

# GitHub Student Handbook

*A complete practical guide for beginners and future developers*

## Module 1 — Foundations of Version Control

1. What is Version Control?
2. What is Git?
3. What is GitHub?
4. Git vs GitHub
5. Why Companies Use Git and GitHub
6. How Teams Collaborate Using GitHub

## Module 2 — Setup and First Contact

7. Creating a GitHub Account
8. Installing Git on Your Computer
9. Configuring Git (Name and Email)
10. Creating Your First Repository
11. Cloning a Repository
12. Connecting VS Code with GitHub

## Module 3 — Daily Git Workflow

13. Understanding Project Folder Structure
14. Checking File Status
15. Staging Files
16. Making Commits
17. Writing Professional Commit Messages
18. Pushing Changes to GitHub

19. Pulling Updates from GitHub

## Module 4 — Branching and Merging

- 20. Understanding Branches
- 21. Creating and Switching Branches
- 22. Working on Feature Branches
- 23. Merging Branches
- 24. Resolving Merge Conflicts

## Module 5 — Team Collaboration

- 25. Forking Repositories
- 26. Creating Pull Requests
- 27. Code Review Basics
- 28. Handling Review Feedback
- 29. Using Issues for Bug Tracking
- 30. Introduction to Project Boards

## Module 6 — Professional GitHub Usage

- 31. Writing a Strong README File
- 32. Documenting Your Projects
- 33. Maintaining Clean Commit History
- 34. Optimizing Your GitHub Profile
- 35. Using GitHub as Your Developer Portfolio

## Module 7 — Advanced but Practical

*Stuff companies love but beginners rarely learn properly*

36. `.gitignore`
37. Reverting commits
38. Stashing work
39. Tagging versions
40. Release management basics