**Professional experience**

LU9: Final Analysis and Review

To consolidate the learning points that have emerged from this module.

David Norton

05/04/2014

Contents

[Introduction 1](#_Toc384470427)

[Learning Unit Plan 2](#_Toc384470428)

[UWE & Placement Alignment 4](#_Toc384470429)

[Career Goals & Personal Development 8](#_Toc384470430)

[Conclusion 11](#_Toc384470431)

[Study Plan Calendar 12](#_Toc384470432)

[Reflective Logbook 13](#_Toc384470433)

[Individual Development Plan 15](#_Toc384470434)

# Introduction

## AIM

My aim for this Learning Unit is to review what I have achieved on my placement and compare against my original goals set in LU1. From this I can create new goals for the rest of my placement and beyond. I will also review how two years at UWE and this module helped prepare me for my placement.

## Objectives

1. Review the deliverables for this LU and create a plan, while reviewing previous work.
2. How did Computer Security & Forensic Tools align with my placement at IBM?
3. Have I achieved all my goals and what new goals should I start working towards?

# Learning Unit Plan

## *Review the deliverables for this LU and create a plan, while reviewing previous work.*

## Deliverables

Reviewing the aims and objectives of the module, the deliverables can be summarised as the following:

1. Learning outcomes from this module and placement.
2. Compare & contrast study plan to work completed.
3. How conceptual & academic learning at UWE prepared for placement year.
4. Compare & contrast goals set in LU1 to goals achieved.
5. Show you fulfil UWE's placement requirements.
6. Review how employability skills have developed.
7. Discuss how personal and career development can continue to progress.

## Resources

Looking through the list I will need to gather and review the following information:

1. Past LU’s for modules learning outcomes.
2. IDP for placement learning outcomes, work completed & current employability skills.
3. Study Plan and dates LUs have been delivered.
4. Work completed on three past modules.
5. Goals & employability skills listed on LU1.
6. UWE's placement requirements.

## Study Plan

I plan to tackle this LU in a similar way to LU1, as it covers similar content, but will require more research. I believe this plan is reasonable, as on each LU I have submitted my work on time or early and achieved grades I am happy with. Although I am currently busy running events outside of work, I can take full advantage of the second study period. I keep an Individual Development Plan (IDP) up to date, which should help largely cut time off some of the deliverables.

Taking on feedback from previous LU’s and my own observations, I will focus on the main deliverables and try to cover each topic evenly, so I’m not left short for words on any subject. I will do this by splitting the content of work into only two chapters, which should make word count easier to manage. I will also alter my referencing technique.

The two chapters I will break the LU into are **UWE & Placement Alignment** and **Career Goals & Personal Development**.

The first will cover all deliverables related to what I have learnt in this module and degree so far and how they have helped towards my placement year. This includes deliverables 1, 3 and 5.

The second will focus on my personal development and achievements throughout the year, as well as future plans for development. This includes deliverables 4, 6 and 7.

Between this chapter and my logbook I believe I have covered deliverable 2.

# UWE & Placement Alignment

## *How did Computer Security & Forensic Tools align with my placement at IBM?*

## Learning Outcomes

This section will cover the key learning outcomes from past modules, this module and my placement.

### Computer Security & Forensic Tools

Before university I had never looked into computer security or forensics. I was mainly interested in 3D modelling and web design, areas where you can easily see the results of your work. I chose the course because I realised it is a massively expanding industry with very few currently working in the field, so job prospects should look good on graduating. I also enjoy solving puzzles, so liked the idea of leaning how people had founds flaws in software, then developing ways to ensure it couldn’t be done again.

The three modules focused on security included Computer Crime and Digital Evidence, Computer & Network Security and Computer Security & Forensic Tools. The first was taught in the first year and focused more on law, although we gained experience using Forensic tools. The second focused largely on the theory behind how different security solutions work, while the third focused on network security and the different tools available.

Although my role at IBM consists of little security, I have done some testing of FIPS and SSL, I have done several side projects around web application security, mentioned later. I see this as a major area in computer security, but it was barely covered the above modules.

