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Intro to Git and GitHub

Understanding how it all works and one step closer to the world of open-source!

Today's Agenda

1. What is Git and GitHub?
2. Understanding GitHub Workflow
3. What is Version Control System?
4. GitHub Demo

Let's begin!

Are you ready?

Git!=GitHub

- To understand GitHub, we must first have an understanding of Git.
- Git is an open-source version control system that was started by Linus Torvalds—the same person who created Linux.
- GitHub is a United States-based global company that provides hosting for software development and version control using Git.
- It is a repository hosting service for Git.
- While Git is a command line tool, GitHub provides a Web-based graphical interface.

Git

First developed in 2005

Git is installed and maintained on your local system (rather than in the cloud)

One thing that really sets Git apart is its branching model

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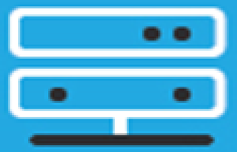
Competitor A

Git is a high quality version control system

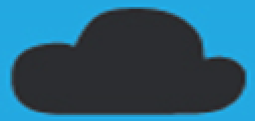
VS.

GitHub

GitHub is designed as a Git repository hosting service



What's your frequently used Emoji?



You can share your code with others, giving them the power to make revisions or edits

GitHub is exclusively cloud-based

GitHub is a cloud-based hosting service

Version Control System

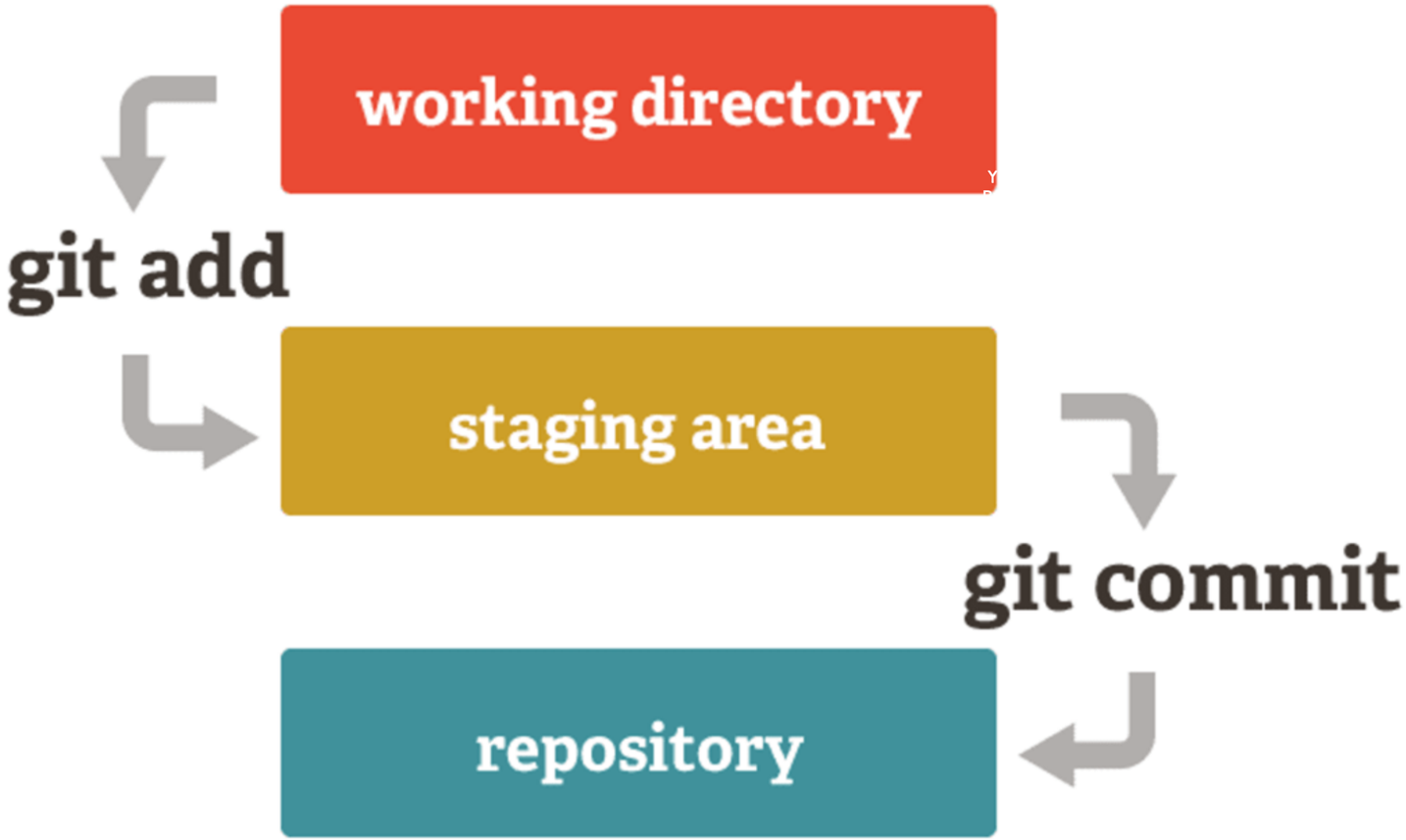
•Version control, also known as source control, is the practice of tracking and managing changes to software code.

