



Report on

Omnimart : E-Commerce Database

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Project Overview

Omnimart E-commerce database project will ensure a structured data storage of a vast number of customers and sellers. There will be a huge inventory for the product information in category with reviews. The project will also manage the data of the orders and offers on products with cart and wishlist. We will also have an internal employees and admin data set who will manage this e-commerce site.

Contributions

Table 1: Team Contributions

ID	Name	Tasks	Percentage
2211247042	Fuwad Hasan	-	-
2211023642	Maharun Afroz	-	-
2211987042	Al-Amin Rabbi	-	-

1 Project Title: Omnimart, E-commerce database

2 Project Description

Omnimart e-commerce database project aims to develop database for an all-in-one e-commerce site which will connect sellers with customers. User Friendly interface and seamless experience will be our top notch priority. Users will be able to register their accounts and order products right away. Users can save their favourite products to wishlist for later purchase and save orders for reordering and get offers based on their purchase history. Sellers can add, update and manage their products. Products will be categorized for easy navigation and users can filter products based on their preferences. Customers can add products from multiple sellers and proceed to a secure checkout process. Customers can choose from different payment options such as mobile banking, Cash on Delivery, Card payment etc. Sellers will have access to their dashboard where they can manage their incoming orders and process them for on time delivery. Customers will be able to track their order status in real time. Customers will be able to leave reviews and ratings for the products they have purchased. These reviews will be displayed on the product pages to enhance transparency and trust. Products will be ranked based on customer reviews. Our database will handle these functionalities in low latency and efficiently.

3 Project Objective

The objectives of this project are:

1. Provide an all-in-one e-commerce platform.
2. Connects sellers and customers for convenient price and quality products.
3. Customers can enlist products for future purchases.
4. Sellers can update their products from a single place.
5. Reviews and rating system is available to enhance transparency and trust.
6. Payments are secure and maintain concurrency.
7. Purchase history is available at all times.
8. Handle a large volume of queries efficiently.

4 Project Deliverable

1. Requirement Analysis
2. Database Design
 - Conceptual ERD
 - Logical ERD
 - Physical ERD
3. Project Implementation and Demonstration

