

CAT 4 RESOURCE DEVELOPMENT

Group 4-092

ONLINE ORDERING OF CANTEEN FOOD

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ABSTRACT

FoodOS, which enables students and staff to order food from the high school canteen online. It is easy and convenient to use as you can access it right at your fingertips with your phone or laptop. It provides a seamless experience for students and staff to order food and saves queueing time, giving students more time to do homework. Apart from allowing students to order their food and choose their pickup time, it also allows vendors to manage their stall and change orders. Other than that, the system was integrated with SMS which enables students and staff to order online, then a message will be sent to both the customer and vendor with the order number, order quantity and pickup time. The integration with SMS also made it even more convenient as ever as SMS is very easy to use. Overall, the programme is convenient, easy to use and helps students and staff save time.

1 INTRODUCTION

1.1 Rationale

During mealtimes, especially lunch, the canteen is packed with people. Therefore, since some students or staff have events after lunch like CCAs etc., they tend to be very rushed when eating or are unable to finish their food. We have thus developed this programme to let them spend their waiting time productively and get their food once lunch starts by using the pickup time feature to pre-order their food.

1.2 Objectives

The objectives of our system were to

- Improve the efficiency of food ordering during recess and lunch breaks
- Increase the convenience of canteen vendors

1.3 Target Audience

The target audience is Hwa Chong Institution High school staff and students.

1.4 Resources

The resources created for this project was a website that integrated SMS function that allows the student to punch a few buttons and order canteen food online anywhere and anytime.



2 REVIEW

We took reference from a recent study, recently presented at the American Heart Association's Scientific Sessions 2017, held in Anaheim, CA. It suggests that gobbling down your food could seriously harm your cardiometabolic health, which is the collective name given to five risk factors for serious cardiometabolic conditions such as heart disease, diabetes, and stroke. According to Dr Takayuki Yamaji (cardiologist at Hiroshima University in Japan)(Takayuki Yamaji, 2017) Metabolic syndrome is one of the leading causes of cardiovascular diseases. Several reports have associations between eating speed and incidents of weight gain.

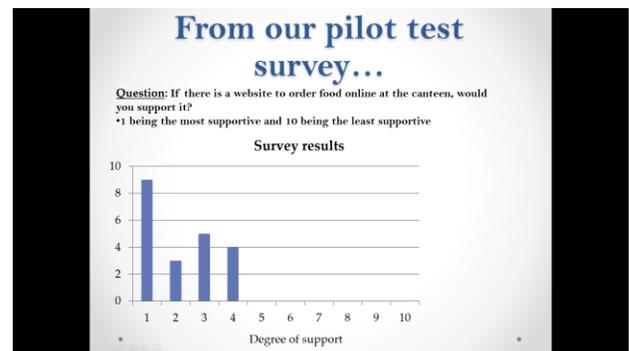
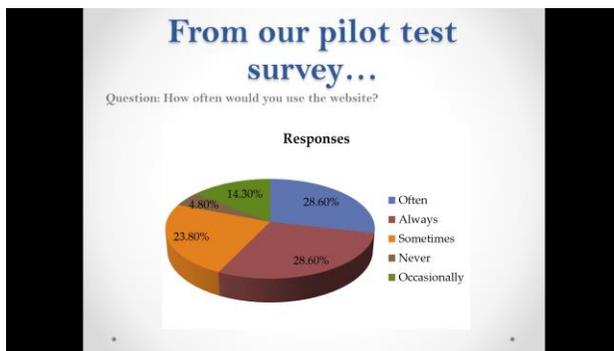
We also took reference from GitHub, where we took some of the source codes and adjusted them to fit our website.

3 METHODOLOGY

3.1 Needs Analysis

A needs analysis has been conducted and surveys have been created with Google Forms and some teachers and students did the surveys. From the response and feedback, we could confirm the feasibility of the project since many of them found that the website would be useful for them. The canteen vendors we have asked also found it a good idea since SMS was easy to use.

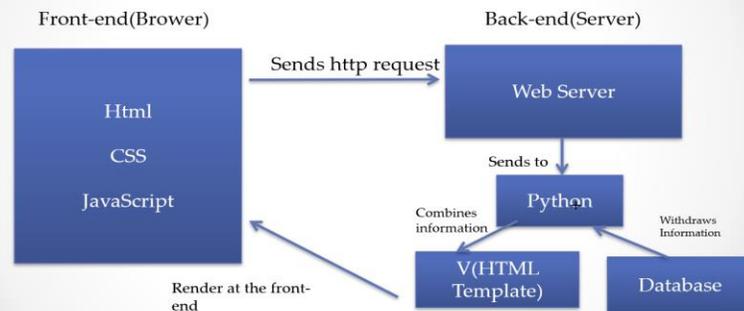
3.2 Survey Results



3.3 Development Of Resources

A survey was created with Google Forms, and the results were collated, which showed a majority of students supported our idea. Starting in April, we worked on the basic structure of our website. We approached vendors in the canteen and received full cooperation from them. From June onwards, we worked on the final stages of our website.

How our program functions



3.4 Pilot Test

A pilot test was administered to some students. They were asked to try out the website and give feedback. Recommendations of the pilot test, including a 5 minute cancellation time which was added. Generally, the feedback was positive and they all said that it would be useful to them. This is extremely important to speed up the ordering of food in the canteen.

Some feedback from our pilot test...

4

"Website is nicely made"

"I hope it will be extremely effective in shortening the queues."

"Great initiative"

OUTCOME & DISCUSSION

The website made turned out as planned after much troubleshooting although the server was unstable at times due to the economic limitations. We also found that since the food is prepared up to an hour before the student goes to pick the food up, the food might end up being cold. We also found out that it would be hard for canteen vendors to store all the food if the demand were to be high. It is also very easy for people to create accounts and it's hard to manage if their are people who create fake accounts that spam the order list.

5 CONCLUSION

FoodOS has been challenging from the very beginning. The long hours of meeting up to discuss potential additions to the website, and approaching many students to get their feedback on our website. Coding the website also required a lot of time, as many minor problems took a long time to fix. However, this project has enabled the group to learn many skills, such as coding, and persuasive skills were also required to get the vendors to work with us. Our mentor also provided us with valuable advice, to help us improve our project. However, patience also played a key role in this project, as we faced many problems during the coding stages.

6 REFERENCES

Sandoiu, A. (2017, November 14) Eating too fast may lead to weight gain, heart disease. Retrieved from <https://www.medicalnewstoday.com/articles/320056.php>

Kihara H. (2018 , June 9) Slow down, You eating too fast: Fast eating associated with obesity and future prevalence of metabolic syndrome Retrieved https://www.ahajournals.org/doi/abs/10.1161/cicr.136.suppl_1.20249

https://www.google.com/search?rlz=1C1NHXL_enSG828SG828&biw=1280&bih=610&tbm=isch&sa=1&ei=72egXPiIDJykwgOlnrqYBQ&q=q+and+a+&oq=q+and+a+&gs_l=img

3..35i39l2j0l8.1955.2098..2474...0.0..0.113.187.1j1.....1....1..gws-wiz-
img.....0i24.GsHh_Sxk3QQ#imgrc=0eef9Buf-MSsSM:

Source code: <https://github.com/wan826/Foodspark/commits/master>

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