

FarmHub - Full Database Schema

This document combines both the **Global Database** and the **Tenant-Specific Database** schemas, including all primary and foreign key relationships.

I. Global Database

Table: Store

Column	Type	Description	Notes
storeId	UUID	Unique identifier	Primary key
name	VARCHAR(255)	Store display name	
address	VARCHAR(500)	Store address	
phone	VARCHAR(20)	Contact phone	
email	VARCHAR(255)	Email (nullable)	
database_name	VARCHAR(255)	Tenant DB name	Unique, used to route store
manager_id	VARCHAR(255)	FK → User(id)	Nullable
opening_hours	VARCHAR(255)	Operating hours	Nullable
is_active	BOOLEAN	Is store active	Default: true
is_deleted	BOOLEAN	Is store deleted	Soft delete, default: false
created_at	DATETIME	Creation timestamp	Auto
updated_at	DATETIME	Last update	Auto
bank_id	VARCHAR(100)	Bank code or ID	Nullable
account_no	VARCHAR(100)	Bank account number	Nullable
account_name	VARCHAR(255)	Name on the bank account	Nullable
is_vat_enabled	BOOLEAN	VAT enabled or not	Default: false
vat_rate	INT	VAT percentage	Default: 8 (%)
invoice_footer	VARCHAR(500)	Custom footer on invoices	Nullable
default_paper_size	ENUM	Paper size for printing	Enum: PaperSize, default: K80

Column	Type	Description	Notes
backup_schedule	VARCHAR(100)	Schedule string (cron or text)	Nullable
default_unit	VARCHAR(50)	Default unit of measure	Default: 'cái'
default_discount	INT	Default discount (%)	Default: 0
default_shipping_fee	INT	Default shipping fee	Default: 0

Table: User

Column	Type	Description	Notes
userId	UUID	Unique identifier	Primary key
userName	VARCHAR(255)	Unique login name	Unique
passwordHash	VARCHAR(255)	Hashed password (excluded from output)	
fullName	VARCHAR(255)	Full name	
email	VARCHAR(255)	Email address	Unique
phone	VARCHAR(20)	Phone number	Nullable
role	VARCHAR(50)	Role (admin_global , store_manager , etc.)	
associatedStoreIds	JSON	Array of store IDs the user is linked to	Nullable
isActive	BOOLEAN	Is account active	Default: true
isDeleted	BOOLEAN	Soft delete flag	Default: false
isSuperadmin	BOOLEAN	System super admin	Default: false
lastLoginAt	TIMESTAMP	Last login time	Nullable
passwordResetToken	VARCHAR(255)	Reset password token	Nullable
tokenExpiryAt	TIMESTAMP	Expiry for password reset token	Nullable
createdAt	TIMESTAMP	Record creation time	Auto
updatedAt	TIMESTAMP	Last update	Auto

II. Tenant Database (per Store)

Table: Category

Column	Type	Description
categoryId	VARCHAR(255)	Primary key
name	VARCHAR(255)	Display name
slug	VARCHAR(255)	SEO-friendly URL slug
description	VARCHAR	Short description
parentId	VARCHAR(255)	FK → Category.categoryId (nullable)
image	VARCHAR(500)	Image URL (optional)
order	INT	Display order
isActive	BOOLEAN	Display status
isDeleted	BOOLEAN	Soft delete flag
createdAt	DATETIME	Creation timestamp
updatedAt	DATETIME	Last update

Table: Supplier

Column	Type	Description
id	VARCHAR(255)	Primary key
name	VARCHAR(255)	Supplier name
phone	VARCHAR(20)	Contact phone
email	VARCHAR(255)	Contact email
address	VARCHAR(500)	Supplier address
tax_code	VARCHAR(50)	Tax code (optional)
contact_person	VARCHAR(255)	Main contact
note	VARCHAR(MAX)	Additional notes
created_at	DATETIME	Creation timestamp
updated_at	DATETIME	Last update
is_deleted	BOOLEAN	Soft delete

