

# TABLE DESIGN

## 1. UserType Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the user type
type_name	String	Not Null	Name of the user type

## 2. User Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the user
username	String	Not Null, Unique	Username for login
password	String	Not Null	Password for login
email	String	Not Null, Unique	Email address of the user
phone_number	String		Contact number of the user
usertype_id	Integer	FK	Reference to UserType table
date_joined	Date	Not Null	Date the user joined

## 3. Customer Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the customer
user_id	Integer	FK	Reference to User table
address	String		Address of the customer

## 4. Admin Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the admin
user_id	Integer	FK	Reference to User table

## 5. Company Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the company
user_id	Integer	FK	Reference to User table
company_name	String	Not Null	Name of the company
company_address	String		Address of the company
registration_date	Date	Not Null	Date of company registration

## 6. Brand Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the brand
brand_name	String	Not Null	Name of the brand

## 7. Product Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the product
name	String	Not Null	Name of the product
description	String		Description of the product
price	Float	Not Null	Price of the product
brand_id	Integer	FK	Reference to Brand table
company_id	Integer	FK	Reference to Company table
image_url	String		URL of the product image
stock_quantity	Integer	Not Null	Quantity of product in stock
warranty_period	String		Warranty period of the product

Column Name	Data Type	Constraints	Description
admin_approval_status	Boolean	Not Null	Admin approval status of the product
added_date	Date	Not Null	Date when product was added

## 8. ProductRates Table

Column Name	Data Type	Constraints	Description
Id	Integer	PK, AutoIncrement	Unique identifier for the product rate
product_id	Integer	FK	Reference to Product table
Price	Float	Not Null	Price of the product
effective_date	Date	Not Null	Date the price becomes effective
updated_by	Integer	FK	Reference to User/Admin table

## 9. Order Table

Column Name	Data Type	Constraints	Description
Id	Integer	PK, AutoIncrement	Unique identifier for the order
order_date	Date	Not Null	Date when order was placed
Status	String	Not Null	Status of the order
total_amount	Float	Not Null	Total amount of the order
customer_id	Integer	FK	Reference to Customer table
shipping_address	String	Not Null	Shipping address of the order
payment_method_id	Integer	FK	Reference to PaymentMethod table
tracking_number	String		Tracking number for shipment

## 10. OrderDetails Table

Column Name	Data Type	Constraints	Description
Id	Integer	PK, AutoIncrement	Unique identifier for the order detail
order_id	Integer	FK	Reference to Order table
product_id	Integer	FK	Reference to Product table
Quantity	Integer	Not Null	Quantity of product ordered
price_at_purchase	Float	Not Null	Price of product at the time of purchase

## 11. PaymentMethod Table

Column Name	Data Type	Constraints	Description
Id	Integer	PK, AutoIncrement	Unique identifier for the payment method
method_name	String	Not Null	Name of the payment method
description	String		Description of the payment method

## 12. Wishlist Table

Column Name	Data Type	Constraints	Description
Id	Integer	PK, AutoIncrement	Unique identifier for the wishlist
customer_id	Integer	FK	Reference to Customer table
product_id	Integer	FK	Reference to Product table
date_added	Date	Not Null	Date the product was added to the wishlist

## 13. Shipment Table

Column Name	Data Type	Constraints	Description
Id	Integer	PK, AutoIncrement	Unique identifier for the shipment
order_id	Integer	FK	Reference to Order table
shipment_date	Date	Not Null	Date the shipment was made

Column Name	Data Type	Constraints	Description
delivery_date	Date		Date the shipment was delivered
expected_delivery_date	Date		Expected date of delivery
tracking_number	String	Not Null	Tracking number for the shipment
carrier	String		Carrier handling the shipment
shipping_cost	Float	Not Null	Cost of the shipment

#### 14.Tracking Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the tracking
shipment_id	Integer	FK	Reference to Shipment table
status	String	Not Null	Current status of the shipment
location	String		Current location of the shipment
timestamp	DateTime	Not Null	Timestamp of the tracking event
delivered_by	Integer	FK	Reference to DeliveryBoy table
otp_verification	Boolean		OTP verification status

#### 15.DeliveryAgent Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the delivery agent
agent_name	String	Not Null	Name of the delivery agent
phone_number	String		Phone number of the delivery agent
email	String		Email address of the delivery agent
assigned_shipments	Integer		Number of shipments assigned

### 16.DeliveryBoy Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the delivery boy
name	String	Not Null	Name of the delivery boy
phone_number	String		Phone number of the delivery boy
email	String		Email address of the delivery boy
assigned_orders	Integer		Number of orders assigned

### 17. ShipmentCosts Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the shipment cost
location	String	Not Null	Location for the shipment cost
cost	Float	Not Null	Cost for shipping to the location

### 18. ReturnPolicies Table

Column Name	Data Type	Constraints	Description
id	Integer	PK, AutoIncrement	Unique identifier for the return policy
product_id	Integer	FK	Reference to Product table
return_window	Integer	Not Null	Return window in days
restocking_fee	Float		Restocking fee if applicable
policy_description	String		Description of the return policy