I believe CCDE focussed too heavily on preparing students for the courtroom, which wouldn’t apply to most students. I think it would be best as an optional final year module for those interested going into that area. I suggest a module more focused on the most common security and forensic issues, such as Session Management that over 80% of web applications are vulnerable[[1]](#footnote-2), to make students aware of realistic issues and what is required to prevent them. This way students can avoid such security issues in anything they develop so can apply the knowledge they learn.

CaNS was one of the most interesting subjects, but I believe focused too heavily on the theory of how security solutions work. I think the basics should be taught, but I don’t expect to ever repeat from heart the mathematics behind DES, just when and when not to use it. I think focusing more on implementation would be far more beneficial.

CSFT was the most useful as it was more practical. Although I have not needed to use the tools discussed in the topic, I think it is important to have a mental list of what software is available if ever required. I would suggest adding BURP SUITE to the list, as it contains many useful security tools.

From comparing my knowledge of Java to other IMP placement students, I feel they were taught a much broader scope of the language, while we focused largely on networking. I believe it would have been more beneficial to have had another programming module like Introduction to Program Development in the first year, perhaps replacing Analytical Modelling as it hasn’t applied, to not only help when on placement, but with second year programming modules as well.

All other modules I believe were helpful towards developing key programming and team working skills and the push towards developing on Linux can only be more stressed. I would suggest a module like CNOS push students to learn a scripting language for coursework such as Python, Ruby or JavaScript, as Java is becoming far less used with products moving to Software as a Service (SaaS), so running on the cloud. On that front IBM is way behind with competitors and is a massive push now.

### Professional Experience Module

Although I don’t believe the Professional Experience has taught me as much directly compared to other modules, it has helped me understand the theory of teamwork and IBM through my own research. It has also helped me set out meaningful goals to achieve throughout the year. All this has helped me get more out of the experience.

The concept of a study plan and reflective logbook is new to me. I found the study plan useful and have broken it down further into individual weeks. The first week I plan the structure of the LU, with each title and an explanatory sentence. With this in place I then assign a chapter for each remaining week, with a few days to a week contingency.

I plan to use this technique for my final year, as it breaks large reports into manageable tasks. I haven’t found the reflective logbook as helpful, largely because I feel most of its content is covered in the main report, so is often difficult to right while avoiding repetition. However, it is an idea I plan to try for my final year project, as it covers content that would not easily fit into the main report, but is certainly useful to keep documented.

The module has been a lot of work, especially trying to fit it in around work. However, having credits completed and the practice of writing reports will prove useful for my final year. Having goals to work towards has made the placement more meaningful, as I feel I am developing employability skills as well as technical skills.

### Professional Experience

I have included my Individual Development Plan at the end of this document. It covers the projects I have been involved in since joining IBM, goals I set myself, how I have achieved some of them, my giveback to the community and more. As I could write a full report on what I have learnt while at IBM, I will briefly sum up the key projects I have been a part of here.

**ISA DC** – 5 weeks

I worked on our product’s ISA DC tool which is used when an error with the product occurs. It collects relevant log files from a client’s computer and sends them to IBM to be analysed. This was my first project and required me to learn the programming language Ant myself with no training. I was able to meet the deadline and improve the product further than tasked, increasing speed by over 50%.

**RFE’s** – 12 Weeks

I worked on new features going directly into the latest version of the product, as well as fixing existing features. This taught me Javascript, JSPs, JUnit and Dojo, as well as increasing my knowledge of Java and the process of bug fixing.

**Accessibility** – 6 Weeks

I tested and fixed code over 100 accessibility defects in the product, which improved my knowledge of JavaScript, JSPs and Java.

**Logo Design** – 2 Weeks

I helped design a logo for an IBM community, being selected as the UK’s representative. This helped me to improve my design, Photoshop and Illustrator skills, while collaborating work with others around the world.

**SQA** – 3 Weeks

I have recently moved to SQA as a tester, so now know the process of testing code before it is released to the public. It is largely a step by step process of running through set commands and ensure nothing unexpected happens, while logging results.

**Software as a Service** – 3 Weeks

Lastly I have been part of the team driving the movement of our product onto the cloud. This has given me insight on how to start a large project from scratch and the amount of planning and customer discussion that is involved.

