
Inventory Management System

BAN5501-01

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Group - 2

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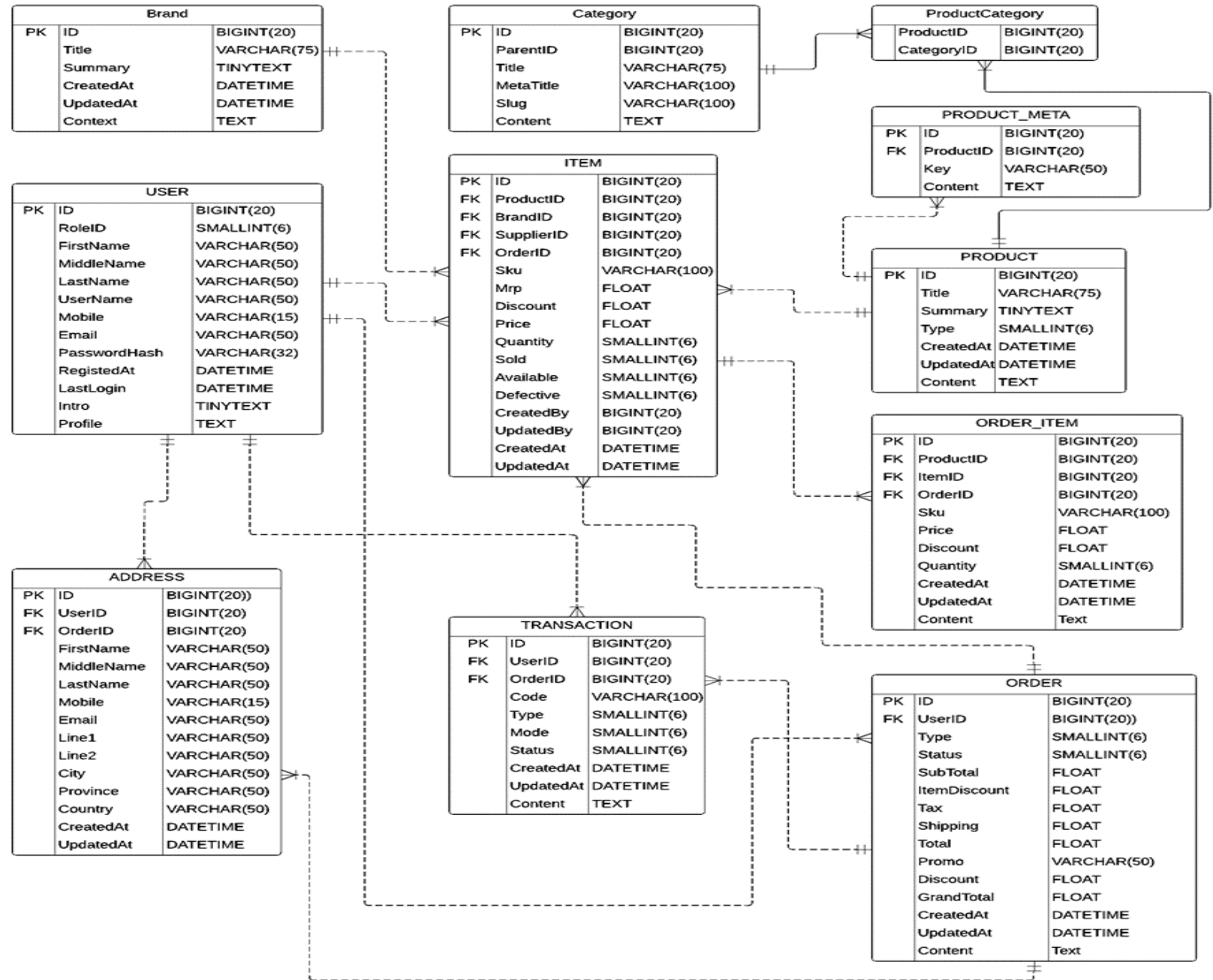
Overview

- A stock management system facilitates the monitoring of inventory levels, orders, sales, and deliveries, which are crucial aspects for businesses to effectively manage their operations.
- The utilization of inventory management permits organizations to maintain meticulous documentation of their stock levels, thus simplifying the monitoring and control of inventory, and ensuring accurate ordering of products at appropriate intervals.
- A stock management system has the potential to aid businesses in maximizing their warehouse capacity while also mitigating stock shortages that can result in a loss of revenue through unfulfilled sales.
- The implementation of a stock management system can yield numerous benefits for businesses such as efficient utilization of time and financial resources, optimized workflow processes, and heightened levels of customer contentment.
- This system possesses the capacity to mitigate the potentiality of stockouts and overstocking, minimize the probability of errors in order processing, and enhance the precision of reporting.

