

# **CRAVEWAVE-RIDING THE HEALTHIER TEMPTATION (WEBSITE )**

A Mini-Project Report Submitted for  
Partial Fulfilment of the Requirements of the  
Degree of Bachelor of Engineering

In

**COMPUTER ENGINEERING**

Semester IV By

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1.

## **CERTIFICATE**

This is to certify that the mini-project entitled “Cravewave-riding the healthier temptation” Website is a bonafide work of “Dasha Duarte (9891), Riya Naik (9923), Pearl Dmonte (9887), Siran Rodrigues (9932)” submitted to the University of Mumbai in complete fulfillment of the requirement for the award of the degree of Bachelor of Engineering in Computer Engineering (Semester- IV).

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## **Approval Sheet**

### **Mini Project Report Approval for S.E. (Semester-III)**

This mini-project report entitled “Cravewave-riding the healthier temptation Website” submitted by Dasha Duarte (9891), Riya Naik (9923) ,Pearl Dmonte (9887), Siran Rodrigues (9932) is approved for the degree of Bachelor of Engineering in Computer Engineering (Semester-III).

Examiner 1: \_\_\_\_\_

Examiner 2: \_\_\_\_\_

Date:

Place: Mumbai

## **Declaration**

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, we have adequately cited and referenced the sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources that have thus not been properly cited or from whom proper permission has not been taken when needed.

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## **Abstract**

The purpose of CraveWave is to bring transparency to the world's food supply with a vision of an optimized food system for human health and the health of our planet. Nutrition depends upon food is also of utmost importance in the cure of disease. Nutrients are required for the build-up and maintenance of healthy cells, tissues, glands, and organs which aid in metabolic, hormonal, mental, physical, or chemical activities of the human body. The right kind of food is the most important single factor in the promotion of health. A balanced diet is of utmost importance for the maintenance of good health and the healing of diseases. A correct diet should contain liberal quantities of seeds, nuts, grains, vegetables, and fruits which provide adequate quantities of all essential nutrients. The acid-alkaline balance plays an important role in the balanced body chemistry. Our daily diet should consist of 80% alkaline-forming foods and 20% acid-forming foods that can provide sufficient amounts of carbohydrates, fat, proteins, vitamins, minerals, dietary fibers, enzymes, and amino acids.

Keywords:

1. Nutrition
2. Disease
3. Nutrients

3. Balanced diet
4. Acid-alkaline balance
5. Alkaline forming foods
6. Acid-forming foods
7. Transparency

## **Acknowledgments**

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We would also like to extend our appreciation to our college Fr. Conceicao Rodrigues College of Engineering for providing us with the opportunity to pursue this mini-project. It's been an enriching experience that wouldn't have been possible without their support. Our collective efforts have culminated in the step-by-step creation of our healthy food website, and we look forward to sharing it with you.

Date:

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## **Chapter 1 INTRODUCTION**

In today's fast-paced world, many individuals struggle to maintain a healthy diet amidst the demands of their busy lives. After enduring a long day at work, they often find themselves faced with the challenge of preparing nutritious meals within tight time constraints. This dilemma frequently leads to the temptation of opting for quick yet unhealthy food choices, such as fast food or processed snacks, to satisfy their cravings.

A key contributing factor to this trend is the widespread lack of nutritional knowledge among the general population. Many individuals are unaware of healthier alternatives or lack the skills to create balanced meals. Consequently, they may unknowingly compromise their health

by consistently making poor dietary decisions. These habits can have detrimental effects, including weight gain and an increased risk of chronic diseases.

Recognizing the urgent need to address these challenges, our project aims to provide a solution for busy individuals seeking healthier alternatives to their cravings. Through personalized recommendations tailored to individual preferences and dietary needs, our platform empowers users to make informed choices about their diet. By fostering a supportive community and offering accessible health resources, we strive to inspire individuals to prioritize their well-being and adopt healthier lifestyles.

## **Chapter 2 OBJECTIVES OF THE PROJECT**

### **1. Healthier Options**

We focused on providing a diverse selection of nutritious alternatives to common cravings. By emphasizing whole foods and balanced meals, users were encouraged to make more wholesome choices that contribute to their overall well-being.

### **2. Catering to Busy Lifestyles**

Understanding the demands of modern life, we curated a range of quick and easy-to-prepare recipes tailored to busy individuals. These options allowed users to maintain their dietary goals even with limited time for cooking.

