DATA DICTIONARY

User

FIELD NAME	DATA TYPE	FIELD LENGTH	CONSTRAINT	DESCRIPTION
user_id	INT	11	PRIMARY KEY	Unique identifier for each user.
username	VarChar	20	NOT NULL, UNIQUE	The username chosen by the user.
password	VarChar	100	NOT NULL	The hashed password of the user.
email	VarChar	30	NOT NULL, UNIQUE	User's email address.
first_name	VarChar	30		User's first name
last_name	VarChar	30		User's last name
birthday	Date	8		User's birthday
phone	VarChar	20	Optional	User's contact phone number.
address	Text		Not Null	User's shipping address.
role_id	INT	•	FOREIGN KEY REFERENCES roles(role_id)	The role of the user (either customer or admin).
created_at	Timestamp		DEFAULT CURRENT_TIMESTAMP	Date and time the user account was created.
updated_at	Timestamp			

Roles

FIELD NAME	DATA TYPE	FIELD LENGTH	CONSTRAINT	DESCRIPTION
role_id	INT		PRIMARY KEY	Unique identifier for roles
role_name	ENUM		Not Null	Role name('Customer', 'Admin')

Products

FIELD NAME	DATA TYPE	FIELD LENGTH	CONSTRAINT	DESCRIPTION
product_id	VarChar	15	PRIMARY KEY	Unique identifier for each product.
name	STR	100	Not Null	The name of the product.
description	Text		None	Detailed description of the product.
price	Decimal	10, 2	Not Null	Price of the product.
stock	INT		Not Null	Number of items in stock.
category_id	INT	11	Foreign Key(Categories)	Identifier for product's category
created_at	TIMESTAMP		Not Null	Product Creation date
updated_at	TIMESTAMP		Not Null	Date of latest product update

${\bf Shopping Cart}$

FIELD NAME	DATA TYPE	FIELD LENGTH	CONSTRAINT	DESCRIPTION
cart_id	INT	11	PRIMARY KEY	Unique identifier for each cart.
user_id	INT	11	FOREIGN KEY (references Users(user_id))	ID of the user who owns the cart.
product_id	INT	11	FOREIGN KEY (references Users(product_id))	ID of the product in the cart.
quantity	INT	11	NOT NULL	The quantity of the product in the cart.
created_at	TIMESTAMP		Current_timestamp	Date and time the product was added to the cart.
updated_at	TIMESTAMP			Unique identifier for each cart.

Orders

FIELD NAME	DATA TYPE	FIELD LENGTH	CONSTRAINT	DESCRIPTION
order_id	INT	11	PRIMARY KEY (id lang)	Unique identifier for each order.
user_id	INT	11	Foreign Key (Users(user_id))	ID of the user who placed the order.
total_price	decimal	10, 2	Not Null	Total price of the order.
order_status	enum	'pending', 'shipped', 'delivered'	Not Null	The current status of the order.
shipping_address	text		Not Null	Shipping address for the order.
order_date	TIMESTAMP			Unique identifier for each cart.

OrderItems

FIELD NAME	DATA TYPE	FIELD LENGTH	CONSTRAINT	DESCRIPTION
order_item_id	INT	11	PRIMARY KEY	Unique identifier for each order item.
order_id	INT	11	FOREIGN KEY (references Orders(order_id))	ID of the related order.
product_id	INT	11	FOREIGN KEY (references Products(product_id))	ID of the product included in the order.
quantity	INT		NOT NULL	The quantity of the product ordered.
price	Decimal	10, 2	NOT NULL	The total price for this product (quantity × price).
order_date	TIMESTAMP			Unique identifier for each cart.

Payments

FIELD NAME	DATA TYPE	FIELD LENGTH	CONSTRAINT	DESCRIPTION
payment_id	INT	11	PRIMARY KEY	Unique identifier for each payment.
order_id	INT	11	None	ID of the related order.
amount	Decimal	10, 2	None	The amount paid.
payment_method	enum	'credit card', 'paypal', 'bank transfer'	None	The method used to make the payment.
payment_status	enum	'pending', 'completed', 'failed'	None	The current status of the payment.
payment_date	timestamp		DEFAULT Current_timestamp	Date and time the payment was made.

Reviews

FIELD NAME	DATA TYPE	FIELD LENGTH	CONSTRAINT	DESCRIPTION
review_id	INT	11	PRIMARY KEY AUTO_INCREMENT	Unique identifier for each review.
product_id	INT	11	FOREIGN KEY (references Products(product_id))	The product that was reviewed.
user_id	INT	11	FOREIGN KEY (references Users(user_id))	The user who submitted the review.
rating	INT	6	None	User's rating (between 1 and 5).
comment	text		optional	The written review by the user.
review_date	timestamp		DEFAULT Current_timestamp	Date and time the review was submitted.

Categories

FIELD NAME	DATA TYPE	FIELD LENGTH	CONSTRAINT	DESCRIPTION
category_id	INT	11	PRIMARY KEY	Unique identifier for each category.
category_name	VARCHAR	15	NOT NULL	Name of the product category.
parent_id	INT	11		Identifier for the parent category (if any)