Table Description

Table Name	Table Description
User	to store user information
Product	to store the product data
Product Meta	to store additional information about products including the product banner URL etc.
Category	to store the product categories
Product Category	to store their mappings
Brand	to store the brand data
Order	The order can be associated with either Supplier or the Customer.
address	to manage the address of either the user or the order.
Item	to store the item details
Order Item	to manage the order items purchased by the customers
Transaction	to track the order payments made by the buyer and for bookkeeping.

ERD



APPLICATIONS

Real-time stock following: This application permits businesses to track their stock levels in real-time, guaranteeing that they continuously have sufficient stock to fulfill orders and avoid stockouts.

Arrange administration: This application empowers businesses to oversee their orders, from getting to handling and conveyance. It makes a difference businesses streamlining their operations and guaranteeing that orders are satisfied precisely and on time.

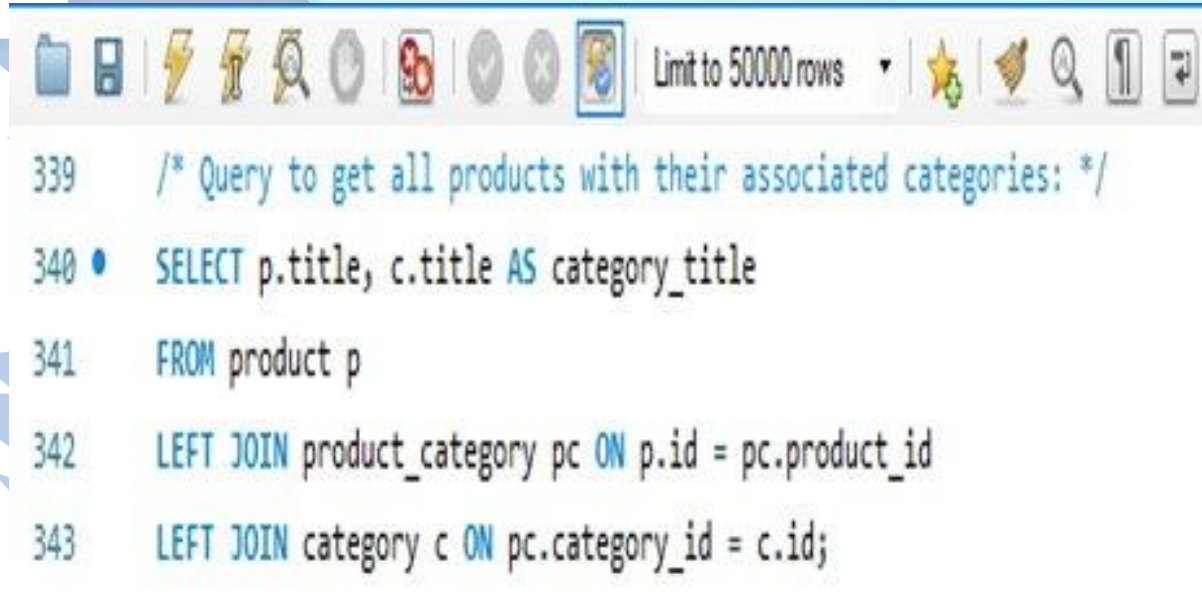
Detailing and analytics: This application permits businesses to analyze their deals and stock information, recognize patterns, and make educated choices around their stock administration techniques. It makes a difference businesses optimize their stock levels and minimize squander whereas maximizing productivity.

SOFTWARES USED

- MY SQL
- PHP ADMIN
- MICROSOFT VISUAL STUDIO

QUERIES

Here are the query for the product







```
339  /* Query to get all products with their associated categories: */  
340  SELECT p.title, c.title AS category_title  
341  FROM product p  
342  LEFT JOIN product_category pc ON p.id = pc.product_id  
343  LEFT JOIN category c ON pc.category_id = c.id;
```



	title	category_title
▶	Product 1	Books
	Product 1	Clothing
	Product 2	Books
	Product 2	Beauty
	Product 3	Electronics
	Product 3	Books
	Product 4	Electronics
	Product 4	Clothing
	Product 5	Beauty
	Product 5	Sports
	Product 6	Clothing
	Product 6	Home & Garden
	Product 7	Sports
	Product 7	Toys & Games
	Product 8	Electronics
	Product 8	Toys & Games

```
345      /* Query to get the total number of items in stock for a particular product:*/  
346 •    SELECT SUM(quantity) AS total_items  
347      FROM item  
348      WHERE product_id = 2;
```

Result Grid			 Filter Rows: <input type="text"/>	Export: 	Wrap Cell Content: 
	total_items				
▶	180				

```
387 • SELECT u.id, u.first_name, u.last_name, COUNT(o.id) AS total_orders
388 FROM user u
389 LEFT JOIN `order` o ON o.user_id = u.id
390 WHERE u.role_id = 2
391 GROUP BY u.id;
392
```

