AC51049
Database System Development Coursework II

Team number 4

Company name : *RePlast Creations*
Company slogan : "*Where Sustainability Meets Style And Comfort*"

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We confirm that the team members have read and understood the university policy on academic misconduct.

1. Introduction

This report outlines the approach to developing a database system for our company, which specializes in selling sustainable furniture made from processed used plastic. It details the database setup, user roles, access levels, and the SQL queries required to ensure efficient management and accessibility for various users. The system supports roles such as directors, store managers, warehouse managers, and customers, facilitating seamless communication and operations for each. The database is implemented using MySQL, leveraging its ability to manage complex data relationships and ensure data integrity. The primary objectives include designing a robust database structure populated with relevant sample data, creating user interfaces tailored to specific user needs, and developing SQL queries to perform essential functions. These features streamline critical operations, including order processing, inventory management, and sales reporting, while ensuring the system remains user-friendly and efficient.

Login Details:

Hostname: replastcreation.c6bophngdnlq.us-east-1.rds.amazonaws.com
Port: 3306
Database Name: replustcreation01
Username: admin
Password: admin2911

2. Database Access and User Management

2.1 Access Levels

2.1.1. Admin Access:
- Permissions: Full access to the database, including Create, Read, Update, and Delete (CRUD) functionality.
- Role Description: Admin users can manage the entire database, make system updates, and manage inventory, customers, and orders.

2.1.2. User Access:
- Permissions: Read-only access to the database. Users can view but not modify data.
- Role Description: These users are limited to viewing data like product details, customer information, and sales records.

2.1.3. Special User Access:
- Permissions: Can read and write data but cannot perform full administrative tasks like adding new users or modifying permissions.
- Role Description: This role is typically for managers or sales associates who need to update some data (e.g., inventory levels, orders) but don't need full admin rights.

3. Database Structure

The database for this system is designed to support the operations of our company. The key tables include:

•**Product:** Stores details about the furniture items, including type, material used, pricing, and available stock.
•**Customer:** Contains customer details such as contact information, purchase history, and feedback.
•**OrderTable:** Tracks customer orders and their status (processing, shipped, completed, etc.).
•**Inventory:** Tracks stock levels for each product and updates based on sales and restocking.

4. SQL Queries for User Access

4.1. Store Manager

4.1.1. Interaction with the Database:

- Manage store inventory, oversee sales, and track employee performance.
- Generate store-specific reports for decision-making.

4.1.2. Access Level:

- **Read, Update, Delete Access** for store-related data.
- Access to their chosen store's inventory control and customer orders.
- Unable to view company-wide data, but able to perform transactions and update inventory levels.

4.1.3. CRUDS Operations:

- **R (Read):** View store inventory, sales records, and employee activity logs.
- **U (Update):** Update inventory levels or sales records.
- **D (Delete):** Remove incorrect sales entries.

4.1.4. Advanced-Level Functions:

4.1.4.1. Product Stock: Check how much stock is available for a product that the customer enquires about

| Name: Jill Bryde Employee ID: 101 |

| Sale | Return / Cancel | Generate Report | Product |

Table				
Stool	Classic Dine Recycled Table	Modern Eco Dining Set	Rustic Coffee Companion	Sleek Eco Lounge Table
Bench	Compact Living Side Table	Urban Minimal Sidepiece	All-Weather Patio Table	Garden Bistro Table
Storage Unit	Little Learner Activity Table	FunPlay Kids Craft Table	SmartFold Utility Table	Portable Fold-N-Go Table
Chair	FocusPro Study Desk	WFH Desk		
Shelves				Back

– upon clicking the product, the following query will run

SELECT
   p.ProductName,
   p.ProductType,
   i.EdiStock,
   i.BirStock
FROM Product p
JOIN
   Inventory i ON p.ProductID = i.ProductID
WHERE p.ProductID = 859;

