Project Documentation

of

CampusMart: An E-Commerce Website

Ву

NAME	ID
TANVIR AHAMMED BIPUL	221-15-4925
MD. JAHIDUL ISLAM RAKIB	221-15-4814
SAMSUL AREFIN	221-15-5279
SAYED MD AHSANUL HAQUE	221-15-5330

This Report Presented in Partial Fulfillment of the Requirements for the Software Project-II course of B.Sc. in Computer Science and Engineering.

Supervised By

MD. ASSADUZZAMAN

Lecturer (Senior Scale)

Department of CSE

Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY DHAKA, BANGLADESH

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INTRODUCTION

1.1 Project Name:

"CampusMart"

1.2 Background:

The <u>CampusMart</u> project aims to address the unique needs of our university campus by providing a comprehensive e-commerce platform. The idea stems from the large size of the campus, resulting in significant distances between halls and essential service points such as restaurants and stores. To bridge this gap, CampusMart will facilitate the digital delivery of food, medicine, groceries, and electronic products.

1.3 Project Objectives:

- Develop a user-friendly e-commerce website for the university campus.
- Extend the platform to a mobile application for enhanced accessibility.
- Provide a one-stop solution for ordering food, medicine, groceries, and e-products.
- Improve convenience and save time for students, faculty, and staff.
- Ensure the availability of essential items within the campus.

1.4 Scope:

CampusMart will focus on serving the university campus community, offering a range of products and services tailored to the daily needs of students, faculty, and staff.

CHAPTER 2

UNIQUE IDEA

2.1 Description: CampusMart will be a unique e-commerce platform catering exclusively to the university campus. The project will commence with the development of a website, followed by the creation of a mobile application. The platform will facilitate the digital delivery of food, medicine, groceries, and e-products, providing a convenient and efficient solution for the campus community.

2.2 Features:

- Seamless and user-friendly interface for easy ordering.
- Delivery of a wide range of products from local vendors.
- Focus on saving time for students and ensuring convenience.

2.3 Merits:

2.3.1 Benefits for Users:

- Convenient and efficient ordering process.
- Time-saving, especially for students with tight schedules.
- Enhanced safety for girls' hostel students, allowing them to order after
 7 pm.

- Access to a variety of products without leaving the campus.
- **2.3.2 User Interface:** CampusMart will offer a seamless and user-friendly interface, ensuring a positive user experience while ordering food, medicine, and groceries.

2.4. Demerits:

2.4.1 Competition:

- CampusMart faces competition from existing platforms like Food Panda.
- Strong marketing efforts are required to gain user trust and establish CampusMart as a reliable service.

2.4.2 Dependency on Local Delivery Services:

- Depending on existing local delivery services may pose challenges.
- Strategies for overcoming competition and building trust need to be formulated.

METHODOLOGY

3.1 User's Journey

1. <u>User Registration:</u>

- User visits the website.
- User creates an account by providing personal information (name, email, password etc.).
- User account data is stored in the database.

2. <u>User Login:</u>

- Registered users log in using their email and password.

3. <u>Visiting the site and choosing products:</u>

- Upon login, users can access the site's products information with image, cart and business policy.
- A lot of product's information is provided from the database and displayed on the website.

4. Selecting a product:

- Users scroll the site, select products and add to their cart.
- After adding to cart, user can choose another one and add to the cart according to their choice.
- Users can order those products instantly or later using the cart.

5. <u>Data Storage:</u>

- User order, cart and delivery address data are stored in the database, helping them with the user's account.

6. Confirmation and Payment:

- Users receive a confirmation for their orders, home delivery.
- Users make payments, if required, securely through the website.

7. <u>Delivery Processing:</u>

- The site only provides the facility of online ordering and home delivery.
- The products will be delivered to the address given by the user.
- If user changes his location he can update the location.

8. Feedback and Support:

- Users can provide feedback, reviews, or contact customer support for assistance.

3.2 Requirement Analysis and Collection

3.2.1 Software Requirements:

- <u>Visual Studio Code (VS Code)</u>: The primary development
 environment for producing and editing the website's source code
 was Visual Studio Code, a versatile and capable code editor. It made it
 easier to code and debug.
- Browser (Google Chrome): For testing and viewing the website,
 Google Chrome was used as the primary web browser. It enabled the site's front-end components to be inspected and debugged in real time to ensure cross-browser compatibility.
- <u>Figma:</u> Figma served as a platform for creating user flow diagrams, which improved the visual aesthetics and usability of the website.

3.2.2 Language Specification:

Frontend: We will use a modern web development stack with HTML, CSS, and JavaScript for the user interface. Additionally, we will use a frontend JavaScript framework like React for interactive features.

Backend: The backend will be built using a scalable language and framework such as Node.js, Python (Django or Flask). This will handle user accounts, order processing, and vendor integrations.

Database: We will utilize a robust and scalable database system such as MySQL, PostgreSQL, or MongoDB to store user data, product information, and order history.

