

CS 301P Database Systems Lab

Lab 09 IMT2023103 Nirbhay

Table name = Bill

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
Bill_ID	Number	PK, Surrogate
BillDate	Date	NOT NULL
TotalBill	Number	NOT NULL
Payment_ID	Number	FK referencing Payment.Payment_ID

Table name = BillItem

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
BillItem_ID	Number	PK, Surrogate
Quantity	Number	NOT NULL
TotalPrice	Number	NOT NULL
Bill_ID	Number	FK references Bill.Bill_ID, NOT NULL, ON DELETE CASCADE
Product_ID	Number	FK references Product.Product_ID, NOT NULL

Table name = Payment

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
Payment_ID	Number	PK, Surrogate
PaymentDate	Date	NOT NULL
PaymentType	String	NOT NULL
PaymentAmount	Number	NOT NULL
Bill_ID	Number	FK referencing Bill.Bill_ID, NOT NULL

Table name = CardPayment

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
CardPayment_ID	Number	PK, Surrogate, FK references Payment.Payment_ID, ON DELETE CASCADE
CardNumber	Number	NOT NULL, UNIQUE
ExpiryDate	Date	NOT NULL
AuthReferenceNumber	Number	NOT NULL

Table name = Product

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
Product_ID	Number	PK, Surrogate
SKU	Number	NOT NULL, UNIQUE
ProdName	String	NOT NULL
Price	Number	NOT NULL

Table name = Category

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
Category_ID	Number	PK, Surrogate
CategoryName	String	NOT NULL
CategoryDesc	String	

Table name = Product_Category

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
Product_Category_ID	Number	PK, Surrogate
Product_ID	Number	FK referencing Product.Product_ID
Category_ID	Number	FK referencing Category.Category_ID

The combination of Product_ID and Category_ID is a composite key

Table name = Store

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
Store_ID	Number	PK, Surrogate
StoreName	String	NOT NULL
Address	String	

Table name = Stock

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
Stock_ID	Number	PK, Surrogate
Store_ID	Number	FK references Store.Store_ID, NOT NULL
Product_ID	Number	FK references Product.Product_ID, NOT NULL
ShelfQty	Number	NOT NULL
StorageQty	Number	NOT NULL
ReorderThreshold	Number	
StockDate	Date	NOT NULL

The combination of Store_ID and Product_ID is a composite key

Table name = ShelfLocation

Name of column	Data type	Constraints (e.g., PK, FK, Surrogate, UNIQUE, NOT NULL, etc.)
ShelfLocation_ID	Number	PK, Surrogate
Store_ID	Number	FK referencing Store.Store_ID
Product_ID	Number	FK referencing Product.Product_ID, NOT NULL
FloorNumber	Number	NOT NULL
AisleName	String	NOT NULL
ShelfNumber	Number	NOT NULL