Professional Portfolio Project

Fionn Loftus- student no.G00329882

GITHUB Report

Git hub is a web based version control repository or Git. A Git is a [version control system](https://en.wikipedia.org/wiki/Version_control_system) (VCS) for tracking changes in [computer files](https://en.wikipedia.org/wiki/Computer_file) and coordinating work on those files among multiple people. This is obviously very useful for coding as it allows for multiple contributors to work on a project while allowing for previous versions of the code to be recovered should it become unworkable or if bugs arise in the main code.

I had previously been introduced to the platform earlier in the course. It was used as a method to cooperate on group projects between students. It was important to cooperate with my partner as we created both the source code and different branches of the code which we could test. We would test each other’s code and troubleshoot it before incorporating into the master code.

For my portfolio I selected several projects that I wished to include. I spent several weeks improving the projects themselves adding more functionality trying to remove any bugs that I had been unable to remove prior to having them graded during the course. I selected the projects that I was most satisfied with and uploaded them to Github within their own repositories.

The projects that I have decided to upload are

* Database project -[G00329882\_databases\_sql](https://github.com/FionnLoftus/Portfolio/tree/master/G00329882_databases_sql)

This project uses SQL to create a working database of a hotel reservation system. Within it, there is the sql code used to develop the database, a pdf file to visually display the database model and the written report to explain the project. It can be found in its own pinned repository named “Database-project” as well as the repository named “portfolio” as the unzipped folder.

* Web Application Development project- final project

This project uses HTML, CSS, javascript, PHP and SQL. It is a functioning website for a hostel that includes a JavaScript shopping cart application, Php functionality for secure booking and a credit card validator to mimic payment. SQL is used to create and remember customers when accessing the PHP pages. It can be found in the pinned repository named “Web-Development-final-project” it is also found in a zipped form in the repository named “portfolio”.

* Web Application Development- Website project

This project was one of the first project created in the course. It is a simple website featuring several pages with video audio and javascript functionality. It was created using HTML, CSS, Javascript and bootstrap. It was used as the foundation for the final Web application project. It can be found in the pinned repository named “Website--Project” it is also found in a zipped form in the repository named “portfolio”.

* Integrated Mobile App Development- Final Project

This project is an ionic mobile application, it allows for the user to enter a single reminder into the application with a priority (high, medium, low), description and whether it was complete (true, false) the data was also not to be saved on the phones local storage but instead on JSON blob website. It can be found in the pinned repository named “Mobile-Application-final-project” it is also found in a zipped form in the repository named “portfolio”.

* Integrated Mobile App Development- NASA Picture of the Day Mobile Application

This project was a group project between me and another student. It is an ionic mobile application connects to the NASA picture of the day website and displays all the pictures and descriptive text on the app with the follow options:

⦁ Today

⦁ The previous seven days

⦁ The previous fourteen days

It can be found in the pinned repository named “Mobile-Application-nasa-project” it is also found in a zipped form in the repository named “portfolio”.

Thoughts on Github

Github provides a very useful service in its version control system, it allows you to return to the last functioning version of your code should problems arise, allowing for easier troubleshooting and bug fixing. It is also great for collaboration projects as each partner can work on one branch of code, ensuring it works before pushing it into the master branch.

Code uploaded to Github is also protected against data loss as it stored on Github servers instead of on your desktop. It is also easy to publish your work through Github as any open source code that you create is easily disseminated through Github network should you wish it.

Issues I have with the service however is that it has a fairly steep learning curve when you first try to get to grips with all it functions. I had some difficulty in particular with the collaboration system with the different branches and organising the repositories in the ways I wanted. The 25mb/100 file upload limit was also a hindrance when I wished to upload large projects that I didn’t want to compress.

In conclusion however I feel that Github or similar services will be vital in any future IT career I embark upon.