITORY

OBJECTIVES

- Explain GitHub
- Differentiate between Git and GitHub
- Describe how to create a GitHub repository
- Describe Branching, Committing, and Pulling in GitHub

INTRODUCTION TO GITHUB 1-2

Platform for users to work together
and create collaborative code

Setting Up and Maintaining
code on GitHub

As of April 14, 2020, GitHub
announced that all of the core
GitHub features are now free for
everyone.

Store

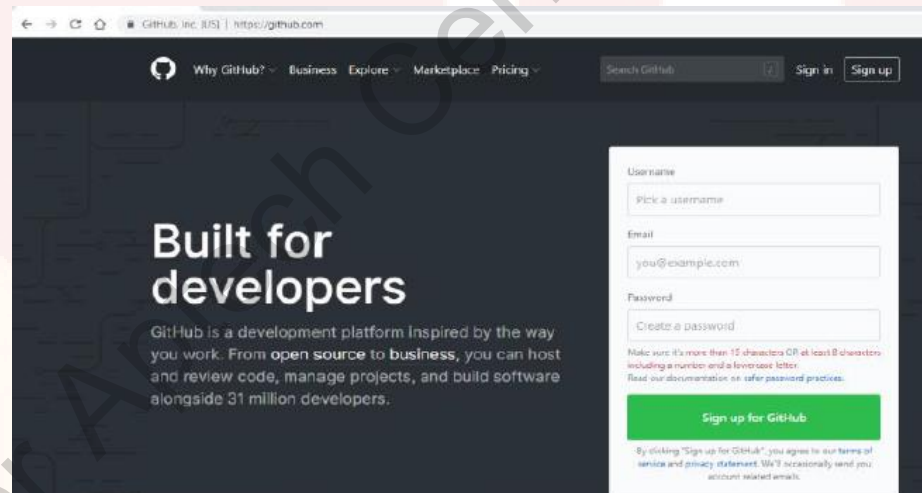
Manage

Control and Track
the repositories

INTRODUCTION TO GITHUB 2-2

Public account are free of cost
whereas private is to be paid

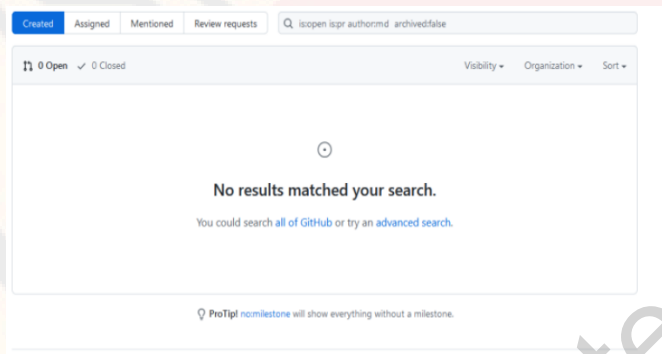
View the repositories
created
by the user on GitHub