194 23:20:07 SELECT ProductID, EdiStock, BirStock FROM Inventory WHERE ProductID = 905 -- select * from Inventory where ProductID = 900 LIMIT 0, 1000   1 row(s) returned

ProductName	ProductType	EdiStock	BirStock
Urban Minimal Sidepiece	Table	45	55

Name: Jill Bryde Employee ID: 101

Product Name	Product ID	Stock (Edinburgh)	Stock (Birmingham)
Urban Minimal Sidepiece	859	45	55

(The Store Manager can check the current stock on this page)

4.1.4.2. Inventory Adjustment: Update inventory levels after returns or damage.

Name: Jill Bryde Employee ID: 101

Sale	Return / Cancel	Generate Report	Product
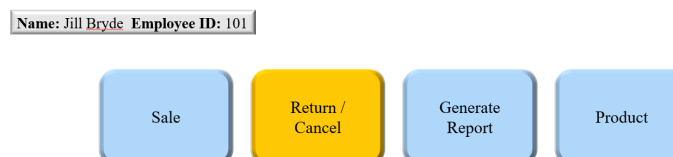
User will enter the orderID and below UI will be displayed.

SELECT
   od.ProductID,
   p.ProductName,
   od.Quantity
FROM OrderDetails od
JOIN
   Product p ON od.ProductID = p.ProductID
WHERE od.OrderID = 10057;

Name: Jill Bryde **Employee ID:** 101			

Order ID: `10057` [Return product] [Cancel order]

Product ID	**Product Name**	**Quantity**	
907	CoastLine Adirondack Seat	2 ▽	Return
909	PlayNest Toddler Chair	1 ▽	Return
910	SkyLine Wall Shelf	1 ▽	Return
911	AeroSpace Floating Shelf	1 ▽	Return
902	FoldEase Compact Chair	3 ▽	Return

	ProductID	EdiStock	BirStock	TotalStockProduced	TotalStockSold
	899	35	40	500	425
	900	60	25	500	415
	901	80	35	500	385
	902	40	40	500	420
	903	55	50	500	395

Clicking on Return button, the following query will run:
START TRANSACTION;
UPDATE Inventory
SET EdiStock = EdiStock + 1
WHERE ProductID = 909;
DELETE FROM OrderDetails
WHERE OrderID = 10057 AND ProductID = 909;
COMMIT;

After:

	ProductID	EdiStock	BirStock	TotalStockProduced	TotalStockSold
▶	900	59	25	500	414
✱	NULL	NULL	NULL	NULL	NULL

Name: Jill Bryde **Employee ID:** 101			

Order ID: `10057` [Return product] [Cancel order]

Product ID	**Product Name**	**Quantity**	
907	CoastLine Adirondack Seat	2 ▽	Return
909	PlayNest Toddler Chair	1 ▽	Return
910	SkyLine Wall Shelf	1 ▽	Return
911	AeroSpace Floating Shelf	1 ▽	Return
902	FoldEase Compact Chair	3 ▽	Return

Return successful

(The Store Manager can check and update the quantity of products returned by customers on this page. This will automatically adjust the inventory for the same products.)

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4.1.4.3. Check the sales report for the month of October:

Name: Jill Bryde **Employee ID:** 101

Sale	Return / Cancel	Generate Report	Product

Name: Jill Bryde **Employee ID:** 101

Start date: YYYY/MM/DD   End date: YYYY/MM/DD

Filter by: Revenue

Revenue: £

Upon selecting filter by option and dates:

select sum(Quantity * UnitPrice) as TotalSales
from OrderDetails
join OrderTable on OrderDetails.OrderID = OrderTable.OrderID
where OrderTable.OrderDate between '2024-10-01' and '2024-10-31';

643 23:30:00 SELECT   SUM(Quantity * UnitPrice) AS TotalSales FROM   OrderDetails JOIN   OrderTable ON OrderDetails.OrderID = OrderTable.OrderID WHE... 1 row(s) returned

