

INTEGRITY/ACCEPTANCE TEST REPORT- VERSION 1.0

Team Number: TA342
Team Name: Super-Ninja

Team Member:
Lu Chen
Songnan Lin
Jizhou Wang
Ram Purmessur

05/10/2018



Introduction

This report states the issues of childhood overweight and obesity in Australia as well as proposes an originality solution to deal with the problem. In addition, detailed information about the functionalities of the website are provided. Related open resources and security aspects within the website are also presented in the report. Links towards the system, maintenance documentation and coding warehouse are also included in the report.

This integrity testing report serves as Sugarbattle's System Acceptance Test. Sign-off statements from the developing team and project sponsors are included.



Table of Contents

Introduction	1
1. Overview of Application	1
1.1. Project Overview	1
1.2. Data Sources	1
1.3. Security Aspects.....	2
2. Final System	3
2.1. System	3
2.2. Maintenance Document	3
3. Integrity Test Plan	4
4. Sign-off Statement	7



1. Overview of Application

1.1. Project Overview

Childhood obesity has become a pervasive social problem around the world. According to the World Health Organization (WHO), the number of overweight children under the age of five is estimated to be over 41 million in 2016 around the world. In Australia, 25% of children (aged 2 to 17) were overweight or obese in 2014-15 (Australian Institute of Health and Welfare, 2018). Furthermore, those kids are likely to stay obese as they grow up and more likely to develop diseases like diabetes and cardiovascular diseases at a younger age than other children (World Health Organization, 2018). Obesity leads to several diseases but not limited to type 2 diabetes and chronic diseases including cardiovascular diseases which costed the Australian government around \$48 billion in 2008. Whilst obesity is a complex issue with many contributing factors, one important factor is exercise. Exercise burns off energy obtained from the food we eat, rather than allowing our bodies to store it as fat. Diet is also crucial – what and how much energy the person consumes is a leading contributor to obesity. Diet and exercise are things that can be changed and are within control, however it is important to recognize that medical and genetic issues can also contribute to obesity – these are not easy to control without medical advice.

The aim of our project is to help kids with obesity or overweight to make a healthy choice and thus make both the parents and the kids happy. The target audience in this project will be the parents with kids from 5 to 10. The project will develop a system that will primarily be a website with different functions and it will be divided in three iterations which will remedy the situation. Our project aims at helping the parents of those kids with obesity by providing a fun and healthy environment where they will be encouraged to go out and be more active and be physically fit. In addition to that they will be able to access a list of recipes on the website where there will be recipes of dishes which are easy to cook. This will benefit their children by being healthy with fresh nutritious ingredients that will not take precious hours to prepare. Moreover, the website will provide a sugar tracking function for parents and help them to monitor the sugar intake of their children.

1.2. Data Sources

Regarding the dataset used for the project, the Australian Institute of Health and Welfare has a breakdown of obesity and overweight in kids according to ages and this is shown over the last four financial years and this conclude how obesity is becoming an issue. The dataset shows which cities across Australian are affected and the percentage of the population with obesity kids. Regarding the dataset for the 4 categories items we aim at, there is an open source data which originate from openfoodfacts.com.

We are using Australia specific datasets for the items in the website. In addition to our functionality we have added a map for location of playgrounds and took the data from the data. The data will help in the location of different playgrounds where the parents can take the kids and be more active. Below is a tabular form of the data sources. Open data related to overweight and obese children are retrieved from the Australian Government websites and the data are utilized on the data visualization section of the website.



Dataset	Year	Granularity	Copyright	URL	Update Frequency
A picture of overweight and obesity in Australia	2017	The data is in Excel showing the age range of people (both male and female) in the overweight or obesity threshold	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	No update
Open Foodfacts-Australia	2018	The data is given in all the ingredients included in the items including the country of manufactured.	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	The maps are shown on a spatial coverage where streets names and parks names are provided	https://data.gov.au/about	https://data.gov.au/dataset/playgrounds	As and when required
Google Map API	2018	The website will embed a google map API on the location page.	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

1.3. Security Aspects

- The main security of iteration 1 is the communication channel. The website is on the Internet and most of the servers will be allocate on the Azure cloud server. Therefore, for the security of the website, SSL encryption as well as the certificate are required on the setting of the website.
- The main function provided on iteration 2 is map function, calendar tracking function, register and log in function as well as information providing function. As such, security issues could exist on the register and login function. SQL injection should not be a problem in the system because the language for the system is ASP.Net and it prevent the SQL injection. The problem is the register and log in function. User are required to register to the system before they can use the tracking function provided by the system. The strength of the user password is important. the system should force user to set a strong password, otherwise user account can be hacked easily. Although the website will not require use to input personal information, the password should be strong enough to prevent users account from losing.
- Issue on the iteration 3 is the cross-site scripting (XSS). User are allowed to input data in the activity description under the map function. XSS could happen if user input a script on the activity description. To prevent this, user input should be limited and checked to make sure the problem will not occur.



