Session 7A Version Control using Git and Working with GitHub

Exercise 1 – Git Basics

For this exercise, one person should share their screen and walk everyone through the exercise, so that everyone in the group follows along on their own machine. Make sure everyone is ok with all steps and take things as slowly as you need. Refer back to the lecture slides to help you.

1. If this is your first time using Git, you should configure your username and email as per the instructions in the slides.
2. Create a new folder somewhere on your machine and open it in VSCode.
3. Initialize a new Git repository in this new folder.
4. Write a simple piece of code, and save the file in your new folder.
5. Check the status of your repository using the Source Control panel – you should see that Git is aware of your new file, but is not tracking changes.
6. Stage and commit the new file, with an appropriate commit message. Check the status again both post-stage and post-commit.
7. Check the timeline to see the details of your commit.
8. Make some changes to your code file, and save them
9. Check the status of your repository again – you should see that Git has identified that the code file has been modified, but notes the changes have not yet been staged for commit.
10. Stage and commit the changes.
11. View the timeline to see the details of your commit history
12. Look at the diff between the two commits.
13. Make further changes to the code file. Perhaps add a deliberate bug / error.
14. Stage and commit the changes.
15. View the timeline to look at the commit history.
16. Look at the diff between the latest commits.
17. Use a Git Revert to revert the latest commit back to the previous version. Check the timeline and also flick back to your code– you should see it's flipped back.
18. Try creating a new code file in your repository and practice the above on the new file too.