### **3. Promoting Nutritional Awareness**

Educational content was integrated into the platform to enlighten users about the nutritional content of various foods. By highlighting the benefits of suggested alternatives, we aimed to foster greater awareness of healthier eating habits among our users.

### **4. Personalization**

Our system was designed to customize recommendations based on user preferences, dietary restrictions, and health objectives. This ensured that the alternatives presented were relevant and appealing to each individual, enhancing their engagement with the platform.

### **5. User-Friendly Interface**

A key focus was placed on designing an intuitive and user-friendly website interface. Through clear categorization and easy navigation, users could quickly access and choose from a variety of healthier craving options, enhancing their overall experience.

### **Chapter 3 SCOPE OF THE PROJECT**

The scope of the project is to develop a user-friendly website to promote and educate visitors on healthy eating habits and nutrition. To create a comprehensive database of articles, recipes, and resources related to health and wellness. We are ensuring a responsive, visually appealing, and easy-to-navigate design. Additionally implementing search functionality, meal planning tools, and user-generated content (e.g., reviews and comments). To enable sharing of content on social media and community forums for user engagement. Integrating an online store for health food products and related merchandise. To make Blog and Newsletter: Maintain a blog section and offer a newsletter for regular updates and engagement. Ensuring ADA compliance and accessibility features for all users. Implementing data tracking and analysis to optimize content, user engagement, and website performance.

## Chapter 4

### REVIEW OF LITERATURE

Table 4.1 The "Literature Survey" table serves as a repository of research findings from existing academic papers and articles related to recommendation systems. It compiles valuable insights and knowledge from a variety of sources, Table 4.1 Literature Survey

Title of Paper	Algorithms & Database	Advantage/ Disadvantage	Overview
CraveWave: Riding the healthier temptation (1)	Collaborative & for backend MySQL	Advantage: More comprehensive recommendation system based on busy lifestyle. Disadvantage: Increases system complexity	The project is being undertaken to address the needs of individuals who have limited time to cook after work and are looking for healthier alternatives to their cravings. The identification of the problem stems from the growing demand for convenient yet healthy food options in today's fast-paced world.

Health and Nutrition Websites: Explore websites like Healthline, WebMD, and Mayo Clinic for articles and advice on healthy eating alternatives.(2)	Xampp, VS code.	<p>Advantage: Getting advice on healthy eating alternatives.</p> <p>Disadvantage: It doesn't provide bulk and cut options to users.</p>	Customization is done according to the user's demand.
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Cooking and Recipe Platforms: Platforms like Epicurious, Allrecipes, and Food Network often feature quick and healthy recipe ideas. (3)	MySQL, JavaScript, HTML, CSS.	<p>Advantage: cooking apps help users track, organize, and manage the food they already have, plan their meals, create grocery lists, avoid unnecessary purchases, and save money.</p> <p>Disadvantage: The time it takes to train staff to follow recipes exactly.</p>	This recommendation process involves a combination of both content and collaborative filtering approaches.
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<p>Research Papers: Scholarly articles on topics like behavior change, nutrition, and food psychology can provide valuable insights into creating effective craving Alternatives(4)</p>	<p>Hybrid Recommendation system, MySQL</p>	<p>Advantage: Provides more accurate and diverse recommendation</p> <p>Disadvantage: Maintenance of hybrid systems is complex and requires expertise.</p>	<p>This paper expresses views on social network data-based recommender systems by considering the usage of various recommendation algorithms, functionalities of systems, different types of interfaces, filtering techniques, and artificial intelligence techniques.</p>
<p>Nutritional Blogs: Many bloggers focus on quick and healthy recipes, such as Minimalist Baker, Skinnytaste, and Oh She Glows.(5)</p>	<p>--</p>	<p>Advantage: It's a chance to experiment with new recipes and techniques. Sharing Knowledge: Food bloggers have the opportunity to educate and inspire others.</p> <p>Disadvantage: Information may not be authentic and bloggers are not certified dietitians</p>	<p>Food vloggers often maintain a healthy lifestyle by engaging in regular physical activity, such as working out or playing sports, and by eating a balanced diet that includes plenty of fruits, vegetables, and lean proteins.</p>

**Table 4.2: The "Drawbacks of Existing Fitness Apps"** table is a compilation of identified limitations and shortcomings in currently available Fitness planning solutions. It provides a structured overview of the challenges and issues users commonly encounter.

