Final Year Computer Science Project - Outline Document

Agile Modelling of an Agile Development Project

Agile modelling is a process used by software teams to complete projects. This technique has many advantages for small to medium-sized projects. The agile modelling approach contains iterative cycles consisting of design, development, testing, and customer feedback phases. Each cycle is completed in a short sprint with a focus on one element of the project at a time.

This approach to a project ensures the customer has input into the development and allows for requirement changes during cycles. Regular meetings with the software engineering team allow for this customer involvement. The short sprints associated with each cycle allow for the project to be completed efficiently. Due to the involvement of the customer in the project's progress, good communication is one of the advantages of using an agile approach to a project. Less time is wasted throughout development as a result of the customer association which allows for any adjustments early into the cycles.

The project assigned is to follow a modern agile model method (SCRUM) and develop a web application in cycles and sprints using the supervisor as a customer to get feedback and requirement adjustments to mirror an industry project. The web application will be a search of Twitter using their API (Application Programming Interface) and display tweets containing the searched term. Throughout the cycles of the project, feedback from the customer during regular meetings will be considered and implemented to add or change requirements for the application to satisfy the customers’ demands.

To complete this project, short cycles will focus on one aspect of the web application at a time. The initial cycle will include a basic web application design using a wireframe and proposed to the customer for feedback. Other cycles will include creating the web application, implementing the Twitter API, displaying tweets with the searched term to the user, and other functionalities that the customer may wish to add during the process. Each of the cycles will be developed in short sprints and proposed to the customer for feedback. Additionally, in-depth research will also be carried out to understand how agile modelling can be applied to projects in the working industry and how it differs from other approaches. Lastly, a final report will be created containing all relevant details about how the project was completed using an agile method.