**Giveback**

For giving back to the community I came to UWE to give a presentation on the placement scheme. I have also improved my presentation skills by giving lectures at UCL and Cambridge University about web application security. I have also run similar events at IBM to improve employee knowledge in all branches around London.

I also volunteered at a primary school in Clapham for a couple of months, teaching the basics of programming via Lego Mindstorm kits, which helped my teaching and confidence skills.

Overall it has taught me a huge amount and given me many skills to apply in future projects. I wouldn’t expect to be able to take part in so many side projects with another company. It has also meant that I’ve been able to try things I never would have considered before, such as presenting and teaching, which has opened a lot of opportunities for the future.

## Placement Requirements

I believe I have met all placement requirements, as my work is relevant to my course, not just developing programming skills, but security skills as well. I have also completed this module and developed many more skills that can be applied to any role I take in the future. I have also been able to plan my final year project and developed skills through this module and at IBM that will help me complete it to a higher standard than if I hadn’t taken a placement year.

## How UWE helped preparation

I believe that although UWE helped prepared me in theory, there can be no real preparation for a placement until you are there, as you can’t know what project you will be involved in. I believe you learn more through application, rather than through theory, so having practical labs at UWE was the best preparation method.

During my placement I have received no official training, simply given tasks and left to work out the solution myself, or by asking others. I think how UWE most helped was by enforcing deadlines and improving my ability to research and learn.

When you start a new job you are unlikely to know the product you’re working with, or even the language, so you rely heavily on your ability to research and learn. This means you can adapt quickly to something new and begin real work quickly, rather than requiring months of training.

Lastly, I think it would be useful for students starting their second year to have more interaction with final year students who have completed their placement, as they could find it useful to know what would be expected of them after they complete the year, so could prepare in some way over the year. For example I wish I had spent more of the year learning Linux and how to program in a scripting language.

# Career Goals & Personal Development

## *Have I achieved all my goals and what new goals should I start working towards?*

## Orginal Goals

* Team Working – I planned to work closer with my team to produce better results.
* Self-Confidence – I planned to take a larger role in meetings to help improve this.
* Work on a major product – I wanted to have something to quote in the future.
* File a patent – As IBM gives this opportunity I wanted to take it up.
* Achieve a good result in my final year.
* Learn more about computer security – The first two years were focused more on forensics.
* Find a job in computer security after university.
* Gain a place back at IBM.
* Keep a log of achievements via the Professional Experience module.
* Understand and create meaningful goals for the year.

## Progress Made

I have worked closer with my team on certain projects, but have not been able to progress as much as I would like. I think this is still due to my team working remotely the majority of the time. Even with an after work social that had a large turnout, nobody from my team attended and none are signed up for the next office event. This is likely a lost cause so not something I am still actively pursuing.

I think my self-confidence has grown from what it was at the start of the placement. I never would have considered teaching at a school or leading presentations before, so having the opportunity to do so has really helped. As a result I have become more talkative in meetings, so I think I have achieved the original goal, but it something I would like to continue improving.

I have worked on a couple of IBM’s major products now, testing, fixing and developing new features. It has been good to work at each stage of the development lifecycle, especially now I am working on a new product that’s in its conception phase.

I have been unable to submit a patent yet, although I am having regular weekly meetings. It is difficult to come up with an idea that hasn’t already been patented, as so many patents already exist even though there are no matching products. We plan to submit a few ideas in the next few weeks that are similar to already existing ideas, but hopefully different enough to be granted.

I believe I am far more prepared for the final year now than I was before my placement, as my programming, security knowledge and planning skills have improved. I think by undertaking the security projects I have been able to achieve two goals, as I have learnt more on the subject, which in turn prepares me more for my final year.

I hope with the security lectures I have given and the work I have done so far, I would be able to get a job in security, or back with IBM, or even both, after graduating. I think with the activities I’ve been part of, my portfolio should look good compared to others who haven’t had the same opportunities.

This module, along with my IDP, has helped me log my accomplishments this year, and should be useful when compiling a CV in September. Lastly, I think the module has helped me plan and achieve meaningful goals, which now I have reviewed I can refocus and set new ones for the four months I have remaining on my contract.

