**Introduction**

This documents charts my thoughts/decisions etc. as I have completed this project.

**Choosing a Project**

Initially I was thinking of writing some generic service (e.g. a hotel reservation system or a fantasy football league) in C# using the ASP.NET Web API 2 or ASP.NET Core framework. I was planning on using Azure to get these hosted, and was planning on using React.js for the user interface. These are the technologies I’ve most worked with and am familiar with.

However, during Assignment 1 I enjoyed being exposed to the technologies involved there which were mostly new to me, so I decided to iterate on the Assignment 1 codebase.

**My Initial Plan**

* Firstly, I plan getting my environment setup so that I can deploy to Bluemix. This is something I’m not familiar with at all, so I want to look at it first and ensure I am able to use it. I also plan on documenting the setup.
* Complete the UI clean-up I started with in Assignment 1.
* Add support for an Admin user – only show pages like Add Product to admins.
* Clean-up login functionality?
* Support logout functionality?
* Investigate Discovery Service for REST?
* Stock Management Service?

**Initial Improvements to Codebase**

**Add support for an Admin user**

The idea here is that we can have different user types for customers and employees who may need to update products, add products etc.

To achieve this, I am going to do the following:

* Rename the ‘customer’ table to ‘user’.
* Add a new column in this database indicating user type. This will be an integer value. 1 will be used to identify employees, and 2 will be used to identify customers.
* I’ll then need to modify any code that interacts with this table and ensure that it works successfully.
* I’ll then review all code that is used to access pages etc. so I can use the user type to determine if a user should be allowed to access that page.

Creating Dockerfiles & Images for each service

TODO – use notes from other doc.

Creating Dockfile and Image for MySQL Database

TODO – use notes from other doc.

Deploying to AWS

TODO – include nodes but indicate that I backed out due to complexity.

Deploying to Bluemix

TODO

**Bug Fixes Notes**

**User Service**

* The users service was not checking the password provided, only the username. So as long as a valid username was input, the login would be successful, even if the password for that user was incorrect. I modified the user service to take account of the password also.