

Category 4 Resource Development

SafetyOntheLine

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Abstract

SafetyOntheLine is a project that aims to educate students about the dangers in cyberspace and inculcate good lifelong habits to stay safe online. In our current world, the internet is heavily relied upon and used by many. This can be seen as our school uses online platforms for teaching, disseminating information etc. With our increased reliance on the internet, online safety is extremely important. We provide a comprehensive and interactive online package and we hope that the students will learn useful information about staying safe online while also having fun. We aim to prevent students from falling prey to online scams, cyber attacks and more. We also have physical resources such as posters pasted around the school to provide further outreach and awareness to our target audience, Hwa Chong Students. Our resources are interactive, user-friendly and easily accessible.

1 Introduction

1.1 Rationale

As technology develops, we are spending more time and are becoming increasingly reliant on the internet. It is now an integral part of life with many of us using it for work and entertainment. A lot of services and information can be accessed online and safeguarding those information is extremely important. While there is a lot of information on the web, most students do not even feel the importance of online safety and can't be bothered to read up and protect themselves, according to research and surveying we have done. Therefore, we have created a user-friendly and interesting online package consisting of multiple resources to appeal to the students' likings. We hope to equip students with the knowledge of dangers online and how to stay safe.

1.2 Objective

The objectives of our project was to:

1. Raise awareness on the dangers online
2. Educate the students and how to protect themselves from online threats

- Inculcate good online habits in students so they can make accurate decisions online

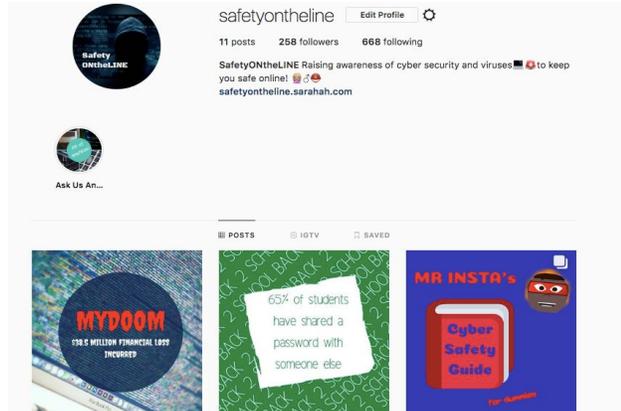
1.3 Target Audience

The target audience for this project comprises secondary school students from Hwa Chong Institution.

1.4 Resources

The resources we created consist of a website containing useful tips and information, a game to allow students to assess their ability to stay safe online, videos showing some real life scenario. The topics we covered in our package include malware and viruses, dangers of putting information online as well as the importance and how to create strong passwords. In order to increase awareness for our product, we created an instagram account to reach out to more people. We have also designed posters and placed 9 of them around school to further raise awareness on the importance of cyber security. Below are the images of our products.