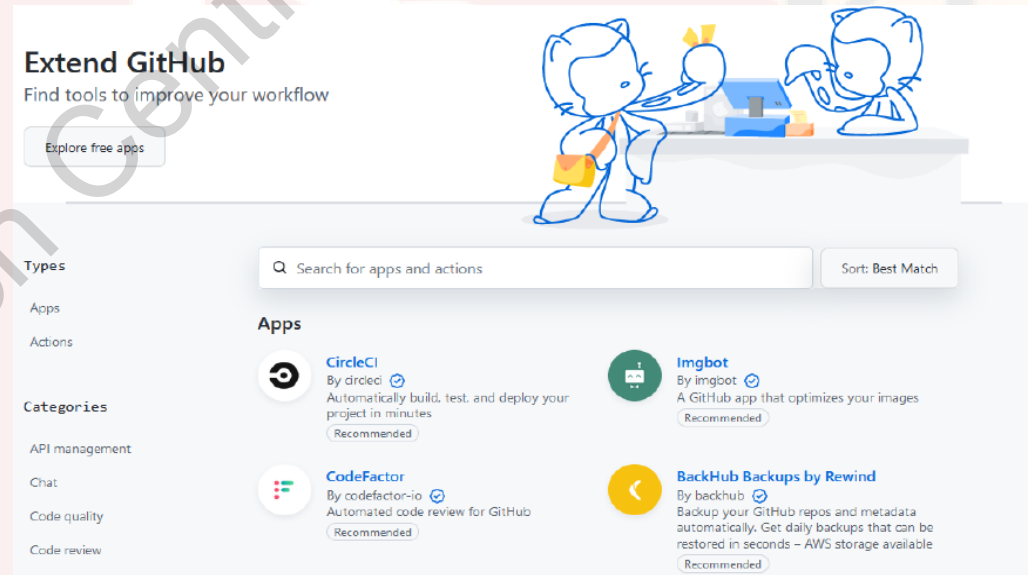
GITHUB WEB INTERFACE 1-2

Collaboration of users

Extend and Explore GitHub



Marketplace menu displays tools/apps on GitHub



Enables users to check topics, trending repositories, and more

GITHUB WEB INTERFACE 2-2

Cloning Mechanism

Process of Pushing

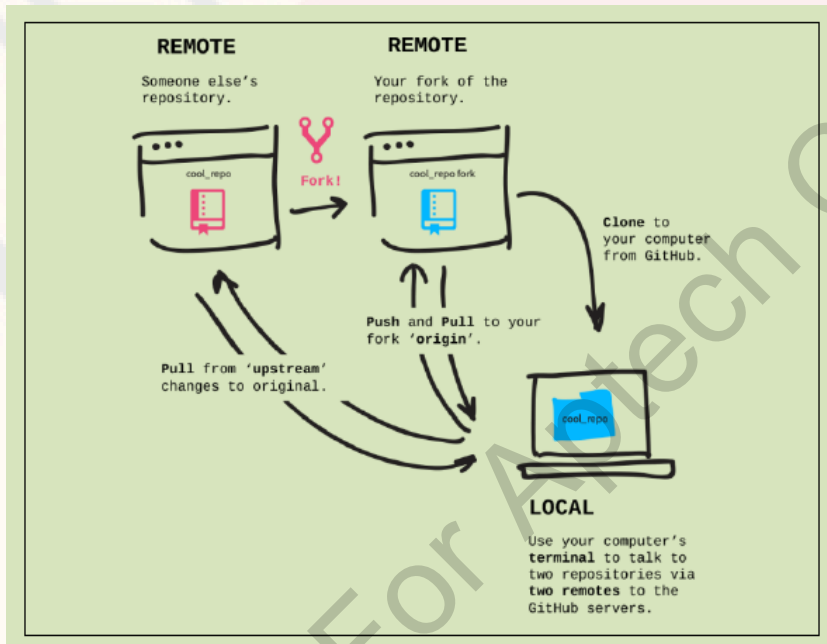