Table 4.2 Drawbacks of Existing Travel Planners

Existing planners	Problems	Solutions
1. HealthifyMe	<ul style="list-style-type: none"> <li>Limited food options: The food database in the app may not include all of the foods that you eat regularly, which can make it difficult to track your progress accurately.</li> </ul>	Our website provides a wide variety of food options that we use in our day-to-day lives. Based on available ingredients our website suggests healthier alternatives.
2. Google Fit	Google Fit doesn't track exercises like weightlifting, helping a friend carry a sofa up 10 flights of stairs, doing yoga, jumping jacks, etc - because all of these actions are effectively in the same location in terms of GPS it cannot track the intensity of those activities.	Our website tracks the exercises of users. It takes basic information about users about their ailments/allergies and suggests alternatives. It gives ways to burn those calories.
3. FitBit	The uneven quality of medical information available on the website.	Our website has recommendations and personalizations for users from professional certified dietitians.

Table 5.2 serves as a comprehensive repository of knowledge, health benefits, dietary choices, and alternatives to less healthy options.

## Chapter 5 PROPOSED SYSTEM

### 5.2 Proposed problem statement:

The project is being undertaken to address the needs of individuals who have limited time to cook after work and are looking for healthier alternatives to their cravings. The identification of the problem stems from the growing demand for convenient yet healthy food options in today's fast-paced world. Characteristics of the problem include:

1. Time Constraints: Many people are often too tired or time-constrained to cook a nutritious meal after a long day at work.
2. Unhealthy Choices: In such situations, individuals might resort to ordering fast food or consuming processed snacks, leading to unhealthy eating habits.
3. Lack of Nutritional Knowledge: People might not be aware of the healthier food options available to them or how to create balanced meals.

Proposed System Block Diagram:

[User Interface]

|

[Mobile App/Website] <--> [Database]

|

|

[User Input] <-----> [Recipe Database]

|

[Nutritional Information]

## Chapter 6

### SYSTEM DESIGN



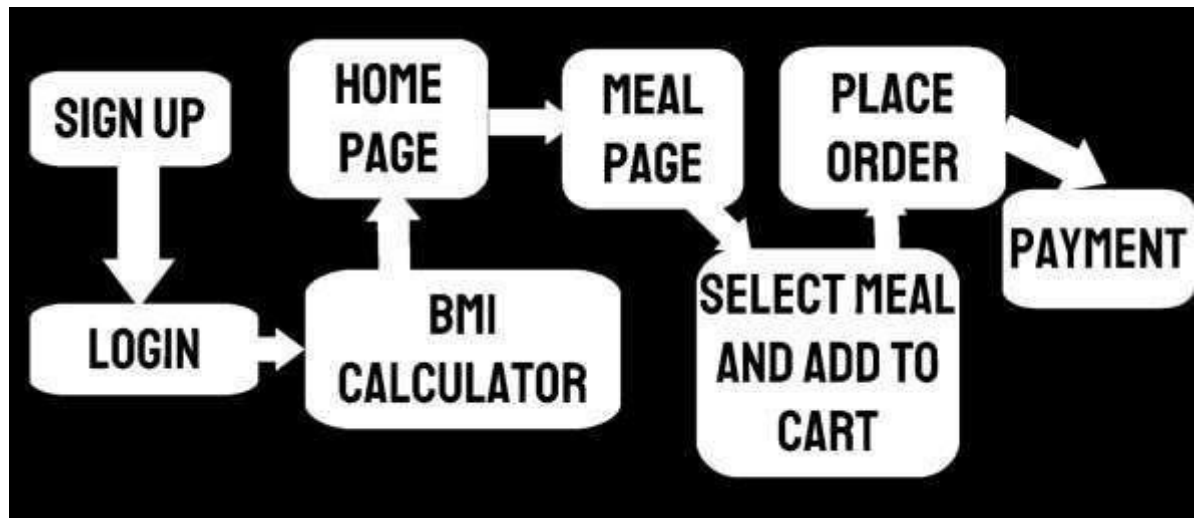


Figure 6.1: Block Diagram of Recommendation System

### Analysis of block diagram:

#### Sign Up:

This is the initial step for new users to create an account in the system. Users will provide personal information and create login credentials.

**Login:** Registered users will log in using their username and password. This step is crucial for personalization and security.

**Home Page:** After login, users are directed to the home page, which is the central hub of the application. It should offer a user-friendly and engaging interface, displaying featured content, recommendations, and navigation options.

