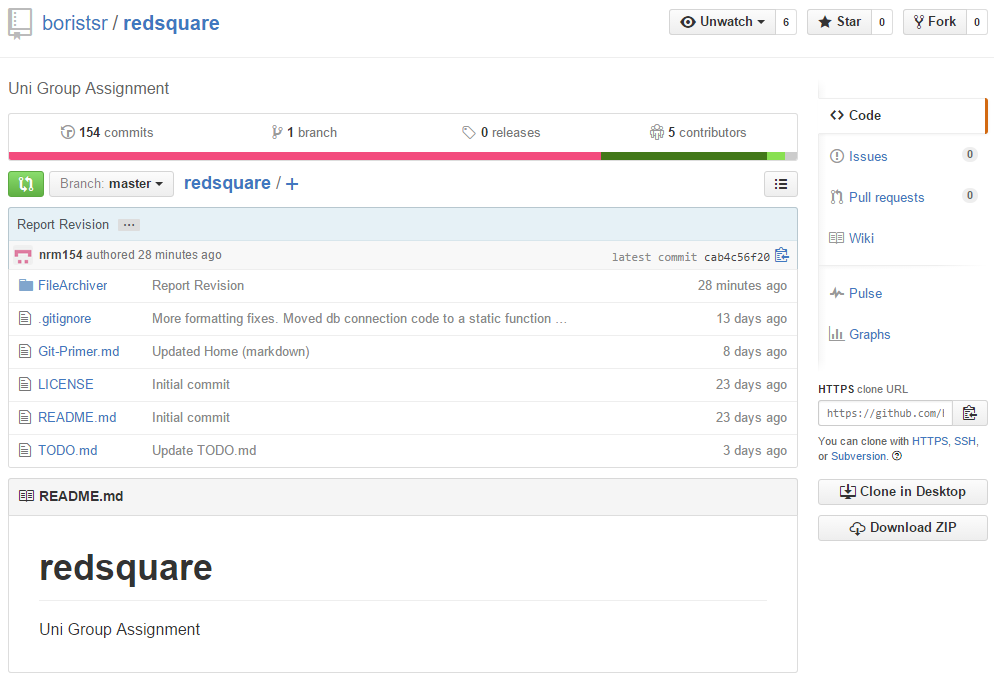
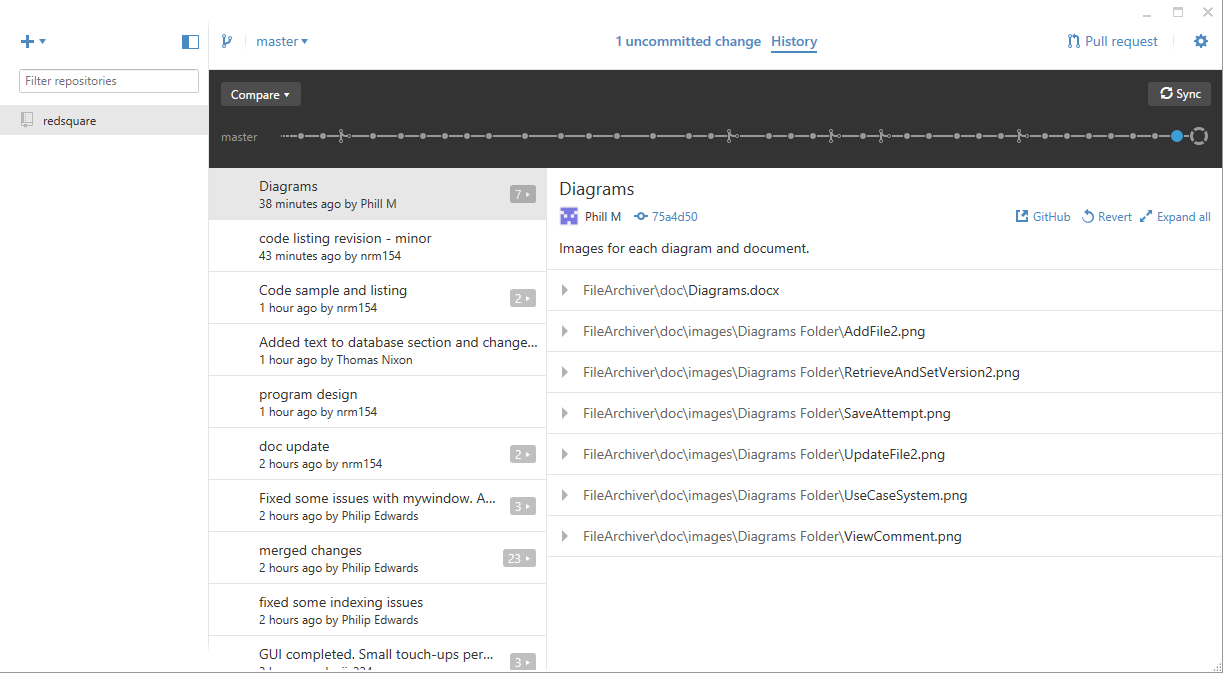
# CSCI222 – Group x – Version Control

