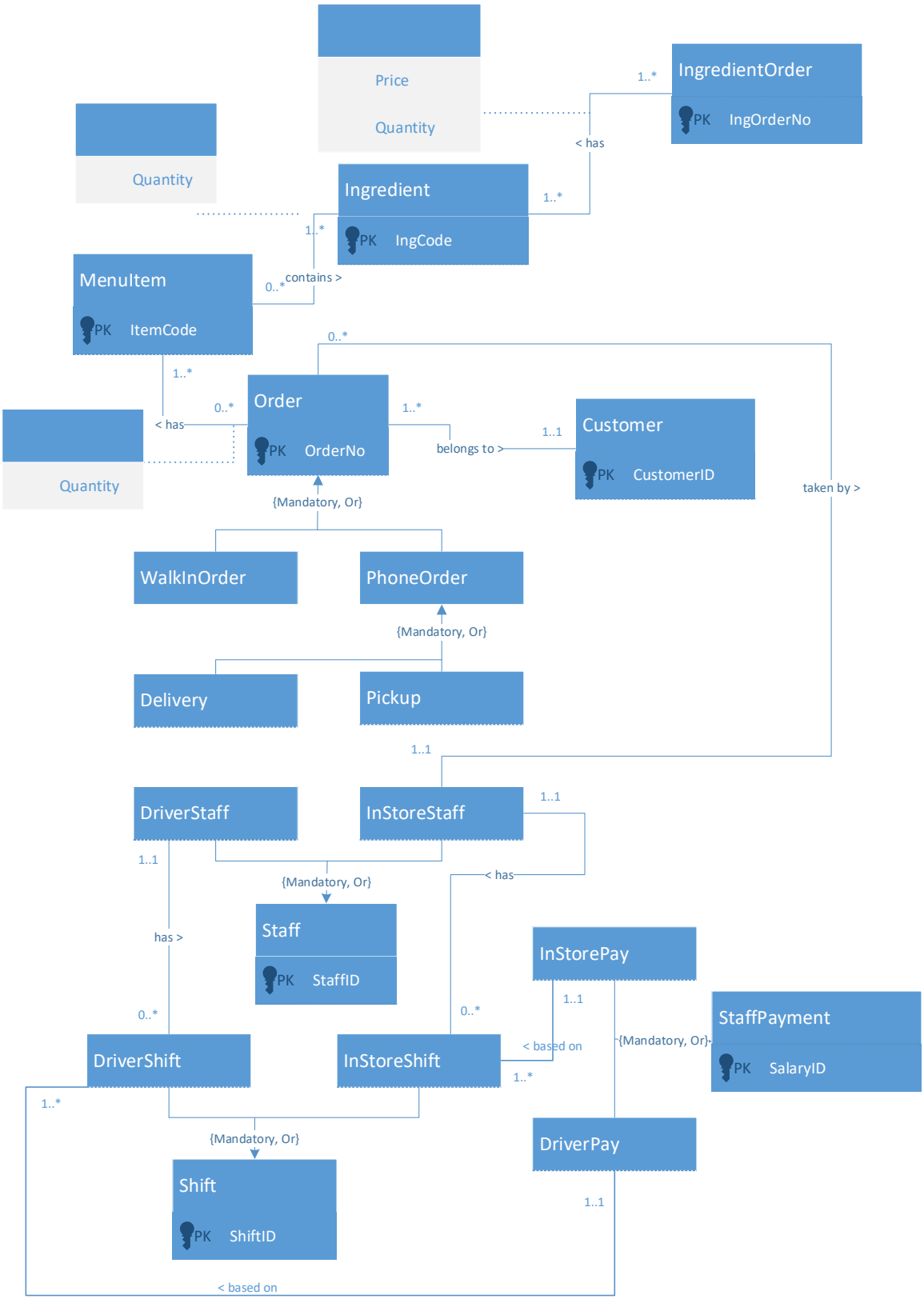
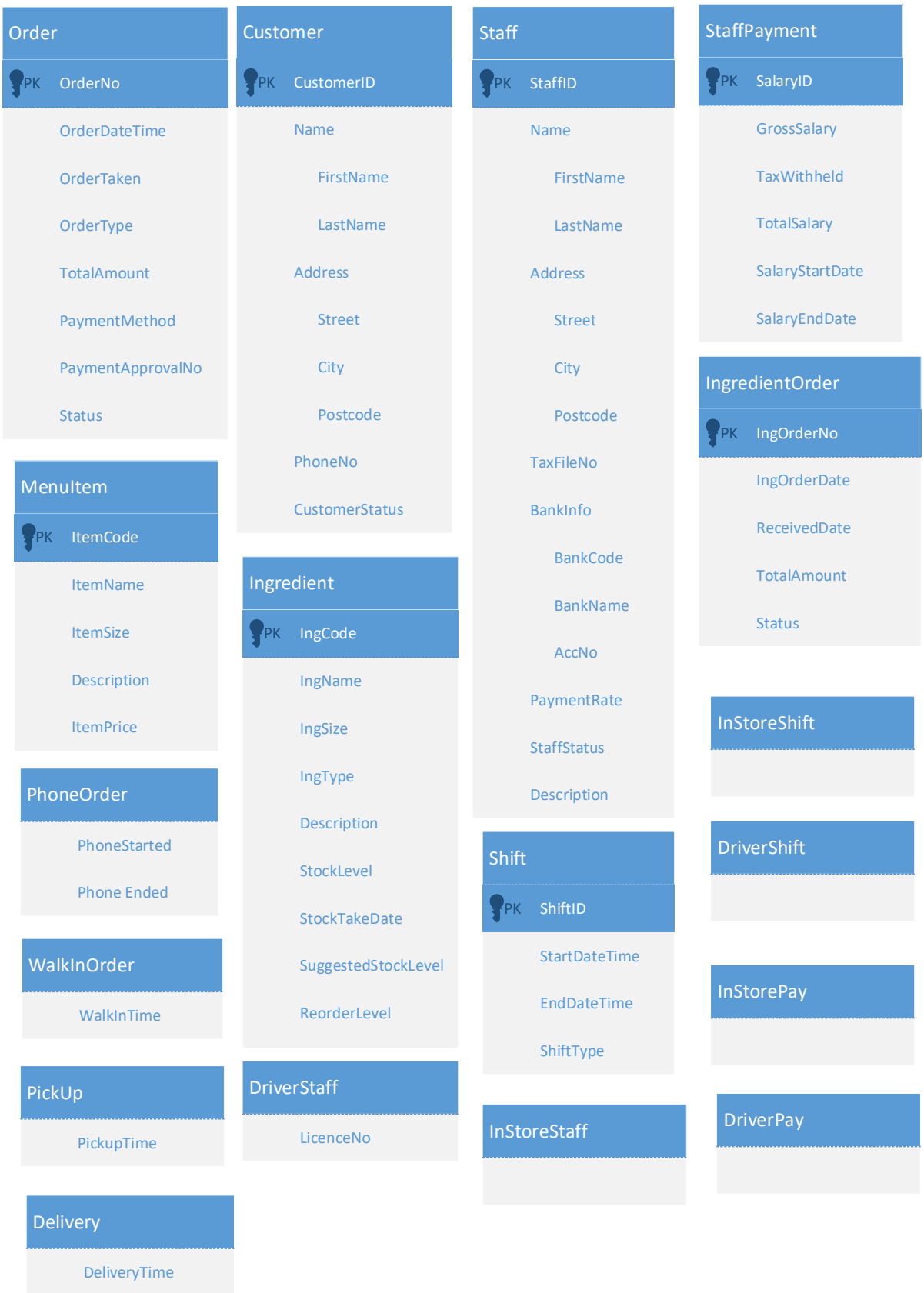
EER Model and Data Dictionary