Result Grid	Filter Rows:	Export:	Wrap Cell Content:

	TotalSales
▶	60

4.1.4.4. Remove the order that has been placed mistakenly if not paid:

Name: Jill Bryde **Employee ID:** 101

Sale	Return / Cancel	Generate Report	Product

Name: Jill Bryde **Employee ID:** 101

Order ID 10057   Return product   Cancel order

Product ID	Product Name	Quantity	
907	CoastLine Adirondack Seat	2	Return
909	PlayNest Toddler Chair	1	Return
910	SkyLine Wall Shelf	1	Return
911	AeroSpace Floating Shelf	1	Return
902	FoldEase Compact Chair	3	Return

Clicking on Cancel order, the following query will run:

delete from OrderTable where OrderID = 10067;

648 23:45:23 select * from OrderTable   -- start transaction; -- update OrderTable set OrderStatus = 'Shipped' where OrderID = 10016; -- update Shipping set Status =... 76 row(s) returned

	OrderID	CustomerID	OrderDate	OrderStatus	ShippingAddress	TransactionID	TrackingNumber
	10064	9433	2018-01-25	Cancelled	695 Church Lane, Edinburgh, UK	TRX10064	TRK10064
	10065	9434	2022-03-04	Cancelled	956 Church Lane, Liverpool, UK	TRX10065	TRK10065
	10066	9434	2018-07-10	Delivered	610 Kings Road, Glasgow, UK	TRX10066	TRK10066
	10068	9435	2024-02-07	Shipped	24 London Road, Liverpool, UK	TRX10068	TRK10068
	10069	9435	2024-07-03	Delivered	517 Kings Road, Bristol, UK	TRX10069	TRK10069
	10070	9436	2020-03-14	Delivered	280 Kings Road, Birmingham, UK	TRX10070	TRK10070
	10071	9436	2019-01-22	Shipped	149 High Street, Liverpool, UK	TRX1....	.RK10071
	10072	9437	2020-03-21	Processing	925 The Crescent, Birmingham,...	TRX10072	TRK10072

Name: Jill Bryde Employee ID: 101

Order ID [10057]   [Return product]   [Cancel order]

Product ID	Product Name	Quantity
907	CoastLine Adirondack Seat	2
909	PlayNest Toddler Chair	1
910	SkyLine Wall Shelf	1
911	AeroSpace Floating Shelf	1
902	FoldEase Compact Chair	3

Cancellation successful

(The Store Manager can check and update the quantity of products returned by customers on this page. This will automatically adjust the inventory for the same products.)

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4.2. Warehouse Manager

4.2.1. Interaction with the Database:

- Manage stock levels and track shipments.
- Monitor damaged goods and stock discrepancies.
- Coordinate logistics for incoming and outgoing shipments.

4.2.2. Access Level:

- **Read, Update, and Delete** access to warehouse-specific data.
- Complete command over their hub's inventory.
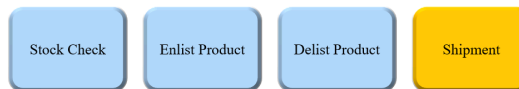- Able to track inventory levels, handle stock adjustments, and identify needs for replenishment.

4.2.3. CRUDS Operations:

- **R (Read):** View warehouse inventory, shipment logs, and stock levels.
- **U (Update):** Update shipment statuses and inventory adjustments.
- **D (Delete):** Remove invalid or duplicate inventory records.

4.2.3. Advanced-Level Functions:

4.2.3.1. Shipment Tracking: Check the Pending shipments to prepare the ordered product to be sent to customer's address and once done, update the Status.

