

QuickBazaar – An Online Marketplace

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Chapter 1

Introduction

Online marketplaces let customers and companies exchange goods and services on a predetermined platform, much like a conventional physical retail store. E-commerce transactions, however, take place fully online as opposed to in a physical location, which is the major distinction between it and physical commerce. E-commerce is the practice of conducting business for the sale of goods and services through the use of communications and instruments based on communications, such as the internet. Nowadays, daily purchases are made on e-commerce platforms by people in the developed world and an increasing number of people in the developing world. Even still, there is much to be desired and there is still room for improvement in the underdeveloped world's e-commerce spread. In this study, the ideal response to the problems encountered when creating an e-commerce website is described. It consists of the planning stage, which begins with choosing the use case and web application's architectural design. In general, the front-end and back-end development phases make up the entirety of the development process. Along with the database design, its relational connectivity is also examined. Products will be categorized and listed in order on our website. Users that register can view the images of the things they need and make purchases while having a personal profile. The sale and purchase of goods and services over computer-mediated networks with the actual payment and delivery being handled offline are referred to as e-commerce transactions in its broadest sense. Our goal is to establish a user-friendly e-commerce platform that the customers will primarily find acceptable.

Chapter 2

Related Works

E-commerce in Bangladesh is expanding at a faster rate each year. In the first quarter of 2016, Bangladeshi e-commerce experienced significant growth of almost 67%, according to an article in The Daily Observer. [1] Bangladesh experiences a yearly increase in internet users. As more people have access to the internet, they will use the sites more frequently. Bangladesh offers excellent prospects for e-commerce. There are some online market places that are similar to our project. [2]

1. **Daraz:** Daraz is the leading e-commerce marketplace across South Asia. It is very popular in Bangladesh. They ensure 100% authenticity, best price, fastest delivery, customer service and protection, easy and free return policy and many more services which is very similar to our project. [3]
2. **Alibaba:** Alibaba is an international marketplace for wholesale purchases where customers may get the best deals on big quantities of goods. Alibaba enables customers to develop custom items, bargain directly with producers, and save a lot of money. [4]
3. **Flipkart:** The most well-known eCommerce site in India, Flipkart, is encouraging numerous Indian companies to enter the cutthroat online retail market. The platform provided by this multi-vendor website allows vendors to showcase their goods to website users. [5]
4. **Amazon:** The enormous online store Amazon.com sells a wide range of products, including books, music, movies, housewares, electronics, toys, and many others, either directly to its millions of consumers or by acting as a middleman between them and other sellers. [6]
5. **Chaldal:** Bangladesh's largest online grocery market is Chaldal. The business, which began as a tiny online grocery retailer, has since grown into a massive food corporation with a number of verticals that support the grocery at its core. [7]
6. **Rokomari:** Rokomari also functions as an online marketplace. It works with publishers who market their books on this site. A minor number of books written in other languages can be found here, however the majority of the books in this market are written in Bengali and English. It mostly focuses on selling books whereas our website will have variety of products. [8]

These are some related works to our project. In our project, we want to keep variety of products instead of focusing on a specific product. Most notably, Bangladesh lacks an online marketplace for the sale of agricultural goods. These products will be highlighted on our website. Bangladesh is an agricultural nation, hence it will have a positive impact on our nation's agriculture sector. Thus, this is one of our website's fields of specialization. Despite the fact that these websites closely resemble our website, there are certain shortcomings that can be fixed. Some websites occasionally take too long to load. An excessively slow e-commerce website may even cause users to lose trust in it. If it takes more than five seconds for your site to load, the majority of users will quit. We shall therefore make an effort to reduce the website loading time. Some websites employ deceptive advertising to persuade visitors to buy something. The customers are misled by this. We'll steer clear of this in our project. Another problem with online markets is irrelevant or poor-quality product photos. Customers who want to be sure that the item they're about to buy is clean and in perfect shape won't appreciate seeing this. All of the product photos in our website will continue to be vivid and pertinent. In an effort to draw buyers, they occasionally utilize spammy product descriptions. A user's perception of your site's credibility can be quickly damaged by spammy and low-quality material. We'll keep our website free of all forms of spam. Additionally, the aforementioned websites do not offer an emergency delivery feature during the shipping process. A customer may occasionally require a product more quickly. In such circumstances, this capability can be useful. By including this, we'll expand the shipping feature. Furthermore, a live search feature will be available so that buyers may look up the things they need using the product's keywords. We're going to add a chatbot system to our website so that users can text us with any questions. Unlike Amazon, where shipping costs are excessively high, our website will have lower shipping costs. Compared to other websites, this one will be simpler and more beautiful. Moreover, these are the flaws of some of the online marketplaces we plan to improve.