Mobile App: In addition to the web platform, we will consider developing mobile apps for Android and iOS to provide a more convenient ordering experience.

Project Plan

4.1 Timeline:

Website Development:

• Start Date: 20-09-2023

• End Date: 20-12-2024

Mobile Application Development:

• **Start Date:** 25-08-2024

• End Date: 18-06-2025

Testing and Quality Assurance:

• Start Date: 22-12-2024

• End Date: 18-13-2025

Launch:

• Launch Date: 25-08-2025

4.2 Resources:

Development Team:

- List of Team Members:
 - ✓ Project Manager: Mr. Alexander Thompson
 - ✓ Web Developer 1: Ms. Emily Rodriguez
 - ✓ Web Developer 2: Mr. James Foster
 - ✓ Mobile App Developer 1: Dr. Olivia Chen
 - ✓ Mobile App Developer 2: Mr. Benjamin Patel

Marketing Team:

- List of Team Members
 - ✓ Marketing Manager: Ms. Lauren Williams
 - ✓ Content Writer: Mr. Michael Turner
 - ✓ Social Media Specialist: Ms. Jasmine Lee
 - ✓ Graphic Designer: Mr. Ethan Reynolds

Testing Team:

- List of Team Members:
 - ✓ Testing Lead: Ms. Samantha Carter
 - ✓ Quality Assurance Analyst 1: Mr. Andrew Mitchell
 - ✓ Quality Assurance Analyst 2: Ms. Jessica Turner

4.3 Budget:

Detailed breakdown of costs for development, marketing, and other projectrelated activities:

Development Costs:

- Website Development:
 - *Design and UI/UX: \$10,000*
 - Frontend Development: \$15,000
 - Backend Development: \$12,000
 - Total: \$37,000
- Mobile Application Development:
 - Design and UI/UX: \$8,000
 - App Development (iOS and Android): \$20,000
 - Total: \$28,000

Marketing Costs:

- Advertising and Promotion:
 - Online Advertising (Social Media, Google Ads): \$8,000
 - Campus Events and Sponsorship: \$5,000
 - Total: \$13,000
- Collateral (brochures, posters, etc.):
 - Printing and Design: \$3,000
 - Distribution: \$2,000
 - Total: \$5,00

Other Project-Related Costs:

• Testing and Quality Assurance:

• Testing Tools and Software: \$5,000

• Quality Assurance Team Training: \$2,000

• Total: \$7,000

Miscellaneous (contingency):

• Unforeseen Expenses: \$10,000

• Total: \$10,000

Total Budget:

• Grand Total: \$100,000 (Sum of all costs)



Risks and Mitigation

5.1 Competition Risks:

Risk:

• Potential competition from existing platforms like Food Panda.

Mitigation:

• **Strategy:** We Launch aggressive marketing campaigns highlighting CampusMart's unique features.

Action Steps:

- We Conduct market research to identify key differentiators.
- Develop a compelling marketing message emphasizing CampusMart's benefits.
- Utilize various channels such as social media, campus events, and targeted advertising to reach the audience.
- We Offer promotions or discounts during the initial launch phase to attract users.

5.2 Dependency Risks:

Risk:

 Dependency on existing local delivery services may pose operational challenges.

Mitigation:

• **Strategy:** Establish partnerships with reliable local delivery services to ensure seamless operations.

Action Steps:

 Identify and approach local delivery services with a track record of reliability.

- Establish clear communication channels and service level agreements (SLAs) to ensure timely and efficient deliveries.
- Regularly monitor and evaluate the performance of delivery partners to address any issues promptly.
- Consider having backup options in case of unexpected service interruptions.

This detailed project plan provides a more comprehensive view of the timeline, resources, budget, and risk mitigation strategies for the successful execution of the CampusMart project.



DESIGN SPECIFICATION

6.1 Front-end Design

To attain its wide range of functions, the "CampusMart" website heavily relied on the expert utilization of various programming languages and technologies. The following components were vital in ensuring the project's successful accomplishment:

HTML (Hypertext Markup Language): HTML was the foundation for organizing the website's content. It allowed the production of structurally marked-up web pages and ordered the information shown to users.

CSS (Cascading Style Sheets): CSS is essential in improving the website's visual aesthetics and user experience. It enabled the application of styles, layout, and design components, resulting in a unified and visually pleasing presentation.

6.2 Registration Page:



User Registration

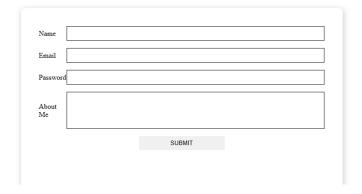


Figure 6.1: Registration Page

The sign-up page on the webpage in picture 4.1 is easy to use, allowing visitors to create accounts quickly. The page only asks for essential information, such as name, email address, mobile number, date of birth, and a strong password. This makes the registration process quick and efficient.

