



Nuts&Dairy.me

5Nuts

Be Safe | Be Healthy
Protect your child from food allergies

Testing Details



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Introduction

Website testing is a software engineering practice that ensures the quality and reliability of the product. It also aids in suggesting to the developers whether various functionalities of the product are functioning properly or not. Any part of web testing should encapsulate a myriad of practices such as functional discrepancies, environment issues, usability testing and security testing which accounts for any security breaches.

Functionality Testing

Functional testing primarily ensures that all the functions inside the website are working smoothly without any technical glitches.

1. Link testing

- The team TA20 has done detailed testing and analysis of the website link for Iteration 2.
- Check if various pages of the website are clickable or not.
- Ensure if the user is able to get to the Resources page, Lunchbox recipes page, Prevention Page from the Home Page.
- Ensure if the Quiz page is working properly and see if all the questions are being answered.
- Ensure if the Quiz link is working correctly on the home page.
- Ensure if the pages are redirected properly for the user to verify.
- Ensure that there are no isolated pages left on the website with no call to action.
- Make sure that all Call-To-Actions are working properly and all buttons are clickable.

Iteration 1	Iteration 2
No SSL certificate. No website security	SSL certificate
Not able to load all pages	We are able to click on all pages
The quiz did not have a proper Call to Action.	This time the quiz redirects the user to the resources and the prevention page.
The website name was not with the project name.	The website name is with the project name NutsNDairy.me The link is working correctly

Tips

Grain - Grains are high in natural fiber and are an important source of many nutrients. Eating grains reduces the risk of chronic disease.

Vegetable - Eating more vegetables can increase your intake of fiber and potassium, which may help prevent some types of cancer.

Dairy - Dairy products can provide calcium and vitamin D, which improves skeletal health in children as they grow up.

Protein - Protein is an important part of a healthy diet. It is an energy source necessary for the growth and repair of cells in children's bodies.

Fruit - The fiber in fruit can help to lower cholesterol. Eating fruits containing high vitamin C, such as oranges and strawberries, can improve your child's immune system.

Drink - Drink enough water to boost your child's diet. Drink water regularly throughout the day to flush waste from the body.

Create Your Healthy Lunchbox!

Breadcrumbs, white

Carrot, baby, peeled, fresh, raw



Dairy



Protein



Fruit



Drink

Database Testing

A subpart of software testing that checks the various parts of the database such as schema, tables, the accuracy of the data, data redundancies and imputation errors. This testing also checks data integrity and consistency. It may involve creating complex queries to load/stress test the database and check its responsiveness.

The following things have been carried out under database testing:

- Check for data inconsistencies such as missing values
- Check for updates, deletion anomalies.
- Check for insertion anomalies
- Create an accurate representation of the ERD with correct primary and foreign keys.
- Ensure if all the entities are included and have correct attributes.
- Ensuring if the ERD follows the design rules.
- Execute python script for running and converting the CSV files to SQL database.
- Check if the data types of the columns are correct or not.

- Check for the values of nutrition for various food items are correct or not by double-checking values from the internet.
- Ensure if the SQL queries are working or not.
- Ensuring if the tables in the dataset are linked correctly or not.
- Ensuring if the backend part of the product is correctly integrated with the front end part.
- We have 3 main files for our website→ Application.py, Database.py, Model.py
- We have separate files for Data cleaning and Data Analysis which is→ ProjectDev Data Analysis.ipynb

Iteration 1	Iteration 2.
No database was used. Only CSV files	SQL Relational database used.
	Proper Entities are defined with proper tables such as Food table, Recipe table, Nutrition table.

Usability Testing

Usability testing is a user-centric way to measure the effectiveness of a product in meeting a user's goals, mental models, and requirements.

- The appearance of the website is minimalist. The relevant content is presented in a direct way.
- Check that the navigation and the content of the website are easily understood and aligned with the user experience and expectations.
- The colours of the web page are mainly green and white. The colours that match the safety theme are more attractive to the users.
- Ensure the size of the text is appropriate in the design of the page and some key content is highlighted.
- Ensure that no spelling or grammatical mistakes occur.

Problems with Iteration1:

It's not only your Child. Don't blame them or

The Problem

3.2 million Australians suffer from food allergies

approximately **26.4%** proportion of children aged **2-19** years avoid food due to allergy or intolerance.

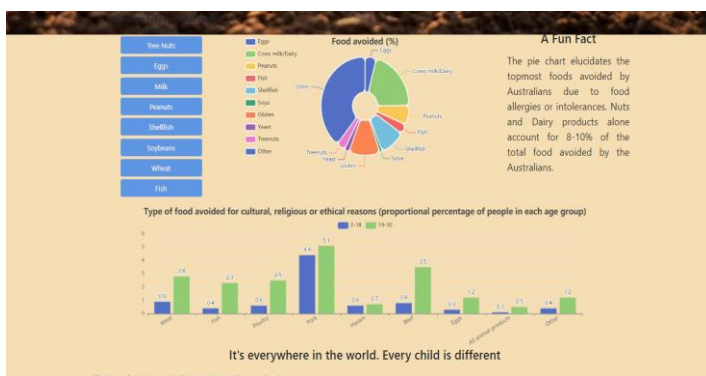
The Solution

17% of Victorians suffer from food allergy



What is Food Allergy?

