



16/10/2018

Version 2.0

Product Document

Team Name: Super Ninja

Team Number: TA342

Team Members:

Ram Purmessur

Songnan Lin

Jizhou Wang

Lu Chen

Version Changing History

Version	Changing Description
1.0	Original version
1.1	Removed footer from version 1.0
1.2	Change the detail of data resource section (rewrite the granularity)
2.0	Fix some grammar problems and done all the changed

Table of Contents

1. Product Document Overview	1
2. The fundamentals of the Proposed Product	2
3. Product Benefits and Target Audience	2
4. Application Management	2
5. Data Sources Details	3
6. Security and Testing	3
7. Documentation	3
8. Potential Risk for sponsors	4
9. Value of the system	4
10. Advice for future Implementations	4
11. Team Description	4



1. Product Document Overview

Childhood obesity have been a major concern for most nations. According to World Health Organisation (WHO), in 2016, the number of overweight children under the age of five was estimated to be over 41 million globally. The chart 1. below will give an indication for the trend in Australia for obesity in adults. In addition to obesity it predicted that if a child is overweight it is highly that the child will be obese for the rest of his or her life. Obesity contributes to major health issues and one of the main contribution factors to obesity/overweight is high sugar intake.

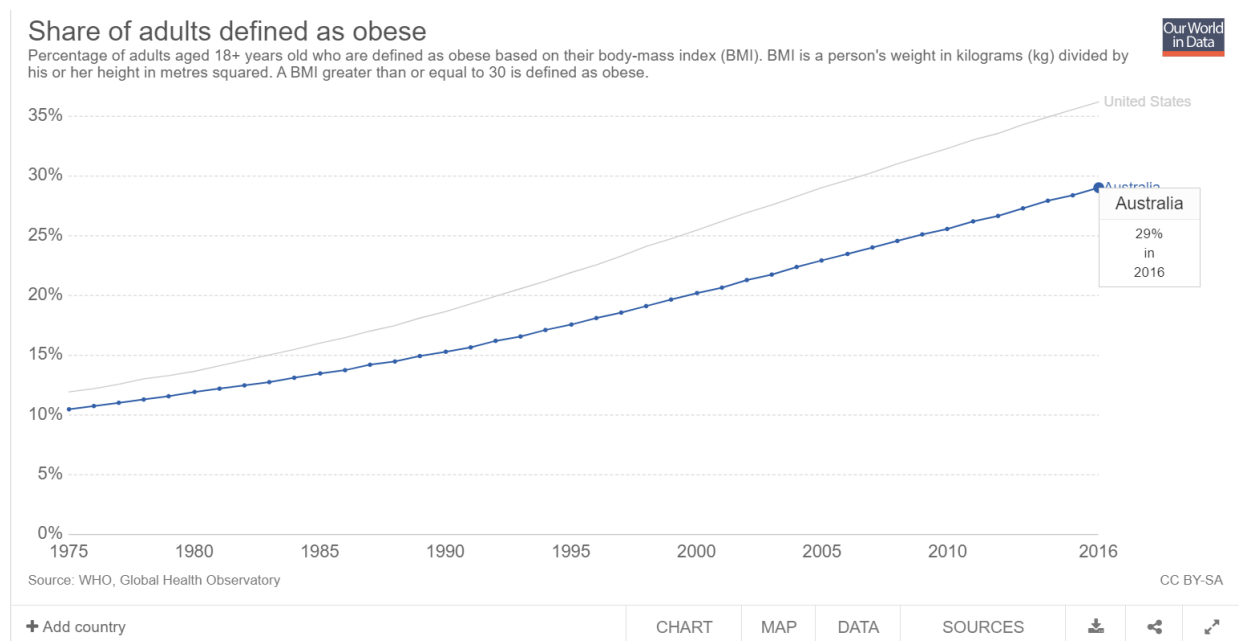


Chart 1.

This product document contains the fundamental information of the product, including the product details, the benefits to the target audiences and the factors need to take into consideration while managing the application by the future owner or sponsor. On the other hand, you will be briefed about the support document and the maintenance document, which will provide more suggestion about how to help support the daily running and the future maintenance and modifications from a more technical perspective.



2. The fundamentals of the Proposed Product

The product aims at helping parents with obesity or overweight kids aged from 5 to 10 years of age in Victoria, Australia to make a difference to the lives of their kids. The product being a website will provide information of the consequences of high sugar intake and the main functionality of the website is the sugar calculator of four highly consumed category of food children like to eat. The sugar calculator will provide a breakdown of the sugar quantity in the items selected from the category and a total sugar intake of the kid's intake of the day. This feature is unique because it not only allows users to calculate daily intake for their children but also record the sugar intake for parents and help them track sugar intake for children.

Our product also provides a location feature that user can search for nearby parks and recreational centres to take their children to. In addition, a recipe list of healthy menus is provided to help users cook healthier. By being a registered member, users will have their own calendar with the track of their sugar intake and the locations saved so that they can refer or plan.

The user can visit our website via the link <https://sugarbattle.tk> and see the product video for a visual understanding of our product which can be accessed here <https://www.youtube.com/watch?v=FGBrTP4hiZM>

3. Product Benefits and Target Audience

There are many websites and apps which gives healthy menus options or recreational location areas or even sugar-calculator, but they are all targeting adults' users or teens. When facing the childhood obesity problem, our team focused on the way to attract children's attention and motivate them to do more exercise under their parents' supervision and guidance. According to research if a child is obese it is highly that the child will develop into an obese adult. The website we are providing will make us unique as we are aiming at helping parents with obesity kids to make a change at an early stage of their kid's life by monitoring their sugar intake and utilising the website for location of parks for further activities like trekking, running or picnics. The parents can make the most of the website with the calendar feature where parents can backtrack the items of foods the kids have consumed and plan. The target audience are the parents with obesity or overweight kids who are either fulltime working parents or housewives who want to monitor their kids eating habits and make their kids' lives for more fun and healthier by using the website.