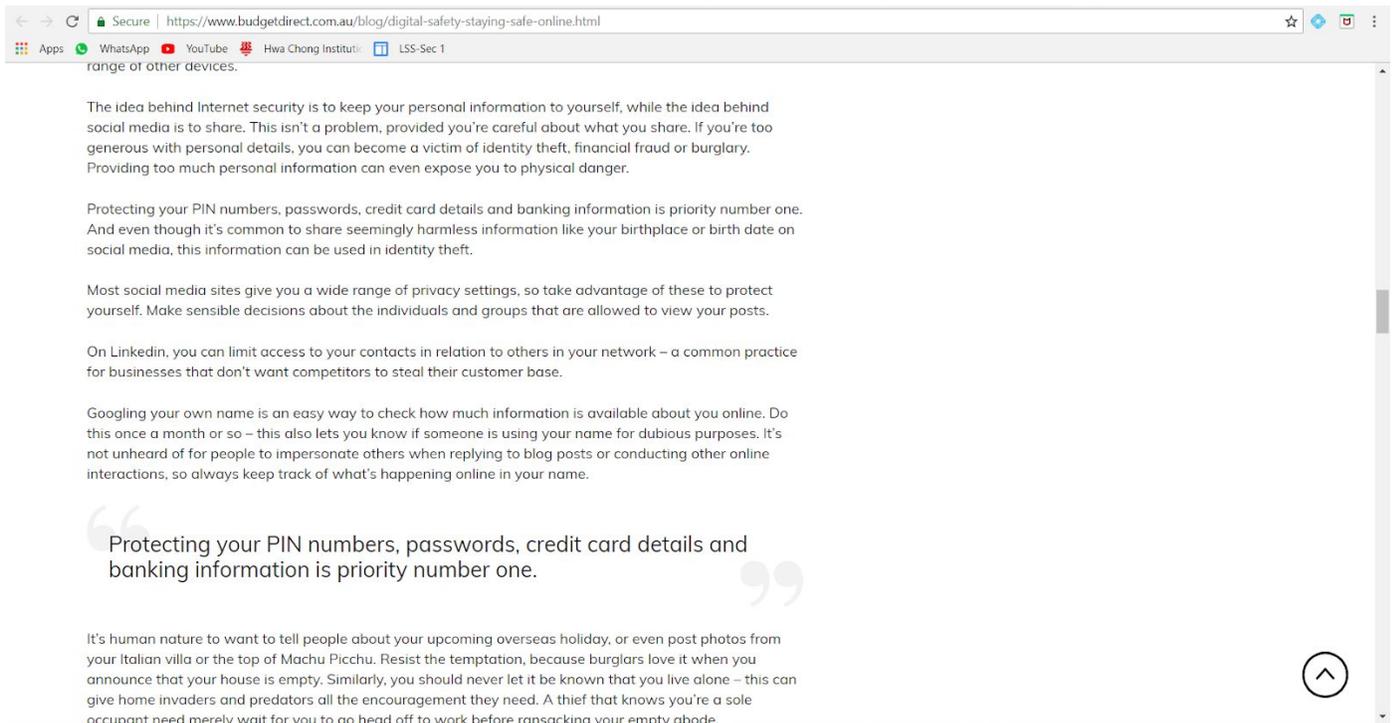




2 Review

Currently there are many resources online with many useful tips spread out across many various websites and there are also several talks organised by schools to educate students about it. Despite the wealth of information that can be found online, we found that many people do not bother to go up and read about it. Most of us found the websites too wordy, not interactive enough and that people were too lazy and did not

see the need to go find out about this information.