EER Model




Order
PK OrderNo
OrderDateTime
OrderTaken
OrderType
TotalAmount
PaymentMethod
PaymentApprovalNo
Status
Customer
PK CustomerID
Name
FirstName
LastName
Address
Street
City
Postcode
PhoneNo
CustomerStatus
Staff
PK StaffID
Name
FirstName
LastName
Address
Street
City
Postcode
TaxFileNo
BankInfo
BankCode
BankName
AccNo
PaymentRate
StaffStatus
Description
StaffPayment
PK SalaryID
GrossSalary
TaxWithheld
TotalSalary
SalaryStartDate
SalaryEndDate
IngredientOrder
PK IngOrderNo
IngOrderDate
ReceivedDate
TotalAmount
Status
MenuItem
PK ItemCode
ItemName
ItemSize
Description
ItemPrice
Ingredient
PK IngCode
IngName
IngSize
IngType
Description
StockLevel
StockTakeDate
SuggestedStockLevel
ReorderLevel
InStoreShift
PhoneOrder
PhoneStarted
Phone Ended
Shift
PK ShiftID
StartDateTime
EndDateTime
ShiftType
DriverShift
WalkInOrder
WalkInTime
InStorePay
PickUp
PickupTime
DriverStaff
LicenceNo
InStoreStaff
DriverPay
Delivery
DeliveryTime