5 Database Design

5.1 Conceptual Design Diagram

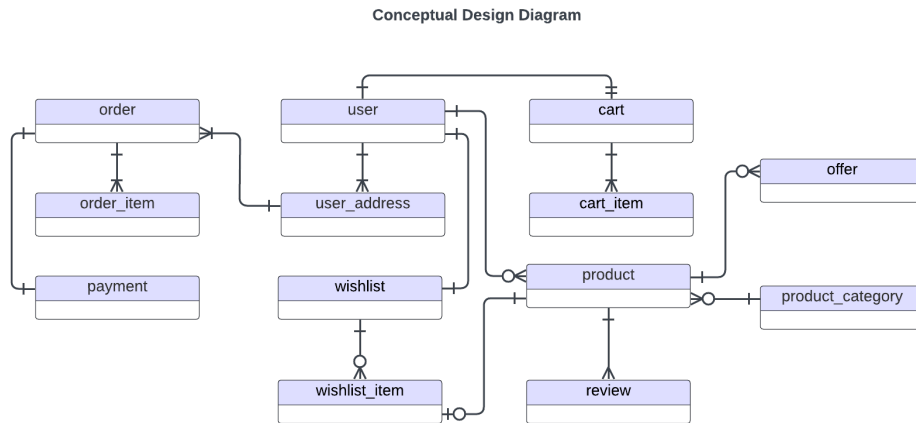


Figure 1: Conceptual design of the database

5.2 Logical Design Diagram

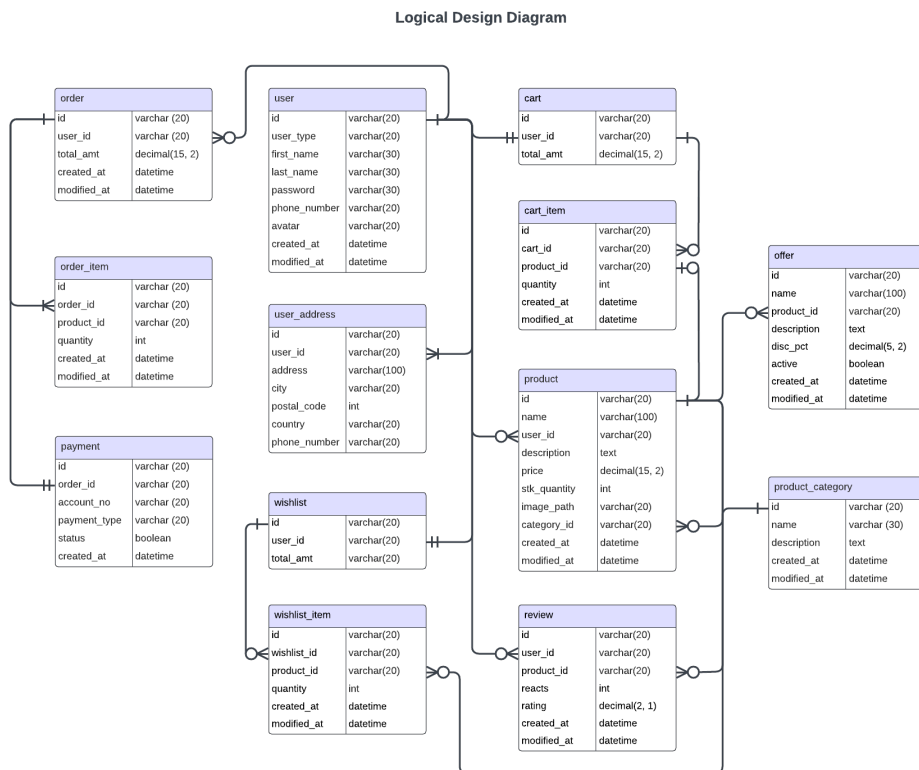


Figure 2: Logical design of the database

5.3 Physical Design Diagram

Insert design diagram in this section. Sample image insertion shown in Figure 3.