## New Goals & Future Development

I have managed to accomplish some of my goals, but need to continue developing others and have a couple more to replace completed goals.

* Self-Confidence – Although I have taken major steps to improve this, it is still something I consider a weakness and will continue to develop by taking on any new opportunities that are presented to me, via giveback or other projects.
* I will continue working to file at least one patent before I end my placement. It would be great to be an inventor and would look good on a CV.
* Achieve a good result in my final year. I have improved my skills and knowledge through my placement, and have started working on my final year project. However, I realise it will be a lot of work and will take some adjustment moving back to education where I study in my own time, instead of a work environment with set hours and deadlines.
* Gain a place back at IBM on their graduate scheme, or with another company in a security role. Hopefully the work I have done so far will help with this, but I still have a performance review and another assessment centre to perform well in to be considered.
* Learn a scripting language. I think this would prove useful in the final year and afterwards, as it would make developing simple applications quicker and it is always good to know another language. I will most likely look into learning Python, as it is more commonly used than Ruby and easier to read and learn than Perl.

## Employability Skills

### Technical Skills

The following are technical skills that I believe help make me employable. I have improved them all since working at IBM, through developing code and attending numerous training sessions.

|  |  |  |
| --- | --- | --- |
| Skill | Previous Star Rating | Current Star Rating |
| Ant |  |  |
| Bash |  |  |
| Dojo |  |  |
| Java |  |  |
| Java Servlets |  |  |
| JavaScript |  |  |
| JSPs |  |  |
| JUnit |  |  |
| Omnibus |  |  |
| Python - Learning |  |  |
| Servlets |  |  |
| Unix |  |  |
| WARs |  |  |
|  |  |  |

### Soft Skills

Below are ‘Soft Skills’ that I believe I’ve developed since joining IBM.

* Communication and organizational skills from setting up and holding meetings with over 20 participants, with attendees in different locations in the world.
* Working in a team as part of an agile environment.
* Presentation skills from demoing work, to giving presentations at IBM and universities.
* Experience in the planning, development and testing stages of software development.
* Teaching skills with younger children and adults.

# Conclusion

I believe my placement at IBM has improved not only my technical skills, but my soft skills as well. This is because I’ve had the opportunity to develop code as well as hold presentations, lectures, teach primary school children, organise meetings and attend numerous education courses. There are still goals I want to achieve, so it has been useful to reassess my old goals and create new ones to work towards.

It has also been interesting to review my previous university work and see how I’ve used the knowledge. Although several subjects have not applied to me in my current role, I can see they could for other roles. This module as a whole has also been useful, as I can use a lot of the information I have collected towards applications for jobs after I graduate. It has also been interesting to learn some of the theory behind what happens at work.