**BMI Calculator:** This is a useful tool for users to calculate their Body Mass Index (BMI). It can provide insights into their current health status and assist in setting fitness goals.

**Meal Page:** The meal page likely includes a collection of available meals or recipes. Users can explore and select their desired meals from this section.

#### Select Meal and Add to Cart:

Users can choose specific meals from the meal page and add them to their virtual cart. This is the first step toward meal planning. **Place Order:**

Once users have selected their meals and are ready to proceed, they can place their orders. This step initiates the process of preparing and delivering the chosen meals. **Payment:**

This is where users provide their payment information to complete the order. It's a crucial step in the transaction process, and it must be secure and user-friendly. Here's an analysis of the overall flow:

**User Onboarding:** Users start by signing up and logging in to access the platform's features. This ensures personalization and tracks user preferences.

**Information and Calculation:** The BMI calculator serves as a health-related tool for users to assess their current health status and make informed decisions about their dietary choices. **Meal Selection:** The meal page offers a variety of meal options, and users can add their choices to the cart. This is where users can explore and select healthier alternatives to their cravings. **Order Placement:** After selecting their meals, users proceed to place an order, indicating they are ready to have their chosen meals delivered to them.

**Payment:** Users provide payment information to complete the order, ensuring a seamless and secure transaction process.

It emphasizes convenience and user engagement by allowing meal selection, order placement, and payment within the application. Additionally, the sign-up and login steps are essential for personalization and data security.

## **ALGORITHMS**

### **THEORETICAL ANALYSIS**

#### **6.1.1 ALGORITHMS USED (Justify the selection of algorithms)**

##### **1) DATABASE DESIGN:**

Database Name: CraveWaveDB

Table Name: Homepage Table

**Structure:** Table 6.1 This table facilitates the structured storage of Healthy Alternatives for cravings, enabling users to organize and access their diet plans efficiently. The user puts the Login ID and password and information is saved. Based upon his requirements the options are provided. Table 6.1: Database design

Column Name	Data Type	Description

LoginID	INT (Primary Key)	Unique identifier for each user
Password	VARCHAR(100)	For authentication
Requirement	VARCHAR(100)	This is used for the customization of recipes.

### 6.1.3 UI DESIGN:

User Input Components:

"Delivery Address": Users can enter their delivery address, ensuring accurate and timely delivery of their food orders.

"Food Preferences": Allows users to specify their food preferences, such as cuisine type, dietary restrictions, or favorite dishes. This information helps us personalize food recommendations.

"Order Now": A prominent button that enables users to start browsing and ordering food items.

User-Friendly Menu Bar:

- Home: Provides direct access to the homepage.
- Menu: Users can explore a wide variety of food items available for delivery.
- Order History: Shows users their order history and order tracking.
- Special Offers: Displays ongoing promotions and discounts.
- Contact Us: Offers a way for users to get in touch with our customer support team.

Table 6.1.4: The table provides an overview of the software components used in the project, along with their respective versions or configurations. It lists key tools and technologies, including Visual Studio Code for software development, and MySQL for database management, all maintained at their latest versions.

On the hardware side, the project runs on the Windows 11 operating system. This table summarizes the core software and hardware infrastructure, ensuring that the development environment is up-to-date and equipped to support the project's requirements. It reflects the commitment to maintaining a modern and well-configured development setup for efficient project execution.

#### 6.1.4 SOFTWARE USED

Category	Software/Hardware/Tool	Version/Configuration
Software	Visual Studio Code	Latest Version
Software	Javascript	Latest Version
Software	HTML	Latest Version
Software	CSS	Latest Version
Software	API	Latest version.