4. Application Management

Administrators who have basic IT background are expected to manage the application. 1 or 2 administrators with basic programming skill and SQL knowledge are enough for the product management. No specific trainings are required for maintenance of the website. In addition, the support document includes details steps to help users better manage the system. The system is required to maintain every 2 weeks to check whether the website is running normally, and this should be done by administrators.



5. Data Sources Details

The table below shows the data source used by our product:

Dataset	Year	Granularity	Copyright	URL	Update Frequency
Overview of overweight and obesity in Australia	2017	Population breakdown in age range with percentage of obesity and overweight	https://www.aihw.gov.au/about-our-data/accessing-australian-government-data	https://www.aihw.gov.au/reports/overweight-obesity/a-picture-of-overweight-and-obesity-in-australia/data	As and when required
Open Foodfacts-Australia	2018	Food ingredients breakdown in groups	https://au.openfoodfacts.org/data	https://au.openfoodfacts.org/cgi/search.pl?search_terms=sugar+drinks&search_simple=1&action=process	As and when required
Playgrounds in Melbourne	2018	Playground location	https://data.gov.au/about	https://data.gov.au/dataset/playgrounds	As and when required
Google Map API	2018	Street name	https://cloud.google.com/maps-platform/terms/#17-copyrightpolicies-content-removaltermination-of-repeat-offenders-accounts	https://developers.google.com/maps/documentation/javascript/tutorial	As and when required

6. Security and Testing

Our website will not ask users for their personal information, so there are no privacy issues on it. SSL certificates are utilized on the website so the communication channel between the server and clients is secure. Our product is implemented by using ASP.NET and it is free from SQL injection and XSS which make our product secure.

Testing includes integrity testing, security testing, load testing, backup and recovery testing and UX testing have already done by the ‘SuperNinja’ team and all tested features passed the testing. Our website has been tested by our team as well as potential users and no severe problems were found on the website. Therefore, the testing result can be trusted.

7. Documentation

Maintenance document and support document are provided by ‘SuperNinja’ team. For support document, it illustrates the data maintenance and software maintenance. It also tells users how to use the system in the future. The support document covers the day to day



support activities, security and privacy, training information, future site preparation, all the data for this system, and testing information. For maintenance document, it is about the coding and the server maintenance and modify. This document contains the system equipment environment, computer hardware, support software, database model, and error conditions. These two documents provide the detail of how to maintain the system in the future.

8. Potential Risk for sponsors

The only potential risk for you is that there are too many similar websites over the internet. Those websites either provide detailed nutrition information of different food or provide suggestion on healthy diet or provide solution on obesity and overweight. Our product is unique to those websites and if future runner improves the website further, our website could outstand other competitors.

9. Value of the system

In terms of the website cost, it is hosted on the Azure Cloud Service, which requires regular charges of the account. The money would be charged every month, which is up to 25 dollars. The money is mainly used to host the application on the internet and allocate a reachable url for all users to visit.

As a result, the application requires to be sponsored so that the website would not stop operating and possess the authorized licenses and database and web server could not be affected.

In addition, the person hours also require to take under the consideration. Development team, financial team also need to be paid from the sponsor so that all processes could operate smoothly.

10. Advice for future Implementations

To provide further functionalities to the end user, there are some improvements which can be considered to add to the product. You can consider increasing the number of kids linked to one parent account from 1 to few. This will enable the parent to have a view of the kids in one login and can focus on the kid with slow progress. In addition, there can be a Pokémon Go kind of system where there can be treasure hidden in the parks where kids can go and hunt for those. Such addition will make the kids more active and make the system more fun. Further to that there a few minor changes which can make the website more appealing for example, adding events like Australian open, Footy for kids' competition or Melbourne show ground. In addition, the location feature can be expanded to all the states, more recipes added to the list, implement a kid gamify section on the and lastly a visualisation of the sugar intake for the kids and might understand which day or week there where sugar intake was at its peak.

11. Team Description



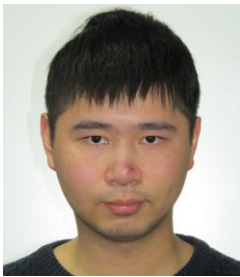

The team involved of developing the product consists of four individuals studying at Monash University at master level while doing the capstone unit Industry Experience in their last semester. The four students came from different Faculty of IT stream namely Data Science,



Information Technology, Business Information System and Network Security. The team were chosen based on their different skills to work on an agile environment to develop the product. The team members are Lu Chen (Master of Business Information System), Songnan Lin (Master of network security), Jizhou Wang (Master of Information Technology and Ram Purmessur (Master of Data Science). Jizhou was involved in the development of the website as he is the only IT student with knowledge in Web Development. Songnan took the responsibility of the security and testing of the website and helping Jizhou along the way. Ram helped in finding the data sources and help in ensuring the website is functioning appropriately and report any errors/bugs to Jizhou. Lastly Lu was involved in the usability and interface design and took some parts of the development tasks for the website.

All the team members were involved in all the stages of the product development process, providing feedback and improvement to each other. Table 1 shows a break-down of their skills.

Table 1.

	<i>JIZHOU WANG</i>	<i>Ram Purmessur</i>	<i>Songnan Lin</i>	<i>Lu Chen</i>
				
Skills				
Programming	√		√	
Network Support	√		√	
Security Issues			√	
Dataset Analysis		√		
Database Implementation	√		√	√
Testing	√		√	



Data Visualization		√	√	
Interface Design	√		√	√
Business System Analysis		√		√
Project Management		√		√