IMSE 5715
Modeling of intelligent Informaiton system

Term project: Enterprise system analysis

Team Members:

Shahriyar Chowdhury

Apurba Saha

Britta Chowdhury

Introduction

Chowdhury's or Ch’s drug store is a local drug store that can assist customers with receiving medication and selling products that are related to utilities such as hygiene products, beauty supplies and some other items. This local drug store is based in Dearborn and has only one location situated at Ford road. This drug store mainly provides the pharmaceutical prescription drug services to its valued consumers by receiving medication on time and always has the proper drugs in stock. The owner of the drug store has many suppliers to receive goods and services for the business. The store has many aisles which represent a category for products such hygiene products, beauty, vitamins, medicine, and personal care. In addition, the store has a photo department where it can print customers photos and take passport pictures. In the warehouse department, the clerks are responsible to restock inventory and making sure of supplies are being ordered and shipped on time. In this pandemic, the store’s employees are responsible of making the store clean as much as possible. Clerk is going wipe down every aisle and counter with disinfectant wipes.

Chowdhury’s Drug Store Operations

The business model is to provide a service to customers where they can provide medication and do a refill prescription. Also, another operation is to sell convenience items such as hygiene products, beauty, vitamins, medicine, personal care, food. It also shows of what every department is responsible for.

Functions:

A. Provide Prescriptions Order

1. Schedule a Pick Up
2. Refill Medication
3. Submit Prescriptions Order
4. Process Payment
5. Finalize

A. Maintain Store

1. Stock items on aisle
2. Reorder item for stock
3. Clean Store

B. Provide Customer Service

1. Take and Print Photos
2. Service customers with Items
3. Provide assistance with customers

Schedule a Pick-Up

Customers can schedule pick up for their orders online. Customer must provide a time and personal information of pick up their prescription order. Also, the pick-up request can be done through a phone call.

Refill Medication

Customers can refill medications by showing a proof of an existing prescription order that has been done in the past. Customers can request refill in online, phone, and walk in. After having certain amount of refill count, pharmacist will need to doctor to get permission to provide refill or the customer can get other doctors note.

Submit Prescription Order

Customers will need to provide a doctor’s note to receive medication. Customer can scan a copy a doctor’s note and submit through online. Customers can also show a doctor’s note in person by doing a walk in. Doctor’s office can fax a prescription order to store.

Process Payment

Customers can process their payment by showing a proof of insurance and bill gets to send to the insurance agency and the drug store receive payment. Customer can pay the prescription by credit card or cash.

Process Home Delivery

Pharmacy clerk will provide a home delivery of prescription once everything has been finalized.

Stock Items

Store Clerk must stock items whenever the items get low on the aisle. They must organize the item to distinguish one item to another.

Reorder items for stock

Store Clerk must keep track of inventory level. When inventory get low, the warehouse clerk must purchase inventory from the supplier. Store clerk will need to keep track of shipment

Clean Store

Store clerk must clean the store to make it presentable to the customers. Store clerk must swipe, vacuum, disinfect of every counter.

Take and Print Photos

Customer can submit the photos online and can pick it up at the photo department. Customers can also bring a media device or memory card and can decides of what photo size that they would like. Customers can take photos for passport/ID purposes.

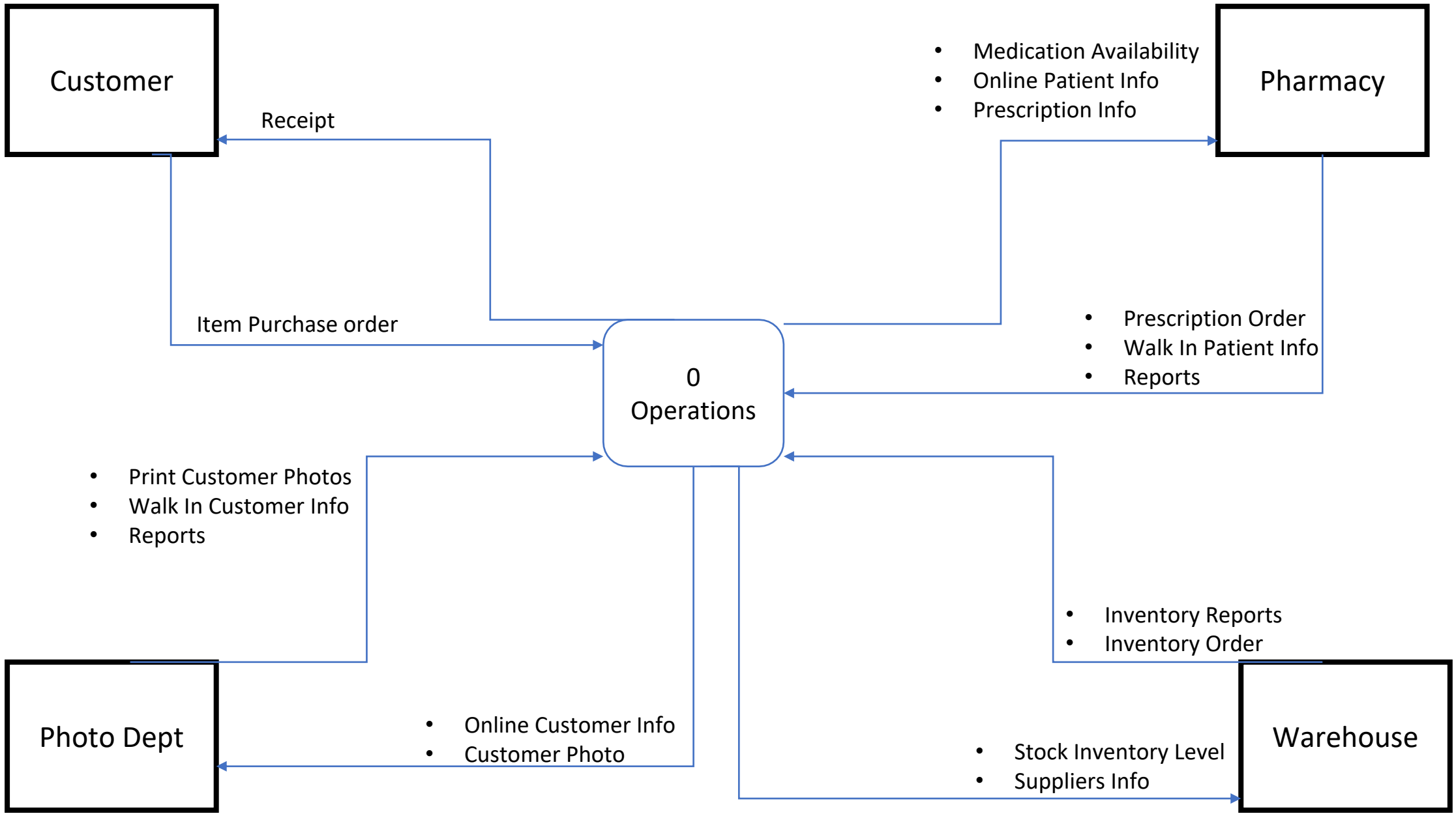
Service Customer's with Items

Store clerk can process the items by ringing out the customers. Also, they can make return or exchange an item. Customers can process payment with cash, credit/debit card, or check