6.3 Log in Page:

From this page users will start his/her journey to our website. All the section are rooted to this page. So from this page user will get 'products', 'Cart' and 'Contact and copyright' section by scrolling the page down or clicking the buttons on navigation bar.



Figure 6.2: Log In Page

6.4 Home page:

In this section users can discover key information about the website. Users can explore our gallery to know about the products and let grow their interest to buy products. Moreover, they will be able to add in cart, order them instantly by online payment. They can get package delivery at any location. Even they will get the opportunity to change locations and get the package securely.



Figure 6.3: Homepage

6.5 Our Products:

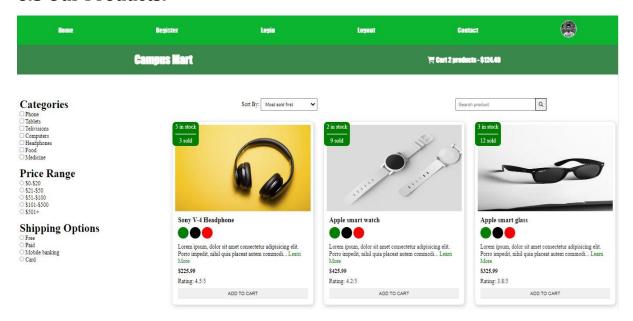


Figure 6.4: Our Products

We are proud to offer our customers a wide selection of high-quality products and gadgets at competitive prices. We are also committed to providing our customers with the best possible shopping experience.

6.6 Shopping Cart Page:

This section is where user can secure a spot at our restaurant. It's like having a VIP pass to a great dining experience. User can pick the date and time, let us know how many guests are joining and any special requests. We'll make sure a table is ready just for user when he arrives. No waiting around; it's all about enjoying the meal hassle-free.

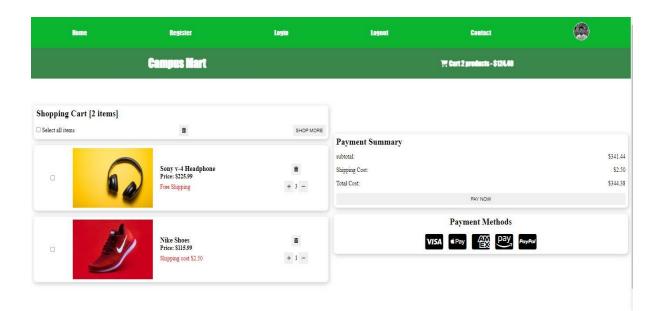


Figure 6.5: User cart

6.7 Profile page:

In this page user will be able to check their profile information. They will be able to edit or update their profile at any time including profile pictures.

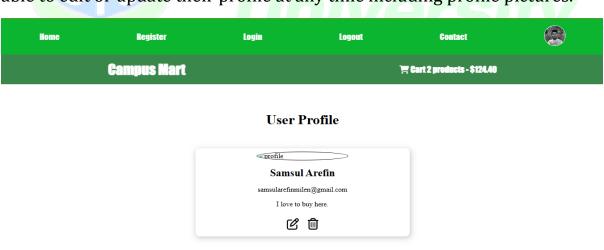


Figure 6.6: Profile Page

6.8 Contact and Copyright:

In this section clients will be given the option to be connected with the authority. They will be able to complain about their problem. Besides, we will let the user to chat directly with a representative.

Here will also be some information and notice about the safety and copyrights.

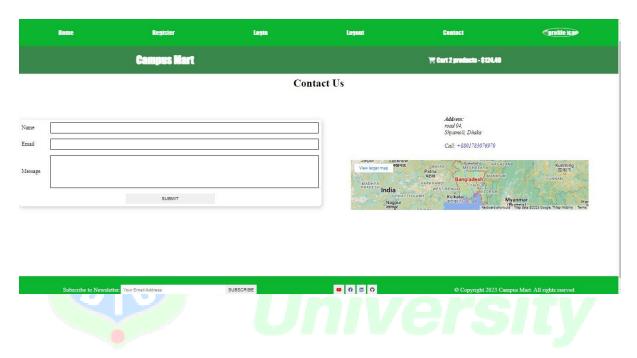


Figure 6.7: Contact and Copyright

CONCLUSION AND FUTURE SCOPE

7.1 Discussion and Conclusion

The <u>CampusMart</u> e-commerce website was created using the latest web development technologies to provide a sleek, user-friendly, and interactive shopping experience. It features a variety of innovative features, such as personalized shopping, comprehensive product search, and a robust customer support system. We are proud of the <u>CampusMart</u> website and the value it offers to our customers. And finally, we are also proud to create such a website for students and teachers.

7.2 Scope for Further Developments

Our team endured many challenges while working on this project, including content management, cross-device testing, CSS and stylistic complexities, and ensuring data correctness. These challenges were difficult, but they helped us learn and grow. We plan to add more features to our website in the future, and we are committed to making it more user-friendly and faster by listening to feedback from our customers.