•Version control systems are software tools that help software teams manage changes to source code over time.

•Version control software keeps track of every modification to the code in a special kind of database. If a mistake is made, developers can turn back the clock and compare earlier versions of the code to help fix the mistake while minimizing disruption to all team members.

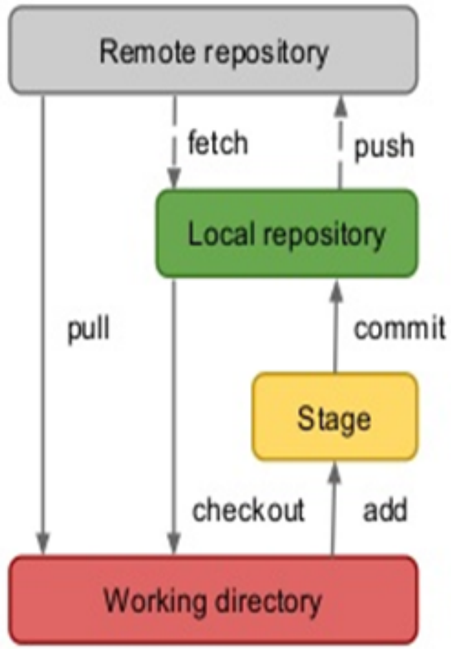
•Version control protects source code from both catastrophe and the casual degradation of human error and unintended consequences.