**Word Count:** 3258

# Study Plan Calendar

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **UWE-FET UFCFE6-15-3 Professional Experience Module Calendar 2013/14 for** *[David Norton]* | | | | | |
| **UWE wk no**. | **Module wk. no.** | **Wk. comm.** | **Study Period (SP)** | **Learning Unit (LU) to be tackled** | **Notes**  **Milestones** |
| 9 | 1 | 23-Sep | Registration leeway period | |  |
| 10 | 2 | 30-Sep |
| 11 | 3 | 07-Oct | **SP1**  **(3 weeks)** |  | Due to course delays and tutors not being assigned, I will spend this time planning the required work **Ends Thu 24 Oct** |
| 12 | 4 | 14-Oct |
| 13 | 5 | 21-Oct |
| 14 | 6 | 28-Oct | **SP2**  **(3 weeks)** | *LU1* | I will complete LU1 and have it pre-marked by my tutor to avoid major mistakes, as I know I have time free over this time. **Ends Thu 14 Nov** |
| 15 | 7 | 04-Nov |
| 16 | 8 | 11-Nov |
| 17 | 9 | 18-Nov | **SP3**  **(3 weeks)** |  | I will likely be too busy with work this SP, but I will plan for LU5 and make contact for collaborative work. **Ends Thu 05 Dec** |
| 18 | 10 | 25-Nov |
| 19 | 11 | 02-Dec |
| 20 | 12 | 09-Dec | **SP4**  **(3 term weeks + 3 optional vacation weeks)** | *LU5* | This SP gives twice the time of the others, so it gives me the best advantage to complete another LU. I have chosen LU5, as it gives me more time to get the collaborative work needed for LU6. **Ends Thu 16 Jan** |
| 21 | UWE vacation | 16-Dec |
| 22 | 23-Dec |
| 23 | 30-Dec |
| 24 | 13 | 06-Jan |
| 25 | 14 | 13-Jan |
| 26 | 15 | 20-Jan | **SP5**  **(3 weeks)** |  | I will keep this SP free for a midway review, to ensure I am keeping up with my targets and deadlines, and adjust my plans if work isn’t being completed as expected .E**nds Thu 06 Feb** |
| 27 | 16 | 27-Jan |
| 28 | 17 | 03-Feb |
| 39 | 18 | 10-Feb | **SP6**  **(3 weeks)** | *LU6* | I will have had plenty of time to get the collaborative work by this SP, so is a good time to complete SP7. **Ends Thu 27 Feb** |
| 30 | 19 | 18-Feb |
| 31 | 20 | 24-Feb |
| 32 | 21 | 03-Mar | **SP7**  **(3 weeks)** |  | I will leave this SP free to plan as I have a holiday booked in this time and don’t want conflictions. **Ends** **Thu 20 Mar** |
| 33 | 22 | 10-Mar |
| 34 | 23 | 17-Mar |
| 35 | 24 | 24-Mar | **SP8**  **(3 weeks)** | *LU9* | Iwill complete the final LU in this SP, as it gives me full advantage of the time made available in the year. **Final deadline Thu 10 Apr 2pm** |
| 36 | 25 | 31-Mar |
| 37 | 26 | 07-Apr |

# Reflective Logbook

|  |  |  |
| --- | --- | --- |
| **UWE-FET UFCFE6-15-3 Professional Experience 2013-14 Reflective Logbook template** | | |
| **PROLUGUE** | **Student name**: David Norton | **SP #:** SP8 |
| **Employer:** IBM | **Date ending:** 7th April |
| **Tutor name:** Stewart Green | **LU #:** LU9 |
| **Overview**: I have covered Final Analysis And Review in this final report. I can review what I have covered in the previous learning units and see the progress I’ve made since LU1. I can also go through the goals I set at the beginning of this module, create a new plan for those I haven’t completed and set new goals based on my experiences so far. | |
| **PLAN** | My plan for this LU is to first break down the work into chapters and headings and see exactly what I am expected to write. I can use all the pages on blackboard to work exactly what I need to cover, then order the deliverables so they flow correctly in the report.  I can then review my previous learning units and find the goals I set for myself and read my reflection statements to see how to improve this learning unit. I will also go through the feedback I have been given as well.  I will review my old modules to see how they have helped me with my placement. I will also use my Individual Development plan to cover the work I have done and the skills I have developed. | |
| **ACTION** | I created my report template and added brief descriptions on what to cover under each, so I wouldn’t forget when I got back to them. I also planned a new referencing system, but as I only had one reference in the report it didn’t seem worth using so I decided on a footnote to make referencing quicker and easier.  I managed to type out the bulk of the content early on, but then became busy with planning another security ethical hacking day for IBM’s Vice President of Cloud and Smarter Infrastructure, so had a couple of weeks gap before I had the time to return to it.  I then reworked the university section and was able to come up with a couple of new goals over the weeks I planning the event. Although I had less time to do the work, it was helpful coming back to it with a fresh view and being able to make improvements. I was also able to spend more time reviewing my first and second year work and seeing what I had actually applied during the year.  I also reworked the technical skill section from a list to a before/after star rating table and ended with a conclusion summing everything up. | |
| **REVIEW** | Comparing this learning unit to previous ones, I think I kept my report structure a lot more closely related to the requirements listed on Blackboard. I think this is because I planned in thoroughly in the first section of the report.  I found reviewing back on previous modules hard, as there was a lot of points I wanted to make, but it would cause me to go way over the word limit. I didn’t want to stick to just three though, as I didn’t think doing so would give a good enough overview of the course. I’m not sure if I would have been better covering less modules in more detail and covering specifics, or giving the suggestions I did on what I personally would have found more useful.  I could also have added more detail to the projects I have worked on and the skills that I learnt, but because of the number I have been part of I wasn’t able to go into the detail I wanted. | |
| **REFLECTION** | There are techniques in this module that I plan on using in the future, such as the logbook and study plan. I will also ensure to keep me IDP up to date as well. I can now use all of this information to start creating a new CV for applying back to IBM and for other companies.  It has been good experience trying out different ways of referencing, so I can ensure I do it correctly in my final year project.  It has also been very useful to set myself new goals, as it makes my placement feel more meaningful and more of a learning experience than a regular job. I hope to lean at least the basics of Python before returning back to university and getting some more work done towards my final year project. I’m also spending the free time I have to try getting a patent submitted. | |
| **EPILOGUE** | Since the first learning unit I have become much more confident and work better as part of a team. I’ve also taken on more roles, helping run a Lego robot challenge event with nine schools, running security events, designing a logo and being a key member of moving OMNIbus to the cloud.  This LU has helped me review my goals and see what I have achieved not only on my placement, but during my time at university as well. This has helped me confirm my choices for my final year modules, Advanced Databases and Cryptography, are the correct ones, as I believe I should learn more practical skills that I can apply than in the other options.  I think everything covered shows how important the placement year is for personal development and hopefully everything I’ve learnt this year will help me achieve the grade I want next year. It has also been a good experience to work for a company like IBM, and will make a good comparison if I join a different company in the future. | |