## Chapter 7 Implementation

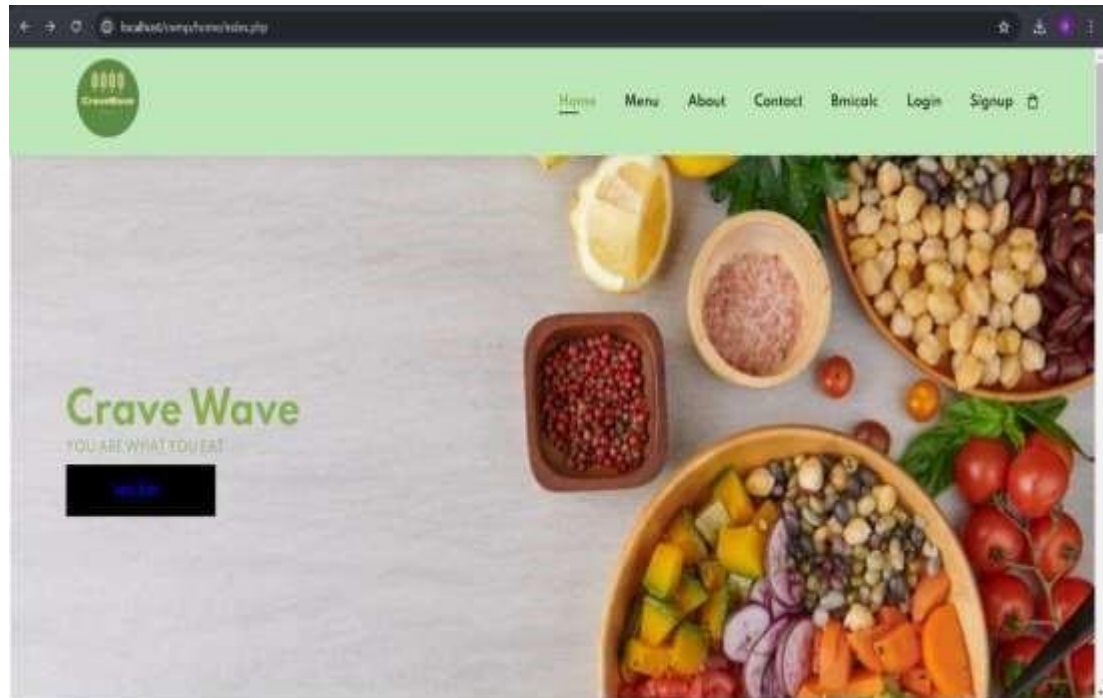
A healthy diet is the foundation of a vibrant and active life. It fuels the body with essential nutrients and helps maintain a healthy weight. Nutrient-rich foods provide the energy needed for daily activities. Moreover, a balanced diet can reduce the risk of chronic diseases and support overall well-being. Making mindful food choices is a crucial step toward a healthier, happier life.

Step by step this is how the process goes:

1. Planning and Research: Begin by conducting thorough research on nutrition, dietary guidelines, and health-related topics. Understand your target audience and their needs
2. Choose a Domain and Hosting: Select a relevant domain name that reflects the purpose of your website. Choose a reliable hosting provider to ensure your website's uptime
3. Website Design: Design an appealing and user-friendly website layout. Focus on clean, easy-to-navigate pages with a responsive design for mobile users.
4. Content Creation: Develop high-quality content that covers various aspects of healthy eating, including articles, recipes, videos, and infographics. Ensure the content is accurate and up-to-date.
5. Search Engine Optimization (SEO): Optimize your website for search engines by using relevant keywords, meta tags, and alt text for images. This will help improve your website's visibility on search engines.
6. User Registration and Interaction: Implement user registration and interactive features, such as forums, comment sections, and user reviews. Encourage community engagement and discussions.
7. Recipes and Meal Plans: Include a section for healthy recipes and meal plans. Provide nutritional information, portion sizes, and preparation instructions.
8. Shopping Lists and Tools: Create tools like shopping lists, calorie calculators, and BMI calculators to assist users in their health journey.
9. Newsletter and Social Media Integration: Allow users to subscribe to newsletters for regular updates. Integrate social media sharing buttons to increase the website's reach.
10. Feedback and Improvement: Collect user feedback through surveys or feedback forms. Continuously improve the website based on user suggestions and emerging health trends.