Table: Product

Column	Type	Description
productId	VARCHAR(255)	Primary key
productCode	VARCHAR(255)	Unique SKU within store
name	VARCHAR(255)	Product name
slug	VARCHAR(255)	SEO-friendly slug
description	VARCHAR(255)	Product description
categoryId	VARCHAR(255)	FK → Category.categoryId
brand	VARCHAR(100)	Brand name
unit	VARCHAR(50)	Unit of measure
price	DECIMAL(18,2)	Retail price
creditPrice	DECIMAL(18,2)	Installment price
stock	INT	Quantity in stock
minStockLevel	INT	Minimum stock level
images	TEXT	JSON string of image URLs
specs	TEXT	JSON string of technical specs
warrantyInfo	VARCHAR(255)	Warranty details
supplierId	VARCHAR(255)	FK → Supplier.id
isActive	BOOLEAN	Whether product is for sale
isDeleted	BOOLEAN	Soft delete flag
createdAt	TIMESTAMP	Creation timestamp
updatedAt	TIMESTAMP	Last update timestamp

Table: Customer

Column	Type	Description
customerId	VARCHAR(50)	Primary key
name	VARCHAR(255)	Customer name
phone	VARCHAR(20)	Phone number
email	VARCHAR(255)	Email address

Column	Type	Description
address	VARCHAR	Full address
taxCode	VARCHAR	Tax ID (optional)
customerType	VARCHAR(50)	Type (<code>retail</code> , <code>wholesale</code> , ...)
note	VARCHAR(255)	Notes
creditLimit	DECIMAL(18,2)	Credit limit
totalDebt	DECIMAL(18,2)	Current total debt
debtDueDate	DATE	Nearest debt due
lastPurchaseDate	DATE	Last purchase date
status	VARCHAR(50)	Account status
isActive	BOOLEAN	Active flag
isDeleted	BOOLEAN	Soft delete
createdAt	TIMESTAMP	Creation timestamp
updatedAt	TIMESTAMP	Last update

Table: `Order`

Column	Type	Description
orderId	UUID	Primary key
orderCode	VARCHAR(100)	User-facing code (unique)
customerId	UUID	FK → Customer.customerId (nullable)
totalAmount	DECIMAL(18,2)	Total amount before payment
discountAmount	DECIMAL(18,2)	Discount applied
shippingFee	DECIMAL(18,2)	Delivery fee
totalPaid	DECIMAL(18,2)	Amount customer has paid
paymentType	VARCHAR(50)	Payment method
paymentDetails	TEXT	Additional payment info
status	ENUM	Order status (pending, confirmed...)
expectedDeliveryDate	TIMESTAMP	Estimated delivery
deliveryAddress	VARCHAR(500)	Shipping address

Column	Type	Description
deliveryStatus	ENUM	Delivery status (processing, shipped...)
note	TEXT	Order notes
processedByUserId	UUID	FK → Global.User.userId (nullable)
isDeleted	BOOLEAN	Soft delete
createdAt	TIMESTAMP	Record creation time
updatedAt	TIMESTAMP	Record update time

Table: OrderItem

Column	Type	Description
orderItemId	UUID	Primary key
orderId	UUID	FK → Order.orderId
productId	UUID	FK → Product.productId
productName	VARCHAR(255)	Product name snapshot
productUnit	VARCHAR(50)	Unit of product
quantity	INT	Quantity ordered
unitPrice	DECIMAL(18,2)	Unit price at time of order
totalPrice	DECIMAL(18,2)	quantity × unitPrice
isDeleted	BOOLEAN	Soft delete flag
createdAt	TIMESTAMP	Record creation time
updatedAt	TIMESTAMP	Record update time

Table: Installment

Column	Type	Description
id	VARCHAR(255)	Primary key
order_id	VARCHAR(255)	FK → Order.id
installment_number	INT	Installment sequence
due_date	DATETIME	Payment due date
amount	DECIMAL(18,2)	Payment amount
paid_at	DATETIME	Actual payment time (nullable)

Column	Type	Description
payment_method	VARCHAR(50)	Payment method
is_late	BOOLEAN	Overdue flag
note	VARCHAR(MAX)	Notes
collected_by_user_id	VARCHAR(255)	FK → Global.User.id (nullable)
created_at	DATETIME	Creation timestamp
updated_at	DATETIME	Last update

Table: ReturnOrder

Column	Type	Description
id	VARCHAR(255)	Primary key
order_id	VARCHAR(255)	FK → Order.id
customer_id	VARCHAR(255)	FK → Customer.id
return_date	DATETIME	Return timestamp
total_refund_amount	DECIMAL(18,2)	Refund total
reason	VARCHAR(MAX)	Reason for return
status	VARCHAR(50)	Return status
processed_by_user_id	VARCHAR(255)	FK → Global.User.id
created_at	DATETIME	Creation timestamp
updated_at	DATETIME	Last update

