**Honour’s Project Weekly Diary**

# 10/09/2018

This week was a little busy. Lectures about starting a project and getting a supervisor was the same as last year’s, no real new information for me. Already ahead of the curve. Organised first meeting with my supervisor (Xiaodong Liu) for Friday. Had to change the timing slightly as there was a conflict with a careers lecture that was only posted up on the honour’s Moodle page. Wasn’t a real issue.

During the meeting I showed him my Initial Project Overview (IPO) and he was impressed by it. I also showed him my drafted Project Management plan (Gantt chart). HE advised I should have around 10 tasks to show, along with repeating supervisor meetings etc. I also discussed my current reading material and, again, impressed with what I have done. I need to continue what I’m doing and find a few more sources I think. He directed me to a book, available free on Safari, to read that has some useful information. We also organised to have the weekly meeting on a Thursday at 1300. Only real day we are free to have it. Schedule conflicts are annoying.

Other lectures this week included a careers lecture and a critical thinking lecture. The careers lecture was pretty much a repeat from last year. But more importance now and stuff to start doing.

The critical thinking lecture was good. Learned a lot of things. I got singled out, my fault for sitting in the front row, to talk about my project. It got highlighted that I was a little to broad on my current thinking and need to narrow down my research for MSA. The reasons for this and why I’m building an E-commerce/amateur sports league web service. Something to think. This will help with my current draft for dissertation chapters as I found they were getting to broad and slight worry I was going to start to write about too much. So, I have a few ideas how I am going to start narrowing things down. Write a few ideas and see what Xiaodong thinks next week.

I am also going to start transferring over my drafts to Tex studio for a LaTex designed document. As it is the commonly recognised document design software when it comes to professional and academic publishing. A steep learning curve to, so I hear, but I think worth it.

# 17/09/2018

My IPO is nearly finished. Just a few small changes to make. I am planning on sending a copy to Xiaodong and see if there is any other small detail needing changed before sending it in. I finally chose to implement an E-commerce based web system. As online shopping is becoming more available and developed, I feel doing this for my project would bring the most benefit as I could be working on something similar in the working world.

My Gantt chart/ Project plan still needs a little bit work. I’m not sure how detailed I want to make. Xiadong recommended around 5-10 tasks for each section or so. But I might go a little bit more detailed than that. Just to be safe. At the very least I will show him my “final” version and amend from there.

Transfer of drafts to LATex went well. I learnt a new few things tinkering with the template design provided: How to setup bullet points, even list in a list – listception. Learning how the references section was interesting. Basically, inserting a document (Tex format) of references and referencing them in the doc. I might consider making multiple bibliography docs – one for each type of acceptable reference. This might help to prevent multiple pages for a ref doc. Will have to see if it is the same processes for referencing docs within folders for these things. Insert Latex documents into my dissertation – pretty much the same concept as my bibliography doc(s). I think this will be my default option for different sections. Having multiple docs for each chapter/chapter section instead of having one big massive document that is pages long. This should make it easier to read over things and change where needed. I am still going to do my initial drafts using word as it is easy. Copy & paste isn’t an issue for me. I have nearly finished chapter 1: introduction. Onto the first section of chapter 2. I am considering setting a weekly deadline for each section of the literary review. Once I have planned the sections I will discuss. This should finish up around the winter break, possibly a week or 2 extra to start the next phase.

# 24/09/2018

This week saw a little more development of the project plan. I did two variations: one was more detailed than the other. Xiaodong did say the less detailed one was fine for insertion as a Gantt chart – something I am going to need to look at to reduce in size, so it can fit in one page as reference, not over a few pages. LOL. The more detailed one I can use for my own progress and how things are going etc.

I discovered how to add figures to TEx studio and have them added to the figures table. Just add a caption. It is a necessary item if it is to be added to the table of figures. Which would be a requirement. As they are inserted via link a folder. I can easily resize them out with the document so less hassle there. The plan for next week is to have the microservice section of part 2 finished for Fridays meeting with Xiaodong. The date was changed, temporarily -this week only, as I have plans on the Thursday. He was fine with this. I did start adding a section for the requirement specification document. At this stage still mostly, a blueprint. Some content was added. But I am going to need to do the main part of design – high-level abstract designs of the system. I did a rough draft idea of how it will look in terms of using architectures. Xiaodong was happy with this. I even confirmed you can use the REStful architecture with the MVC architecture. This was possible.

I also bounced the idea of buying a raspberry pie to use a third host for a microservice. The idea being my desktop would host the majority. And add a smaller one to the pi and my laptop and see if it works in term of communication to prove that my design does work. Xiaodong thought this was good and I hope it does work. My task now is to finish up the section on Microservices and start reading up on domain driven design. I found a few white papers that should help with understanding it more in the context of microservices.

# 01/10/2018

I finally got a product key to get windows 10 education onto my laptop!! Docker is a go!!! With it on my computer and my laptop It should make development of the prototype go more smoothly. A bit of a pain to get it going on my desktop again – it somehow got corrupted. I may even create the start of the project. Possibly from the API gateway section. And develop the front-end section of each microservice as I go. Along with the API entrance for each microservice.

I’ve started to read the information I have on DDD. It seems creating a bounded context within MSA can be difficult. Something I am going to need to write about. But I am confident I can get something working. The library lecture really helped with the demonstration of how to narrow down your search parameters. I am going to do a little bit more research and see if I can find any more relevant papers.