Data Dictionary

Entity Types

Entity Name	Description	Aliases	Occurrence
Order	Describing orders customer have made	Pizza Order	When an order is made by a customer
Customer	Provide details of customer that have made order	Client	When a customer made an order
MenuItem	Describing the list of menus available at the restaurant	Menu	When a customer chooses the menu during the order
Ingredient	Describing the ingredients used to make up the menu	Menu Ingredient	When order is made for a particular menu, the ingredients are chosen with different quantities.
IngredientOrder	Describing the order made for the ingredients	Restock	Manager will order based on the actual ingredient level, suggested stock levels and reorder level.
Staff	Provide details of staff working at SuperTaste Pizza	Employees	Either staff takes an order or deliver the order.
Shift	Describing the time for staff working	Work Hours	When the staff records their time at work
StaffPayment	Describing the payment made to the staff	Salary	When payment is made to the staff

PhoneOrder	An order made through phone call	Phone Call	When customer make a call via phone.
WalkInOrder	An order made by through walk in	Walk In	When customer visit the store to make an order
Delivery	An order customer who wants them to be delivered	Handing over	When a customer requests the order to be delivered
Pickup	An order that customer wants to collect at store	Collection	When a customer requests to collect the order at store
DriverStaff	Staff who deliver the order to the customer	Delivery man	When customer choose the order to be delivered
InStoreStaff	Staff who is responsible to take the order.	Shop Worker	When customer makes an order.
DriverShift	Work shift for driver	Driver's Shift	When driver records their work shift.
InStoreShift	Work shift for in-store staff	In-store staff's Shift	When in-store employee records their work shift.
DriverPay	Payment for the driver	Driver's salary	When salary payment is made to the driver.
InStorePay	Payment for in-store employees.	In-store staff's salary	When salary payment is made to the in-store employees.

Relationship Types

Entity Name	Multiplicity	Relationship	Multiplicity	Entity Name
Order	1..*	Belongs to	1..1	Customer
	0..*	Taken by	1..1	InStoreStaff
	0..*	Quantity	1..*	MenuItem
	(Man,Or)	Generalization	(Man,Or)	PhoneOrder
	(Man,Or)	Generalization	(Man,Or)	WalkInOrder
MenuItem	0..*	Quantity	1..*	Ingredient
Ingredient	1..*	Price, Quantity	1..*	IngredientOrder
Staff	(Man,Or)	Generalization	(Man,Or)	DriverStaff
	(Man,Or)	Generalization	(Man,Or)	InStoreStaff
Shift	(Man,Or)	Generalization	(Man,Or)	DriverShift
	(Man,Or)	Generalization	(Man,Or)	InStoreShift
StaffPayment	(Man,Or)	Generalization	(Man,Or)	DriverPay
	(Man,Or)	Generalization	(Man,Or)	InStorePay
PhoneOrder	(Man,Or)	Specialization	(Man,Or)	Delivery
	(Man,Or)	Specialization	(Man,Or)	Pickup
DriverStaff	1..1	Has	0..*	DriverShift
InStoreStaff	1..1	Has	0..*	InStoreShift
DriverPay	1..1	Based on	1..*	Driver Shift
InStorePay	1..1	Based on	1..*	InStoreShift
Staff	1..1	Receives	0..*	StaffPayment

Attributes

Entity Name	Attributes	Description	Data Type & Length	Nulls	Multi-valued	Derived
Order	OrderNo	Unique order identifier	Char(10)	N	N	N
	OrderDateTime	The date & time the order is made	Datetime2	Y	N	N
	OrderTaken	Phone or walk-in	Varchar(10)	Y	N	N
	OrderType	Delivery or pickup	Varchar(10)	Y	N	N
	TotalAmount	Total money for the order	Float	Y	N	Y
	PaymentMethod	Card or cash	Varchar(15)	N	N	N
	PaymentApprovalNo	Payment approval number if payment made by card	Char(8)	N	N	N
	Status	Status of the order	VarChar(10)	Y	N	N
Customer	CustomerID	Unique customer identifier	Char(10)	N	N	N
	Name					
	FirstName	Customer's first name	VarChar(15)	Y	N	N