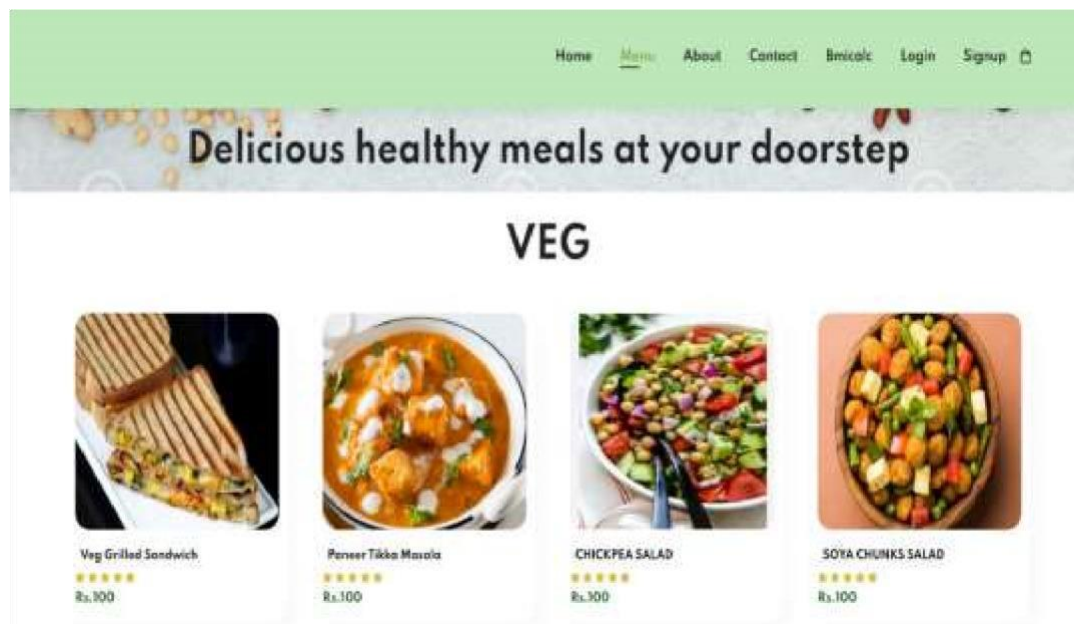
## **Chapter 8 Results**

Screenshot 8.1: Our homepage typically serves as the main entry point for a website or app, offering a welcoming interface. It includes navigation links to key sections, featured content or announcements, and a search bar for user convenience. This page aims to engage and guide users to explore the site's content or features.



Screenshot 8.1: Home Page

Screenshot 8.2: Our “Delicious healthy meals at your doorstep” page provides the user with the choice to order their food preferences.



Screenshot 8.2: Delicious healthy meals

Screenshot 8.3: Incorporating a calorie and nutrition counter into your food delivery website is crucial for providing transparency to users about the nutritional content of the meals they order. This feature allows customers to easily access information on calories, macronutrients, and other vital nutritional data, helping them make informed choices that align with their dietary goals and restrictions.



Screenshot 8.4: Our "BMI Calculator" page estimates body fat from weight and height, categorizes users, and offers optional unit choices. Users should consult healthcare professionals for comprehensive health assessments due to BMI's simplicity.

A screenshot of a BMI Calculator web form. The form is light blue with a white border. It has a title "BMI Calculator" at the top. Below the title are two input fields: "Weight (kg)" with the value "56" and "Height (cm)" with the value "167". A blue "Calculate" button is below the input fields. Below the button, the text "Your BMI is: 20.08" is displayed, followed by "Your weight is normal." in a smaller font.

Screenshot 8.4: BMI Calculator

Screenshot 8.5: Our feedback page features a form for user comments, options for names and emails, and category selection. After submission, users receive a thank you message and privacy assurance, aiding user input and experience improvement.

