**Introduction**

For deliverable 3 individually we worked on the git activities that included creating and pulling the latest files from a central Git repository, running local tests on the git repository, committing local changes to Git, and pushing to a remote central Git repository. The problem that was faced for this deliverable was to create a local Git repository on our personal machine and using Git Bash explore, edit, and commit changes to that repository. Using the step-by-step instructions provided it became clear on to test the repository for changes and be able to add or delete files from the repository. Finally, at the end of the deliverable we were to sign up or sign into GitHub and create a remote central repository in which both teammates and the instructor could access as collaborators.

**Description**

**Yuan:** I learned the levels of Git. It starts from Working Directory🡪Staging Area🡪Local Repository🡪Remote Repository.

To be able to move the content from one level to another level, we need to give a different command respectively. For example, we need to use “add” command to move our local changes to stage area. We need to use “commit” to move changes from stage area to local repository. We use “push” to push from local repository to remote repository. At one point even thought I was following the steps, I missed some steps, but I was able to use git “reverse commit” to go back to where I made the mistake.

When I tried to push my homework to remote Github, I got authentication issues. I first thought it could be some wrong saved credentials then I removed all the saved credentials including Windows Credentials Manager and SourceTree credentials, but it still did not work. I spend a lot of time searching, then it turns out I need to update my git.

I have been using git at work. The challenge we always face is merge conflicts. We currently are using KDiff extension to help us resolve the conflicts, but sometimes, we still spend a lot of time to resolve the conflicts. So I am still trying to find if there is an even smarter tool available to support merge conflicts.

**Edward:** By running through this exercise, it opened my eyes to a few new things for me. In my career and school career I have not had to collaborate on many different things. I have used GitHub to pull programs and files to be able to achieve different homework but having to do it to work with a partner has been beneficial. I can see the appeal to have everyone work from the same file and have the same information as they work towards better solutions for problems faced.

At first being unfamiliar with Git I had to read a bit more on it to get started but after that the exercise helped me step through many different processes that I can see being beneficial. I did make a few missteps and have a typo in the code which caused a lengthy error message that something was not recognized. This was easily fixed with no harm done since the typo was not an actual command. Now that I have stepped through some adding, deleting, committing, and other exploration of Git I feel more comfortable.

As for the final GitHub URL my partner has been handling this since the beginning of class, I was able to easily set this up with the directions provided and when reviewing my partner’s work and comments saw that updates are a must when working with GitHub as it could cause problems as he stated.

**GitHub URL:** <https://github.com/yuanli11/gitPDGroup5.git>