Project Less Sugar, Less Diabetes

Group Members: Gao Weiran (10)

Liu yiming (22)

Fan yixiang (8)

Group number:4-036

Abstract:

Our group had the idea for this project around last November during the holidays. We came up with this idea as we saw bubble tea shops filled with students wearing school uniforms. We saw this as a serious problem and wanted to change this. Therefore, we started on this project. During this project, we went on to research a lot, discussed as a group, and met up with our mentor regularly. We also did surveys and planned our timeline.

Introduction

1.1 Rationale

Our rationale for this project is because the teenage obesity rate has jumped tenfold in recent years, from 1974 to 2014. We do not want to see this happening to our peers, therefore, we decided that we should start this project.

1.2 Objectives

Our objectives of this project are to firstly, discourage peers from drinking bubble tea, secondly, teach peers facts about sugary food, and lastly, provide alternatives to bubble tea.

1.3 Target audience

The target audience for this project is our peers, which is, secondary school students aged from 13 to 16 years old. We chose this as most of the people who drink bubble tea are students.

1.4 Resources

To promote this, we had chosen 3 resources to make: a website, a game, and an Instagram page. We hope that through these resources, we could reach our objectives.

2. Review

For our review, we searched through authorised and trusted websites. We made sure that the information is taken from websites that have credibility. Instead of just copy-pasting, we improvise the information from the websites to make it more suitable for our target audience. For most of the websites, we felt that the information given is not good enough, therefore, we try to improvise it.
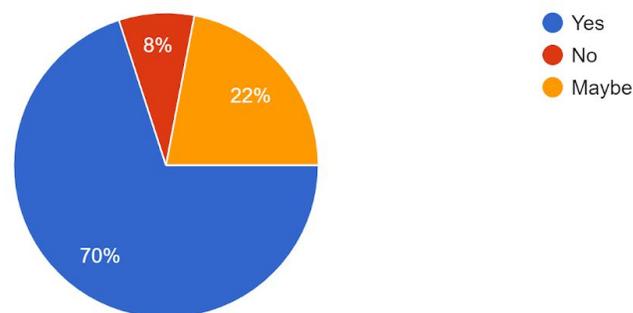
3 Methodology

This project was carried out through various means. For the brainstorming part, we came up with a basic outline for the game. We decided our game should be a simple avoidance game, which would include a character dodging unhealthy food and collecting healthy food.

3.1 Survey results

After that, we went on to the needs analysis for our website. For the needs analysis, we asked our respondents how much they knew about sugary food or diabetes and whether they were taught enough in school. Here are the responses.
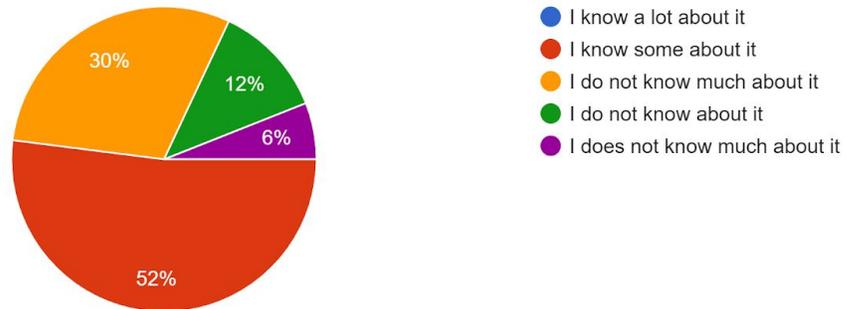
Q3 Will you be interested to learn how to reduce weight and facts about unhealthy food?
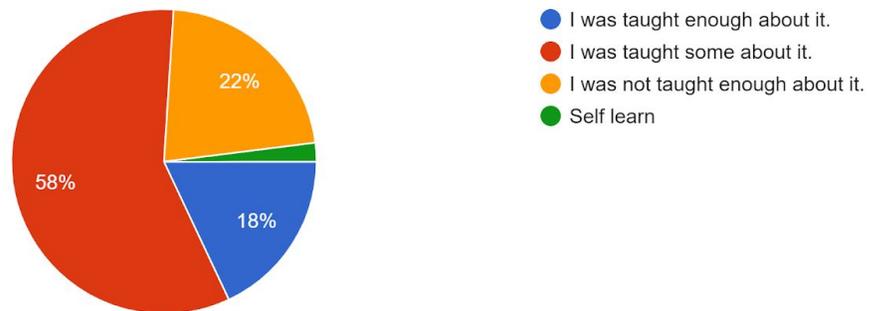50 responses