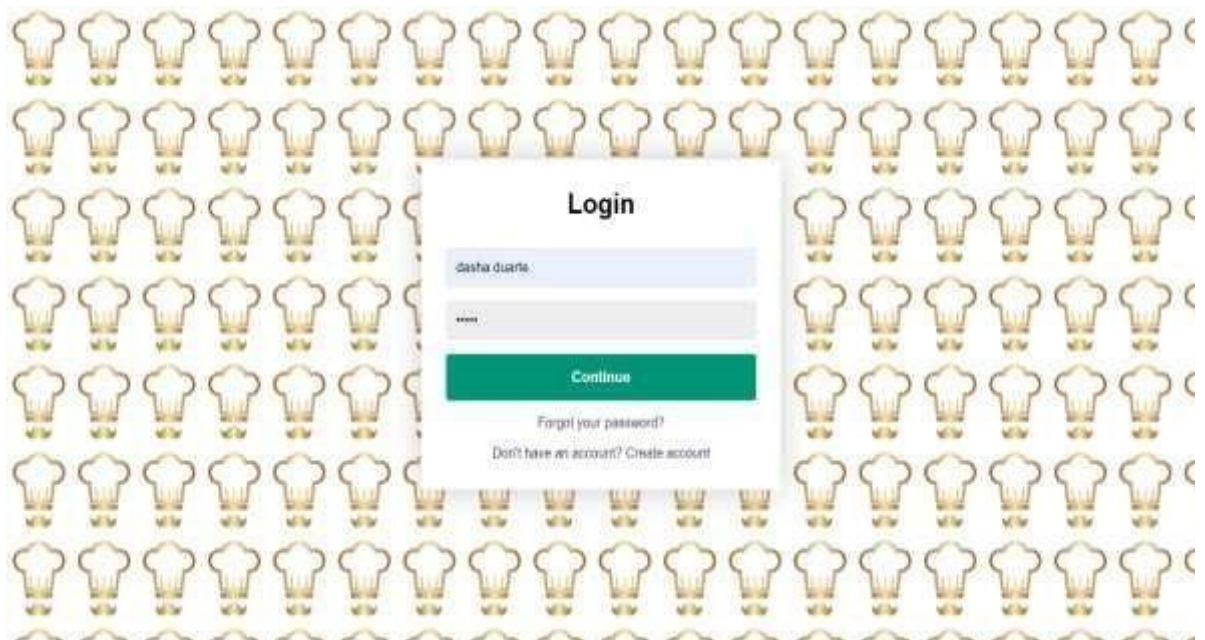
A screenshot of a feedback form on a website. The form is titled "LEAVE A MESSAGE" and "We would love to hear from you". It has three input fields: "Your Name", "e-mail", and "Your Message". A green "SUBMIT" button is at the bottom. The form is set against a light green background with a navigation bar at the top containing links: Home, Menu, About, Contact, BmiCalc, Login, and Signup.

Screenshot 8.6: Our Contact page





Login successful. Welcome, dasha duarte!



## **Chapter 9: Conclusion**

### **Conclusion**

Eating a balanced diet is crucial for maintaining good health and overall well-being. The information presented on this healthy food website provides a comprehensive guide to making informed dietary choices. By exploring the diverse range of articles and resources available, individuals can gain valuable insights into the importance of nutrition. A diet rich in fruits, vegetables, and whole grains can significantly reduce the risk of chronic diseases, such as heart disease and diabetes. Additionally, the website underscores the significance of portion control and mindful eating in weight management. The incorporation of lean proteins and healthy fats into one's diet is highlighted as essential for a balanced and satisfying culinary experience. Moreover, the site emphasizes the importance of hydration and the consumption of water to maintain optimal health. The inclusion of practical tips and recipes serves as a valuable resource for those looking to transition to a healthier diet. The website's dedication to promoting dietary awareness can positively impact the lives of individuals seeking to improve their nutritional choices. In conclusion, this healthy food website offers a wealth of information and practical advice to support a healthier lifestyle through mindful eating and nutritional knowledge. By following the guidance provided, individuals can take proactive steps toward achieving their health and wellness goals, ultimately leading to a happier and more fulfilling life.

## **Chapter 10**

### **REFERENCES**

To gather references for our project, we considered looking into the following sources:

- 1) Creating a website that suggests healthier alternatives to cravings for busy individuals is a great idea!
  
- 2) Health and Nutrition Websites: Explore websites like Healthline, WebMD, and Mayo Clinic for articles and advice on healthy eating alternatives.
  
- 3) Cooking and Recipe Platforms: Platforms like Epicurious, Allrecipes, and Food network often feature quick and healthy recipe ideas.
  
- 4) Meal Planning Apps: Apps like MyFitnessPal, Yummly, and Mealtyme offer meal planning and recipe suggestions based on dietary preferences and restrictions.
  
- 5) Nutritional Blogs: Many bloggers focus on quick and healthy recipes, such as Minimalist Baker, Skinnytaste, and Oh She Glows.

6) Research Papers: Scholarly articles on topics like behavior change, nutrition, and food psychology can provide valuable insights into creating effective craving alternatives

## **Appendix 1:**

Modules:

**1. User Interface (HTML and CSS):** Our user-centric design philosophy shines through the user interface. The seamless blend of HTML and CSS provides an aesthetically pleasing and highly intuitive platform. Users can effortlessly input their preferences and access their personalized choices, making the planning process engaging and user-friendly.

**2. Database (MySQL and XAMPP):** The heart of our platform lies in the database, powered by MySQL and XAMPP. This robust architecture securely stores and manages a vast repository of Healthy alternative-related information.

**3. Javascript**    User Interface (UI) <--> Algorithm <--> Database | v Recommendation Engine | v Third-Party                      APIs