**Background and Analysis**

**Introduction**

The business environment that this project will fit into is that of online education. The final product’s ultimate goal is to provide students with the ability to track their progress, as well as granting teaching staff the ability to track their student’s progress also. There are many applications, whether web-based or mobile-based, or both, that fit into this business model, each offering a good source of inspiration for the project at hand.

Below is a brief summary of three different systems that are similar to the system we are designing:

**Sololearn**

Sololearn is an educational application that focuses on numerous programming languages and techniques for the developing programmer. It is both web-based and mobile-based to allow users to easily engage with the tool wherever they may be. The application allows users to create an account with their email address and from then on tracks the users progress in each of the many courses offered, so the user can easily pick up where they left off or revise what they have already learned. Visual indicators clearly show the user exactly how much progress they are making in each individual course. A dashboard view of all courses undertaken by the user displays each course in a circular icon with a progress bar wrapped around it. Navigating into one of the courses, the user is then met with a page displaying icons representing sections of that particular course, with each icon a certain color to display whether or not it is completed or not.

This type of application satisfies at least some of the high-level requirements of our project. Keeping track of learning progress is the main goal. An application like this, updated to allow others (staff or admin) to view your account, seems very suitable for our projects needs. Slight differences would be that instead of users (students, staff) creating their own accounts, an admin would create the accounts and inform the users of their login details.

**edX**

EdX is an educational platform founded by Harvard and MIT. It works much like a university with lectures and other instructional material, with slides and notes to browse. Once a user has created an account, they will have access to the material and an option to pay for a certificate. A user will go through the course sequentially with a basic ‘next’ link to navigate to the next piece of learning material, while the previous icon representing the material just looked at will turn green with a tick to show completed. The material is designed to a schedule and separated into week 0 – week n, to help keep the student on track. Also, an open forum for discussion, FAQs, and blogs are available for the student, to help keep them engaged and to help them with their learning.

Work is submitted to the teaching staff at edX and the students progress is tracked. It would be reasonable to assume that there would be accounts available for students, staff and admin given the size and nature of the application, making it an ideal example for our project.

This application is available as a website and as a mobile app.

**Stackskills**

Similar to the above examples, StackSkills offers users to create an account and enrole on numerous courses as and when desired with visual cues on sections highlighting when completed. Unlike edX, the courses are not monitored, work is not submitted to be marked, and each course can be completed in the users own time with no time limit and no certification. Also, there are no avenues for discussion or FAQs, and no engagement with anybody. StackSkills courses are designed to be undertaken in ones own time, traffic of information going only one way, with no interaction or feedback from teaching staff.