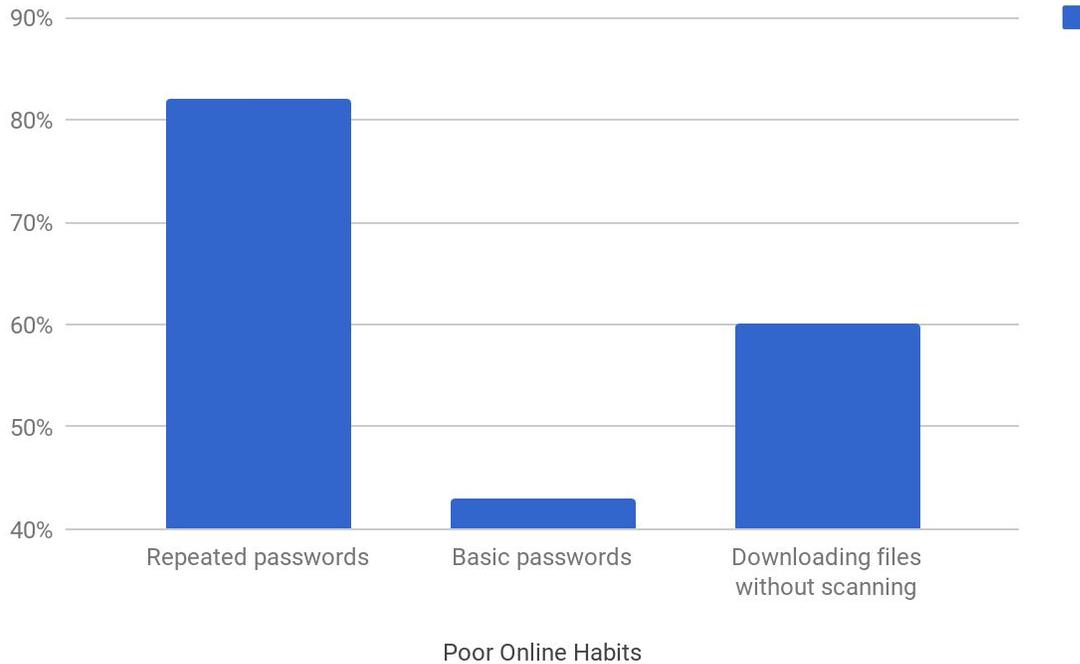


3 Methodology

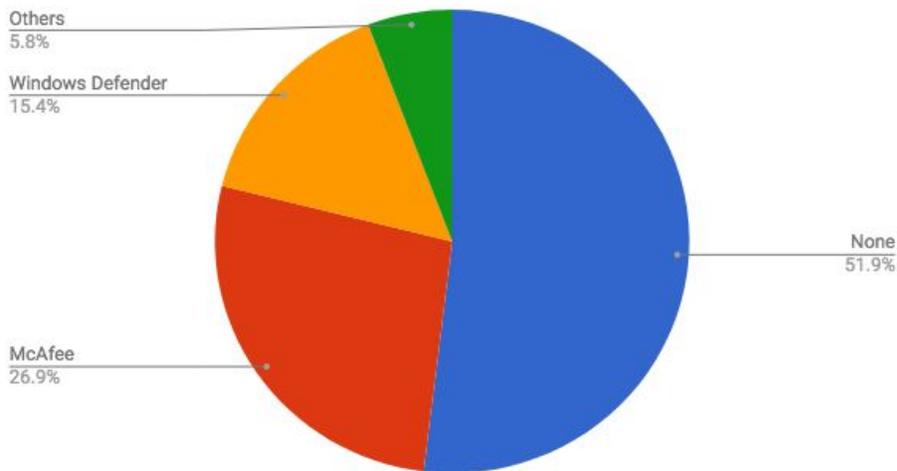
3.1 Needs Analysis

We conducted an online survey with 54 students from our target group, Hwa Chong students. From there we found out that many students lacked sufficient knowledge and that many of them were vulnerable on the internet. Half the students felt that antivirus softwares were redundant, many used multiple passwords across different sites, and

many do not scan their files before downloading it on the internet.



People who use Antivirus Software



3.2 Development of Resources

We sourced the information from various different websites and compiled all the relevant information together. From there, we created an organised a concise website containing the essentials of what students need to know. We used some of the information to create several life-like scenarios and placed it in our trap game for people

to test their awareness and safety. We posted some of the more interesting information on our social media page and invited people to ask questions they had on the topic. On our website, there is also a weekly blog where we upload news regarding cyberattacks. We also filmed a few short videos containing a few common bad habits people had and the dangers involved in doing so. We also included tips to stay safe when online in the videos. On our instagram account, we opened a Sarahah (QNA) for our followers to ask us questions regarding online safety. We designed several posters. Some were posted on our instagram account. We received constructive feedback and were able to reach out to several students. We pasted 9 posters around the school.

3.3 Pilot Test

A pilot test was conducted on over 20 HCI students, where we allowed them to test our game, read through our online website and watched the educational videos. From there, we interviewed each of them to ask them for the overall effectiveness of the package and areas for improvement. Here are some examples of the feedback we received you can upload sample report on the drive

Feedback from Students

The game was quite challenging and fun! It helped me learn a lot more about online safety!

Marcus Ng 213

The information on the website was really clear and concise. I have learnt a lot more about online safety from this game

Ong Chi Juay 212

The video was a very interesting and showed some common mistakes all of us made. This project has helped me realise how dangerous the internet can be!

Yu Zhenning 213

The videos were really helpful! This has motivated me to change some of the habits I was committing.

Josh Lai 213

This package was really useful. The interactive quizzes on insta were really useful and helped out reach to more people!

Throughout the pilot test, many participants commented on our game, as they found it the most interesting and interactive. They also highlighted our instagram and thought that it was a great way to disperse information and allowed them to learn about online safety. They also gave us valuable suggestions and ways to improve our resources, for example, we needed to have more videos and possibly more public interaction through instagram.

4 Outcome and Discussion

The learning package received positive feedback from students who tried it. Many students who tried our online package commented that the learning package was an interactive and interesting way to learn more about cybersecurity. After receiving feedback from the pilot test, we created more videos to contain more common day to day scenarios. We also incorporated their suggestions and ideas into our resources (example: interactivity on instagram, more information on website, etc.) We also expanded our resources to include posters so we could make our resource more student-friendly as the posters were to be pasted all around school, making it easily accessible. One of the limitations of this project is our relatively small target group. We were unable to contact external cyber-security related organisations and further widen our target audience. Our lack of experience in video editing and creating websites was also limitation. Regarding further improvement, we could possibly create more detailed and in-depth resources that contained even more information, or even comments and suggestions from professionals in the cyber-security. We can also widen the scope of our project to address more cyber safety issues such as cyberbullying or widen the scope of our target audience to impact more individuals.

5 Conclusion

This project has been a challenging process as we had to spend long hours sourcing for relevant information across the internet, crafting the games and videos, and designing the posters to upload on our instagram page. We also had to juggle between

our CCAs, schoolwork and other commitments. This learning journey has taught us about the importance of proper time management and also the importance of teamwork. We had to start our work early and split up the work among the members in order to complete the task on time. We also learnt how to be more creative in order to design a fun and interactive game and interesting videos. Creativity was important in our project work journey as it allows us to attract our target audience to use our product and is important to set our resources different from other similar resources. Beside that, we also had to learn how to use many of the softwares and apps such as wix as we had no prior experience in using it. We also had to pick up new skills such as being able to plan skits and edit videos. Through our combined efforts and hard work, we were able to complete this project, finishing what we had planned and started more than half a year ago.

6 Acknowledgement

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