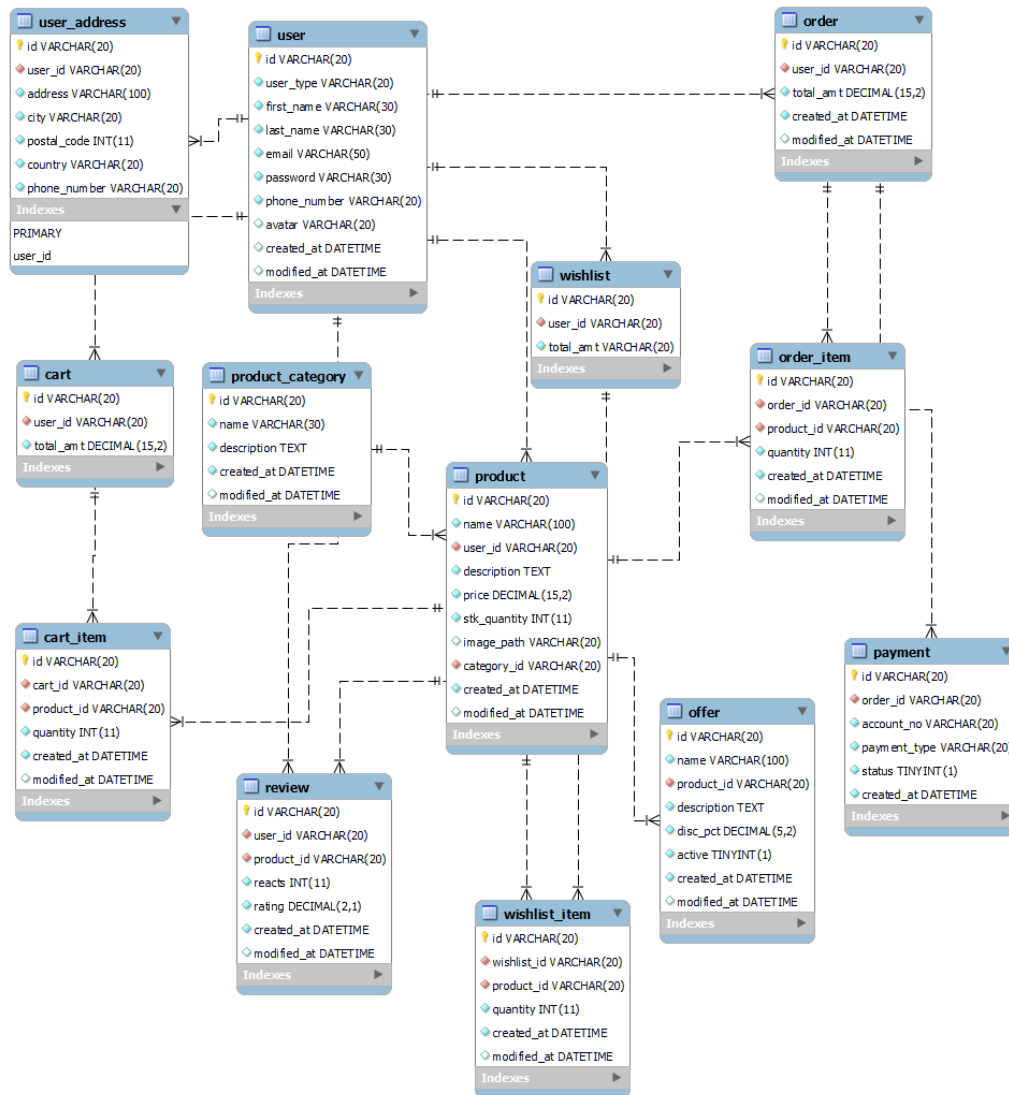


Figure 3: Physical design of the database

6 Implementation

6.1 Data Population

6.2 Data Manipulation

6.3 Query Implementation

7 Database Testing

8 Security Threats Addressed

Write security threats specific to your project.

9 Database Security Mechanism Deployed

Example Images The ROC-AUC curves are also plotted for each type of blahblah- blahblah1 (fig 5), blahblah2 (fig 4), blahblah3 (fig 6), blahblah4 (fig 7).

Example using the mesh parameter

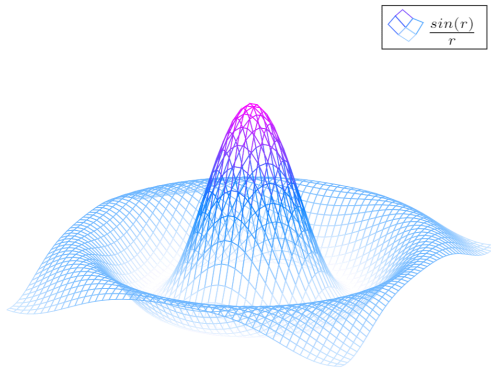


Figure 4: ROC Curve: Random Plot 2

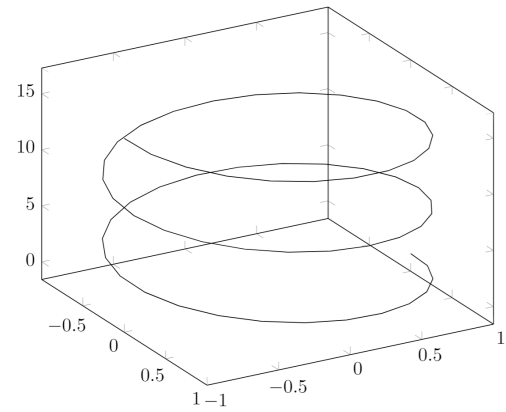


Figure 5: ROC Curve: Random Plot 2

Plotting from data:

Temperature dependence of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ solubility

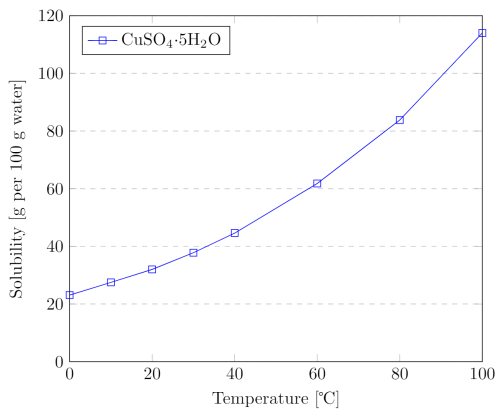


Figure 6: ROC Curve: Random Plot 2

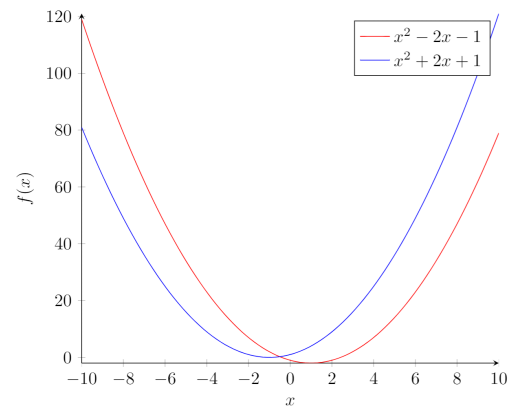


Figure 7: ROC Curve: Random Plot 2

10 Example table

You can use latex tables or long table which spans multiple pages nicely.

Table 2: Table caption / title

	Tools 1	Tools 2	Tools 3
1st Run	168.97%	16.90%	100%
2nd Run	64.83%	0.34%	200.97%
Accuracy (avg.)	40.23%	88.51%	31.03%

Table 3: Table caption / title

symbol	value	unit
zNa	11	-
zF	9	-
E_{maxNa}	0.545	[MeV]

Table 4: Table caption / title

Keyword	Threshold	Parent	Child
"move"	left	-	1
"left"	right	-	1

11 Conclusions

12 Acknowledgements