Memo

To: Alain Beauparlant

From: Matthew Ferderber

Date: August 15th, 2013

Re: Computer Science Co-op Work Report

My Co-op work term with HRSDC as a .NET Developer began May 27th 2013, ending on August 19th, 2013. My time at HRSDC was a great experience. It was a pleasure to work with Kayla Jessup (My Supervisor) and the rest of the team.

HRSDC's (Human Resources and Skills Development Canada) mission is to create a stronger, competitive Canada and to support Canadians with choices in life. HRSDC has several different branches with many different functions. The IITB branch (Innovation, Information and Technology Branch), provides information and technology services to the department. Business applications to streamline work processes, processing millions of transactions and providing easy access to data.

My Position

My job at HRSDC was as a .NET Programmer. I was given several different tasks during the summer which were all technical Projects. The majority of the time, I would be writing documented VB.NET code for existing projects (Either upgrades or migration work). I also learnt about the BI (Business Intelligence) tool Cognos near the end of my work term. I created small reports and learnt a lot about databases.

My work environment at HRSDC was a cubicle in the new Eddy building (20 Rue Eddy, Gatineau). I had my own workstation loaded with Windows XP. I used Visual studio 2010 and SQL Developer for my tasks which I worked on in: SQL, XML, VB.NET, C# and Cognos. Considering it was a new building, everything was very clean, modern, and overall, a very enjoyable workplace.

Skills, Used & Acquired

The information I learnt from the school year was very relevant to the co-op term. Having a very solid understanding of OOP (Object Oriented Programming (Java, VB, C#, etc.)) was the biggest advantage for me. During my Co-op term, having the knowledge of HTML was great for the ASP.NET portion of my work and Business class was actually quite important for my work. Creating reports, knowing what a BI (Business Intelligence) tool is and having a basic understanding of relational database structures before starting Co-op helped me grasp Cognos (BI tool) easier.

During my work term, I learnt several different skills that I can apply to school. I learnt about the many different ways projects are managed (Recording bugs, writing notes about projects and general organizational tips that I can apply to any work) and about programming / web programming during my term. Having learnt quite a bit of VB.NET, ASP.NET and SQL, I feel I'm prepared to work even harder and start the new school year working hard to learn even more.

Co-op Experience

Before starting Co-op, I was worried about whether I was ready for all of the new content I would be introduced to. Once the work term started, I was relieved to find out that I was very familiar with what I was doing. VB.NET was a very enjoyable experience and I learnt it rather easily. Looking back, I think I was prepared for the job. I didn't struggle to learn anything during the work-term.

The project I'm most proud of during my work term, would be the tool I created to automatically convert Excel files to the correct version and Log the changes. If the files had been changed since the last conversion, it reconverted them. All of this was done through the web browser. Although it was difficult, I learnt a lot about VB, storing data and problem solving. I'd say my favorite part of this assignment was probably learning about XML. I was very surprised with how easy it was to implement XML and how much could actually be done with just the data stored in that file.

The one topic I had trouble with during Co-op was Databases. It was difficult because we didn't deal with the technical aspects of databases during the year. With a bit of database experience, I feel it would have been easier to understand some of the projects I worked on. However, learning what I did during the summer about databases is definitely helpful and applicable to the database course this year.

Although my work term was definitely a great experience, learning not only technical skills but also work management skills (Organization, bug tracking and note keeping). I believe I could have benefited from doing slightly more programming and a bit less reporting. The

Cognos I learnt at the end of the work term was very interesting. However, it's very specific software and it seems the same result can be made through programming a report. Another interesting point: I was the sole Co-op student on my floor (And one of few in the whole building). It was very odd to be the only student. However, it did encourage me to get to know others.

Conclusion

Overall, my work term was great. I got to learn a lot of valuable skills, met some great people and worked on some very interesting projects. Knowing that each assignment I worked on automated and decreased the amount of manual work needed was awesome. Although some of the work was difficult at first, learning it was definitely a rewarding challenge. Co-op was a great way to learn about the Computer Science program and what awaits me in the future after school.

Resume

See Attached Document.