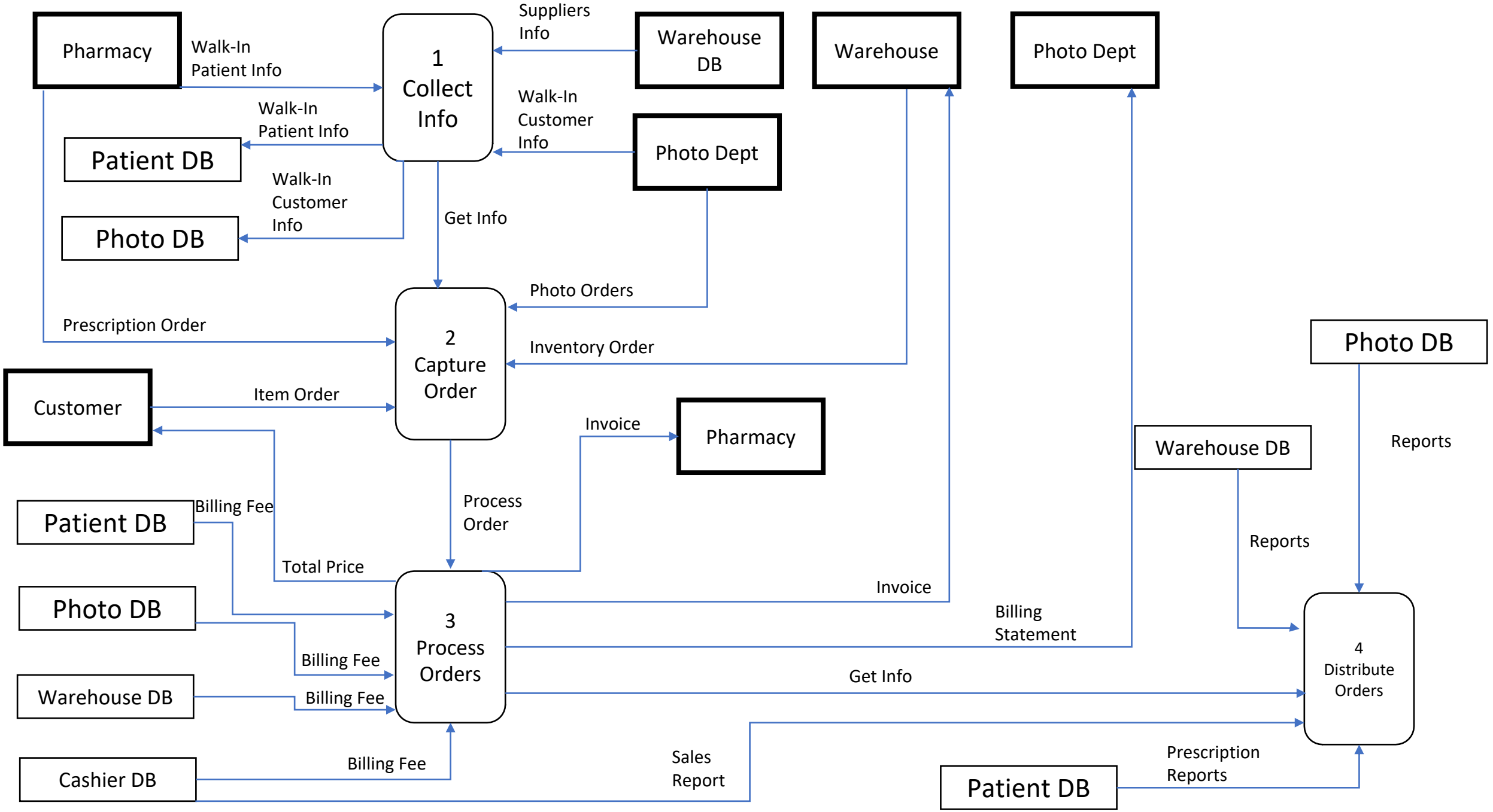
Provide assistance with customers

Answer any questions that the customer may have. Show guidance and directions of the item that they need. Most customers will have a hard time to find an item. So, the store clerk will need to make sure that customers are finding of what they need. It will show great customer service.