Yes
No
Maybe

Q4 Do you know how to recognise the symptoms of prediabetes?
50 responses

- ● I know a lot about it
- ● I know some about it
- ● I do not know much about it
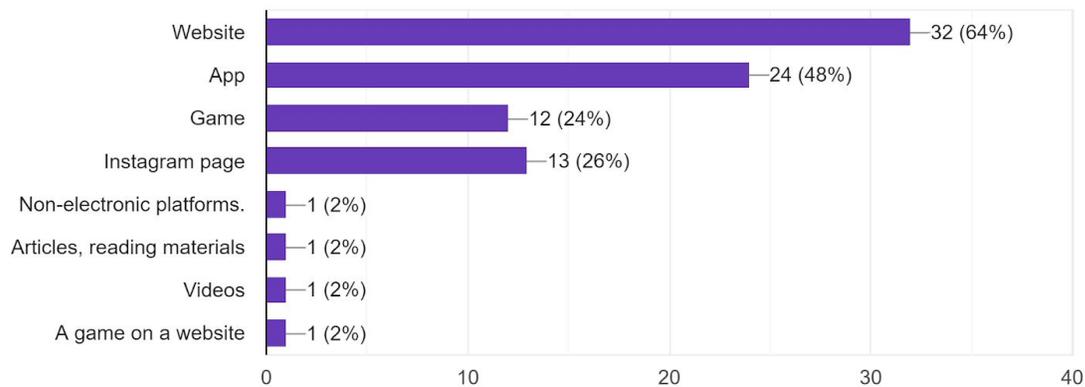- ● I do not know about it
- ● I does not know much about it

30%
12%
6%
52%

Q6 Do you think that you are taught enough on the facts of sugary food from your teachers, parents or friends?
50 responses

- ● I was taught enough about it.
- ● I was taught some about it.
- ● I was not taught enough about it.
- ● Self learn

22%
58%
18%

Q6 In which way would you like to learn how to reduce weight and facts about unhealthy food?
50 responses

Category	Value
Website	32 (64%)
App	24 (48%)
Game	12 (24%)
Instagram page	13 (26%)
Non-electronic platforms.	1 (2%)
Articles, reading materials	1 (2%)
Videos	1 (2%)
A game on a website	1 (2%)

A note to the judges: There are some error in the question number, please do not mind it.

3.2 Development of resources

After looking at the needs analysis, we decided on a few main categories to start on for our website. The website includes these main categories: Information on diabetes, information on sugary food, and alternatives to sugary food. From May onwards, we started to create the resources. For the construction of the game, we used buildbox to make it. We chose this as it provides easy programming for us. For the game, we created our own character, our own obstacles, and our own credits, which took shape like a car, a bubble tea bottle and a vegetable respectively. We found these materials online. We had also added many functions to the game, such as explosion and camera shake feature, and trails. For the website, we used the internet to search up on resources. We did not lift off the resources, we created our own resources under each category with reference to the other websites. The references could be found on the last page of this written report. Throughout the creation for our website, we felt that we should also add some other categories to make our website better. We had also added a video section of youtube videos that the user could view. Last but not least, our instagram page. We had planned our instagram page to be a source where people

could easily access our target. Therefore, we posted a lot of facts about diabetes and sugary drinks. In addition, we also wanted to have interaction with our audiences, therefore, we did a giveaway at 200 followers, with us posting some questions and then answering it. The prize was a $20 gift card.

3.3 Pilot testing

For our pilot test, we asked users questions about the website and the Instagram page. Here are some questions and responses.
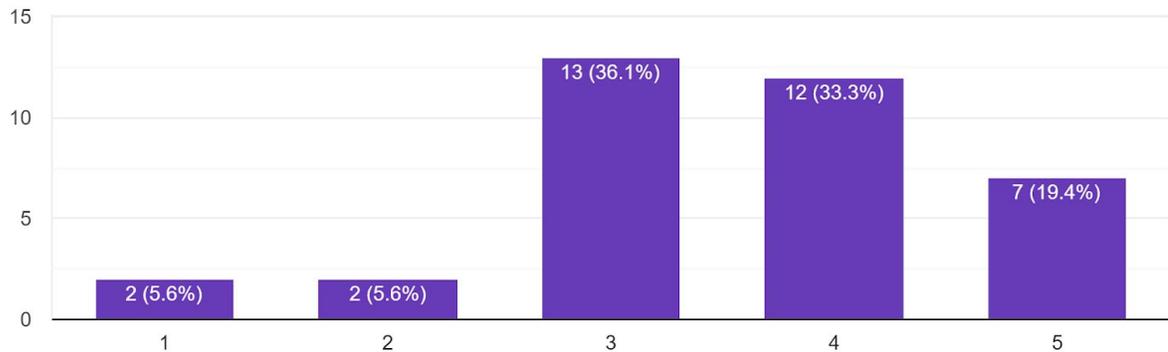
Do you think this website could help you learn new things?
36 responses
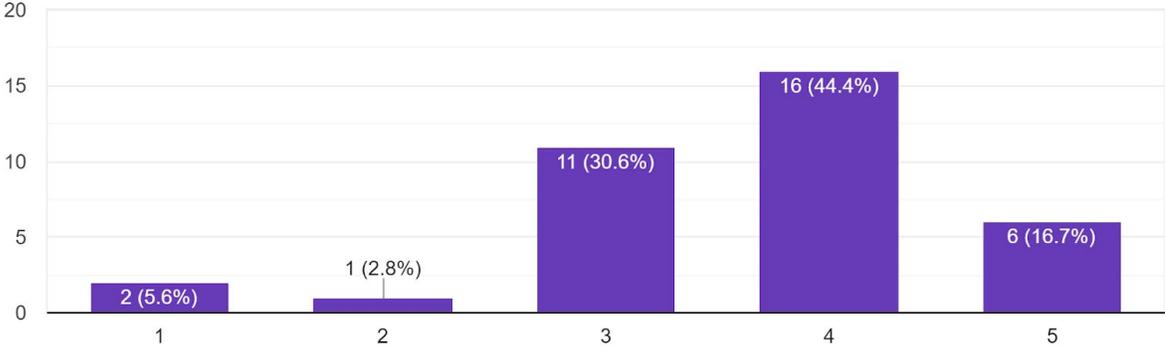
How much do you think you have learnt about diabetes?

