Development Diary

26/8/2017:

**What is this document?**

This document serves to record the initial steps of my journey as a budding Software Developer. Having recently finished my 1st year of Computer Science at Swansea University I feel that I have the basic knowledge required to take a stab at my first real software project that isn’t a college or university assignment. It is important that I start doing projects like this so that I can develop as a programmer as well as have concrete projects to discuss in work placement interviews.

While I feel that I’m a strong programmer relative to the rest of my student cohort all of my assignments to date have involved writing code to fulfil assignments which has a) provided only programming experience in a vacuum, devoid of specification and design work; and b) not exposed me to formulating a (substantial) program from scratch based only on my perception of a particular niche. As my first response to these gaps I have chosen to write a program that models Dungeons and Dragons 5th Edition character creation/development. While this choice of project may seem trite it actually has some good things going for it:

1. Modelling how the various systems in D&D5E interact with one another properly will be a non-trivial challenge.
2. Assuming the initial scope involves being able to create, edit, store, and retrieve characters, there is great potential for extending the program e.g. converting it into a web application, simulating combat encounters etc.
3. Having started a campaign with my mates I’m really into D&D right now and I think this enthusiasm will be helpful for this initial project.

The 1st point means the project will be sufficiently complex to be interesting and worthy of talking about in interviews etc. The 2nd point should allow me to practise a wide variety of programming concepts and techniques, e.g. creating GUI’s. The 3rd point will keep me motivated if and when things I try don’t work!

**Software Engineering (not programming)**

Part of what has inspired me to undertake this first project has been my revision for the Software Engineering and Modelling Computing Systems exams; immersing myself in the material gave me an urge to try the techniques in those modules on a software project on my own. To that end this project will involve me producing a formal SRS (Software Requirements Specification) document containing formal process modelling, designs for the program, as well as formal tests and testing documentation. My inexperience with applying these techniques to a real project will almost certainly make the process a struggle but I trust that my aforementioned enthusiasm for the application purpose will assist me here!

In anticipation of eventually needing to collaborate with other developers as well as wanting to become familiar with at least one VCS (Version Control System), I will also use this opportunity to learn to use Git. Eventually I intend to learn the command line Git interface but until I become familiar with the gist of how it works I am content to use the Git desktop application.

**SRS**

To help me write my first serious SRS I will be using an IEEE Recommended Practise document[[1]](#footnote-1). I am assuming at the outset that because of the relatively simple nature of my application that a fair amount of the content in this document will not be applicable however I feel that it is a good starting point to base my own SRS structure on.

1. http://www.cse.msu.edu/~cse870/IEEEXplore-SRS-template.pdf [↑](#footnote-ref-1)