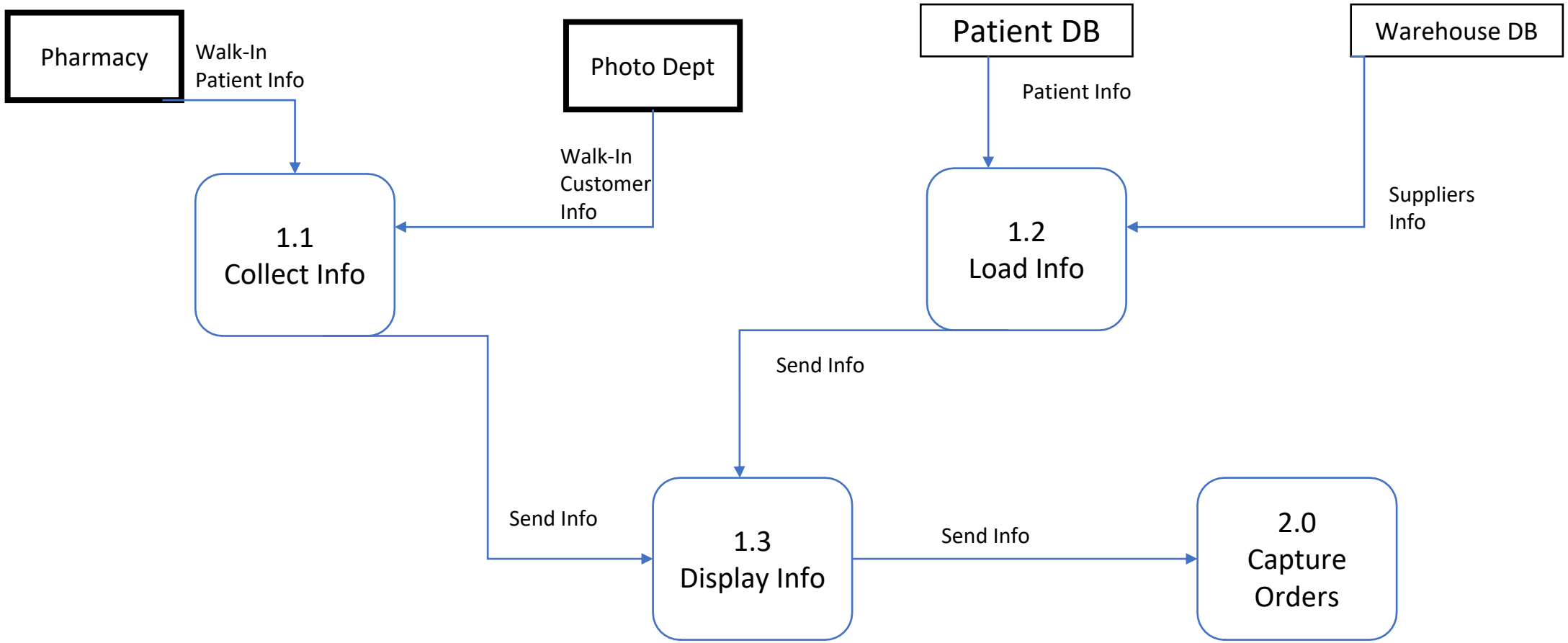
Context diagram



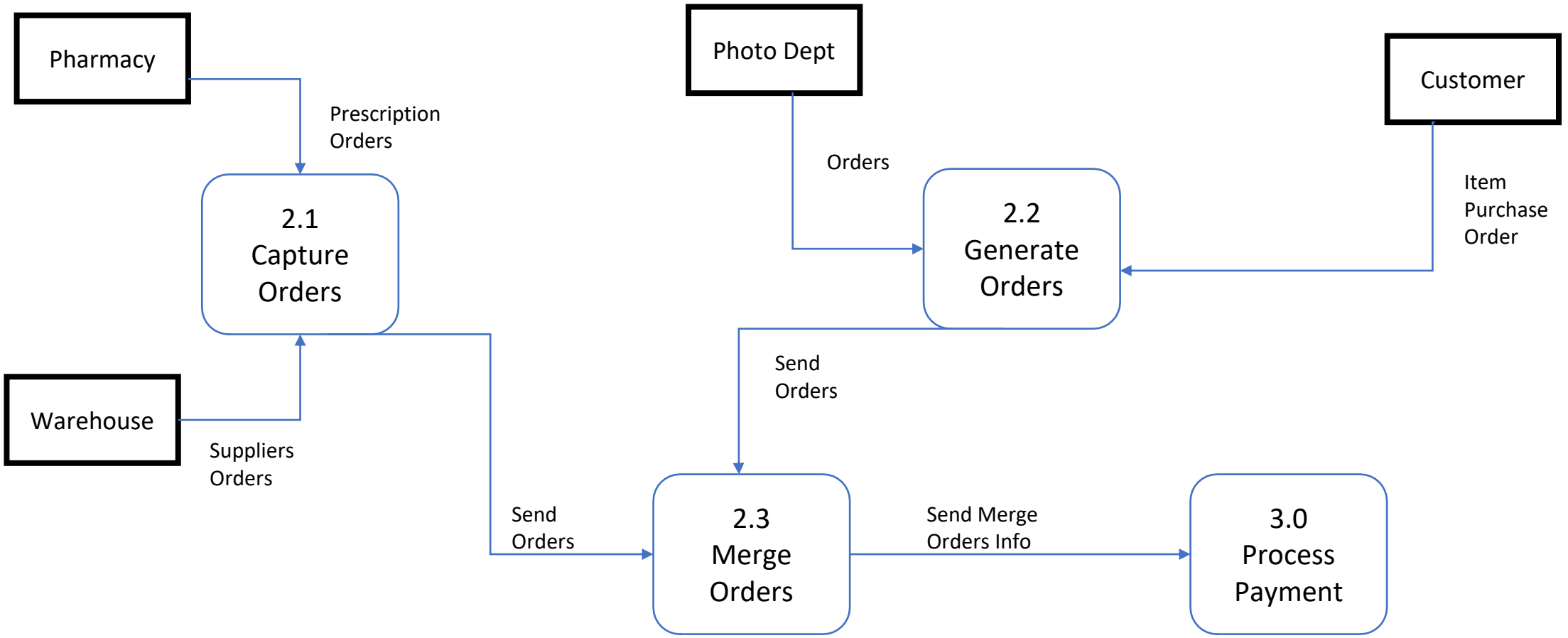
Level-0, Data Flow Diagram



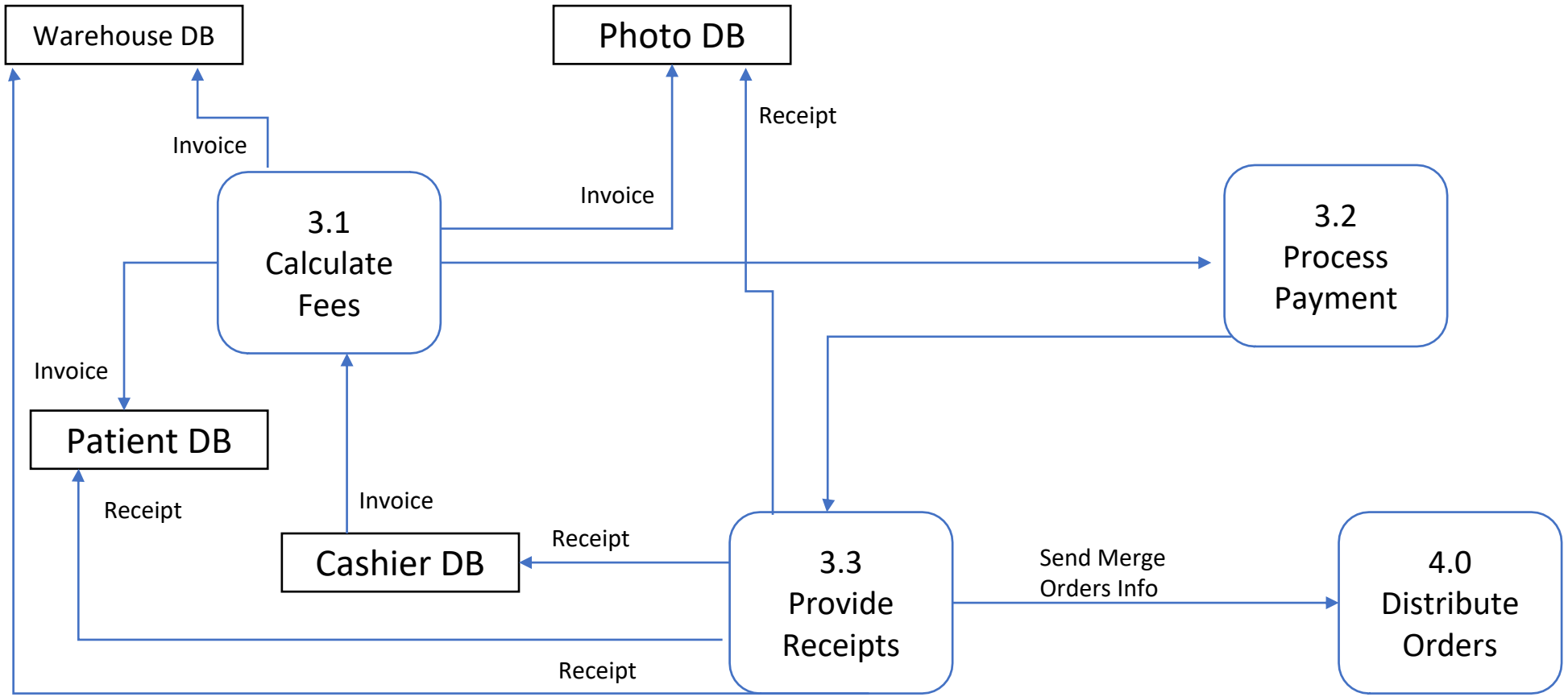
Level-1, Data Flow Diagram



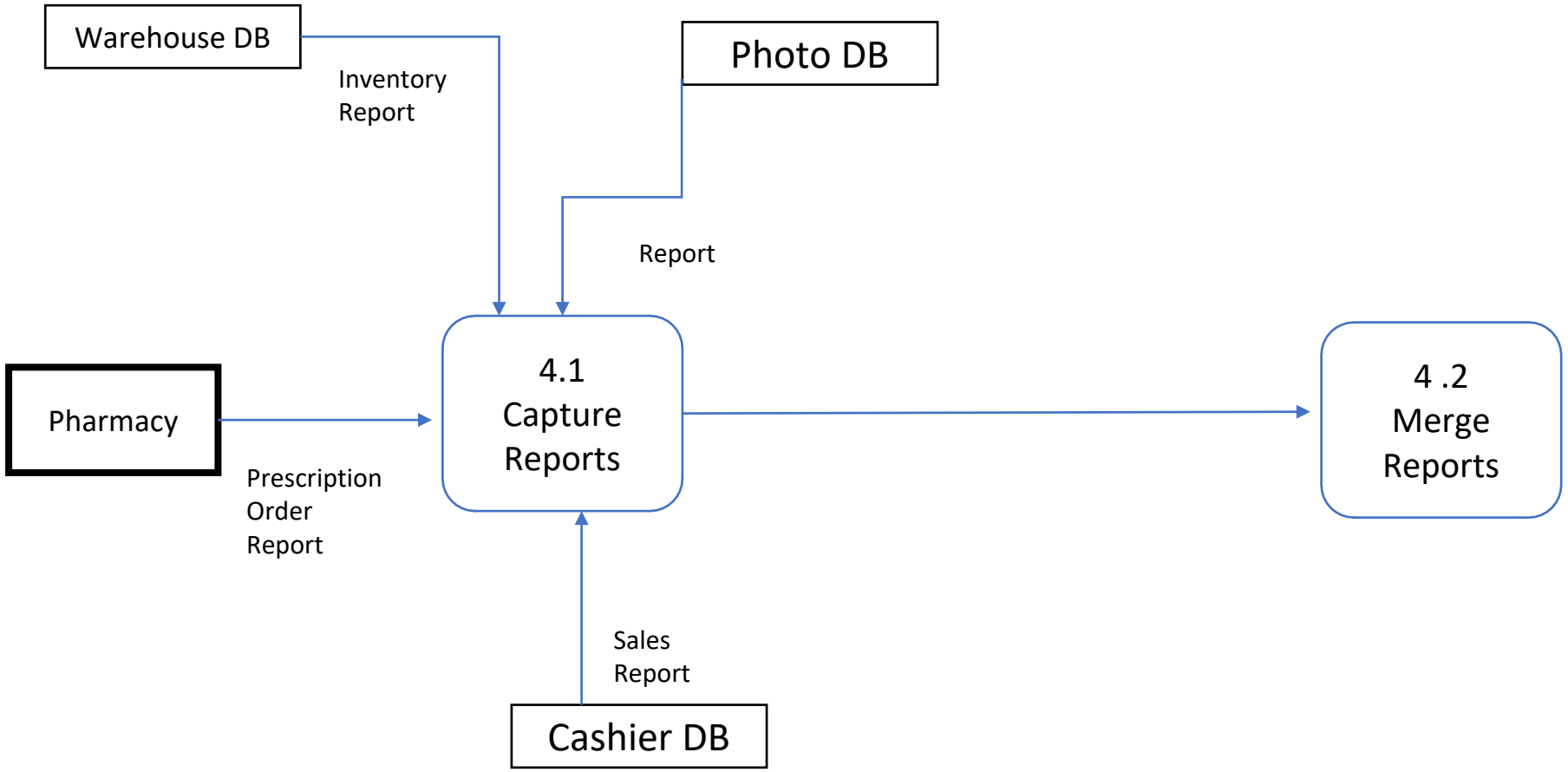
Level-2, Data Flow Diagram



Level-3, Data Flow Diagram



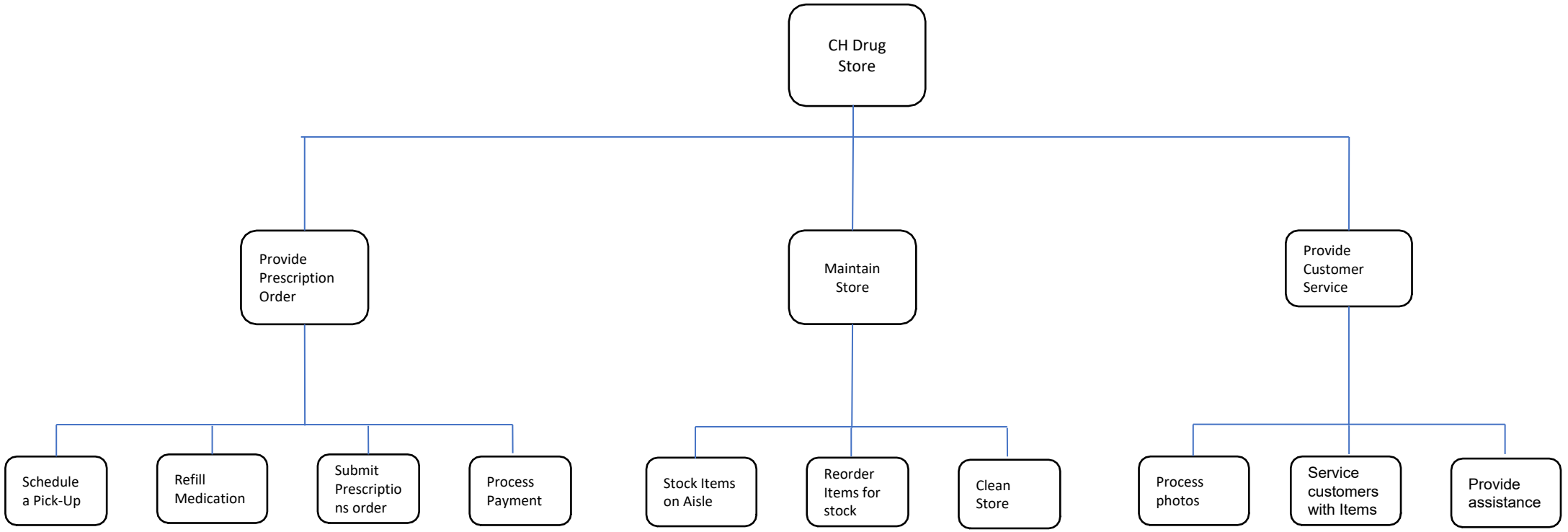
Level-4, Data Flow Diagram



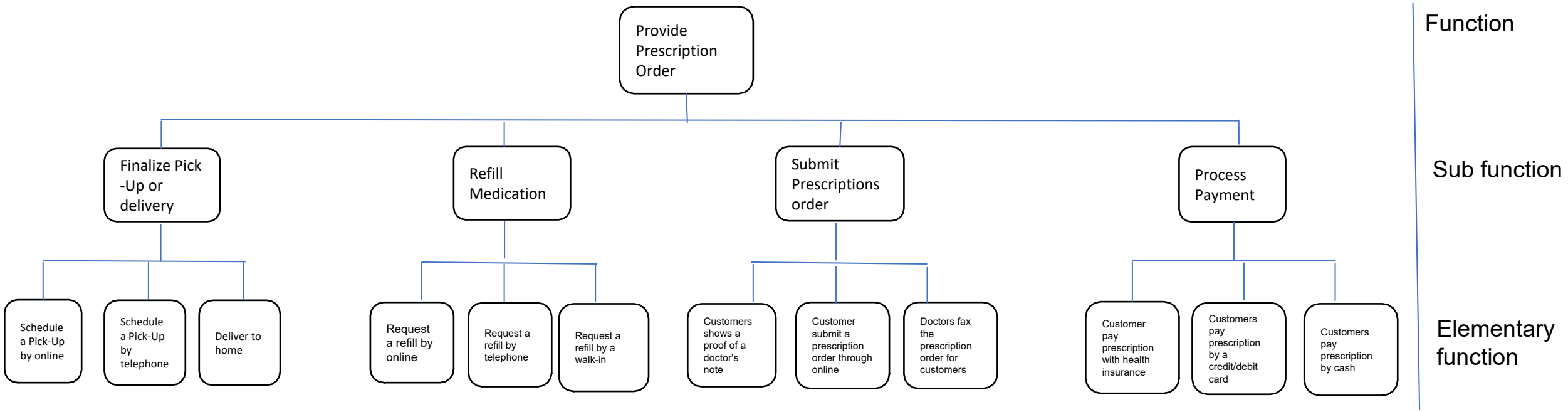
Data Flow Diagram Description

- Context Level Diagram
  - The level 0 diagram, shows all the external entities. The system is the operations that will show all the department activities and functions that are happening in each department. So, in the system, it will contain all the data that is occurring in each data. In the customer entity, the item purchase order will be an output for the system then the customer will receive a receipt. In the pharmacy entity, it will be outputting the prescription order, walk-in patient info, and reports. Then it will be inputting Medication availability, online patient info, and prescription info. The photo department will be inputting online customer info and photos. Then it will be outputting print customer photos, customer info, and reports.