For version management we have decided to utilise GitHub, a web based Git repository hosting service. We have chosen GitHub due to most members of the group having particular familiarity with it and it’s easy to use desktop application.

This is the main screen of the repository we used on the website, and the second picture shows the desktop application screen.





## Setup

GitHub makes setting up a local repository simple.

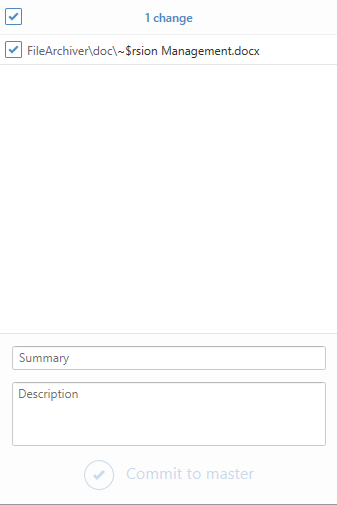
Firstly everybody in the group created a GitHub account, Phil E then created the repository ‘redsquare’ and added each group member to it for proper version control, after this the group is free to pull from the master branch and push/commit any new files or changes made to old ones.

For Windows and Mac users there is a downloadable desktop application (Displayed above) for GitHub which makes this version management much easier.

## Details/How we used it

This black bar is the top level of the Git repository. It shows the entire timeline of commit history to the repository. Each dot represents a commit and clicking on each takes you back to the previous versions of the repository. This is great for data security to ensure nothing is lost in an accidental commit of wrong work.

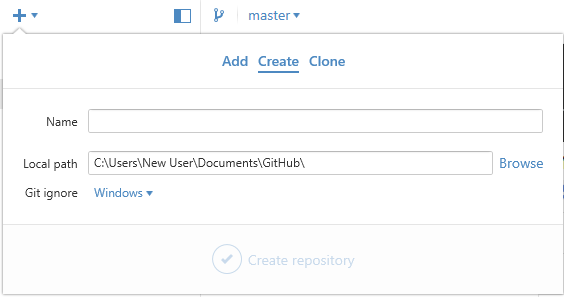
The image below shows any uncommitted changes a user has made to a current document or file. To commit it to the repository they must include a summary of what they are adding/changing and a description so that other users know what changes have been made. We used this information to go over each other’s work and make any recommendations to fix any mistakes the user who committed may have made and suggestions on how to fix them, working together to help each other.



