

Ahsanullah University of Science and Technology

Department of Computer Science and Engineering

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Online Store with Reviews



Group : 06

20210104032 : Afia Fahmida

20210104040 : Ashikul Islam

20210104047 : Zenun Chowdhury

Faculty : Nazmus Sakib AND Md Zahid Hossain

Abstract

The "Online Store with Reviews" project aims to design and develop a sophisticated database system for managing records of products categorized in details and lets people explore more. This system will enable customers and consumers to explore products as per their interest, order and give reviews on both our service and the product quality. Sellers can efficiently manage their product details, customer information, and all the things related to the business. The project aims to streamline the online shopping procedure, improve customer service, and enhance the operational efficiency of online business.

Contents

1	Purpose of the Project	1
2	Project Potential Clients	2
3	Project Estimated Cost	3
4	Project Stakeholders	4
5	Project Details	5
6	Entity Relationship Diagram (ERD)	6
7	Project Schema	7
7.1	User Table	7
7.2	Products Table	7
7.3	Orders Table	8
8	Searching Design	9
9	Conclusion and Future Work	10
9.1	Conclusion	10
9.2	Future Works	10

List of Figures

1	Entity-Relationship Diagram (ERD) for the Online Store & Reviews	6
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List of Tables

1	Sample Data in the "User" Table	7
2	Sample Data in the "Products" Table	7
3	Sample Data in the "Orders" Table	8

1 Purpose of the Project

The primary purpose of the "Online Store with Reviews" project is to provide an online shopping platform where products can be purchased effortlessly and orders can be managed efficiently. This system is designed to address the following key objectives:

- **Exploring Products:** The project aims to simplify the process of accessing the product details in different category and ways. Customers can easily search for available products, choose their preferred ones, and purchase them effort.
- **Global Store:** Just like Global Village our platform is a Global store from where customers can purchase their desired available products effortlessly from no matter what location they are at. Our platform will help in both reducing traffic problems on the roads and in pandemic type situations.
- **Improve Customer Service:** By offering a user-friendly platform, the project enhances the overall customer experience. Customers can access product information, order in a beginner friendly way and pay, ensuring a seamless and convenient purchase.
- **Expand Varieties of product:** In case of onsite stores, having enough space to keep the products safe condition is a factor. It results in unavailability of many products at the same store. The system's flexibility lets several stores or branches of the same store collab and continue their business swiftly by promoting availability.
- **Review System:** The project welcomes customers and consumers to provide reviews publicly so the sellers and other buyers can get the genuine idea of customer service and quality of the product. This will motivate the sellers and let them improve if need.

The "Online Store with Reviews" project will make things easier for buyers and sellers enhancing customer satisfaction and business growth.

2 Project Potential Clients

The "Online Store with Reviews" project has the potential to serve a wide range of clients, including but not limited to:

1. **Sellers:** This project is designed to help the common sellers not related to any specific brands to market their available products more easily with less hassle. It offers flexibility and scalability, making it suitable for buyers from all location to access the platform and connecting with the sellers quickly at any time in need.
2. **Brands:** A virtual Store will broaden swift marketing. Due to increased screen time of common people most individuals prefer searching up products online for details. Thus this platform will be profitable for the brands that are willing to sell their products as they will be able to market the items more vastly.
3. **Courier Agencies and Delivery Service Holders:** Our indirect clients are the agencies and individuals who work as Delivery person as the platform will increase employment opportunities for them and their employees.

The versatility and adaptability of the "Online Store with Reviews" make it a valuable resource for clients from both markets and common sectors, whether they are looking to enhance their operational efficiency, expand their services, or improve their customers' booking experience.

3 Project Estimated Cost

The successful development and implementation of the "Online Store with Reviews" project require financial resources to cover various expenses. The estimated costs associated with this project are as follows:

- **Development Phase:** The initial development phase is projected to cost approximately \$50,000. This includes expenses related to database design, software development, and user interface design.
- **Infrastructure and Hardware:** The project requires server infrastructure and hardware to host the system. The cost of server setup and related equipment is estimated to be approximately \$2,000.
- **User Training:** Ensuring that airline staff and users can effectively utilize the system is essential. Training costs, including materials and training sessions, are estimated at \$3,000.
- **Ongoing Maintenance:** After the system's implementation, ongoing maintenance and support are essential for its smooth operation. Monthly maintenance costs are estimated at \$900.
- **Additional Expenses:** Other potential expenses, such as licensing fees, security enhancements, and scalability upgrades, should be considered as part of the project's overall budget.