- Level 0
  - In the level 1 process, it states to collect info so the pharmacy department and photo department will be providing the walk-in patient info and the warehouse database providing the suppliers' info. The walk-in customer info will be stored in the Patient and photo database. Then it will be proceeding to level 2 which is capture order. So the process will be capturing orders from every department. The orders are prescription, items, inventory, and photos. Then it will proceed to process orders. When processing orders, it will send an invoice to every entity. After receiving the entity, each database will be outputting the Billing fee. Finally, it will proceed to level 4 which is Distribute reports. So, each database will be providing reports to the process.
- Level 1
  - This is more of a detailed level 1 process, where the processes are collected info, load info, and display info. The first process is to collect info of walk-in customers and patient info. The second process is to load info from the database. Finally, it will display the data.
- Level 2
  - This is a level 2 child diagram that is broken into different processes. In the first process, it is capturing orders from Pharmacy and Warehouse. The second process is to generate orders by having sales. The sales are based on Customer and Photo departments. Then both processes will merge orders so they can be unified.
- Level 3
  - This is a level 3 child diagram where it is processing payments. In the first process, it is calculating the fees and sending invoices to the Warehouse database, patient database, cashier database, and photo database. Then it each database will send a billing fee to process payment. Then it will provide receipts.
- Level 4
  - Finally, the level 4 child diagram is the capture reports from each database then merge the reports.

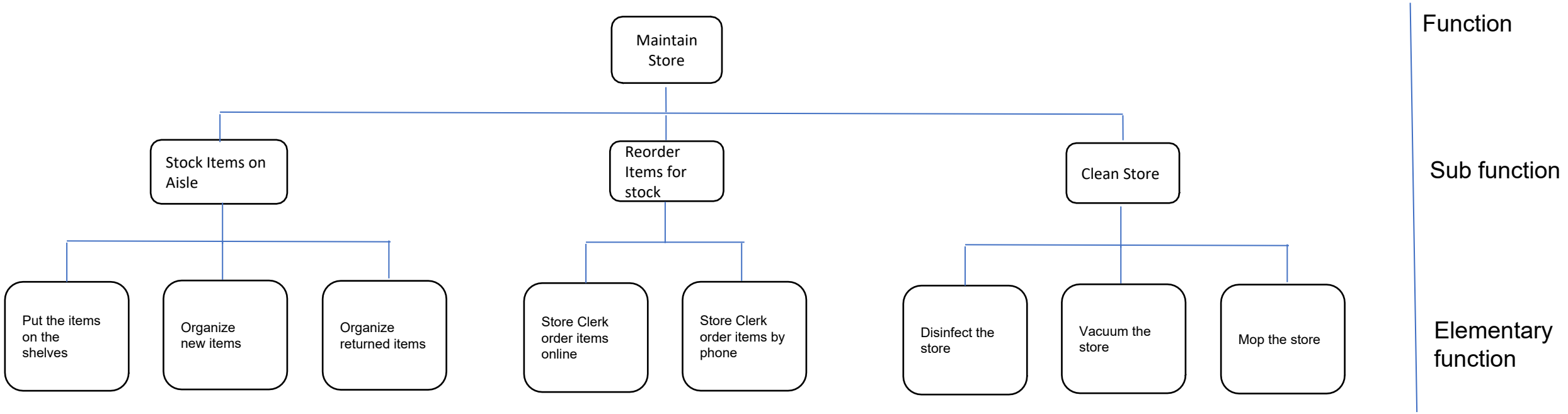
Function view



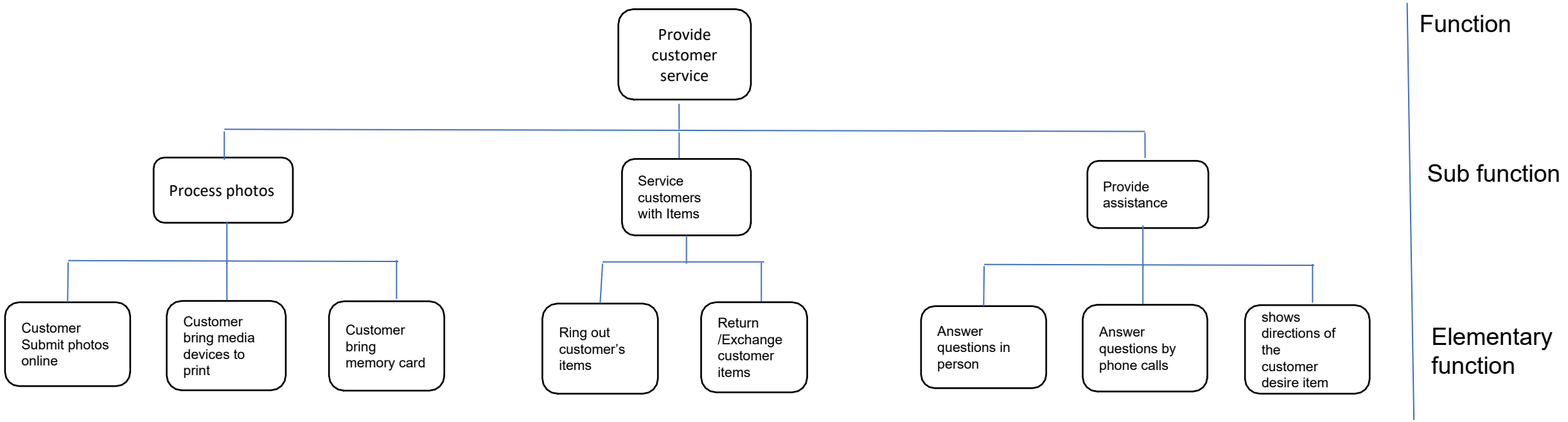
Function view: Provide Prescription Order