Table: ReturnOrderItem

Column	Type	Description
id	VARCHAR(255)	Primary key
return_order_id	VARCHAR(255)	FK → ReturnOrder.id
product_id	VARCHAR(255)	FK → Product.id
quantity	INT	Returned quantity
unit_price	DECIMAL(18,2)	Refund unit price
condition	VARCHAR(100)	Item condition (new, used, damaged)
restocked	BOOLEAN	Whether item was restocked

Table: PurchaseOrder

Column	Type	Description
id	VARCHAR(255)	Primary key
order_code	VARCHAR(255)	Unique order code
supplier_id	VARCHAR(255)	FK → Supplier.id
total_amount	DECIMAL(18,2)	Total purchase amount
status	VARCHAR(50)	Status (pending , ordered , etc.)
expected_delivery_date	DATETIME	Planned receipt date
received_date	DATETIME	Actual receipt date (nullable)
note	VARCHAR(MAX)	Notes
created_by_user_id	VARCHAR(255)	FK → Global.User.id
created_at	DATETIME	Creation timestamp
updated_at	DATETIME	Last update

Table: PurchaseOrderItem

Column	Type	Description
id	VARCHAR(255)	Primary key
purchase_order_id	VARCHAR(255)	FK → PurchaseOrder.id
product_id	VARCHAR(255)	FK → Product.id
quantity	INT	Ordered quantity
unit_price	DECIMAL(18,2)	Purchase unit price
total_price	DECIMAL(18,2)	Line total
received_quantity	INT	Actual received quantity
unit_name	VARCHAR(50)	Purchase unit name
conversion_rate	INT	Conversion rate to base unit

Table: StockAdjustment

Column	Type	Description
id	VARCHAR(255)	Primary key

Column	Type	Description
product_id	VARCHAR(255)	FK → Product.id
adjustment_type	VARCHAR(50)	Type (<code>increase</code> , <code>decrease</code>)
quantity_change	INT	Quantity change
reason	VARCHAR(MAX)	Reason for adjustment
adjusted_by_user_id	VARCHAR(255)	FK → Global.User.id
created_at	DATETIME	Timestamp

Table: `DispatchOrder`

Column	Type	Description
id	VARCHAR(255)	Primary key
dispatch_code	VARCHAR(255)	Code for internal tracking
purpose	VARCHAR(255)	Dispatch purpose
status	VARCHAR(50)	Status (pending, completed, etc.)
created_by_user_id	VARCHAR(255)	FK → Global.User.id
created_at	DATETIME	Timestamp
updated_at	DATETIME	Last update

Table: `DispatchOrderItem`

Column	Type	Description
id	VARCHAR(255)	Primary key
dispatch_order_id	VARCHAR(255)	FK → DispatchOrder.id
product_id	VARCHAR(255)	FK → Product.id
quantity	INT	Quantity dispatched
unit_price	DECIMAL(18,2)	Unit price (for reference)
total_price	DECIMAL(18,2)	Line total

Table: `Notification`

Column	Type	Description
id	VARCHAR(255)	Primary key

Column	Type	Description
type	VARCHAR(50)	Notification type (order, system...)
title	VARCHAR(255)	Title
description	VARCHAR(MAX)	Notification content
link	VARCHAR(255)	Optional URL
is_read	BOOLEAN	Read status
created_at	DATETIME	Timestamp

Table: Voucher

Column	Type	Description
id	VARCHAR(255)	Primary key
name	VARCHAR(255)	Voucher name
description	VARCHAR(255)	Short description
points_cost	INT	Points required to redeem
value	DECIMAL(18,2)	Discount value
type	VARCHAR(50)	fixed, percentage, shipping
created_at	DATETIME	Timestamp
updated_at	DATETIME	Last update

Table: InventoryTransfer

Column	Type	Description
id	UUID	Primary key
source_store_id	UUID	FK → Store.storeId
target_store_id	UUID	FK → Store.storeId
transfer_code	VARCHAR(100)	Code for tracking
note	TEXT	Transfer note
status	VARCHAR(50)	Status (pending, completed, canceled)
created_by_user_id	UUID	FK → Global.User.userId
created_at	TIMESTAMP	Creation timestamp
updated_at	TIMESTAMP	Last update