# Individual Development Plan

#### This document is intended to be a complete record of the Placement Student's year at IBM. It will form the basis for discussion at each meeting between the IT and the PDM and will be used as a key input to the PDM's ongoing assessment of the IT's overall performance.

#### It is the responsibility of the IT to keep this record up to date.

## Department (Project) Objectives

### Background

#### In this section, describe the function of your department, what it does, where it fits in and what is the basic purpose of your role.

I work in the **Web GUI** department of the **Tivoli Netcool OMNIbus** product**. Tivoli** Software is a brand within IBM’s Cloud & Smarter Infrastructure division.

OMNIbus is a near real-time event management package that is used to monitor a business's infrastructure, such as data centers and networks. The software provides full management and automation to help the user maintain continuous uptime of business services and applications.

Web GUI is a front end display of OMNIbus that processes network events from one or more data sources and presents data in various graphical formats. It extends the capabilities of OMNIbus by being more configurable and remotely accessible through the Internet.

My role is to add additional functionality to Web GUI via customer suggestions and other projects, as well as defect fixing for issues such as accessibility and testing as part of SQA. I have also taken on various other tasks, including usability tests and helping develop a SaaS offering.

### Scope of Work

#### In this section, describe your specific responsibilities, the tasks you are expected to perform on a daily, weekly, monthly (etc) basis. This section is often referred to as a 'Terms of Reference' or 'Job Description'. Include details on any specific priorities as agreed with your Task Manager.

**ISA DC**

I have taken lead of the ISA DC tool development for Web GUI. This is a web application tool that clients use when they have a problem with Web GUI and need to send relevant files for L2 to analyse. Rather than a member of L2 having to talk through what files the client needs to zip up and send manually over the phone, the client now just has to fill in a few dialog boxes and click some buttons and the ISA DC tool will collect the correct files and send them to IBM automatically.

Not only have I developed a new collector for the tool, but I improved upon the current collectors. I also commented all the code thoroughly, vastly improving understandability of the code for future development. I also wrote a detailed Wiki on a step by step level so anyone who has to develop the tool in the future so have a much easier time.

Doing this required regular meetings with my mentor, as well as with the L2 team and other members of the Web GUI team. I also run demos to show how the tool works and request ideas for improvements.

**RFE**

I have been set to help develop solutions for the Request for Enhancement community. Clients use RFE's to submit requests for improvements for IBM software. I am currently developing a solution to one of the major requests made by multiple clients to improve the Web GUI interface.

This requires regular meetings with my mentor to discuss progression as well as with other members of the Web GUI team to discuss the best method of implementation. I have also had to help run usability tests to ensure the completed work matches what the client wants and that everyone is happy with the end result.