Function view: Maintain Store



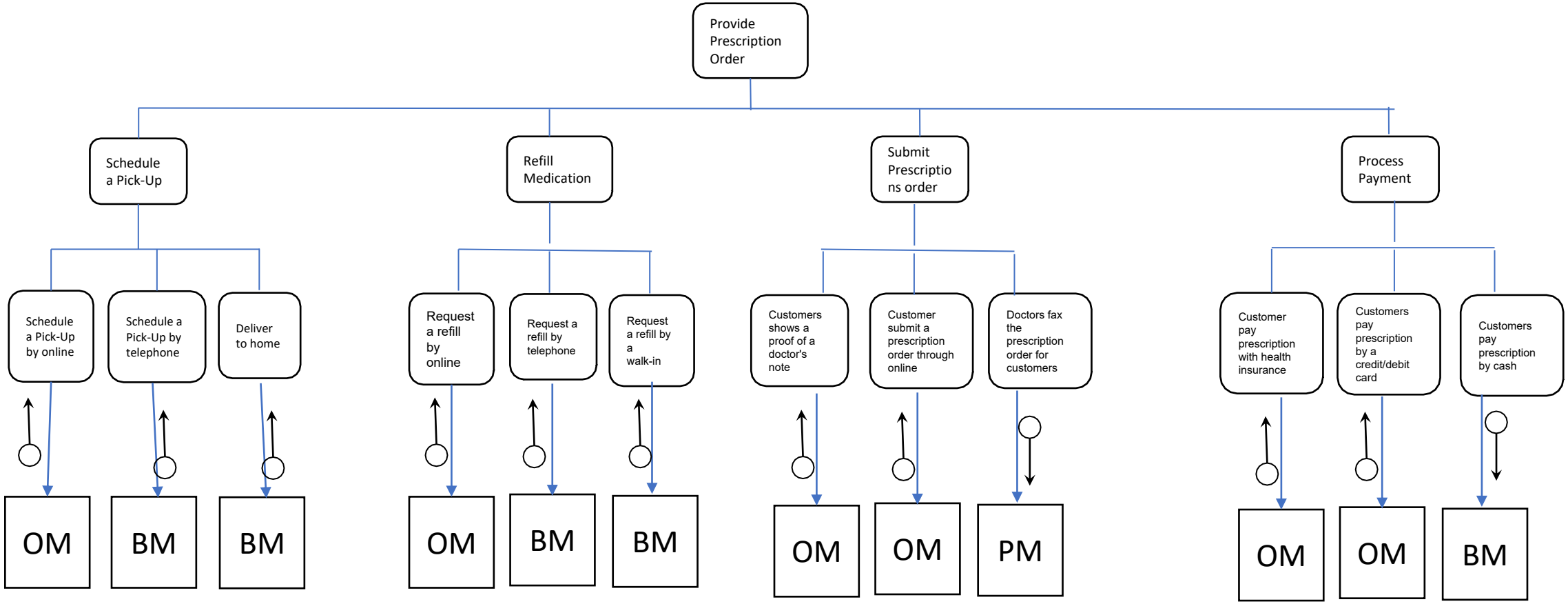
Function view: Provide customer service



Description of Function view:

- Function View
  - This function view shows the high level of the function tree. This tree shows the different functions of different store departments. In the pharmacy department, it shows the different ways of the prescription order. Also, the maintaining store will require functions since it needs to be cleaned and restock the items of the aisle. When providing customer service, the store can assist customers by providing customers directions, answering questions, assisting with their items.
- Function View: Provide Prescription Order
  - In the pharmacy department, the role is to assist patients with their medication. Making sure that the patient is receiving proper treatment. Patients can request the pharmacy to do a pick-up online. But the customers must enter information and show proof of doctor's note. Once the patient enters the information, the pharmacy will receive a notification that the customer requests a pickup. This procedure will have the same process of when the customer requests delivery at home. The pharmacy will need the customer info then it will proceed to deliver its medication to their house. When scheduling a pick by telephone, the clerk will take down the customer info but the clerk will only give the patient's prescription if the patient shows proof of doctor's note. When Refilling a medication, the patient can request it by online, telephone, or through a walk-in. Submitting a prescription order can be done by scanning a copy and upload it online. The patient can show proof of the doctor's note in person. Finally, the doctor can fax the pharmacy department of the doctor's note. Paying the prescription can be done in multiple ways. The patients can pay it by using a credit/debit card or cash. Also, they can pay it with their proof insurance. So, their insurance can reimburse the payment.
- Function View: Maintain Store
  - This function view shows different ways of maintaining the store and making sure it looks well-mannered and professional. The store clerk must restock the shelves with inventory in an orderly fashion. It will help the customer to distinguish between different items. When the inventory starts to get low, the store clerk will need to order items online or calling the supplier. The store will need to make sure to disinfect the whole store and cleaning the store properly.
- Function View: Provide Customer Service
  - In the photo department, customers can submit the photos online, bring a media device, or a storage card so the store clerk can print the pictures for them. When serving the customers with their item, the cashier will usually ring out the customers or provide a return and exchange with the items. When assisting, the clerk would usually answer questions in person or over the phone and provide directions in the aisle. So the customer can find the desired item.

