**Introduction**

The Project:

This project is carried out as part of the COMP204P Systems Engineering 1 module. The team had been assigned a client, ATOS, to work with. The aim of the project is to build a financial portal to match up small and medium enterprises (SMEs) with suitable credit providers.

The Team:

The team consists of Bill Ma and Heidi Tan, two second-year Computer Science students at UCL.

Specific Features:

* SMEs and credit providers sign up on the portal as users
* SMEs have to answer a set of questions when they sign up for an account with the portal that will help to narrow their matches when searching for a suitable credit provider and vice versa for credit providers
* SMEs will be able to search for suitable credit providers based on the criteria they can enter in the search engine and vice versa for credit providers
* SMEs will each have their own page to introduce their company and the service/ product they are pitching to the credit providers
* Credit providers will each have their own page to introduce their company and background
* There will be a platform provided by the portal for the SMEs and credit providers to communicate with each other
* The contact details of the SMEs and credit providers can be found on their respective webpages

**Background and Context**

What is the system to be designed is meant to do and in what context:

In recent years, the UK alternative finance market has grown rapidly, leaping from £666 million in 2013 to £1.74 billion in 2014. SMEs, entrepreneurs, charities and other organisations that previously faced difficulties obtaining financing from conventional credit providers like banks are now obtaining funding easier as they look to other sources of finance such as P2P business lending, invoice trading, equity-based crowdfunding and so on. This is beneficial as the growth of the alternative finance market contributes to UK’s economy.

However, even with such evident progress, more can be done to connect SMEs to potential investors faster and easier. We hope to come up with a financial portal to bridge the gap between these SMEs and people with the financial ability to fund them. We plan to focus on SMEs that have been established less than 5 years ago and have a turnover less than £10 million a year first. Our portal aims to help an SME that needs financing to work out where to get it. SMEs will be able to sign up for an account on the portal and use their webpage in the portal to pitch their product or service virtually. The portal will serve as a platform to connect with potential investors where they can exchange further details if interested to kickstart funding talks. In addition, the portal will match SMEs to different alternative finance sources based on a range of information parameters such as the object of borrowing, the terms of borrowing, the nature of the relationship sought with the lender, the risk level of the business activity and so on. All these will help to streamline the search process and match SMEs up with investors most suitable to meet their needs and vice versa.

Initial problem statement: To help advance the growth of UK’s economy, the alternative finance market should be further developed to enable SMEs to easily obtain funding. However, there are currently very few platforms for SMEs to find sources of alternative finance easily and effectively, without the representatives of these SMEs having to spend time at multiple networking events to make contacts. Hence, building an online financial portal that matches SMEs with suitable credit providers will save time as well as collate the SMEs requiring financial funding and credit providers in a single database that is easily accessible for both parties.

Information about the client:

Atos is a global digital services corporation that provides Consulting & Systems Integration services, Managed Services & BPO, Cloud operations, Big Data & Cyber-security solutions, as well as transactional services through Worldline, the European leader in the payments and transactional services industry. Using their expertise in the technology sector, the company has clients from all over the world across various business sectors such as defense, financial services, health, manufacturing, media, utilities, public sector, retail, telecommunications and transportation.

Specific challenges to be met:

1. Learning new languages (eg. Ruby on Rails) that are necessary to build the financial portal
2. Building a search engine that will filter results according to the criteria the user chooses
3. Having a database to store the users’ account details
4. Building an interface and framework for users to create their company profile on their own webpage
5. Integrating a communication platform with the portal

What is needed for the project to be a success:

* Clear communication between the client and the team
* Sufficient technical knowledge in order to build the financial portal and all its features successfully
* Detailed documentation of the progress of the project
* A well-thought out project timeline that will be strictly followed to ensure that the project is progressing on time