Result Grid					Filter Rows:	Export:	Wrap Cell Content:
	id	first_name	last_name	total_orders			
▶	1	Sarah	Lee	3			
	4	David	Kim	1			
	7	Jessica	Park	0			
	10	Justin	Lee	0			

Total number of orders made by each user


```
364      /*Query to get all items that are currently out of stock:*/
365 •    SELECT i.id, p.title AS product_title, b.title AS brand_title
366      FROM item i
367      INNER JOIN product p ON i.product_id = p.id
368      INNER JOIN brand b ON i.brand_id = b.id
369      WHERE i.available = 0;
370
371      /*Update the price of a product with a certain ID:*/
```

Result Grid				Filter Rows: <input type="text"/>		Export: 	Wrap Cell Content: 
	id	product_title	brand_title				

SINCE WE DON'T HAVE ANY OUT OF STOCK, WE HAVE AN EMPTY TABLE

Login

Username

Password

Login

Not yet a member? [Sign up](#)



Register

Username

Email

Password

Confirm password

Register

Already a member? [Sign in](#)

Here is the local host page for the user to get registered for the website if he/she is already a member they can click sign and move on.

Additional Reports

- Dashboard: A visual overview of the key performance indicators (KPIs) such as sales, revenue, inventory levels, etc.
- Product listing: A list of all the products available for sale, with their images, names, descriptions, prices, and stock levels.
- Product details: A detailed view of a specific product, with additional information such as product specifications, ratings, reviews, and related products.
- Cart and checkout: A shopping cart where customers can add or remove products and proceed to checkout, where they can enter their shipping and payment details.
- Sales report: A report showing the sales trends over a specific period, with data such as sales volume, revenue, profit margins, and top-selling products.
- Inventory report: A report showing the current inventory levels of all products, with data such as stock on hand, stock on order, reorder points, and lead times.
- Customer management: A feature that allows the store owner to manage customer information such as names, addresses, order history, and loyalty points.
- Vendor management: A feature that allows the store owner to manage vendor information such as names, contact information, and products supplied.
- Employee management: A feature that allows the store owner to manage employee information such as names, roles, and schedules.
- Alerts and notifications: A feature that sends alerts and notifications to the store owner or employees for low stock levels, new orders, order cancellations, and other important events.

REPORTS RESULTS

```
/* Report 1*/  
SELECT o.id AS order_id, o.user_id, o.type, o.status, o.total, oi.product_id, oi.sku,  
oi.price, oi.discount, oi.quantity  
FROM `order` o  
JOIN order_item oi ON o.id = oi.order_id  
ORDER BY o.id ASC;
```

[illegible]

```
/*Report for total number of orders made by each user*/  
SELECT u.id, u.first_name, u.last_name, COUNT(o.id) AS total_orders  
FROM user u  
LEFT JOIN `order` o ON o.user_id = u.id  
WHERE u.role_id = 2  
GROUP BY u.id;
```

	id	first_name	last_name	total_orders
▶	1	Sarah	Lee	3
	4	David	Kim	1
	7	Jessica	Park	0
	10	Justin	Lee	0


```
/* Report 1*/  
SELECT o.id AS order_id, o.user_id, o.type, o.status, o.total, oi.product_id, oi.sku,  
oi.price, oi.discount, oi.quantity  
FROM `order` o  
JOIN order_item oi ON o.id = oi.order_id  
ORDER BY o.id ASC;
```

[illegible]

```

/*Report to get the list of orders made by a specific user*/
SELECT o.id, o.type, o.status, o.total, o.created_at, oi.quantity, p.title
FROM `order` o
JOIN order_item oi ON oi.order_id = o.id
JOIN item i ON i.id = oi.item_id
JOIN product p ON p.id = i.product_id
WHERE o.user_id = 1;

```

id	type	status	total	created_at	quantity	title
1	Purchase Order	New	115.00	2023-04-20 19:00:58	1	Product 1
1	Purchase Order	New	115.00	2023-04-20 19:00:58	2	Product 2
3	Purchase Order	Shipped	72.50	2023-04-20 19:00:58	3	Product 3
3	Purchase Order	Shipped	72.50	2023-04-20 19:00:58	1	Product 2

CONCLUSION

- Stock administration framework makes a difference businesses track their stock levels, orders, deals, and conveyances.
- It can offer assistance to businesses to optimize their distribution center space and avoids stockouts, which can lead to misplaced deals.
- The framework can decrease the hazard of stockouts and overloading, diminish the probability of blunders in arrange preparing, and increment the exactness of announcing.
- The framework permits businesses to analyze their deals information, distinguish patterns, and make educated choices around their stock administration forms.
- A stock administration framework is as it were one portion of a bigger supply chain administration technique, and businesses ought to moreover consider obtainment, generation, and co-ordinations to successfully oversee their stock and maximize their benefit..

THANK YOU!!