Name: Jill Bryde Employee ID: 101

| Stock Check | Enlist Product | Delist Product | Shipment |

Name: Jill Bryde Employee ID: 101

| Pending | In Transit | Cancelled | All Orders |

select Status, OrderID, ShippingAddress, TrackingID, ShippingPartner from Shipping where Status = "Pending"

	Status	OrderID	ShippingAddress	TrackingID	ShippingPartner
▶	Pending	10016	372 Park Avenue, Sheffield, UK	TRK10016	UPS
	Pending	10022	252 Park Avenue, Cardiff, UK	TRK10022	UPS
	Pending	10076	385 Park Avenue, Manchester, UK	TRK10076	UPS
*	NULL	NULL	NULL	NULL	NULL

Name: Jill Bryde Employee ID: 101

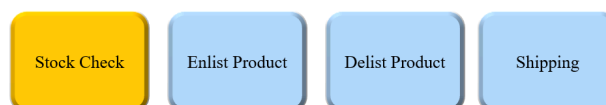| Status	Order ID	Shipping Address	Tracking ID	Partner	
Pending	10016	Address 1	TRK10016	UPS	Update Status
Pending	10022	Address 2	TRK10022	UPS	Update Status
Pending	10076	Address 3	TRK10076	UPS	Update Status

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Now the following query will modify the order status from pending to shipped:

update Shipping set Status = 'Shipped' where OrderID = 10016;

	OrderID	TrackingID	ShippingAddress	ShippingPartner	ShippingCost	ShippedDate	Status
▶	10016	TRK10016	372 Park Avenue, Sheffield, UK	UPS	61	2024-09-30	Shipped
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

4.2.3.2. Read: Check for the products that are below 10, so that it can be reproduced again.

Name: Jill Bryde Employee ID: 101

| Stock Check | Enlist Product | Delist Product | Shipping |

Name: Jill Bryde Employee ID: 101

Product ID: [   ] | Check Stock | Modify | Below 10 |

Select Product.ProductID, Product.ProductName, Product.ProductType, Product.SellingPrice, Inventory.EdiStock, Inventory.TotalStockSold
from Inventory
Join Product on Inventory.ProductID = Product.ProductID
Where Inventory.EdiStock < 10;

379 00:03:53 SELECT Product.ProductID, Product.ProductName, Product.ProductType, Product.SellingPrice, Inventory.EdiStock, Inventory.Total... 2 row(s) returned

Result Grid		Filter Rows:	Export:	Wrap Cell Content:

	ProductID	ProductName	ProductType	SellingPrice	EdiStock	TotalStockSold
▶	886	OpenSpace Cube Organizer	Storage Unit	60	9	451
	920	StyleStack Deco Shelf	Shelves	50	5	420

Name: Jill Bryde Employee ID: 101

Product ID: [   ]   Check Stock   Modify   Below 10

Product ID	Product Name	Product Type	Selling Price	EDI Stock
886	OpenSpace Cube Organizer	Storage Unit	60	9
920	StyleStack Deco Shelf	'Shelves	50	5

4.2.3.3. Write: Adding new product when it's available for sale:

Name: Jill Bryde Employee ID: 101

Stock Check   Enlist Product   Delist Product   Shipping

Name: Jill Bryde Employee ID: 101

Product ID: [YYYY/MM/DD]
Product Name: [YYYY/MM/DD]
Product Type: [YYYY/MM/DD]
Cost Price: [YYYY/MM/DD]
Selling Price: [YYYY/MM/DD]
Warranty: [YYYY/MM/DD]   Add Product

On clicking "Add Product":

Query 1 ×   Replastcreation

Limit to 1000 rows

```
1    INSERT INTO Product (ProductName, ProductType, CostPrice, SellingPrice, Warrenty)
2    VALUES ('Recycled Plastic Chair V2', 'Home Office', 40, 90, '4 Years');
3  ● SELECT * FROM Product
```