36 responses

What can we do better to make your experience better?

36 responses

> NIL

> Idk

> Some of the pages are too colourful resulting user not able to read the contents, especially the page with bubble tea. Perhaps the background page can be lightened so the the words can be more legible as the contents are more important.

> The fonts are light against a complex background, making reading tough.

> Background picture lighter so easier to read the text

> The text is placed against a pictorial background, hence making the overall reading a bit distracting at some parts.

> In one of the links, your recommended to eat vegetables and fruits. While most vegetables are low in sugar, some fruits are actually rather high is sugar. So as we much as we encourage the eating of fruits, for some of fruits there still needs to be some moderatio. Maybe one way will be to encourage eating an assortment of different fruits and vegetables, to get the balance. 😊

Through these questions, we have gained better understanding of the user's requirements and what we should do to improve their experience. Some common answers of how we can improve are: making the fonts bigger, changing the background, and adding more interactive features on our website. We improvised according to the

responses given. We changed the font size, added some new categories, and changed the background picture.

4. Outcome and discussion

Around early August, we completed our project. The outcome of the website was a total of categories, each having its own content. These categories include:
For the game, we had constructed a total of 6 scenes. We had also added a feature where the car's speed increased every scene to make it harder. Lastly, our instagram has over 200 followers! We feel that we could start posting on the blog of our website and also translate the website to multiple languages to cater to a greater audience and possibly further reworking on some categories of the website. For our game, we are planning it to be released onto the app store in the near future to let more people experience this and know more about our objectives. We would also like to continue posting on our instagram page to continue on this project.

5. Conclusion

There were definitely many difficulties encountered while doing this project. For the instagram page, we need to use canva and it is a totally new skill to the three of us. Thus, we spend a lot of time at the start to learn how to use canva to make our posters. For our posters, we need to make sure that the contents are interesting, background pictures are related, fonts are clear, not too wordy and more. Sometimes, it was quite hard to find interesting content to make into a poster and we would spend much time on researching.

For the website, wix is also a completely new tool for us and we learnt how to use it while making our website. There were definitely technical problems while making the websites such as editing each category, inserting pictures. Despite that, we were still able to overcome most of the difficulties. For some problems that we can't solve, we use

other methods.To complete these project, we are required to learn how to use Wix and Canva, be creative when solving problems, able to compile clear and easy to understand contents from large amount of informations on the internet, to make engaging poster with fun contents and edit our website so it is organised into different catogories. For the game, we could not find any suitable objects to be the enemy or points on google. To solve this problem, we tried to find those objects on different web pages and websites, finally, we found an object that we are satisfied with. However, there are also many rewarding moments when doing this project. For example, it is extremely rewarding to see our Instagram page grow from 10+ followers to 200+ followers in a matter of months. It is also very rewarding to see the game run well and there are no errors to the code after working on it for a long time. Overall, we think that the project is a very rewarding experience for us, and we will definitely treasure this.

6. References

Food high in sugar(1). (n.d.). Retrieved from

https://www.healthline.com/nutrition/18-surprising-foods-high-in-sugar#1

food high in sugar(2). (n.d.). Retrieved from

https://www.eatthis.com/foods-high-in-sugar/

chocolate. (n.d.). Retrieved from

https://wmchocolate.com/chocolate-makers-blog/how-to-find-the-sugar-content-of-dark-chocolate-without-nutrition-facts/#:~:text=25oz%2C%20or%20about%207g.,bar%20of%2075%25%20dark%20chocolate

article. (n.d.). Retrieved from https://www.medicalnewstoday.com/articles/324673

bubble tea(1). (n.d.). Retrieved from

https://www.thehealthy.com/food/bubble-tea-is-unhealthy/

bubble tea(2). (n.d.-b). Retrieved from

https://mtalvernia.sg/education/whats-in-my-bubble-tea/#:~:text=Another%20thing%20to%20consider%20is,of%20sugar%20and%20335%20calories