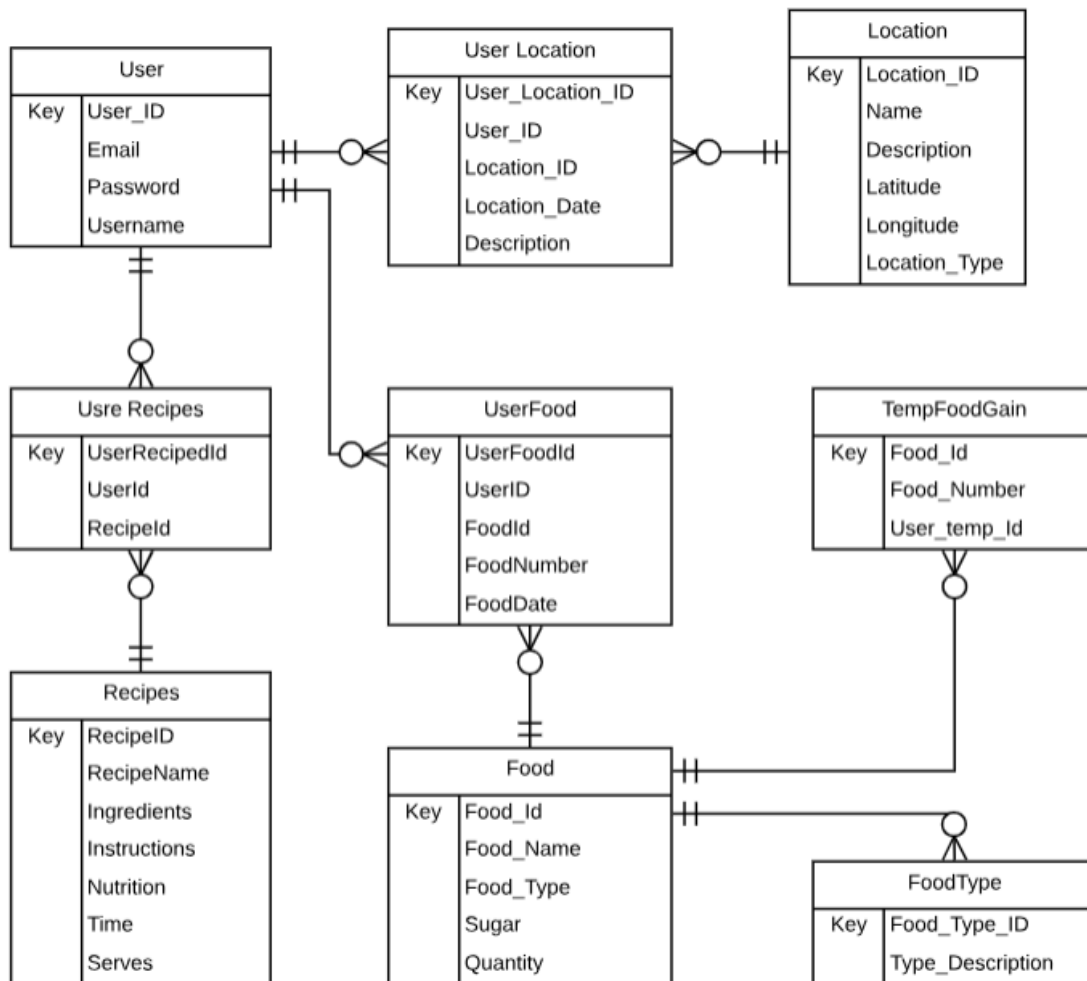
2. Final System

2.1. System

- The completed system can be found from: <https://sugarbattle.tk/>

2.2. Maintenance Document

- The project source code can be found from: <https://bitbucket.org/jwan0061/sugarbattlereq>
- The support documentation is located on Mahara: <https://mahara.infotech.monash.edu.au/mahara/view/view.php?id=20947>
- Data model:





3. Integrity Test Plan

Activity (ADMIN)	Pass/ Fail	Comments
Epic 1: As a user, I want to know the sugar level of different snacks and drinks and I want to calculate the total sugar level of snacks or drinks I provided for my children, so that I can know whether my children have taken too much sugar and I can adjust the amount of snack for my children based on the result.		
User story 1.2: As a user, I want to know how much sugar in drinks or snacks so that I can know whether my child is having too much sugar.		
1.1.1. Successfully open the website	Pass	
1.1.2. View drinks and dessert information and details	Pass	
1.1.3. Select different categories	Pass	
User story 1.2: As a user, I want to calculate the total amount of sugar I provided to my children so that I can adjust the sugar plan for my children based on the calculation result.		
1.2.1. Select the drinks or desserts	Pass	
1.2.2. Choose quantity of drinks or desserts	Pass	
1.2.3. Save drinks or desserts	Pass	
1.2.4. View Result	Pass	
1.2.5. Delete the drinks or desserts from “My Item List”	Pass	
User story 1.3: As a user, I want to know how much sugar is appropriate for my daughters so that I can save my time and provide low sugar level food for my daughters.		
1.3.1. View the information about sugar in home page	Pass	
Epic 2: As a user, I want to look for nearby playgrounds and parks for my children and add an activity to the calendar and go back to track		



the activity in the future so that I can know where I have taken my children to and how much time we spent on the parks or playground.		
User story 2.1: As a user, I want to know the parks near his home so that I can know where to take my daughter to play.		
2.1.1. Successfully open the “Location” page	Pass	
2.1.2. Map shows in the web page successfully	Pass	
2.1.3. Search and show the parks in the map	Pass	
User story 2.2: As a user, I want to have an account for the website so that I can go back and track the activity I has planned for my children.		
2.2.1. Register the account and have a new account	Pass	
2.2.2. Login the account	Pass	
2.2.3. Log off the account	Pass	
User story 2.3: As a user, I want to add activity on the calendar based on the parks or playgrounds so that I knows how much time I spent with my children on which parks or playgrounds		
2.3.1. Successfully open the “Location” page	Pass	
2.3.2. Select and show the park information	Pass	
2.3.3. Choose activity date	Pass	
2.3.4. Choose start date time	Pass	
2.3.5. Choose end date time	Pass	
2.3.6. Add activity description	Pass	
2.3.7. Add and save the activity into calendar	Pass	
2.3.8. View activity information after saving	Pass	
User story 2.4: As a user, I want to know the information of health disease related to over sugar intake so that I can remind me and my children not to take too much sugar.		



2.4.1. Successfully open the web page	Pass	
2.4.2. Show all information of diseases related to high sugar intake	Pass	
2.4.3. Show diseases detail after click “Learn more” button	Pass	
Epic 3: As a user, I want to record the sugar intake for my children every day and go back to track the sugar intake whenever I want so that I can monitor how much sugar my children have taken and provide appropriate amount of sugar for my children. I also want to look for diet food suggestions so that I can know what is good for my children.		
User story 3.1: As a user, I want to look for healthy food recipes so that I can prepare healthy food for my children.		
3.1.1. Successfully open the “Recipes” page	Pass	
3.1.2. Show all food recipes	Pass	
3.1.3. Show recipes details after selecting one specific recipe	Pass	
User story 3.2: As a user, I want to know the history of how much sugar provided for my child so that I can better control the sugar level for the upcoming date		
3.2.1. Successfully open the “Sugar Calculator” page	Pass	
3.2.2. Select and add drinks and desserts	Pass	
3.3.3. Log in the account	Pass	
3.3.4. Save drinks or desserts into “Save List”	Pass	
User story 3.3: As a user, I want to add the recipes on my account so that I can check the recipes easily and save more time.		
3.3.1. Successfully open the “Recipe” page	Pass	
3.3.2. Select one specific recipe	Pass	



3.3.3. Save the recipe into account	Pass	
3.3.4. View the recipe in “My Recipes”	Pass	
3.3.5. Cancel the recipe from “My Recipes”	Pass	
User story 3.4: As a user, I want to look for the weather of the following date so that I can know whether I can take my daughters to go picnic.		
3.4.1. Open the “Location” page successfully	Pass	
3.4.2. View the weather information	Pass	
3.4.3. Search for different weather in different places	Pass	

4. Sign-off Statement

I, Lu Chen, Jizhou Wang, Songnan Lin and Ram Purmessur have reviewed and approved the functions of entire system described in this report as fully functional, unless stated otherwise.

Hereby, I accept the final system (including all the available functions) designed by **P&V (Power & Vision)** Team on condition that any changes are completed. I will sign off those changes in a further document.

Development Team Member Signature: _____
Development Team Member Signature: _____
Development Team Member Signature: _____
Development Team Member Signature: _____
Date: _____

Monash Lecturer Signature: _____
Monash Lecturer Signature: _____
Date: _____