### Practical File

### of

### Source Code Management

### (22CS003)

#### Submitted in

#### partial fulfillment for the award of the degree of

## BACHELOR OF ENGINEERING

***in***

COMPUTER SCIENCE & ENGINEERING

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**CHITKARA UNIVERSITY INSTITUTE OF ENGINEERING & TECHNOLOGY**

**CHITKARA UNIVERSITY**

**CHANDIGARH-PATIALA NATIONAL HIGHWAY**

**RAJPURA (PATIALA) PUNJAB-140401 (INDIA)**

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##### Chitkara University, Punjab Sem: 2nd Batch:2023

##### Session: 2023-2024

**List of practicals**

|  |  |  |
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| **S-No.** | **Practical** | **Signature** |
| 1. | Introducing Version Control – Git client (CLI, GUI), Linux environment Emulation, Advantages of VCS, Installing git CLI and git GUI |  |
| 2. | Setting up of the Git-hub Account and linking Git-hub account with git-bash |  |
| 3. | Creating a repository, Adding files, checking status, staged files/ untraced files and performing Commits |  |
| 4. | Generating logs: Visualization of various git logs |  |
| 5. | Git lifecycle description Git status, add, commit, stage – Life cycle of a file in Git managed in Repos. |  |
| 6. | Git branching and Merging: Visualization of git Branch and HEAD, Git branches management, Create a new branch, Commit changes in the new branch, Explore commit in the new branch, Merging the branches |  |
| 7. | Pushing your local repository on GitHub Repository: Creating a local repository, creating remote origin, performing Git push operation to GitHub account |  |
| 8. | To Add collaborators on Git-hub repository And Git Cloning- Cloning repository, Explore contents of the cloned repository, Explore cloned repository in GitHub Desktop, Commit changes in the cloned repository Git |  |
| 9. | Fork and commit on our repository - Fork is a copy of a repository that you manage After creating a fork, we can make any change like adding collaborators, rename files |  |
| 10. | Merge and Resolve conflicts - Resolution of merge conflicts, GitHub and remote repositories, Cloning remote repository, resolving conflicts |  |
| 11. | Git Reset (soft reset and hard reset), Git revert - Performing Soft reset and hard reset, Git revert |  |

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| **S-No.** | **Title** | **Signature** |
| 12. | Version control with Git |  |
| 13. | Problem Statement |  |
| 14. | Objective |  |
| 15. | Resources Requirements – Frontend / Backend |  |
| 16. | Concepts and commands |  |
| 17. | Workflow and Discussion |  |
| 18. | Reference |  |