Maxwell Haley –

Computer Science Co-op Work Report

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To Sandra Stark  
From Maxwell Haley  
Subject Computer Science Co-op Work Report

The employment period was from May 24th to August 24th. The employer was Employment and Social Development Canada (ESDC), where I worked for the Grants, Contributions & Service Offerings (GCSO) branch. My supervisors name for a majority of the summer was Polly Jones, but as off the 8th of August, my supervisor became Shelly Cooper.

ESDC’s mission statement is:

Employment and Social Development Canada (ESDC) works to improve the standard of living and quality of life for all Canadians. We do this by promoting a labour force that is highly skilled. We also promote an efficient and inclusive labour market.

ESDC manages a plethora of different products and services. Some are used externally by Canadian citizens, like the *Job Bank,* or the *Foreign Workers Bank*. Others are only used internally; such has the *Oracle DSB* or the service I worked on: the *Common System for Grants and Contributions* (CSGC).

My assignment was to work maintenance on the “reports” side of the CSGC. One of the features of the CSGC is the ability for a project officer to generate various PDF reports about their projects. This is done using an ASP.NET page as the front-end, and Oracle Reports as the backend. All data for these reports were pulled from an Oracle Database. The reports are generated based on an RDF template, which both calls the DB for information, and has internal PL/SQL scripts. My activities regularly included fixing bugs and formatting issues inside the RDF files, and fixing bugs that may appear on the front-end as well. Other jobs done include updating sample PDFs, touching up documentations, gathering a list of reports that needed to marked with a “Protected B” status, fixing DB views, and helping on-board a new team member.

My workstation is a Windows 7 x64 CairoTech machine with an Intel i5-4590, and 8 GB of RAM. I started the term of with two monitors already set up, and had my keyboard and mouse swapped out for something more comfortable. My PC was available when I started my co-op, but the software took an addition two months to set-up. I regularly used the VB.NET programming language (for the front-end), and PL/SQL (for the back-end). I also had to edit some values in an XML file. All this was done in Visual Studio 2015. For modifying DB views, I used Oracle SQL developer. Finally, for modify RDF files, I learned and used Oracle Reports Builder.

The skills I used that I learned from the Computer Science program would be working with .NET environments, and working with the Oracle Database environment. New skills include the VB.NET language (which I think has bolstered my appreciation for C#), and the entire Oracle Forms and Reports stack.

I felt prepared both mentally and technically for the for co-op program. Outside of teaching VB.NET (which I don’t recommend), I don’t see how I could have been prepared better. The work term itself could have been improved with a better on-boarding system. A lot of information had to be discovered by hounding busy colleagues during the tail-end of a major release. A central and up-to-date repository for new employees would of gone a long way. If I can draw example from my last employment, the DSB Team had a dedicated Confluence page just to teach new users how to use the software, get into the environments, and linked to relevant documentation on Oracle’s website. Another issue was with the machine I worked on. The software wasn’t fully installed when I showed up. It took a month for technical support to “””successfully””” install the software I needed, and even then it crashed constantly. Eventually my machine was just replaced, and the software still required yet another technician to work with me and get the machine up and running. By the time I had everything needed to do my job fully, two months had passed.

In conclusion, despite a long and rocky start, this co-op term went well. The project was technically interesting, and the team was a blast to be around. If the on-boarding processed was smoothed out, this would have been a flawless co-op.