Understanding GitHub Workflow



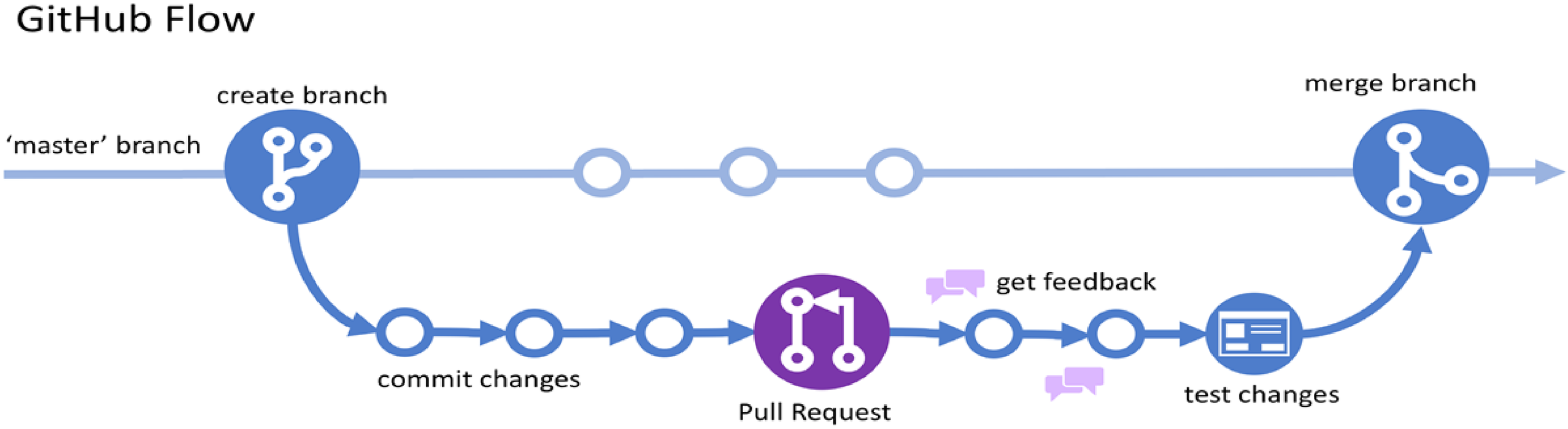
Understanding GitHub Workflow

Understanding of workflow

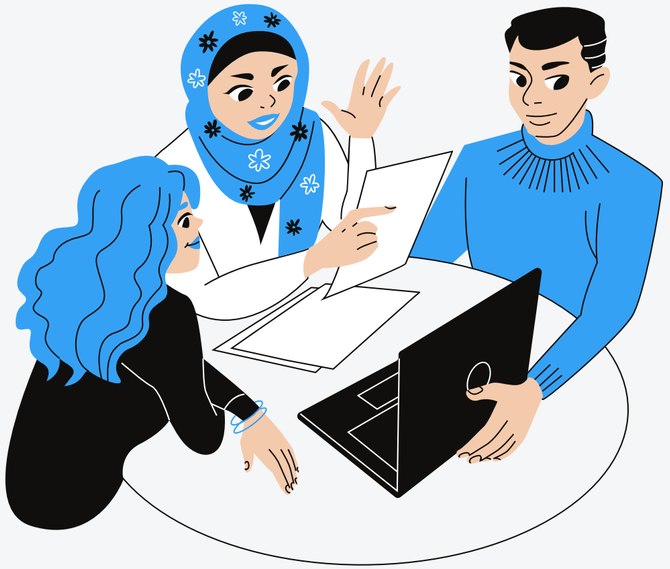


- Obtain a repository
  - *git init* or *git clone*
- Make some changes
- Stage your changes
  - *git add*
- Commit changes to the local repository
  - *git commit -m "My message"*
- Push changes to remote
  - *git push remotename remotebranch*

Understanding GitHub Workflow



Some Important Git Commands

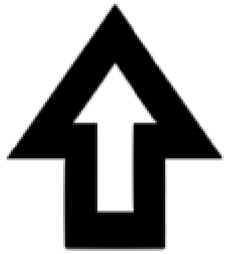


• git init	# Initialize a Repository
• git add [file(s)]	# To add files into your VCS
• git commit –m “[message]“	# Committing Changes to your Files
• git status	# Checking the Status of your Files
• git push	# Pushing the Changes into Central Repo
• git pull	# Pulling in Files and Changes
• git clone	# Cloning a Repository
• git remote add origin	# Adding a remote repository
• git checkout	# Switching / Creating a New Branch
• git restore	# Restoring the Previous Changes

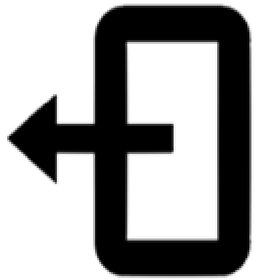
Let's try out a live demo!
Feel free to code along :D

In case of fire

1. git commit



2. git push



3. leave building

Thank you!