Table: InventoryTransferItem

Column	Type	Description
id	UUID	Primary key
transfer_id	UUID	FK → InventoryTransfer.id
product_id	UUID	FK → Product.productId
quantity	INT	Quantity to transfer
unit_price	DECIMAL(18,2)	Unit price (optional)

Table: Promotion

Column	Type	Description
id	UUID	Primary key
name	VARCHAR(255)	Promotion name
type	VARCHAR(50)	Type (percentage, fixed, bogo)
value	DECIMAL(18,2)	Discount value
applies_to	VARCHAR(50)	all, category, product
start_date	DATE	Start date
end_date	DATE	End date
is_active	BOOLEAN	Whether active
created_at	TIMESTAMP	Creation timestamp
updated_at	TIMESTAMP	Last update

Table: LoyaltyPointLog

Column	Type	Description
id	UUID	Primary key
customer_id	UUID	FK → Customer.customerId
order_id	UUID	FK → Order.orderId (nullable)
change	INT	Points added or deducted
reason	TEXT	Reason for change
created_at	TIMESTAMP	Timestamp

Table: PriceHistory

Column	Type	Description
id	UUID	Primary key
product_id	UUID	FK → Product.productId
old_price	DECIMAL(18,2)	Previous price
new_price	DECIMAL(18,2)	New price
changed_by	UUID	FK → User.userId
changed_at	TIMESTAMP	Timestamp

Table: AuditLog

Column	Type	Description
id	UUID	Primary key
entity_type	VARCHAR(100)	Table name (e.g., Order, Product)
entity_id	UUID	Target record ID
action	VARCHAR(50)	create, update, delete
performed_by	UUID	FK → User.userId
diff	TEXT	JSON of changed fields
created_at	TIMESTAMP	Timestamp

Table: FileAttachment

Column	Type	Description
id	UUID	Primary key
entity_type	VARCHAR(100)	Type (Order, Product, etc.)
entity_id	UUID	FK to corresponding record
file_url	TEXT	URL to the file
uploaded_by	UUID	FK → User.userId
note	VARCHAR(255)	Optional description
created_at	TIMESTAMP	Timestamp

Table: DebtTransaction

Column	Type	Description
id	VARCHAR(255)	Primary key
customer_id	VARCHAR(255)	FK → Customer.id
amount	DECIMAL(18,2)	Payment amount
payment_method	VARCHAR(50)	Payment method (cash, bank, etc.)
paid_by_user_id	VARCHAR(255)	FK → Global.User.id
paid_at	DATETIME	Payment time
note	TEXT	Notes
created_at	DATETIME	Timestamp

Table: Payment

Column	Type	Description
id	VARCHAR(255)	Primary key
order_id	VARCHAR(255)	FK → Order.id
amount	DECIMAL(18,2)	Payment amount
method	VARCHAR(50)	Payment method
paid_at	DATETIME	Payment timestamp
paid_by_user_id	VARCHAR(255)	FK → Global.User.id
note	TEXT	Notes

Table: InventoryLog

Column	Type	Description
id	VARCHAR(255)	Primary key
product_id	VARCHAR(255)	FK → Product.id
source_type	VARCHAR(50)	order, purchase_order, etc.
source_id	VARCHAR(255)	FK → Source table
quantity	INT	Quantity change (+/-)
stock_before	INT	Stock before change

Column	Type	Description
stock_after	INT	Stock after change
note	TEXT	Notes
changed_at	DATETIME	Change timestamp
changed_by_user_id	VARCHAR(255)	FK → User.id

Table: DailyReport

Column	Type	Description
date	DATE	Date of report
total_sales	DECIMAL(18,2)	Total paid sales
total_debt	DECIMAL(18,2)	Total outstanding debt
total_received	DECIMAL(18,2)	Total debt payments received
new_customers	INT	New customers that day
created_at	DATETIME	Timestamp

Table: UserActivityLog

Column	Type	Description
id	VARCHAR(255)	Primary key
user_id	VARCHAR(255)	FK → User.userId
action	VARCHAR(255)	Action performed
target_table	VARCHAR(100)	Affected table
target_id	VARCHAR(255)	Affected record ID
metadata	JSON	Optional structured log
created_at	DATETIME	Timestamp