

# GitHub for Youth

**Duration: 3 hours**

**Type: Webinar**

## Summary:

This session introduces beginners to Git and GitHub, focusing on version control fundamentals, repository management, and collaboration techniques. Attendees will learn how to set up Git, execute basic Git commands, and work with branches. The session will also cover handling merge conflicts, contributing to open-source projects, and leveraging GitHub Copilot for AI-powered coding assistance.

## Key Points:

- Understanding version control and GitHub basics
- Setting up Git and executing essential Git commands
- Managing repositories, branches, and merging changes
- Collaborating on GitHub using forks and pull requests
- Introduction to GitHub Copilot for AI-assisted coding

## Target Audience:

- Beginners and aspiring developers

## Table of Contents

### Introduction to Git & GitHub

#### 1. What is Version Control?

- Importance of version control
- Difference between Git & GitHub

#### 2. Setting Up Git & GitHub

- Installing Git (Windows, Mac, Linux)
- Creating a GitHub account

#### 3. Basic Git Commands

- Initializing a repository (git init)
- Cloning a repository (git clone)
- Checking repository status (git status)

### Working with Git & GitHub

#### 4. Making Changes and Committing

- Adding files (git add)
- Committing changes (git commit -m "message")
- Viewing commit history (git log)

#### 5. Pushing and Pulling Changes

- Connecting a local repo to GitHub (git remote add origin)
- Pushing to GitHub (git push origin main)

- Pulling updates (git pull origin main)

## **6. Branching & Merging Basics**

- Creating branches (git branch new-feature)
- Switching branches (git checkout new-feature)
- Merging branches (git merge new-feature)

## **7. GitHub Copilot – AI-Powered Coding**

- Introduction to GitHub Copilot
- Setting Up GitHub Copilot in VS Code
- Writing Code with Copilot (Examples & Hands-on)
- Copilot Best Practices & Limitations

## **8. GitHub Discussions & Further Learning**

- GitHub discussions