	LastName	Customer's last name	VarChar(15)	Y	N	N
	Address					
	Street	Customer street address	VarChar(15)	Y	N	N
	City	City where customer lives	VarChar(15)	Y	N	N
	Postcode	Customer postcode address	Char(4)	Y	N	N
	PhoneNo	Customer's phone number	Char(10)	Y	Y	N
	CustomerStatus	Status of customer	VarChar(10)	Y	N	N
Staff	StaffID	Unique staff identifier	Char(10)	N	N	N
	Name					
	FirstName	First name of staff	VarChar(15)	Y	N	N
	LastName	Last name of staff	VarChar(15)	Y	N	N
	Address					
	Street	Staff postal street address	VarChar(15)	Y	N	N

	City	City for postal address	VarChar(15)	Y	N	N
	Postcode	Staff postcode address	Char(4)	Y	N	N
	TaxFileNo	Staff tax file number	Char(9)	N	N	N
	BankInfo					
	BankCode	Bank code number	Char(6)	Y	N	N
	BankName	Name of the bank	VarChar(15)	Y	N	N
	AccNo	Staff bank account number	VarChar(10)	Y	N	N
	PaymentRate	Staff payment rate	Float	Y	N	N
	StaffStatus	Staff status	VarChar(10)	Y	N	N
	Description	Any other description	VarChar(30)	Y	N	N
Shift	ShiftID	Unique shift identifier	Char(5)	N	N	N
	StartDateTime	Start date and time of shift	DateTime2	Y	N	N
	EndDateTime	End date and time of shift	DateTime2	Y	N	N

	ShiftType	Part time or full time	VarChar(10)	Y	N	N
StaffPayment	SalaryID	Unique identifier of employee salaries	Char(10)	N	N	N
	GrossSalary	Gross salary of staff	Float	Y	N	N
	TaxWithheld	Tax withheld	Float	Y	N	N
	TotalSalary	Total payment made to staff	Float	Y	N	N
	SalaryStartDate	Payment period start date	Date	Y	N	N
	SalaryEndDate	Payment period end date	Date	Y	N	N
MenuItem	ItemCode	Unique menu item identifier	Char(5)	N	N	N
	ItemName	Name of the menu	Varchar(20)	Y	N	N
	ItemSize	Weight of the item	Int	Y	N	N
	Description	Any other description	VarChar(30)	Y	N	N
	ItemPrice	Price of the item	Float	Y	N	N

	Quantity	Quantity of the item	Int	Y	N	N
Ingredient	IngCode	Unique ingredient identifier	Char(10)	N	N	N
	IngName	Name of the ingredient	VarChar(15)	Y	N	N
	IngSize	Weight of the ingredient	Int	Y	N	N
	IngType	Type of ingredient	VarChar(10)	Y	N	N
	Description	Any other description	VarChar(30)	Y	N	N
	StockLevel	Stock level at current stock take period	Int	Y	N	N
	StockTakeDate	Date and time last stock take was taken	Datetime2	Y	N	N
	SuggestedStockLevel	Suggested current stock level	Int	Y	N	N
	ReorderLevel	Reorder level	Int	Y	N	N

	Quantity	Quantity of Ingredient	Int	Y	N	N
IngredientOrder	IngOrderNo	Unique ingredient order identifier	Char(10)	N	N	N
	IngOrderDate	Date of ingredient order	Date	Y	N	N
	ReceivedDate	Date received ingredient order	Date	Y	N	N
	TotalAmount	Total order cost	Float	Y	N	N
	Quantity	Quantity of the ingredient	Int	Y	N	N
	Price	Cost of the ingredient	Float	Y	N	N
	Status	Status of the order	VarChar(10)	Y	N	N
PhoneOrder	PhoneStarted	Time where call is answered	Datetime2	Y	N	N
	PhoneEnded	Time where call is ended	Datetime2	Y	N	N
WalkInOrder	WalkInTime	The time customer walks in	Datetime2	Y	Y	N
Delivery	DeliveryTime	The delivery time	Datetime2	Y	Y	N

Pickup	PickupTime	The pickup time	Datetime2	Y	Y	N
DriverStaff	LicenceNo	Driver licence number	Char(10)	N	Y	N
InStoreStaff	-	-	-	-	-	-
DriverShift	-	-	-	-	-	-
InStoreShift	-	-	-	-	-	-
DriverPay	-	-	-	-	-	-
InStorePay	-	-	-	-	-	-