Image Courtesy: http://jlord.us/git-it/challenges/forks_and_clones.html

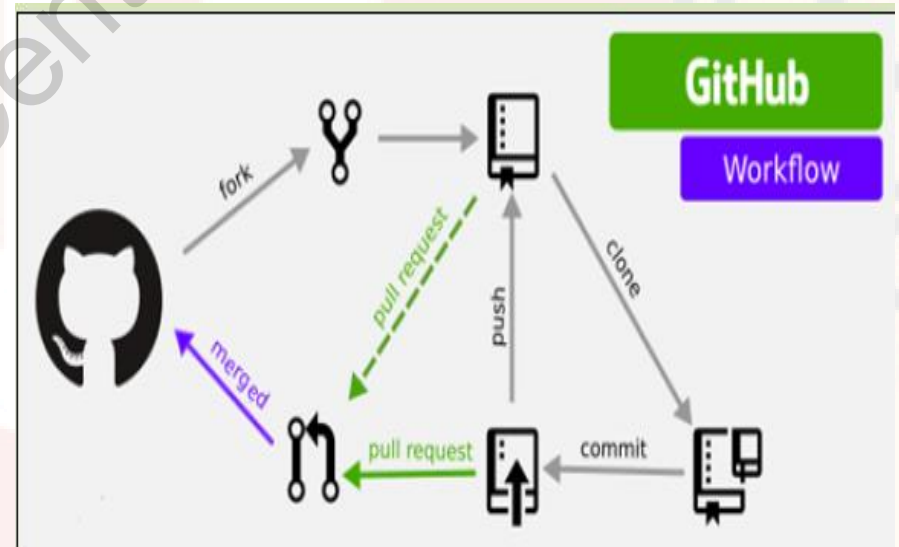
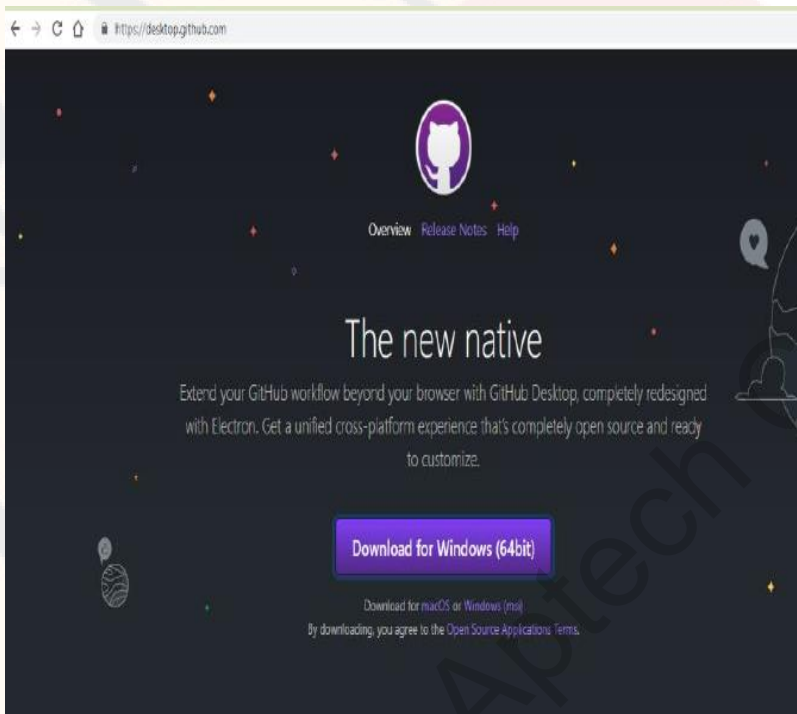


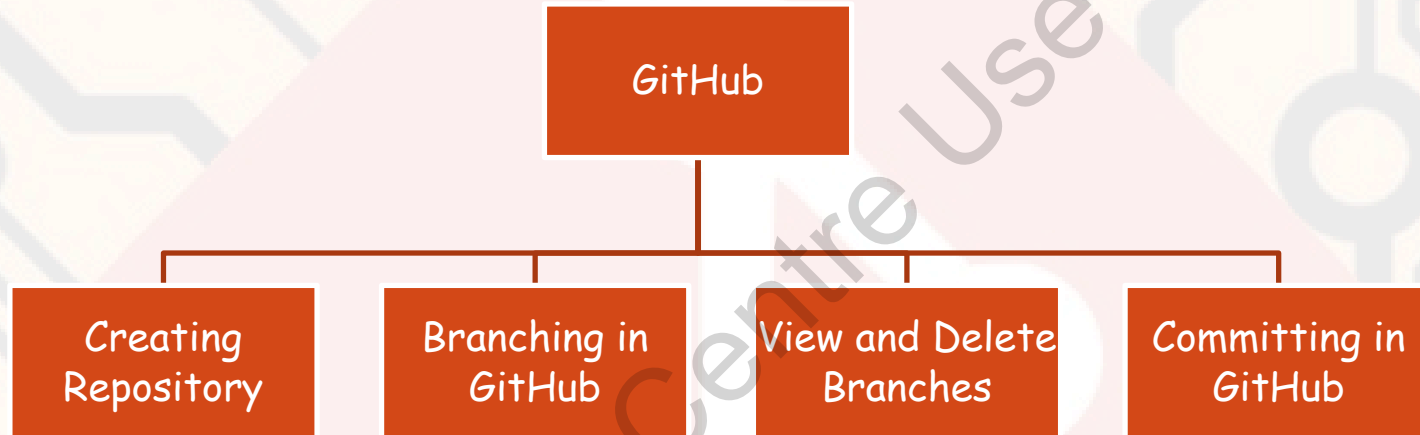
Image Courtesy: <https://levelup.gitconnected.com/how-to-sync-forked-repositories-usinggit-or-github-2933e497fa16>

