SYS-201/SEN-201 Software Engineering Laboratory Exercise 6 Software Configuration Management

- 1. Git in command line: We gained hands-on experience with using Git via the command line, as opposed to relying solely on graphical user interfaces or integrated development environments (IDEs) or GitHub.
- 2. Avoiding errors: We understood the importance of using the Git command line to prevent common errors, such as adding unnecessary files or duplicated files.
- 3. Offline work: We have learned to deal with offline work when the internet is unavailable or GitHub is undergoing maintenance, ensuring we can continue our work locally without an internet connection.
- 4. Working on unfamiliar machines: We discovered how to work with Git on different computers, even those without their preferred IDE, which is valuable for real-world scenarios like customer site visits or other situations where we are forced to work on mediums not of our own.
- 5. Git version control: Using the command line encourages us to think critically about the Git commands we are executing, forcing us to be mindful of file versions.
- 6. Useful Git messages: We learned how to read the informative messages and feedback provided by the command-line Git, which may not always be visible in IDEs.
- 7. Branching: We learned how to create and manage branches in Git, allowing parallel development efforts.
- 8. Handling conflicts: We gained hands-on experience in handling conflicts that arise when merging branches, learning how to resolve these conflicts effectively.
- 9. Repository cleanup: We understood how to clean up a local and remote repository by removing unnecessary files or directories using remove commands
- 10. Collaboration: This lab emphasizes teamwork as we are divided into subteams, work on different computers, and collaborate through version control using the Git command line.

Overall, this lab equips us with practical skills in using Git via the command line, fostering a deeper understanding of version control and collaborative software development practices.