Module design: Provide prescription order

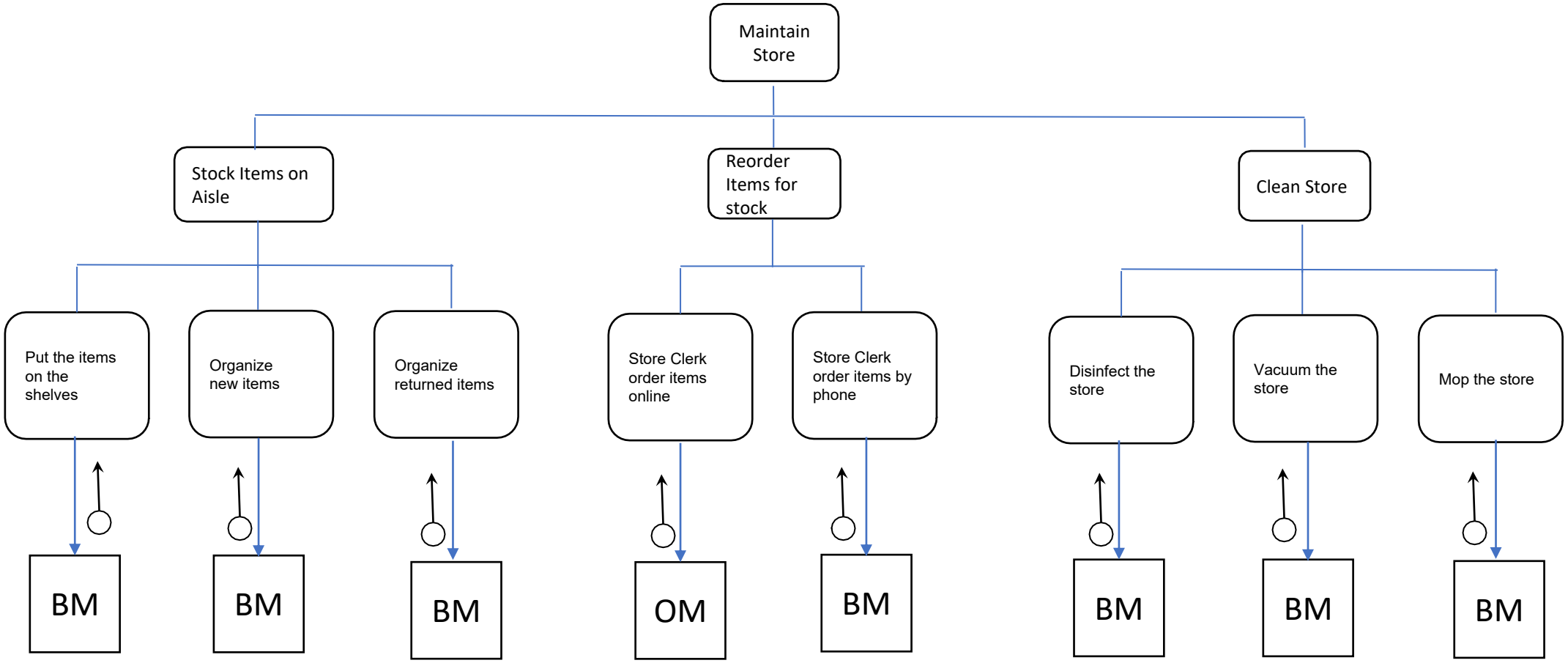


OM = Online Module

BM = Batch Module

PM = Print Module

Module design: Maintain store

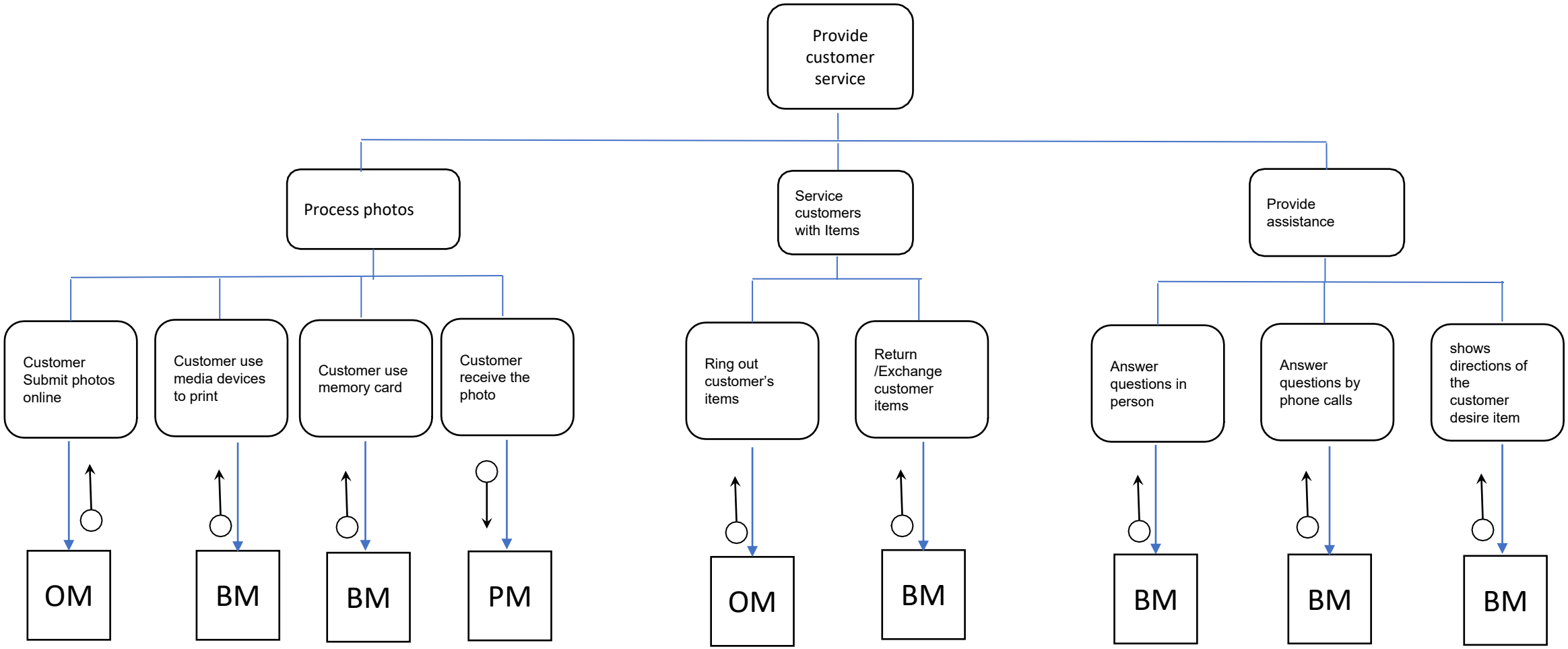


OM = Online Module

BM = Batch Module

PM = Print Module

Module design: Provide customer service



OM = Online Module

BM = Batch Module

PM = Print Module

Description of Module design:

One of the central element of software design is the module, clearly describing an autonomous function block for incoming and outgoing data. Modules consist of the data declaration, control logic and instruction components respectively. In this case the modules were designed based on the three main functions provide prescription order, maintain store and provide customer service. The first diagram shows the module design of provide prescription order, the second one for maintain store and the third one is for provide customer service. We have here three modules such as online module, batch module and print module. They are represented at the down of each elementary function. For example, the sub function schedule a pick up has three elementary functions and they are schedule a pick up by online, schedule a pick up by telephone and deliver to home. In our diagram the respective modules of each elementary function were shown below. In addition, the data flow direction were also shown either upward or downward.

Pseudo code :

Pseudo code : Provide prescription order: finalize pick up

- **Process description for finalize pick up:**

The user will input information at the beginning. The user may be the pharmacy staff or customer itself. The two pages are different but used the same database. The system will verify the user. The function Finalize pick up is under the broad function provide prescription order. At this case the customer or the pharmacy staff confirm a time and date for the pick up of the certain medication base on a valid prescription.

- **Pseudo code Finalize Pick-Up.**

Read Customer name, Customer id, pick up date and time
Query the pick-up database and retrieve info
if pick up data and time = empty
then schedule pick up date and time
else provide empty slots
customer choose an empty slot
fix pick up schedule and inform customer
Update pick up database.

Pseudo code : Provide prescription order: Deliver to home

- **Process description for deliver to home:**

The user is customer or the pharmacy staff and he/she input customer id and name . The system will verify the user. The function deliver to home is under the broad function provide prescription order. In this case, the customer who likes to have the medication delivered to his home make a formal request by online or by telephone.

- **Pseudo code for deliver to home:**

Read Customer name, Customer id, customer address from the screen
Query the home delivery database and retrieve info
if the customer is eligible for home delivery
then schedule a date of home delivery
else message “Not eligible for home delivery”
Inform customer the eligibility
Update medication and home delivery database.

Pseudo code :

Pseudo code : Provide prescription order: Refill medication

- **Process description for refill medication:**

The user is customer or the pharmacy staff and he/she input customer id and name . The system will verify the user. The function refill medication is under the broad function provide prescription order. In this case, the customer will refill medication request by online or by telephone or by a visit to the drug store.

- **Pseudo code for refill medication:**

Read Customer name, Customer id, from the screen
Query the medication database and retrieve info
if the customer is eligible for refill medication
then refill the medication
else message “Not eligible for refill”
Inform customer the eligibility
Update medication database.

Pseudo code : Provide prescription order: Submit prescription order

- **Process description for Submit prescription order :**

The user is customer or the pharmacy staff and he/she input customer id and name . The system will verify the user. The function submit prescription order is under the broad function provide prescription order. In this case, the customer who the customer provides the prescription to the drug store staff or the doctor provides it. After receiving the prescription, the drug store clerk produce the medications and deliver it to the customer.

- **Pseudo code for Submit prescription order :**

Read Customer id, Customer name from the screen
Query the medication database and retrieve info
if screen. customer id= medication. Customer id,
Update medication database.
And process prescription order.
else message “Can not process prescription order”
Inform customer.

Pseudo code :

Pseudo code : Provide prescription order: Process payment

- **Process description for refill medication:**

The user is customer or the pharmacy staff and he/she input customer id and name . The system will verify the user. The function refill medication is under the broad function provide prescription order. This function can be completed by the customer by online transaction using a payment method. When the customer walk in to the drug store and pay, then the drug store staff complete this process.

- **Pseudo code for Process payment done by drug store staff:**

Read Customer name, Customer id, from the screen
Query the payment database and retrieve info
Insert payment method and payment amount
If payment method is alright
Message '' Payment complete''
else message "Payment incomplete"
Update payment database.

Pseudo code : Maintain store: Stock items on aisle

- **Process description for refill medication:**

The user is the pharmacy staff and he/she input the staff id and password . The system will verify the user. The function stock items on aisle is under the broad function maintain store. The pharmacy staff collects report form the aisle department. He then insert or update this information into the corresponding database.

- **Pseudo code for stock items on aisle:**

Insert employee id, employee name
Query aisle database and retrieve info
Insert information to aisle database
Update aisle database.

Pseudo code :

Pseudo code : Maintain store: Reorder items for stock

- **Process description for reorder items for stock:**

The user is the pharmacy employee responsible for making purchasing orders. He/she input the employee id and password . The system will verify the user. The function reorder items is under the broad function maintain store. The pharmacy staff collects report form the aisle department. He then insert or update this information into the corresponding database.

- **Pseudo code for reorder items for stock:**

Insert employee id, employee name
Query stock database and retrieve info
For each
item quantity < required stock
Display item id, item quantity,
Create demand list.
Send demand list.