INSTALLING GITHUB DESKTOP



Visit the GitHub Desktop Web page at <https://desktop.github.com> and download the .exe file.

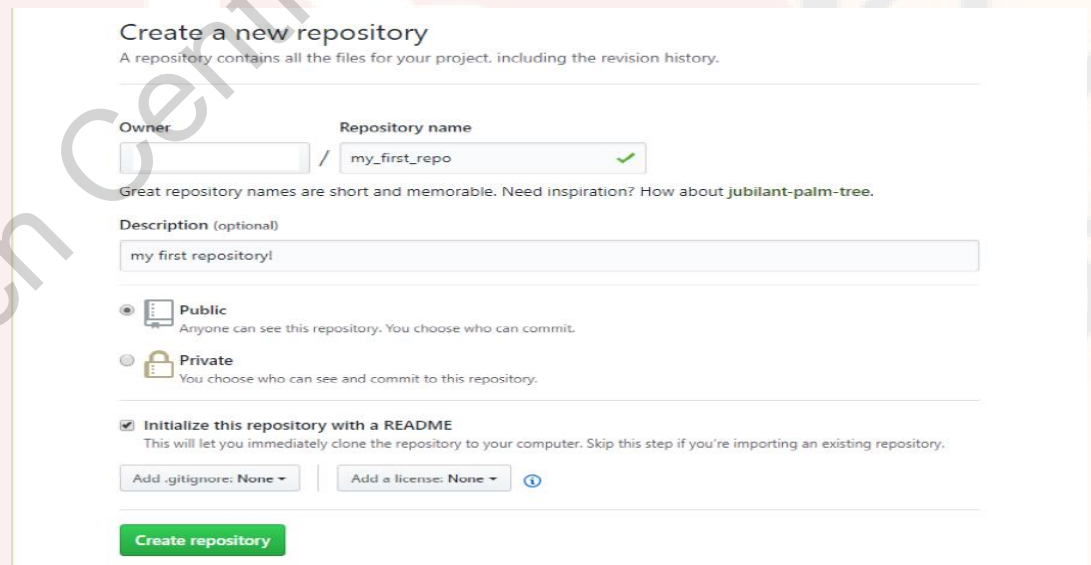
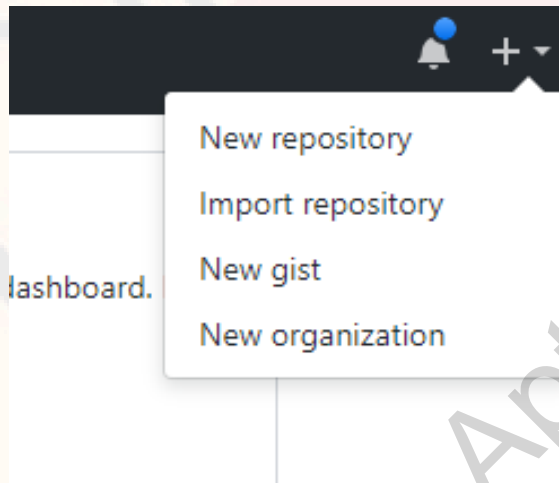
GITHUB BASICS



