CS 308: Large Applications Practicum
In-Class Activity 3: Advanced Concepts in Git, 21st August, 2023

In this activity, we will use some of the advance features of GIT, aliasing, branching, and merging. Each group will be working on their own repository, so make sure you know your group number or ask the TAs. For each group, the project source files are in a repository directory "GroupN" on the online GitHub server (https://github.com/cs-308-2023/group_N) ; where, N = Group number of your group). Default username of your repository is: cs-308-2023 Password is: cs308lap and access token: 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

Step-0: Try to create aliases for a few commands like commit and checkout.

Step-1: Create a local directory named – Activity-3 and cd into it. Now, Clone your repository from the GitHub server.

Step-2: Change the 'cout' statements with an equivalent 'printf' statements in the code. Now, commit the changes on the Master branch.

Step-3: Currently, the function will give a wrong answer for negative Integers. Thus, there is a bug in the code. First, create a different branch for this bug fix (like described in the lecture). Now, make following changes to the branch: Add a check for -ve numbers within the function. The function simply returns '-1' for -ve arguments. Commit the changes.

Step-4 Now, revert to the code on Master branch. On this code, create some more changes (e.g., reverting back from printf to cout statements). Commit your code.

Step-5: Now, merge the bug-fix branch to the Master branch. Resolve any conflicts while merging your code by making changes in the Master branch and remove the conflict resolution markers created. You will need to stage the files that were in conflict and commit them after resolving conflicts.

Step-6: Now, push your code to the Remote GitHub repository. Including the bug-fix branch code.

Step-7: Finally, delete the bug-fix branch locally and also on the remote GitHub repository.