ProductID	ProductName	ProductType	CostPrice	SellingPrice	Warrenty
854	EcoDeck Outdoor Chair	Outdoor Furniture	50	120	3 years
855	RePlast Picnic Table	Garden/Table Sets	100	250	5 years
856	GreenLounge Sofa Set	Lounge Furniture	200	450	5 years
857	PlasticPlank Coffee Table	Coffee Table	40	90	2 years
858	SustainSeat Dining Chair	Dining Furniture	35	80	2 years
859	EcoPark Bench	Public Seating	150	350	5 years
860	Modular Storage Rack	Indoor Furniture	60	130	3 years
861	Reuse Kids' Study Table	Kids Furniture	45	100	3 years
862	GreenPatio Swing Chair	Patio Furniture	80	180	4 years
863	RePlastic Planter Box	Home/Garden Decor	25	60	2 years
864	EcoRelax Sun Lounger	Outdoor Furniture	70	160	4 years
865	ReCycle Folding Chair	Portable Furniture	30	70	2 years
866	GreenCraft Shoe Rack	Storage Furniture	35	75	3 years
867	PlasticPro Study Desk	Home/Office Furnit...	50	120	3 years
868	DurableDeck Patio Table	Patio/Garden Furnit...	100	230	5 years
869	ReVive Bar Stool	Bar Furniture	25	60	2 years
870	EcoPlast Bed Frame	Bedroom Furniture	150	400	5 years
871	GreenCreations Room Di...	Home Decor	40	90	3 years
872	ReForm Kids' Chair	Kids Furniture	20	50	2 years
873	ReGreen Utility Cabinet	Storage Furniture	70	150	4 years
874	PlasticWave Adirondack ...	Outdoor Furniture	80	180	4 years
875	SmartPlast TV Stand	Living Room Furniture	60	140	3 years
876	ReMake Ottoman	Living Room Furniture	25	70	2 years
877	EcoFlex Shelving Unit	Home/Office Storage	50	120	3 years
878	GreenPlay Sandbox Frame	Kids Furniture/Outd...	60	130	3 years
879	Recycled Plastic Chair V2	Home Office	40	90	4 Years
NULL	NULL	NULL	NULL	NULL	NULL

4.2.3.4. Delete an old product's details from both the Products table and the Inventory table simultaneously

Name: Jill Bryde Employee ID: 101

Stock Check	Enlist Product	Delist Product	Shipping

Name: Jill Bryde Employee ID: 101

Product ID: [12345]

Delete Product

start transaction;
delete from Inventory where ProductID = 870;
delete from Product where ProductID = 870;
commit;

ProductID	ProductName	TotalStock	Edistock	BirStock
854	EcoDeck Outdoor Chair	117	61	56
855	RePlast Picnic Table	74	38	36
856	GreenLounge Sofa Set	100	62	38
857	PlasticPlank Coffee Table	95	59	36
858	SustainSeat Dining Chair	82	30	52
859	EcoPark Bench	109	52	57
860	Modular Storage Rack	77	35	42
861	Reuse Kids' Study Table	66	36	30
862	GreenPatio Swing Chair	86	49	37
863	RePlastic Planter Box	119	70	49
864	EcoRelax Sun Lounger	110	44	66
865	ReCycle Folding Chair	86	49	37
866	GreenCraft Shoe Rack	112	70	42
867	PlasticPro Study Desk	110	53	57
868	DurableDeck Patio Table	133	66	67
869	ReVive Bar Stool	84	33	51
871	GreenCreations Room Di...	91	58	33
872	ReForm Kids' Chair	115	49	66
873	ReGreen Utility Cabinet	129	70	59
874	PlasticWave Adirondack ...	85	35	50

It returned 25 rows before deletion, and afterwards it returned 24 rows.

4.3. CEO

4.3.1. Interaction with the Database:

- View company-wide analytics, financial reports, and strategic insights.
- Track high-level performance metrics of stores and warehouses.
- Review product sales and profitability.

4.3.2. Access Level:

- **Read-Only Access** across the database to all non-administrative tables.
- Complete access to sales data, reports, and KPIs measuring company performance.
- Access is limited to analytics and strategy dashboards.
- All financial, inventory, and staff data can be viewed, but they cannot be changed directly.