Chapter 3

System Background

“QuickBazaar” is a website application that enables users to buy and sell tangible objects, services, and digital products online as opposed to at a real location. A company can handle orders, collect payments, manage shipping and logistics, and offer customer care through this website, and a user can purchase the things they need from any location at any time.

Customers will also have the option of emergency delivery. This functionality is missing from the competing website. Unlike Amazon or Alibaba, the shipping fee will be lower. Our website will load more quickly than others. It won't take long. Users have the chance to view a clear representation of the product they want to buy. Numerous websites place little emphasis on the visual appeal of their products. Some e-commerce websites attempt to attract customers' attention by using a variety of spammy tactics. Such stuff won't be present on our website.

Our website is divided into two sections. One is the admin panel, while the other is the buyer view. Usually, anyone with internet access is able to visit our website. Customers can see the available goods on the website. The product brands and classifications are also visible to them. Additionally, customers have the option of searching for the needed item. The user must register, nevertheless, in order to place an order. Or if they already have an account, they merely need to log in. After logging in, individuals can quickly add the things they want to the cart. In addition, they have the choice to modify their cart by adding or removing goods. They can then proceed to the checkout page to confirm the order. Both online and offline payment options are available to them. Before buying a product, customers can read reviews. They can also rate things based on their personal experiences. They can select items from brands or categories that are relevant to them. They can also view all product information and pictures. Customers have the option of selecting the product's color and amount. There will be a pagination system for their convenience so they may check products by visiting different pages. They may view the list of items they've ordered as well as the progress of their deliveries. Customers have the option of contacting customer assistance as well. For any inquiries, they can contact or chat.

On the other hand, anyone who doesn't log in is unable to access the admin dashboard. Only admins have access to and control over the admin panel. The admin must log in in order to access it as a result. After logging in as an administrator, a user can add new products, brands, and categories. They have access to and control over every product from the admin area. They can also modify and update the products. They can determine whether a product is available or not. The order details and delivery status can both be managed by the admin. They can also print the order information. Furthermore, admin can see the customer information in the admin panel.