It's important to note that the estimated costs provided here are approximate figures and may vary based on specific project requirements and decisions made during development.

4 Project Stakeholders

The "Online Store with Reviews" project involves various stakeholders who play essential roles in its planning, development, and operation. The key project stakeholders are as follows:

1. **Sellers:** Sellers are the primary stakeholders. They are the entities that will implement the system to manage product details, availability, and purchasing information.
2. **Users:** Users who use the system to purchase their desired products and manage their orders are significant stakeholders. Their experience and satisfaction are pivotal to the success of the project.
3. **System Developers:** The team responsible for designing, developing, and maintaining the database system and associated software are key stakeholders. They are accountable for delivering a functional and reliable solution.
4. **Maintenance and Support Team:** Ongoing maintenance and support of the system are essential. The maintenance team is responsible for ensuring the system's continued performance and resolving any issues that may arise.
5. **Management and Decision-Makers:** Individuals responsible for making strategic decisions regarding the project's implementation, including business owners and executives, are critical stakeholders. Their support and engagement are vital to the project's success.

The collaboration and effective communication among these stakeholders are essential to ensure the project's successful development, implementation, and long-term operation. Their active involvement will contribute to the achievement of project objectives and benefits.

5 Project Details

The "Online Store with Reviews" project comprises several key components that collectively make it a robust and efficient solution for the airline industry. These components include:

- **Database Development:** The project involves designing and implementing a relational database that stores information related to user accounts, categories of products, product details, payment records, order lists and customer review records. This database forms the core of the system.
- **User Interface:** A user-friendly web-based front-end is developed to provide customers with an intuitive platform for exploring and purchasing goods. The interface also enables sellers to manage product prices, availability, and customer data.
- **Payment Gateway Integration:** The system integrates with payment gateways to facilitate secure online transactions, allowing customers to complete payments efficiently.
- **Reporting and Analytics:** To support the marketing process in monitoring their operations, the project includes a reporting and analytics feature. This component allows the platform to generate reports on revenue, and passenger statistics.

The collaborative efforts of the development team and stakeholders ensure that these project components are successfully integrated to create a comprehensive and effective "Online Store with Reviews."

6 Entity Relationship Diagram (ERD)

An Entity-Relationship Diagram (ERD) illustrates the structure of the database used in the "Online Store with Reviews." It displays the entities, relationships, and attributes within the database. Below is a simplified representation of the ERD:

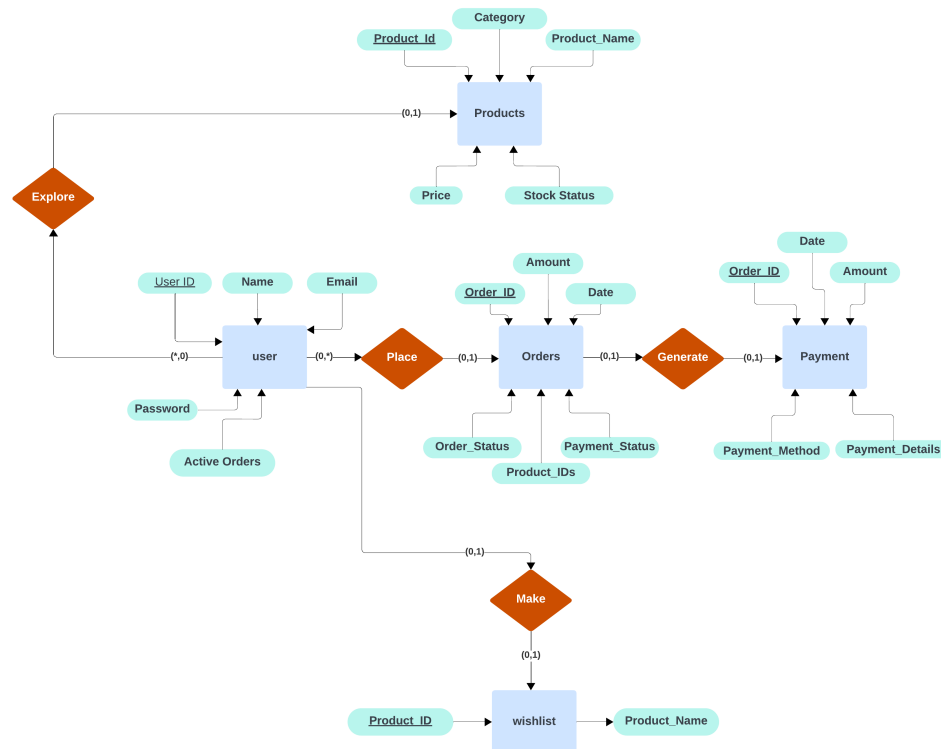


Figure 1: Entity-Relationship Diagram (ERD) for the Online Store & Reviews

7 Project Schema

The database schema for the "Online Store with Reviews" outlines the structure of the database tables and their associated attributes. Below are simplified examples of key tables with sample data presented in tabular form.

7.1 User Table

The "User" table stores basic information related to the user.

UserID	Name	Email	Password	Active orders
101	Ashikul Islam	ashik123@gmail.com	ashik123	3
102	Zenun Chowdhury	zenun780@gmail.com	zenun4047	1
103	Afia Fahmida	afia1234@gmail.com	afia8989	6

Table 1: Sample Data in the "User" Table

7.2 Products Table

The "Products" table stores information for each products.

Product ID	Product Name	Category	Price (\$)	Stock Status
1231	Amazfit Pop 3	Smartwatch	199	170
1232	Realme Air Buds 3	Headphone	79.99	58
1233	Samsung Galaxy Note 10 plus	SmartPhone	1599.99	25

Table 2: Sample Data in the "Products" Table

7.3 Orders Table

The "Orders" table keeps record of each orders.

Order ID	Order Status	Date	Price (\$)	Payment Status	Product _{IDs}
129831	Processing	20/11/2023	278.99	Paid	1231,1233
129832	Out for delivery	20/11/2023	278.99	Paid	1231,1233

Table 3: Sample Data in the "Orders" Table

These tables provide a visual representation of the sample data within the "User", "Products" , and "Orders" tables. We will customize and expand the schema and data tables as needed for your specific project.

8 Searching Design

The "Online Store with Reviews" offers advanced search capabilities to users, allowing them to find and select products based on specific criteria. The design includes the following search options:

- **Search Products:** Customers can search products according to the categories of the goods they want to buy. The system provides real-time results and displays available products with updated prices.

- **Orders Record Lookup:** Users can access their order records based on their order ID references, and accessing Cart.

- **Purchase Status Check:** Customers can check the status of their orders by entering their order reference and name, providing them with updates on their order details.

The searching design ensures that users can easily find the information they need, facilitating a convenient and efficient booking experience.

9 Conclusion and Future Work

9.1 Conclusion

The "Online Store with Reviews" project aims to improve the virtual marketing and shopping traditions by providing a comprehensive solution for managing product details updates, live updated prices, customer information and ordering process. It offers a user-friendly interface, advanced features, and valuable insights through reporting and analytics.

The successful implementation of this project will contribute to operational efficiency, customer satisfaction, and business growth for both sellers and buyers. It will streamline the product purchasing process, making it more accessible and convenient for buyers, while enabling sellers to make data-driven decisions for their operations.

The collaboration between stakeholders, project developers, and the continued support of the system will ensure its success through this platform.

9.2 Future Works

In the future, the "Online Store with Reviews" can be expanded to include additional features and capabilities for further benefits. Some potential future works include:

- **Loyalty Rewards:** Introducing loyalty programs for customers to reward frequent users and enhance customer retention.
- **Integration with cryptocurrency payment gateway:** Users will be able to make payment using any kind of cryptocurrency using their crypto wallet.
- **Accessibility Enhancements:** Continuously improving the system's accessibility, security, and scalability to meet evolving industry needs and standards.

These future works will further solidify the "Online Store with Reviews" as a cutting-edge solution that adapts to the changing dynamics of the ecommerce industry.