An adverse reaction by the immune system towards a certain type of food is termed as Food Allergy. For many sensitive children, minute allergic reaction can be frightening and life-



Answer these question to know where you stand

- Have you searched or learned about food allergies before?
☐ a. Yes ☐ b. No
- Do you or someone in your family suffer from allergies?
☐ a. Myself ☐ b. Children
- Which part do you want to know more?
☐ a. Food Allergens ☐ b. Symptoms ☐ c. Test ☐ d. Treatment
- Which part do you want to know more about your children?
☐ a. Education ☐ b. Sharing Experience ☐ c. Find Recipes ☐ d. Common Protective Methods

- Colour combinations are not used properly.
- The text was not readable
- The use of flip cards in The Problem and The solution made it difficult for the user to read at the same time.
- The images were not visually appealing.
- The information on Open Data was not used properly.
- Not accurate representation of the information.
- The text is difficult to read for the user.

Iteration 2:

[Home](#)
[Resources](#)
[Quiz](#)
[Recipes](#)
[Prevention](#)

Be Safe, Be Healthy

Protect your child from the harmful allergies

[Learn More](#)

The Problem

Australia has one of the highest rates of food allergies in the world. Accordingly, nuts and dairy allergies top the chart with increase in cases amongst children living in Victoria.

[Home](#)
[Resources](#)
[Quiz](#)
[Recipes](#)
[Prevention](#)

We are here for YOU!

No more Fear!

Living with allergies is tough and that's why we bring to you interesting facts and articles to adapt to the situation. Migrating to a new country brings a new set of challenges and lifestyle issues. You are not alone.

[Check for facts to know more.](#)

Every Child is different. Don't blame them or their genetics.

What is Food Allergy?

An adverse reaction by the immune system towards a certain type of food is termed as Food Allergy. For many sensitive children, minute allergic reaction can be frightening and life-threatening. In extreme cases it can lead to immediate hospitalisation or even death.

Food avoided (%)

Food Category	Percentage (%)
Eggs	~12%
Cows milk/Dairy	~10%
Peanuts	~8%
Fish	~5%
Shellfish	~4%
Soya	~3%
Gluten	~2%
Yeast	~1%
Treenuts	~1%
Other	~34%

Build Healthy Lunchbox!

No more Allergy!

Living with allergies is tough and that's why we bring to you interesting facts and articles to adapt to the situation. Migrating to a new country brings a new set of challenges and lifestyle issues. You are not alone.

[Creat lunchbox](#)

Every Child is different. Don't blame them or their genetics.



Known Allergens

☐ Egg

☐ Dairy Products

☐ Peanut

☐ Tree Nuts

☐ Sesame

☐ Soy

☐ Wheat

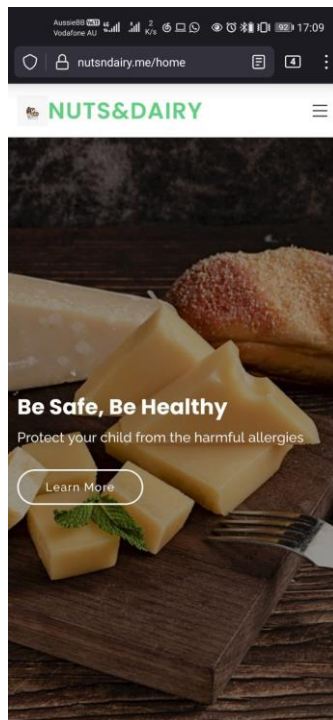
☐ Fish

In iteration 2, the biggest change is the whole website has been redesigned. It now has mobile capabilities which means on a small screen, it will not have overflow issues like in iteration 1.

Compatibility testing

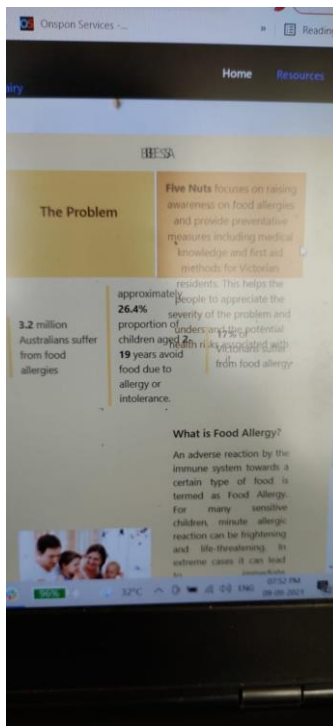
Devices/Mobile: The UI is responsive ensuring that the website opens on the mobile, tablet devices.

Iteration2: Proper responsive UI that adjusts to any screen size.



Iteration1:

The problem was that the UI was not responsive and did not change on different devices. It had screen resolution problems and the text used to get messed up.



Hardware: Our product is a pure-play software product that does not incorporate any hardware tools integrated with the software. Still, a basic check has been performed such as if the website is working properly on different hardware configurations of the website like RAM, HDD, SSD.

OS: We have checked if the product is working with different operating systems such as Windows and Mac OS. 2 of our team members have Mac OS and have tried to see if the website is working properly or not and if the web pages are redirecting it or not.

Network: Ensuring if the DNS names are used properly. We have used cloudflare.com for getting the SSL certificate for our website and have ensured that the domain name and the DNS names are correct.

SSL certification is important because it ensures that the website is safe and secure for the user to use and is protected from any online cyber-attacks.

Software: The software used for front-end development is HTML, CSS, Javascript and at the back-end development on Python with Flask framework.

Browser compatibility: The website has been tested on Google Chrome, Firefox and Microsoft Edge.

Security Testing

- The website is protected by a password. The users need to enter a password to access the website.

Performance Testing

Performance testing includes activities like traffic load, stress test and the number of people visiting the website. It measures web performance. It would be done when the website is finally deployed and users actually use it.

User feedback

The user feedback has been recorded in the form of product usability videos from our target audience such as mothers, pregnant women and young parents. Besides even our peer reviews have helped us in giving us constructive feedback. The videos are uploaded on Mahara and on the team's google drive.