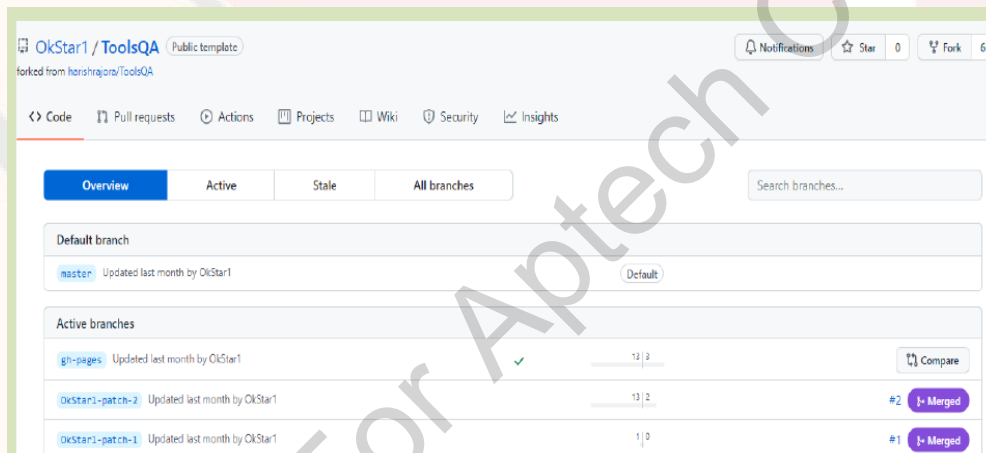
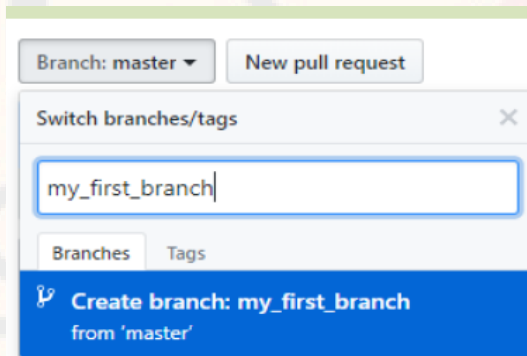
CREATING A REPOSITORY IN GITHUB

Navigate the GitHub page

Initialize the repository

A screenshot of the 'Create a new repository' form on GitHub. The form has a title 'Create a new repository' and a subtitle 'A repository contains all the files for your project, including the revision history.' Below this, there are two input fields: 'Owner' (with a dropdown arrow) and 'Repository name' (with the value 'my_first_repo' and a green checkmark). A note says 'Great repository names are short and memorable. Need inspiration? How about [jubilant-palm-tree](#).' There is a 'Description (optional)' text area with the value 'my first repository!'. Below this are two radio button options: 'Public' (selected) and 'Private'. The 'Public' option has a description: 'Anyone can see this repository. You choose who can commit.' The 'Private' option has a description: 'You choose who can see and commit to this repository.' There is a checked checkbox for 'Initialize this repository with a README' and a description: 'This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.' At the bottom, there are two dropdown menus: 'Add .gitignore: None' and 'Add a license: None', followed by a green 'Create repository' button.

BRANCHING IN GITHUB



GitHub Statistics In 2021

Total Number of GitHub Users:
73+ million!

Number of repositories hosted on GitHub:
200+ million!

Number of Organizations:
4+ million!

View the Default and Active branches

VIEWING AND DELETING BRANCHES 1-2

Your branches: Displays the recent ones first.