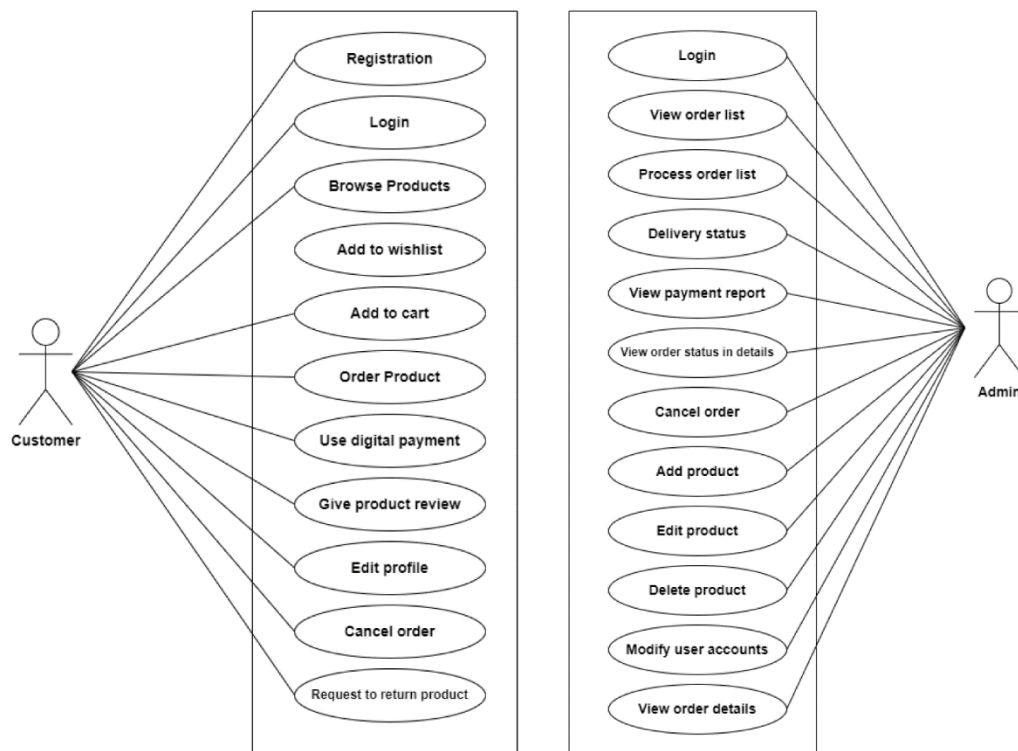


Figure 3.1: Use Case Diagram

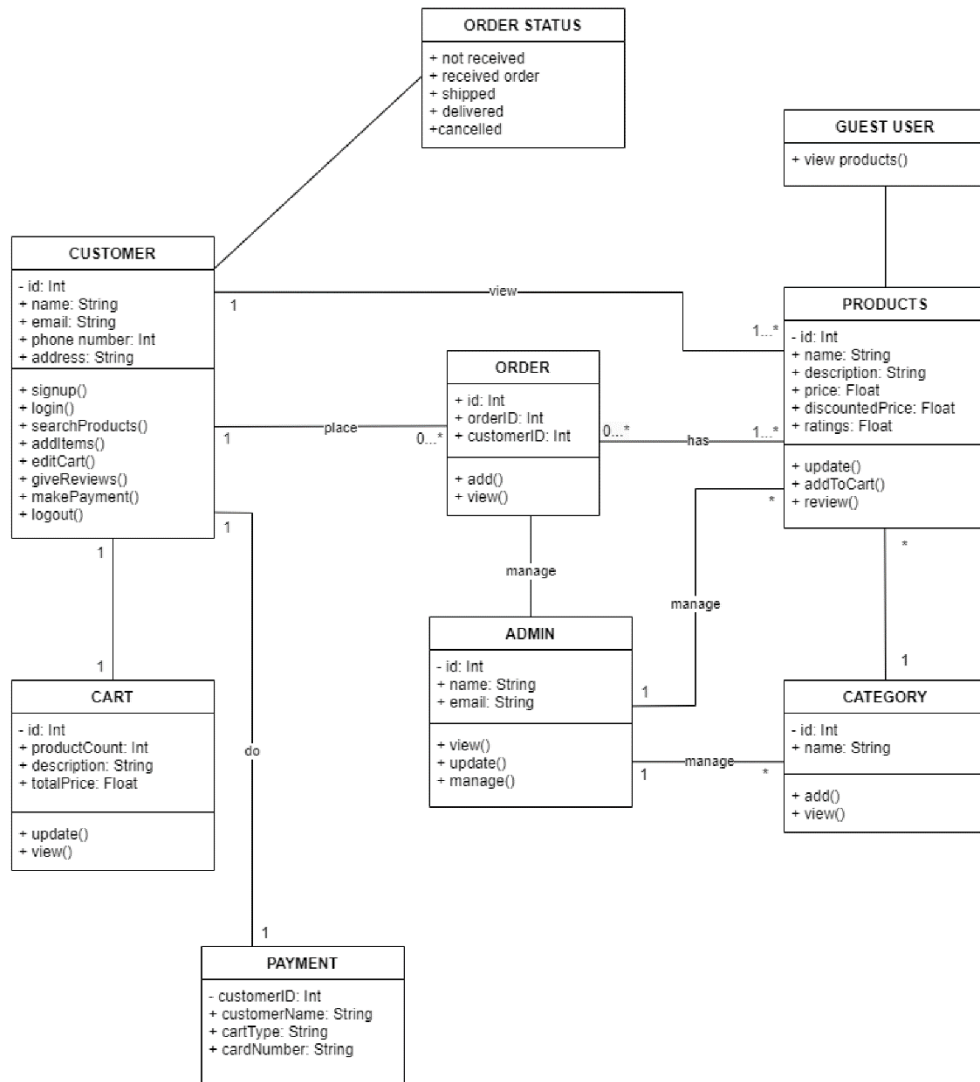


Figure 3.2: Class Diagram

Chapter 4

Economic and Social Impact

E-commerce websites can have a significant economic impact in Bangladesh. Here are a few ways in which e-commerce can contribute to the country's economy:

1. Increased revenue and profitability for businesses: E-commerce allows businesses to reach a wider customer base and sell their products and services online, which can increase their revenue and profitability.
2. Job creation: The growth of e-commerce in Bangladesh can create new job opportunities in areas such as website development, online marketing, and customer service.
3. Improved efficiency and competitiveness: E-commerce can help businesses in Bangladesh to streamline their processes and reduce the need for physical storefronts, which can lead to cost savings and make them more competitive in the global market.
4. Access to global markets: E-commerce can enable businesses in Bangladesh to sell their products and services to customers around the world, increasing their access to global markets and helping them to expand their reach.

Overall, the economic impact of e-commerce in Bangladesh is likely to be positive, as it can drive economic growth, create new job opportunities, and improve the efficiency and competitiveness of businesses in the country.

Chapter 5

Ethical and Professional Responsibility

There are several ethical and professional responsibilities that e-commerce websites in Bangladesh need to consider in order to operate in a responsible and sustainable manner. Some of these responsibilities include:

1. Protecting customer data: E-commerce websites have a responsibility to protect the personal and financial data of their customers and ensure that it is not misused or compromised. This may involve implementing strong security measures and complying with relevant laws and regulations.
2. Ensuring fair and transparent business practices: E-commerce websites should be transparent about their pricing, terms and conditions, and any other relevant information that may impact their customers. They should also ensure that their business practices are fair and do not discriminate against any particular group of people.
3. Providing high-quality products and services: E-commerce websites should strive to provide high-quality products and services to their customers and be responsive to their needs and concerns. This may involve offering good customer support, providing clear and accurate product descriptions, and handling returns and refunds in a fair and timely manner.
4. Complying with laws and regulations: E-commerce websites in Bangladesh should ensure that they are complying with all relevant laws and regulations, including those related to consumer protection, privacy, and data security.
5. Ensuring the security of online transactions: It is essential to implement measures to ensure the security of online transactions, such as using secure payment gateways and implementing measures to prevent fraud.

By adhering to these ethical and professional responsibilities, e-commerce websites can help to build trust and credibility with their customers and contribute to the overall development and growth of the e-commerce industry in Bangladesh.

Chapter 6

Tools and Technologies

To carry out this project, we made use of a variety of tools and technology. Here is a list of them:

Frontend: HTML, CSS, Tailwind CSS, React JS

Backend: Express JS, Node JS

Database: Mongo DB

API testing: Postman

Chapter 7

Results

User View

Landing Page: The goal of a landing page is to convert visitors into customers by presenting them with a clear and compelling call-to-action (CTA) that encourages them to take a specific action, such as making a purchase or signing up for a newsletter.

Product category: An e-commerce web application typically includes a product catalog that displays the products available for purchase, along with details such as images, descriptions, and pricing.

Product Details: The product details function of an e-commerce website is a feature that allows customers to view detailed information about a specific product. This typically includes information such as the product's name, price, images, description, and any available options or variations (such as size or color).

Sign up-Sign in: The sign-up and sign-in features of an e-commerce website are typically used to create and manage customer accounts. Customers who create an account can save their shipping and payment information for future purchases, view their order history, and access other account-specific features.

Shopping cart: A shopping cart function allows customers to select products they want to purchase and keep track of them as they shop. The shopping cart typically includes options for adjusting the quantity of items and calculating the total cost.

Search Bar: The search function of an e-commerce website is a feature that allows customers to quickly find products they are looking for on the site. This is typically accomplished through the use of a search bar, where customers can enter keywords or phrases related to the product they are looking for.

Admin View

The admin section is inaccessible to anyone without a login. In the admin dashboard, we have finished the part where we created products and categories.

Chapter 8

Conclusion and Future Work

We need to build our website more advanced and elegant, according to our study on other E commerce websites, our concept is quite similar to theirs. In the future, that's why we want to include many unique features that the other websites don't have. After the web application is finished, we'll turn it into a mobile application.

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