

# End User Security Training for The I.T. Team

**Nick Lange**  
(Student)  
Department of Business and  
Digital Technologies  
[nick-lange@outlook.com](mailto:nick-lange@outlook.com)

**Ed Correia**  
(Academic Supervisor)  
Department of Business and  
Digital Technologies  
[eddie.correia@ara.ac.nz](mailto:eddie.correia@ara.ac.nz)

**Joe Fourie**  
(Industry Supervisor)  
The I.T. Team  
[joe.fourie@theitteam.co.nz](mailto:joe.fourie@theitteam.co.nz)

## ABSTRACT

The weakest link in a company's cybersecurity defense is the employee. No matter how strong your firewalls are or how secure your data is kept, breaches are always a risk due to human error. Training on end user security is essential in this technology driven world. To a company like the I.T. Team, servicing hundreds of businesses around the country, security is of the utmost importance. Currently, distributing security training programmes is difficult and mainly utilizes outsourced material. This project aimed to create a training programme unique to the I.T. Team that educated the end user on their own best security practices, in a stylistic episodic format, matching The I.T. Teams professionalism, and vibrant appearance. The work utilized a Scrum based methodology to create a 4-episode training programme for users to educate them on common security information and using Microsoft platforms.

**Keywords:** Training, Microsoft, End-User Security, Scrum, ClipTraining

## 1. INTRODUCTION

The I.T. Team is an I.T Service Provider, established in 2004, that provides 24/7 support nationwide, as well as several locations across the world to over 200 managed customers.

The I.T Team currently utilizes an educational training platform called ClipTraining to educate customers on I.T related subjects.

ClipTraining is a e-learning suite that features a range of video-based lessons for training and instruction on technologies all over the world, with a strong focus on Microsoft 365. ClipTraining's extensive library consists of short, task-based training videos, hosted on popular streaming websites, or on the platform itself. ClipTraining's learning strategies boast boosted productivity, improved skill retention, and reducing of helpdesk calls.

Ara Institute of Canterbury is the largest vocational training instate in the South Island.

This paper defines the processes and methodologies behind the project between The IT. Team and Ara Institute, Department of Business and Digital Technology.

## 2. PROJECT DETAILS

### The Problem

A common problem and concern for The I.T. Team is end user security for their customers. Currently, there is no module for end user security learning on their provided ClipTraining, and it is unlikely the customers would opt to pay extra to have access to the ClipTraining created content.

### The Aim

The I.T. Team aimed to create their own end user security learning module to educate customers on effective security policies and provide interactive instructions to save manpower on directing users over the phone.

### The Scope

This project sought to create a sharp end user security tutorial to be hosted on YouTube and distributed via ClipTraining at no extra cost to the customer.

### The Deliverables

- Learning to use ClipTraining content creator.
- Designing and creating a functional, high standard educational course on end user security presented on ClipTraining software.
- Utilizing software such a PowerPoint for presentation and video software for course content.
- Creating quizzes and exams for marked results for users.

## 3. PROCESS

### Project Management

This project followed a standard 4-step project lifecycle of Initiation, Planning, Execution, and Closure (Coursera, 2022).

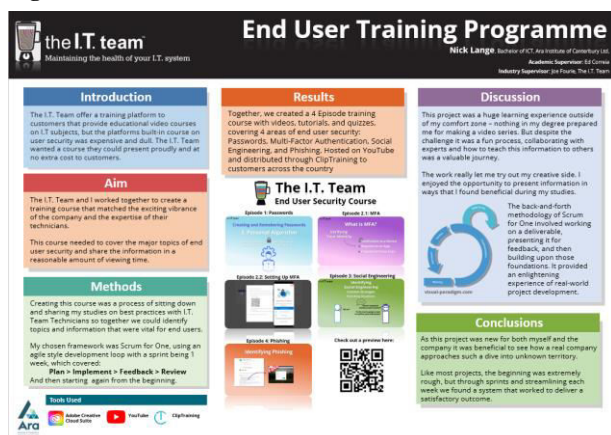
#### Initiation Phase

- Identifying project, problems and aims

#### Planning phase

- Defining goals and scope
- Identifying objectives and risks

Figure 1. Poster



## Execution Phase

- Beginning project work
- Maintaining production cycle of Implement, Review, Reflect, Improve