My RFE's involved adding icons to the Event Viewer on Web GUI in a configurable way, so further icons can be easily added in the future. I also added Journal icons to the Event Viewer, so that users no longer to have to traverse several menus for each event to see this information.

**Accessibility**

I performed several tests on Web GUI using a screen reader called JAWS and Rational Policy Tester to see how accessible it was for disabled users. I created a list of the defects found along with other members in my team. Over a 2 week period I fixed over 125 defects to ensure the sections of the web application I covered were accessible. I did this while working in a small team with daily scrums, over the set period we were able to resolve all accessibility defects.

**SQA**

I spent a week completing five tests for OMNIbus core security, then moved onto running tests for Web GUI, ensuring all tests werew passed before Open-Beta release.

**SaaS**

I have set up numerous meetings for Olivier Bonnet to discuss with members of other teams how we should implementing Software as a Service for Tivoli products. I have done my own research on how teams have implemented SaaS on their products and the design and implementation standards. At the end of March I became part of an 8 person team tackling SaaS architecture and development activities.

### Reporting Structure

#### In this section, describe who you report to, your task manager, team leader and any other 'clients' you work closely with.

My task manager is Matthew Pritchard. We have a team 1st Line Manager Meeting each Monday to review what everyone has done in the last week.

My mentor is Nickolas Tang. I have regular meetings with my mentor on Mondays and Wednesdays and Fridays.

I have meetings with Shannon Clements and Stanford Madriaga, both L2, when developing the ISA DC tool.

I am in contact with Olivier Bonnet and Kristian Stewart in regards to the SaaS project.

## Individual Development Plan

#### Use this section to track your goals and aspirations throughout the year. Long term goals should include (however vague an idea you currently have) what you want to do after you finish university, as well as any even-more-long-term goals you might have.

#### Use the near-term goals section to map out things that will help you achieve your long term goals, or generally enrich your placement year. If you don't know what to write in here, your PDM is there to help!

### Career Aspirations or long term goals

As my University course focuses on computer security and forensics, I would like to find a position within that area of expertise.

I also have a keen interest in web design and would like an opportunity to learn how to develop Andriod apps. Ideally I could combine my knowledge of security in with these technological areas.

I am also keen to achieve the title of 'Master Inventor' in the future if I get a place back with IBM.

### Near-term goals that address your current job assignments and career aspirations

I would like to improve my Java skills before returning to university, as it would help me achieve higher grades in my coursework. I am currently working through the book OCA Java SE 7 Associate Study Guide each week as part of a group.

I have also set up meetings each week to practice the sample exam questions connected to the book. If I can get the opportunity to take this exam before I leave IBM at the end of the year that would be great.

To develop my security skills while on placement I have signed up to be on IBM's Ethical hacking team. There are several workshops planned throughout the year (I have attended UCL and Cambridge) to teach the main security weaknesses that are a concern in the market today. It involves a Capture the Flag tournament, where teams solve security puzzles that teach how to write and audit secure code.

I also took lead on hosting the event at Southbank, where I gave a 30min presentation and guided people through the problems. I have also discussed running a similar session at my university with the head of my module when I return to university.

I am determined to have a patent filed by the end of the year and have joined a patent group in order to achieve this. I have contributed several ideas that are currently being discussed to put forward.

I am also interested in setting up my own giveback along with others at the office as the majority of opportunities are based around Hursley, with little around Southbank. I have completed a program teaching basic programming weekly with Lego Mindstorm kits at a local school, and helped run a contest between the Lambeth primary schools at the end. I am also helping to plan Raspberry Pi lessons for another local school later in 2014.