4.3.3. CRUDS Operations:

- **R (Read):** Allowed to view data only.

4.3.4. Advanced-Level Functions:

4.3.4.1. View Real-Time Sales Trends: Check the Top 5 products:

SELECT Product.ProductName, Product.CostPrice, Product.SellingPrice, Inventory.TotalStockSold
FROM Product
JOIN Inventory ON Product.ProductID = Inventory.ProductID
ORDER BY Inventory.TotalStockSold DESC
LIMIT 5;

ProductName	CostPrice	SellingPrice	TotalStockSold
▶ OpenSpace Cube Organizer	35	60	451
LuxeDine Supportive Chair	50	90	450
Tiny Tots Step Stool	15	25	450
DeskMate File Rack	20	35	440
UrbanLibrary Modular Rack	55	95	440

Name: Jill Bryde **Employee ID:** 101

Start date: [YYYY/MM/DD]   End date: [YYYY/MM/DD]

Filter by: [Top 5 products ▼]

Product Name	Total Sold
OpenSpace Cube Organizer	451
LuxeDine Supportive Chair	450
Tiny Tots Step Stool	450
DeskMate File Rack	440
UrbanLibrary Modular Rack	440

Export to: **Excel**   **PPT**   **Word**   **PDF**

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(The Store Manager can check and download a report as per start and end dates, and by applying a filter)

4.3.4.2. View total profit by product type:

```
SELECT
    p.ProductType,
    SUM(od.Quantity * od.UnitPrice) AS TotalRevenue,
    SUM(od.Quantity * p.CostPrice) AS TotalCost,
    SUM(od.Quantity * (od.UnitPrice - p.CostPrice)) AS TotalProfit
FROM Product p
JOIN OrderDetails od ON p.ProductID = od.ProductID
GROUP BY p.ProductType
ORDER BY TotalProfit DESC;
```

ProductType	TotalRevenue	TotalCost	TotalProfit
▶ Bench	4090	2295	1795
Chair	3725	2195	1530
Stool	2480	1395	1085
Storage Unit	2255	1320	935
Shelves	1540	895	645
Table	795	465	330

Start date: [YYYY/MM/DD]   End date: [YYYY/MM/DD]

Filter by: [Profit ▼]

Product Type	Total Revenue (£)	Total Profit (£)
Bench	4090	1795
Chair	3725	1530
Stool	1540	645
Storage Unit	2480	1085
Shelves	2255	935
Table	795	330

Export to: **Excel**   **PPT**   **Word**   **PDF**   **Back**

(The Store Manager can check and download a report as per start and end dates, and by applying a filter)

4.3.4.3. Storewise sales revenue:
SELECT StoreID, SUM(Quantity * UnitPrice) AS TotalSales
FROM OrderDetails od
JOIN OrderTable o ON od.OrderID = o.OrderID
WHERE
   o.OrderDate BETWEEN '2023-01-01' AND '2024-12-31'
GROUP BY StoreID
ORDER BY TotalSales DESC;

StoreID	TotalSales
1004	2310
1000	1430

Start date: [YYYY/MM/DD]   End date: [YYYY/MM/DD]

Filter by: [Store Performance ▼]

Store ID	Total Sales (£)
1004	2310
1000	1430

Export to: **Excel**   **PPT**   **Word**   **PDF**

Back

(The Store Manager can check and download a report as per start and end dates, and by applying a filter)

4.3.4.4. View overall product performance report:
SELECT
  p.ProductID,
  p.ProductName,
  COALESCE(SUM(od.Quantity), 0) AS TotalUnitsSold,
  COALESCE(SUM((od.Quantity * od.UnitPrice) - (od.Quantity * p.CostPrice)), 0) AS TotalProfit,
  CASE
    WHEN COALESCE(SUM(od.Quantity), 0) = 0 THEN 'Needs Attention'
    WHEN COALESCE(SUM(od.Quantity), 0) < 3 THEN 'Stable'