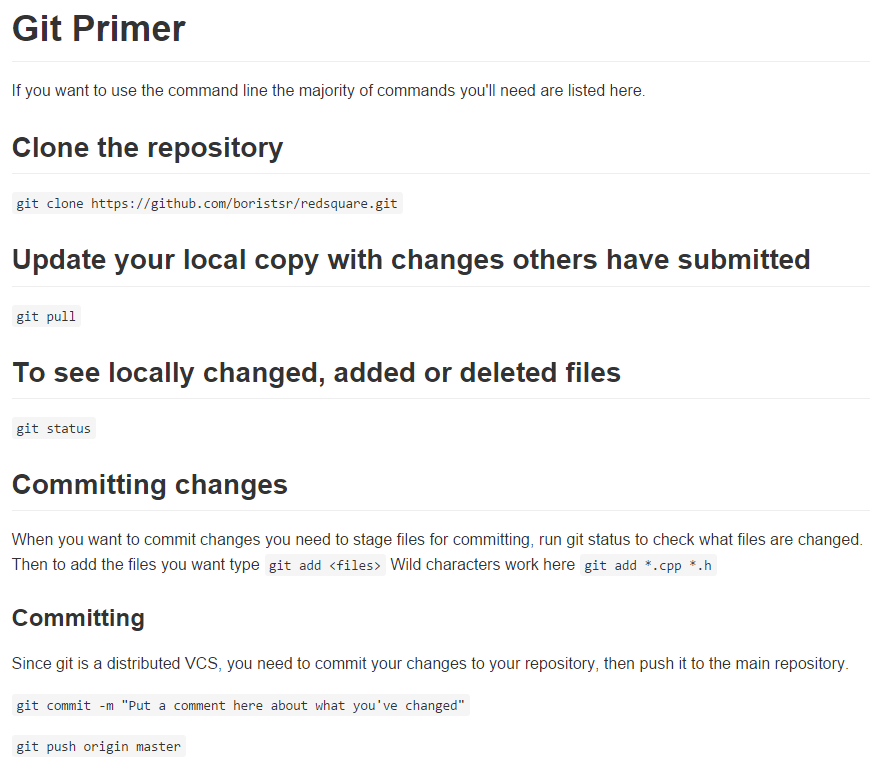
## Access and usage information

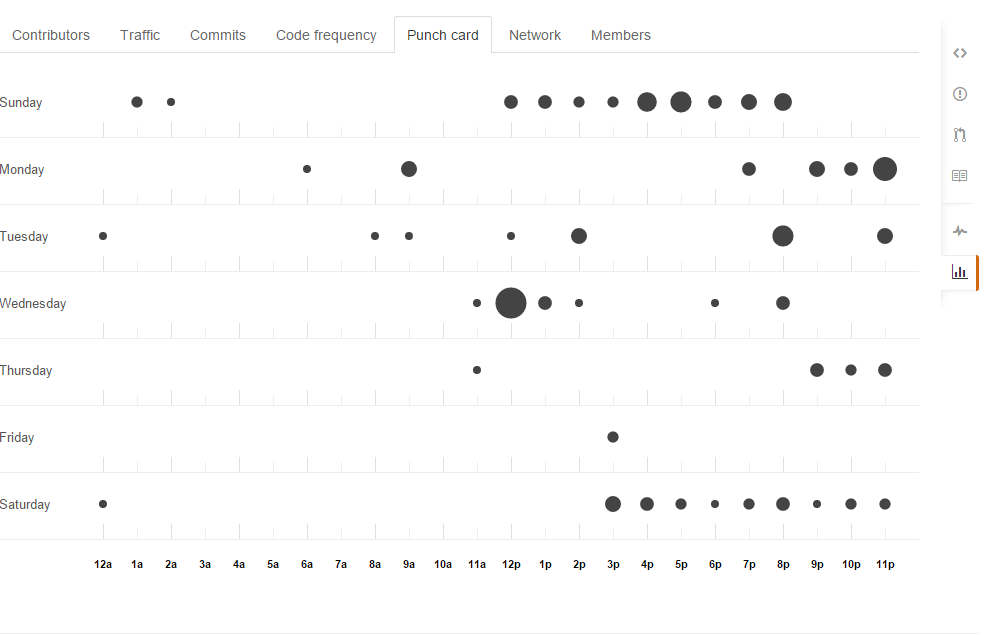
GitHub makes accessing the repository easy whether it’s through command line or through the desktop application. The website supplies a clone/checkout URL for HTTPS, SSH and Subversion which makes it easy for all different users of the repository.

The desktop application is a small 100mb download and makes the version management much easier. All the user has to do is click the plus ‘+’ symbol on the top left of the GUI (Pictured below) and that will drop down a box whether the user wants to Add, Create or Clone a repository, then it’s as simple as copying the clone URL into the program and then you’re ready to go with all files from the repository.



For command line users there a various git commands that do everything needed, from pulling the files down as well as pushing them back up and committing changes. This Git Primer file was created by Phil E to help the other group members who are new to GitHub. It includes step by step what exactly we needed to do if we were on Linux or without the desktop application.



The image below is from the GitHub website. It shows the virtual punch card of work commitments the group has made. It shows which day and at what time each commit occurred at for our group it shows that most work is done in the afternoons and later parts of the day.

<insert img of the final commit statistics showing each member commits here >