# Work Placement Plan

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### Company Details

I am currently undertaking work experience at Continuum Commerce Solutions (CCS) which is located in the Kerry Technology Park in Tralee.

The nature of the business is E-Commerce and it mainly focuses on dynamic currency conversion and multicurrency pricing services, these services generate extra revenue from existing sales without any price increases. Continuum caters for companies in numerous areas of the travel sector such as airlines, car hire and package holidays.

### A Brief History of Continuum Commerce Solutions

The first DCC (Dynamic currency conversion) service for online sales was implemented by Continuum in 2005. They also provided the world’s first DCC solution for online gaming account top-ups. Some of the companies Continuum partners with are Visa, Amadeus to name a few to deliver solutions to customers.

### My Duties and Responsibilities

I am expected to be punctual and to be present from 8am to 4pm. I must conduct myself in an orderly conduct and protect the privacy of the company and not disclose any sensitive information which would be harmful to the company. I must be alert to social engineering and must adhere to a very strict security strategy. I am not permitted to download any programs without going through tech support in order to get software installed safely.

### Placement Details & Relation to College Material

Fortunately Continuum have an intensive work placement schedule in place for me and I should benefit tremendously from their approach. I will have numerous two hour shadowing sessions with the developers to get an understanding of the everyday work they carry out and get a valuable insight into the logic they apply to solving problems. For my work placement project I have chosen form a range of new technologies provided by Continuum, I chose F# a strongly typed functional programming language. This is a completely different way of programming form the objet orientated way I have been thought in college for the last two and half years. Continuum are starting to use functional programming concepts in there software so this will be good exposer for ma as well as having relatively the same experience as all the junior developers in this language. I have also chose ZeroMQ a brokerless messaging system. ZeroMQ is designed for speedy routing of data over a network. I have a chose a database platform called Redis for persisting data, this is a NoSQL database. Again Redis is extremely fast as it stores its data in cache for quick access. Speed is the main attribute with all three technologies. I have chosen all three because the financial sector relies upon data being transferred quickly.

At the beginning of week seven I supposed to take part in a group project with two other students, but as I am the currently the only intern it is yet to be decided what sort of project I am going to undertake. It has been muted that it will be tailored towards the work Continuum undertake to give me a greater insight into the business logic at Continuum.

I am expected to do the same daily tasks as the other developers, such as standing up for the daily progress meeting each morning to participating in Dev-training on Thursday evenings or the book club on Tuesdays.

I have also been asked to learn the source control that is used in the company, this source control tool is Git. Although different to Team Foundation Server it has the same concepts of saving to a remote repository and pulling down a version of that repository to continue working on it. Visual Studio is another tool I am expected to use, luckily I spent the last semester coding in C# in half my subjects so I believe I have a good understanding of the fundamentals and the syntax. I believe these two powerful tools (Visual Studio & Git) will feature predominantly in my projects along with a database backend in which I have experience in working with through college modules. I am being asked to move away from the relational databases we are used to and to implement a NoSQL database which will be strange considering the amount of time I have spent working with SQL throughout college.

### My Goals

Firstly I hope to finish my individual projects in both 6 week sections to the best of my abaility. Secondly I want to make a great impression with the staff of Continuum and make some valuable contacts within the software community. I want to adopt coding standards that are in place in this company and improve my all round development skills.

David Murphy and Thomas O Connell have been assigned as my mentors, they were both in the same position as me last year, I would hope to learn a lot form them and their experiences last year. F# is a technology that Continuum’s architect Billy Stack is really interested in, I have managed to ask him a few questions about this technology. He was very insightful and I appreciated his valuable time. Continuum has provided me with an endless array of eBooks and hardback books from their extensive library..

My plan to achieve these goals is to first research ZeroMQ and F# thoroughly before implementing my solution. My mentors tell me to work in small chunks, starting with the smallest possible working application and then adding to this to build up the overall application. They tell me to learn to walk before I can run.