ProductID	ProductName	TotalUnitsSold	TotalProfit	TrendStatus
905	RelaxFit Universal Chair	3	120	Trending
906	SunShield Patio Chair	3	135	Trending
873	Compact Carry Folding Seat	3	15	Trending
903	TinyComfort Kid's Seat	3	60	Trending
862	Little Learner Activity Table	3	90	Trending
869	Compact Climb Stepper	2	90	Stable
854	Classic Dine Recycled Table	2	120	Stable
870	Tiny Tots Step Stool	2	110	Stable
867	WFH Desk	2	120	Stable
921	ChicView Wall Display	2	60	Stable
884	StoryStack Classic Shelf	1	30	Stable
876	BarElegance High Stool	1	30	Stable
875	CozyFoot Padded Stool	1	25	Stable
874	RelaxMate Footrest Stool	1	20	Stable
872	QuickFold Lightweight Stool	1	3	Stable
871	PlayZone Kids Stool	1	22	Stable
918	ClimbUp Display Rack	1	30	Stable
919	DecoLadder Organizer Unit	1	35	Stable
888	NeatFeet Shoe Organizer	0	0	Needs Atte...
912	CozyCorner Shelf Unit	0	0	Needs Atte...
913	SpaceSaver Corner Organi...	0	0	Needs Atte...

4.4. Customer

4.4.1. Interaction with the Database:

- Browse available products with details like name, type, price, and stock availability.
- Place orders for selected products.
- Track the status of placed orders (e.g., pending, shipped, delivered).
- View order history, including past purchases and associated invoices.

4.4.2. Access Level:

- Restricted access to customer-specific data only.
- Allowed to view products, place orders.
- No access to modify or view data related to other customers, inventory, or company metrics.

4.4.3. CRUDS Operations:

- C (Create): Allowed to place new orders.
- R (Read): Allowed to view product details, order history, and order status.
- U (Update): Allowed to update personal information (e.g., shipping address, contact details).

- S (Search): Allowed to search for products by name, type, or category.

4.3.4. Advanced-Level Functions:

4.3.4.1. View and edit Profile:

	select ▼
	My profile
	Edit profile
	View order
	Track order

Name:	Emily Brown
DoB:	1988/05/22
Address:	791 Queens Road, London
	Line 2
Post code:	SE15 2QW
Country:	UK
Phone:	+44 7548021897
Email:	emily.brown@gmail.com

Edit profile
Save
Back

(Customers can edit their profile details after clicking on the 'Edit profile' button on the previous page

Before:

CustomerID	Name	Email	Phone	Address	CustomerType	Password
9406	Emily Brown	emily.brown@gmail.com	7548021897	791 Queens Road, London, UK	Individual	MtuxTbDI
NULL	NULL	NULL	NULL	NULL	NULL	NULL

UPDATE Customer SET Address = '754 Queens Road, London', Phone = '7745378920' WHERE CustomerID = 9406;

After:

CustomerID	Name	Email	Phone	Address	CustomerType	Password
9406	Emily Brown	emily.brown@gmail.com	7745378920	754 Queens Road, London	Individual	MtuxTbDI
NULL	NULL	NULL	NULL	NULL	NULL	NULL

4.3.4.2. View Products:
customers can choose to select any of the tabs mentioning the product type and view all the details of the product.

select ProductName, SellingPrice, Warrenty from Product where ProductType = "table"

🏠 | All products | Table | Chair | Storage | Shelves | 🔍 search products

Classic Dine Recycled Table	Modern Eco Dining Set	Rustic Coffee Companion	Sleek Eco Lounge Table

