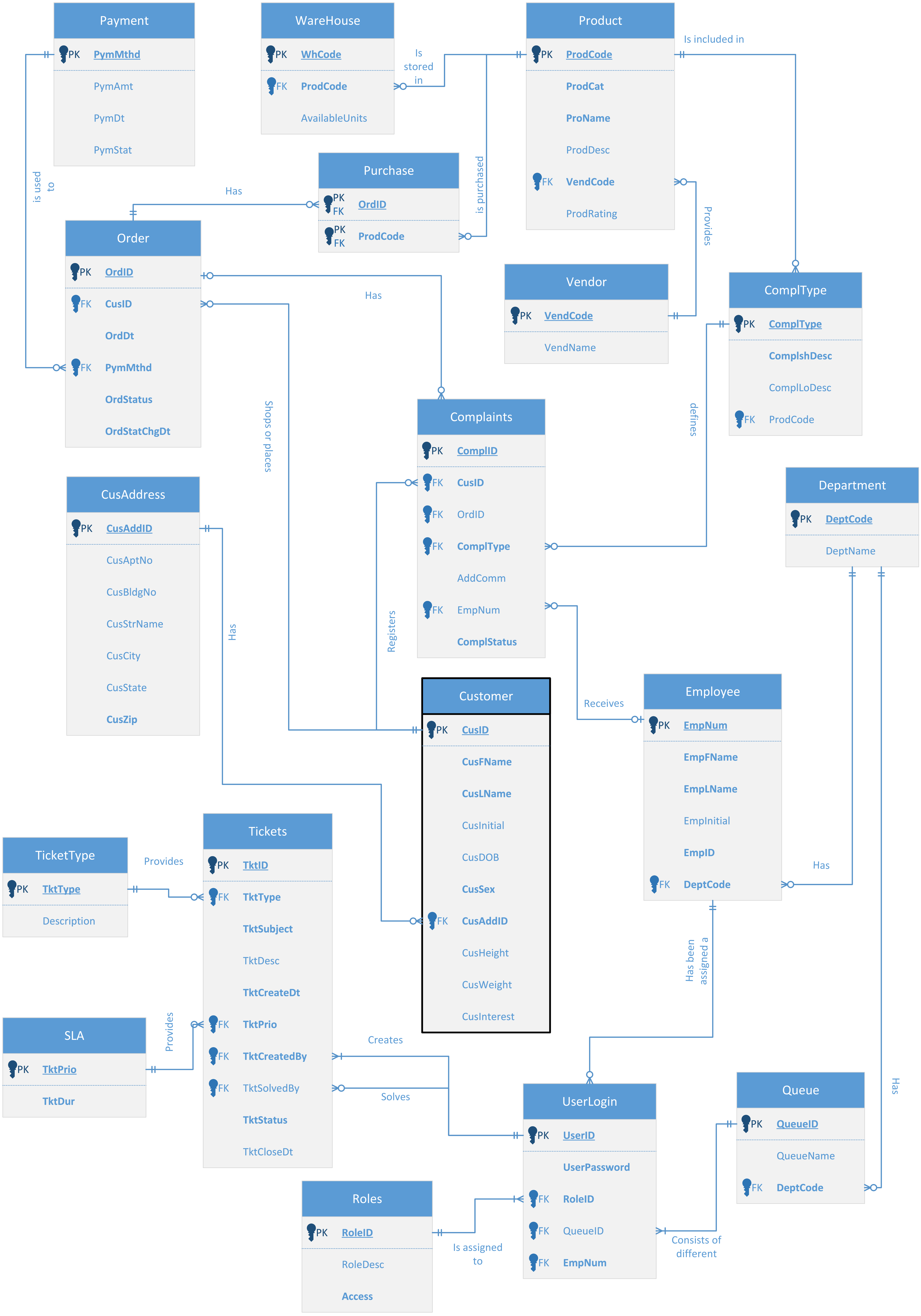
Payment
PK PymMthd
PymAmt
PymDt
PymStat
WareHouse
PK WhCode
FK ProdCode
AvailableUnits
Is stored in
Product
PK ProdCode
ProdCat
ProName
ProdDesc
FK VendCode
ProdRating
Is included in
is used to
Has
Purchase
PK FK OrdID
PK FK ProdCode
is purchased
Provides
Order
PK OrdID
FK CusID
OrdDt
FK PymMthd
OrdStatus
OrdStatChgDt
Has
Vendor
PK VendCode
VendName
ComplType
PK ComplType
ComplshDesc
ComplLoDesc
FK ProdCode
Shops or places
defines
Complaints
PK ComplID
FK CusID
FK OrdID
FK ComplType
AddComm
FK EmpNum
ComplStatus
CusAddress
PK CusAddID
CusAptNo
CusBldgNo
CusStrName
CusCity
CusState
CusZip
Department
PK DeptCode
DeptName
Has
Registers
Customer
PK CusID
CusFName
CusLName
CusInitial
CusDOB
CusSex
FK CusAddID
CusHeight
CusWeight
CusInterest
Receives
Employee
PK EmpNum
EmpFName
EmplName
EmpInitial
EmpID
FK DeptCode
Has
TicketType
PK TktType
Description
Provides
Tickets
PK TktID
FK TktType
TktSubject
TktDesc
TktCreateDt
FK TktPrio
FK TktCreatedBy
FK TktSolvedBy
TktStatus
TktCloseDt
Has been assigned a
SLA
PK TktPrio
TktDur
Provides
Creates
Solves
UserLogin
PK UserID
UserPassword
FK RoleID
FK QueueID
FK EmpNum
Queue
PK QueueID
QueueName
FK DeptCode
Has
Roles
PK RoleID
RoleDesc
Access
Is assigned to
Consists of different

ANA650 - Database Design Project - Part 2

Team 1

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ANA 650: Database Design for Analytics

Professor Trzos

May 22, 2022

Database Type:

This is a **transactional or operational database**, as our goal is to store the day-to-day transactions generated by customer acquisition, orders, troubleshooting issues and complaints from customers.

Main Entity:

CUSTOMER is main entity in our database, as this will store the customer information and is connected to almost all entities directly or indirectly.

Assumptions:

1) Each employee will require credentials to log in to ticketing tool which will have different permissions based on the role assigned to the employee and each user will be a member of a queue.

2) Each department will have its own queue to create or modify the tickets.

3) End Date for a ticket will be calculated with the help of TktPrio and TktDur (duration) in **SLA.** We would not store it in table but will be directly displayed in the ticketing tool.

4) A complain will be registered by a customer hence CusID is required attribute in **Complaints** table, however, not all employees will receive a complaint against them, hence EmpNum is not a required attribute in it.

5) Each Product will be supplied by a vendor and each vendor can supply multiple products, hence there is a one-to-many (1:N) relationship between **Vendor** and **Product** entities.

6) An order can be placed for multiple products together and a product can be present in many orders i.e., there is many-to-many (M:N) relationship between **Product** and **Order** entities. Hence an associative entity called **Purchase** is created to implement this M:N relationship.

7) There are different payment methods available now a days, hence a separate entity called **Payment** is created to store payment related details associated with each order.

8) As this is an online business, our products need to be stored at different location for ease and the earliest delivery of products to customers. Hence a separate entity called **WareHouse** is created to store the information about availability of a product at different locations which will be connected to Product entity using ProdCode.