### Learning activities

|  |  |  |  |
| --- | --- | --- | --- |
| Name of Activity | Dates of Activity | Contact/Link | Summary of learning |
| JSP Tutorial | 30/07/13 | <http://www.jsptut.com/> | Improving JSP knowledge. |
| Digital IBMer: Responsible, Secure Computing | 30/07/13 | - | General IBM security knowledge. |
| OCA Java SE 7 Associate Study Guide Meetings | Weekly 31/07/13 - \* | Nick Banyard | Improve Java knowledge. |
| Think Fridays | Monthly 06/09/13 - \* | - | Improve technical & customer facing knowledge on various subjects. |
| Introduction to Unix | 03/10/13 | - | Learning basic concepts of Unix. |
| IBM's Ethical hacking team | 30/10/13 | Jonathan Settle | Improving security skills. |
| Ethical Hacking Workshop | 10/03/14 | Myself | Improving security skills. |
| IBM Design | 2014 | - | I have taken an interest in the community and regularly take notes for future reference and join in with discussions. |

### Specific Skills developed throughout the year

#### In this section, document specific technical and business skills developed. Discuss these with your PDM. For example, you could list new technologies, coding languages or soft-skills-related techniques that you have picked up.

**Technical Skills**

* Ant
* Bash
* Dojo
* Java
* Java Servlets
* Javascript
* JSPs
* Omnibus
* Servlets
* Unix
* WARs

**Soft Skills**

* Motivation to complete a projects and go a step further than required, ass done in my work on the ISA tool.
* Communication and organizational skills from setting up and holding meetings with people in different locations in the world.
* Time management skills from fitting in multiple meetings, Think 40, Giveback and regular work each day.
* Problem Solving from approaching projects with no background knowledge.
* How to work under a set deadline.
* Teamworking skills from working in a team to complete and improve work.
* Flexibility from switching between projects and adapting to work with a team with members in different locations/countries.
* Presentation skills from demoing work and giving a presentation at my university.
* Ability to work under pressure with multiple projects with strict deadlines.

## Achievement Record

#### In this section, document specific achievements that you would like to bring to your PDM's attention. e.g. Awards, invitations to events, presentations to managers/execs, education you've delivered to others, patents etc.

I was invited to the IBM's Ethical hacking team because of my security knowledge and have discussed with the head of my module at university about holding sessions there when I return for my final year.

I have organised and lead an Ethical Hacking workshop in the office, giving a 30min presentation, for everyone to test and improve their security skills.

I have held a presentation at my university about IBM's placement scheme and discussed with staff ways to improve what the placement team discuss with students.

I was selected to be the UK's representative for design of the C&SI Vitality logo, and had two of my designs selected for the top 10.

## Giveback Record

|  |  |  |
| --- | --- | --- |
| Name of Activity | Dates | Any notes... |
| [Lego Robot Workshop](https://w3-connections.ibm.com/wikis/home?lang=en-us#%21/wiki/IBM%20Robo%20Challenge%202014%20-%20Macaulay%20C%20of%20E%20Primary%20School) | 05/12/2013 - 20/03/2014 [40 hours] | Teaching primary school children the basics of programming via Mindstorm robots. |
| UWE Placement Presentation | 10/12/2013 13:00- 15:00 [2 hours] | Presenting IBM's placement program to students & discussing experience afterwards. |
| IBM's Ethical hacking team | Various Dates [19 hours] | Held events at UCL & Cambridge teaching ethical hacking. |

## Feedback

#### If you receive any emails or Sametime messages from clients or anyone you've worked with, please paste them in here (along with a bit of context). This could be a colleague or someone you've worked with on a Giveback project. Having it here makes sure that your PDM and Task Manager know about it (and hopefully feels a bit less awkward than bringing it up in conversation!)

Colleen Haffrey regarding the Lego Robo Challenge Giveback:

*"Many thanks to all of you for the great job you did today at Ashburnham Community School. The children very much enjoyed the lego building and programming activities and the staff at the school were very appreciative."*

Andy Roberts regarding the Ethical Hacking day I lead in Southbank:

*"I just wanted to say thank you for putting the hack day together. It was great fun, and I learned a lot too!"*

Hollie Sherry regarding the Lego Robo Challenge Giveback:

*"I just wanted to say thank you so much to all of you who made Robo Challenge such a great success on Saturday! The kids and the teachers really got alot out of the day and there's been some great feedback."*

1. Cenzic. (2014) *Application Vulnerability Trends Report* [Online]. Available from: <http://www.cenzic.com/downloads/Cenzic_Vulnerability_Report_2014.pdf> [Accessed 20 March 2014]. () [↑](#footnote-ref-2)