**LoyaltyOne Web Application**

**GitHub:** [**https://github.com/CiaranMc93/CommentSocial.git**](https://github.com/CiaranMc93/CommentSocial.git)

**The Task**

To implement a web application that allows users to log on and create posts from different with information attributed to each post such as date, time and location. Replies will be possible for users so that a post can have multiple responses, all of which has the relative information. A user will be able to see all of their posts. Create the web application in conjunction with a testing framework that should be automated. Automate the build process so that updates will be reflected when the browser is refreshed. Ensure the web application is REST based with a correct structure in place.

**Revisions**

All revisions will be available on GitHub and there will be various stages in the lifecycle of the project that will demonstrate a ‘completed task’. I chose GitHub because of my familiarity with the technology and because it is a powerful tool when it comes to accessing code and keeping track of revisions. I did not have alternatives in this area as I felt it was the correct tool for the job at hand.

**Requirements**

* Design and develop a web application that accepts information and outputs information based on user input.
* The web application must have multiple different stages at which it can be rolled back and demonstrated.
* There must be a testing framework in place that will automate testing for the application.
* The build process, testing and deployment process should be automated.
* A database should be connected so that users can retrieve information relating to their account and be able to submit posts to be stored.
* A front end that allows users to enter the information they wish to enter.
* Capture the users location from a form and determine the longitude and latitude of said location as well and displaying this information in each post.
* Secure the application using HTTPS.
* The application needs to be developer friendly with documented code so that the application can be easily expanded upon or improved by outside developers.

**Technologies Used**

Technologies used can determine a lot about how your application can do and extend to. It is important for a web application to be scalable, secure, easy to use and intuitive. In order to achieve all of this you must choose the correct technology that will be able to meet the requirements and more.

When choosing the technology for each project, there are three key areas. These three areas are the front end, the back end and the storage. These can then interact with each other in such a way that allows the requirements to be met. Familiarity comes into play here as time constraints and developer limitations can make or break an application.

Front-End

* The front end is what the user will see and use so it is important that visually it is intuitive and does not require the user to have any previous knowledge.
* There needs to be a communication between the front end and the back end in order to retrieve information and store user input.
* The type of front end involved in this application means it does not have to be particularly complex.

Back-End

Database

**Database Design**