Active Branches: Displays the last three months branches

Stale Branches: Inactive branches

All Branches: Default branches

VIEWING AND DELETING BRANCHES 2-2

Steps to View repository

User should navigate on main page

Click <number> branches, where number indicates the current branches

Steps to Delete repository

Scroll to deleted branch and click Delete symbol

COMMITTING IN GITHUB

Branch: my_first_branch ▾ New pull request

This branch is even with master.

Initial commit

README.md Initial commit

README.md

my_first_repo

my first repository!

Commit changes

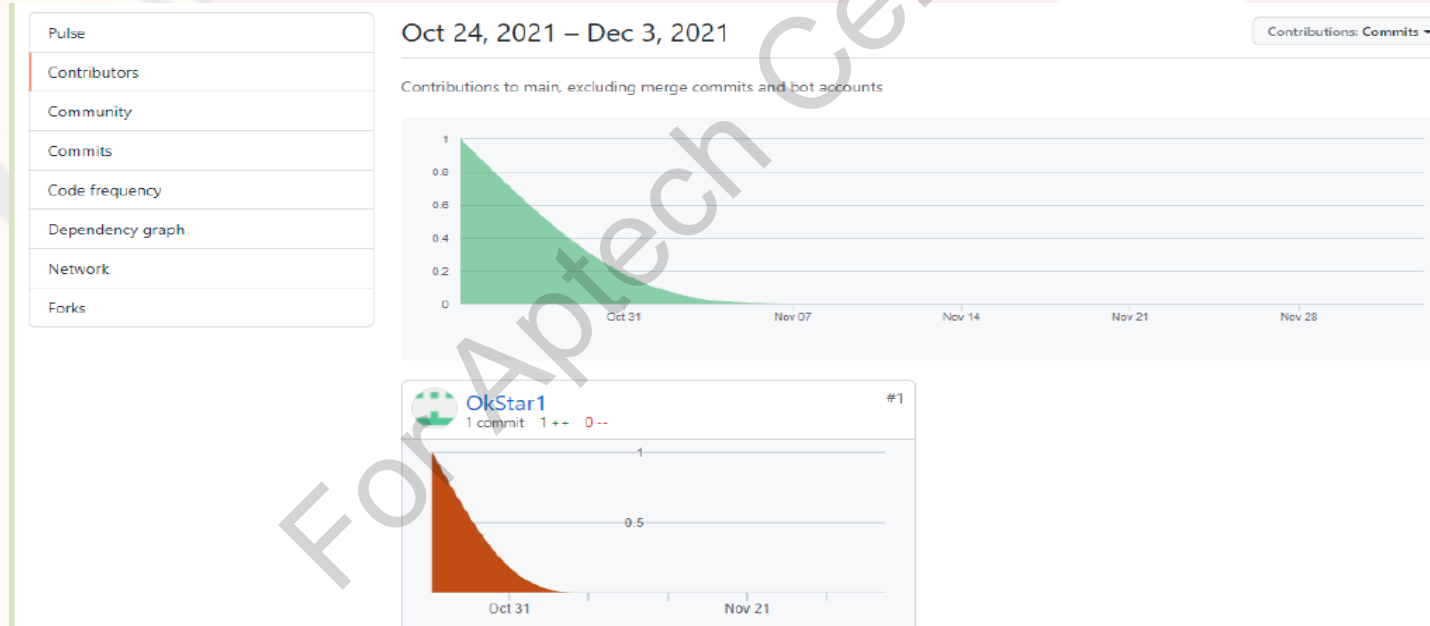
changed README

added to README

☒ Commit directly to the master branch.

☐ Create a new branch for this commit and start a pull request. [Learn more about pull requests.](#)

Commit changes Cancel



SUMMARY

- GitHub is a platform for developers to work together and create collaborative code
- GitHub repositories enables users to implement version control for projects
- Branches allows users to create features, fix issues, or explore within the repository
- Commit enables to save changes to the repository