

Cat 4 resource development

Home safety

Ding Yi Chaw Mang 2A1 (06)

Tan Teong Kai 2A1 (27)

Zhang Zhuo Yang 2A1 (35)

Gee Rui Yang 2O1 (6)

Abstract

Home Safety is a user friendly online platform that aims to teach the elderly how to be safe at home. This project mainly focuses on three possible types of accidents at home that could be avoided. They are: fire, falls and electrocution. We have created a website and posters with concise, dual language information on the ways one can lower the chances of the above accidents from happening. We recognise that not every elderly might be as tech-savvy as us teenagers. That is why we have also created poster to cater to that group of elderly.

1 Introduction

1.1 Rationale

After failing the first proposal evaluation, we relooked some of the ideas that we had and decided that home safety is a very relevant topic nowadays as more and more elderly are living alone. They might have become clumsy, forgetful and have forgotten ways to avoid fire and electrocution. Based on statistics from the National Fire Protection Association (NFPA), the number of civilian deaths from home fire has increased from 2380 in 2013 to 2735 in 2017.

1.2 Objectives

The objectives of Home Safety was to educate the elderly on the ways to prevent fire, electrocution and falls.

1.3 Target audience

Our target audience are the elderly living by themselves.

1.4 Resources

The resources created for this project is a website and posters with concise, easy to understand, dual language information. Both the poster and website has information on how to prevent fire, electrocution and falls.

2 Review

There are other websites out there that have tips and methods to prevent fire or electrocution or falls or other hazards at home but none of the websites have all fire, electrocution and fall prevention tips. Thus, our website would be a lot more convenient than the other website. Instead of only relying on the website, which isn't very easily accessible by not so tech-savvy elderly. We are also planning to contact town councils to have our poster posted on their notice boards. That way,

idle, less tech-savvy elderlies would still be able to read the poster and learn from them and if need be, can use our website to get even more information.

3 Methodology

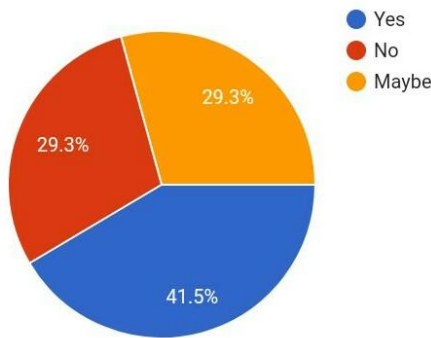
3.1 Needs analysis

A needs analysis was conducted to ascertain the relevance of this project. Out of the 41 people that did the survey, more than half of them said that they either only knew some methods to prevent fire, electrocution and fall or none. Similarly, more than half rated at least 6/10 on the likelihood of accessing a website despite being old. This feedback confirmed the feasibility of this project.

3.2 Survey results

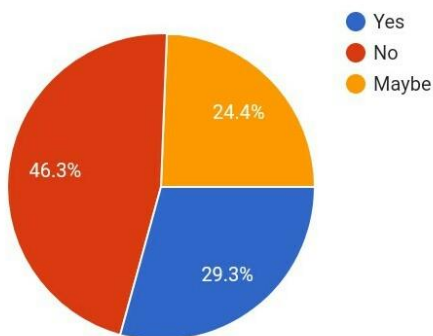
Do you know how to prevent fire at home?

41 responses



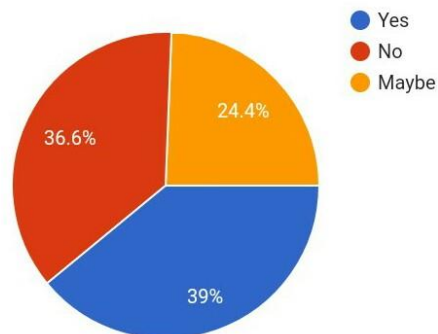
Do you know how to prevent falls at home?

41 responses



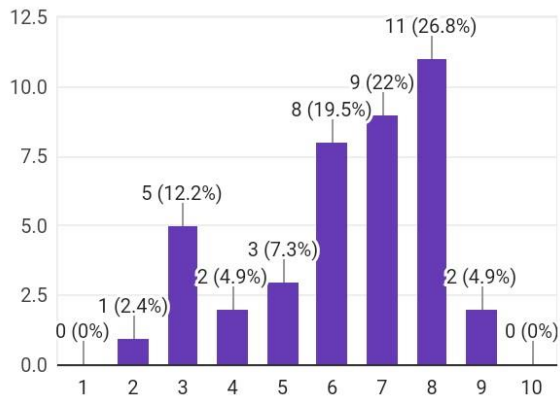
Do you know how to prevent electrocution at home?

41 responses



How likely are you going to use a website to learn more about home safety?

41 responses



3.3 Development of resources

We went to many websites to get tips on preventing fire, electrocution and falls. Then, we compiled them first into three different posters, one for each accident. We also included Chinese in the posters so that more elderlies will be able to read the posters and understand them clearly. When we failed in contacting the resident councils, we created a website and did a more in-depth explanation of the various tips and how it will help in preventing that particular accident. We also added a Chinese version for the website.

3.4 Pilot test

Using our own connections, we managed to find some elderly and gave them our posters. They saw the poster and gave us some of their feedbacks. We also did a presentation on how to prevent the three types of accidents to our grandparents and based on their feedback, we edited some of our tips and our website. Most of the feedbacks were generally positive.

4 Outcome and Discussion

The final product of this project was a website and posters that we plan to give out to the elderly. There are a lot of limitations for the project such as the elderly would not be tech-savvy enough to access the website. For that, we have created posters to educate the elderlies that aren't tech-savvy. There might be elderlies that cannot read Chinese and English or are illiterate. In the future, we could consider adding other languages to for the website but we might not be able to fit three languages in the posters. For those that are illiterate, we could make videos that would explain to the elderlies how to protect themselves using props and actions, instead of just a long lecture. The information on the website and posters are only relevant for Singapore houses, such as HDBs, which aren't as big as houses in the US with a backyard and a garden. The wiring systems in other countries might be different from the wiring system in Singapore.

5 Conclusion

Home Safety has been a difficult project as the group members were not active and the group took a long time to decide on what to do, who to do it and so on, especially the leader. This project has also helped the team to pick up important skills such as co-operation, teamwork and the most important, creativity. We had to think of ways to make our website interesting and how to design our posters such that not only will the elderly be drawn to looking at it, but also teenagers. Perseverance and patience were the final elements that enabled the completion of the project as it pushed the team members to go out of their comfort zones, for example contacting the resident council numerous times but to no avail.

6 Acknowledgements

We would like to thank the following individuals, without whose this project would never be a success.

Our classmates for helping to share the needs analysis with their parents and grandparents.

7 References

1. Jeremy Anderberg (November 7, 2013) A complete guide to fire safety retrieved from :

<https://www.artofmanliness.com/articles/a-complete-guide-to-home-fire-prevention-and-safety/>

- 2) Timothy Thiele (Updated 03/29/18) A guide to electrocution prevention retrieved from :

<https://www.thespruce.com/six-ways-of-preventing-electrical-shock-1152537>

- 3) Wyatt Myers (Updated Feb 27, 2015) 9 ways to prevent falls at home retrieved from:

<https://www.everydayhealth.com/longevity/future-planning/prevent-falls-at-home.aspx>