ProductName	SellingPrice	Warrenty
Classic Dine Recycled Table	140	5 years
Modern Eco Dining Set	175	5 years
Rustic Coffee Companion	85	3 years
Sleek Eco Lounge Table	95	3 years
Compact Living Side Table	60	2 years
Urban Minimal Sidepiece	65	2 years
All-Weather Patio Table	120	4 years
Garden Bistro Table	105	4 years
Little Learner Activity Table	75	2 years
FunPlay Kids Craft Table	80	2 years
SmartFold Utility Table	95	3 years
Portable Fold-N-Go Table	100	3 years
FocusPro Study Desk	125	4 years
WFH Desk	145	4 years

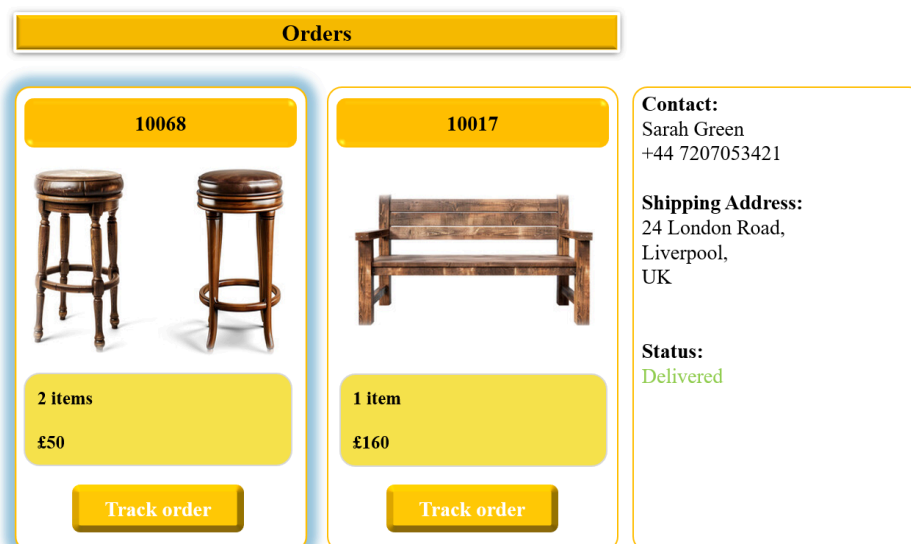### 4.3.4.3. Search for product: Customer can search for a specific product

[Table]

select * from Product where ProductName LIKE '%eco%';

[All products] [Echo]

| EcoDine Comfort Chair | Modern Eco Dining Set | StyleStack Deco Shelf | Sleek Eco Lounge Table |

4.3.4.4. Tracking Order:Customer can track their order

select

My profile

Edit profile
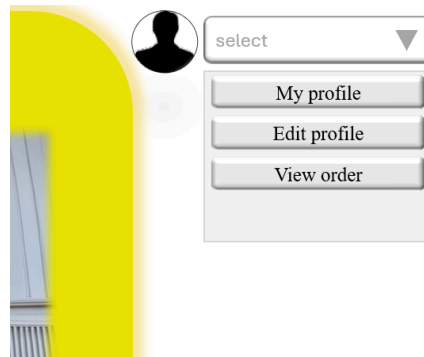
View order

Clicking on View order the following page appears and when you select the order it gets highlighted and displays the status:

select ShippingPartner, Status, ShippedDate from Shipping where TrackingID = 'TRK10068';

Orders

10068

2 items

£50

Track order

10017

1 item

£160

Track order

Contact:
Sarah Green
+44 7207053421

Shipping Address:
24 London Road,
Liverpool,
UK

Status:
Delivered

5. Conclusion

This system is designed to cater to the needs of various user types within our company, with specific roles and permissions to ensure smooth functionality while maintaining data integrity and security. The SQL queries provided enable efficient access to required data based on each user's role and privileges. In order to ensure scalability and alignment with the needs of the company, the database structure has been carefully built to contain a variety of entities, including employees, orders, inventory, and items. This system improves operational efficiency and offers strategic insights for decision-making by fusing technological design with practical applications.