## Closure Phase

- Analyze project results
- Project report
- Finalize project

## Risk Management

Risks were identified and managed through integrating a risk rating system to score risks and apply relevant countermeasures. Designed using a scoring system matrix TPM (TPM, n.d.), risks were calculated off scoring Impact and Likelihood and delegating the sum the Risk Factor. These scores applied priority on assessing and mitigating the risk. (Bonnie, 2021)

## Quality Assurance

Quality was assured through adopting Virginia Tech's Quality Assurance Framework (Virginia Tech, n.d.), a system of identifying standards of quality and outlining methods of achieving them.

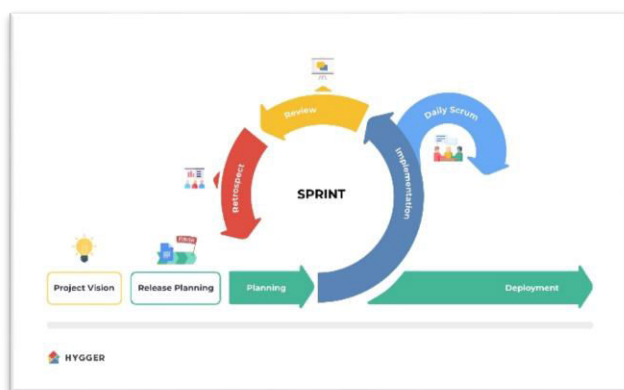
## Methodology

The work in this project followed a modified Scrum framework built for one person projects. With Joe acting as my scrum master, we developed a system of periodic feedback-based sprint reviews and streamlined future work iterations from what we learnt.

## Scrum for One

Scrum is a popular agile project management methodology that is used by teams to get work done at a fast pace, with minimal wasted time. Scrum utilizes short bursts of works, referred to as sprints, to tackle projects incrementally (Keita, 2021). Each sprint consists of planning, executing, and reviewing. A sprint learns lessons from the previous, and as the project progresses sprints become more optimized (Wax, n.d.).

Figure 2. Scrum for One Cycle



## Sprint Reviews

The foundation of the project was reviewing each sprint, consisting of a week, to reflect on the positive and negatives of the previous sprint to improve the next. Sprints begun as one week with a sprint review initiated at the end, but halfway into the project, reviews were increased to twice a week. Sprints consisted of constructive feedback from the supervisor

and defining goals for the next week. As well as time to reflect on improvements we can make to the process.

## Project Delivery

The programme created for this project is a 4-episode training course with quizzes and gamification scores hosted on the e-learning platform ClipTraining.

This course was created by sitting down with technicians of The I.T. Team and building a foundation of their knowledge to share in educational videos. It was important that the information shared in the video would be the same information an on-site technician would share.

Once data gathering was complete, videos were created utilizing Adobe Premiere Pro and Adobe After Effects. Videos would go through scripting, drafting, final edits, and reviews.

Meetings occurred with technicians twice a week to review completed work and instruct on the upcoming week.

## Outcomes

The outcomes in this project are divided between personal and industry:

### Personal

- Utilized project frameworks and methodologies
- Developed new skills to overcome dynamic challenges
- Grew strong, professional relationships
- Engaged in constructive discussion and planning

### Industry

- Created an educational video series
- Documented company unique best practices
- Outlined project report from beginning to closing

## Conclusion

This project demonstrated the value of frameworks to provide structure and methods when attempting the unknown. The work involved was new to all parties and only managed to progress through constructive reflection and identifying what is working and what isn't - finally reaching the goal through constant improvement.

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