Pseudo code : Customer service: Process photo

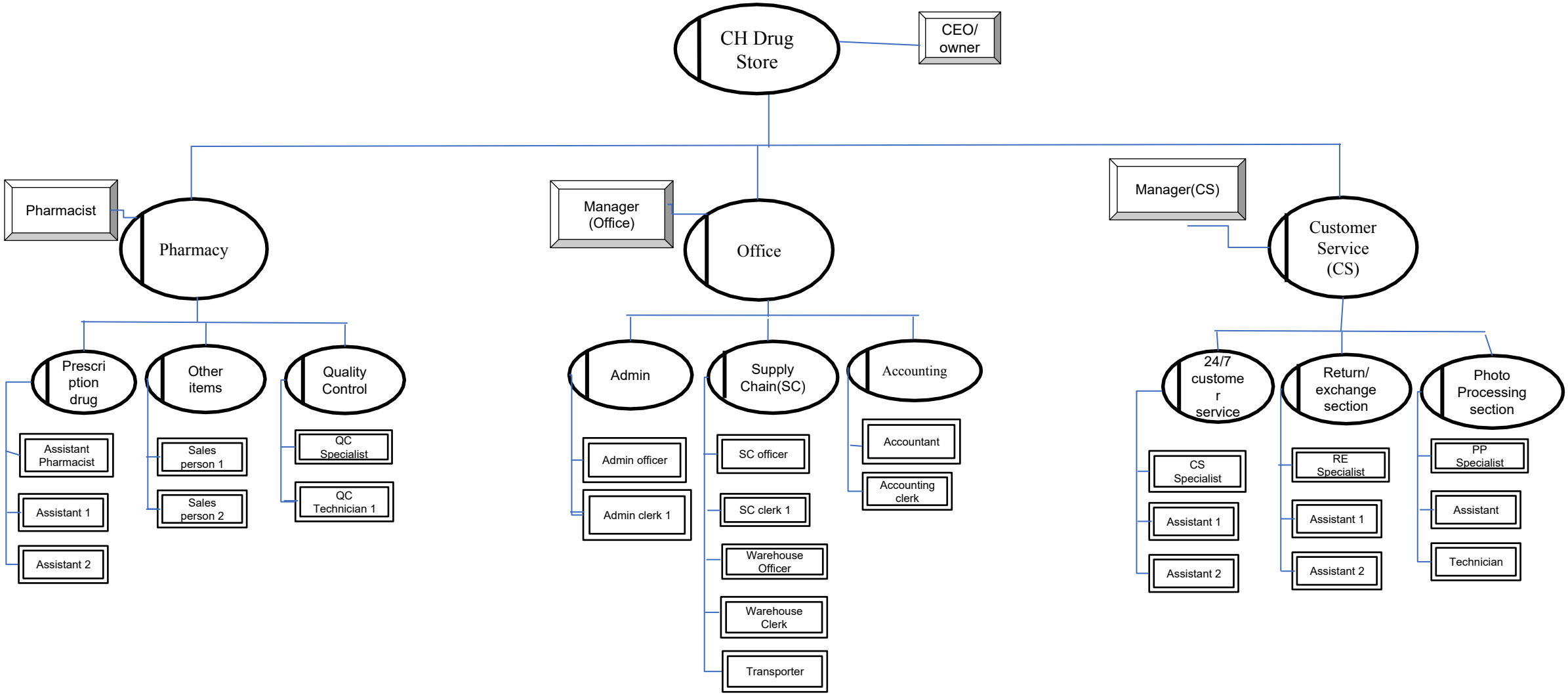
- **Process description for refill medication:**

The user is customer. He/she connect the device containing the photo file with the photo machine. The computer system ask few questions and get answers to process the photo.

- **Pseudo code for stock items on aisle:**

Insert photo size and color mode from the screen.
If photo size and color mode matches with system
Print photo
Else message “Photo cannot be printed”

Organization view: organization chart

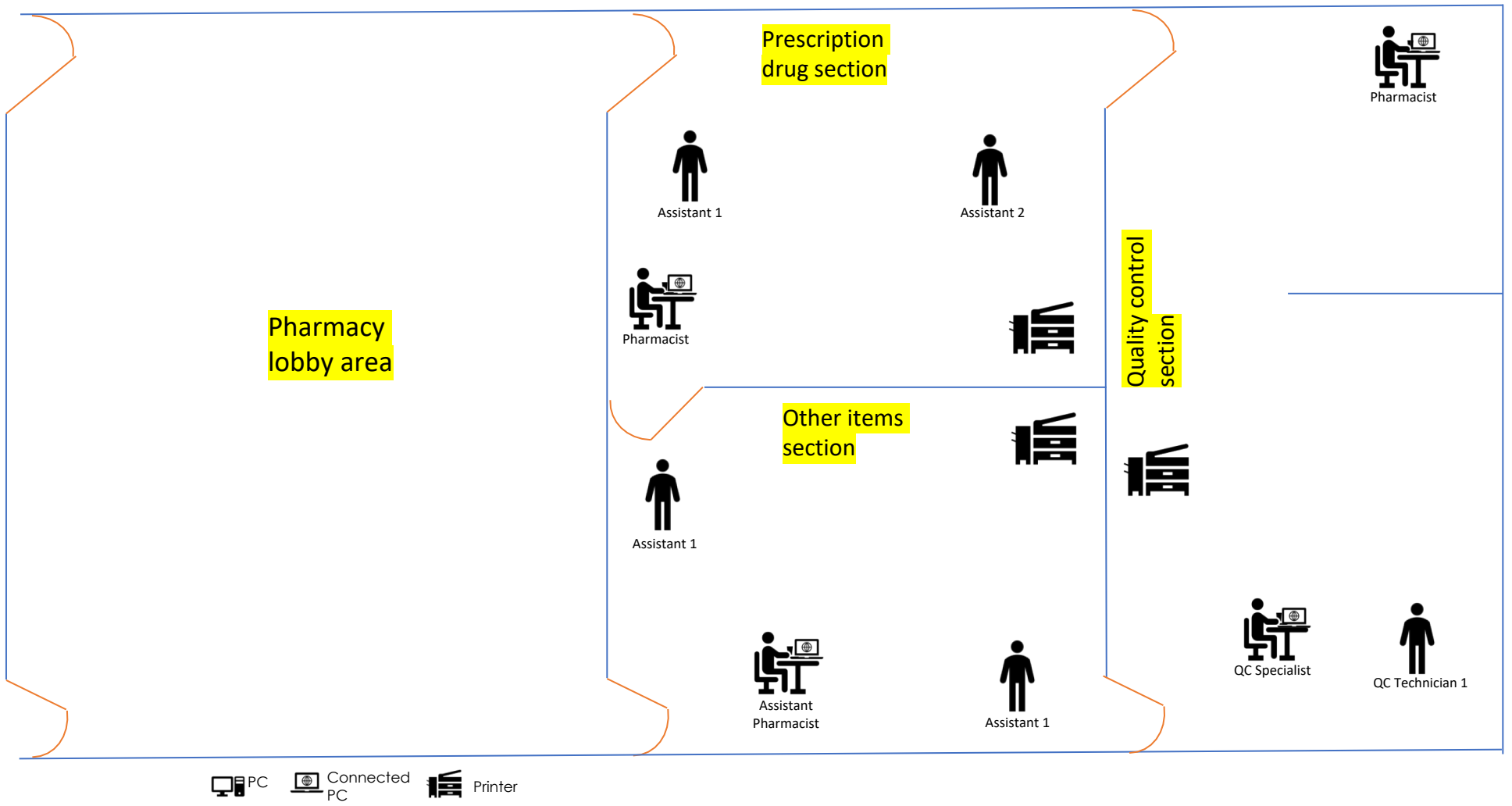


Description of Organization chart:

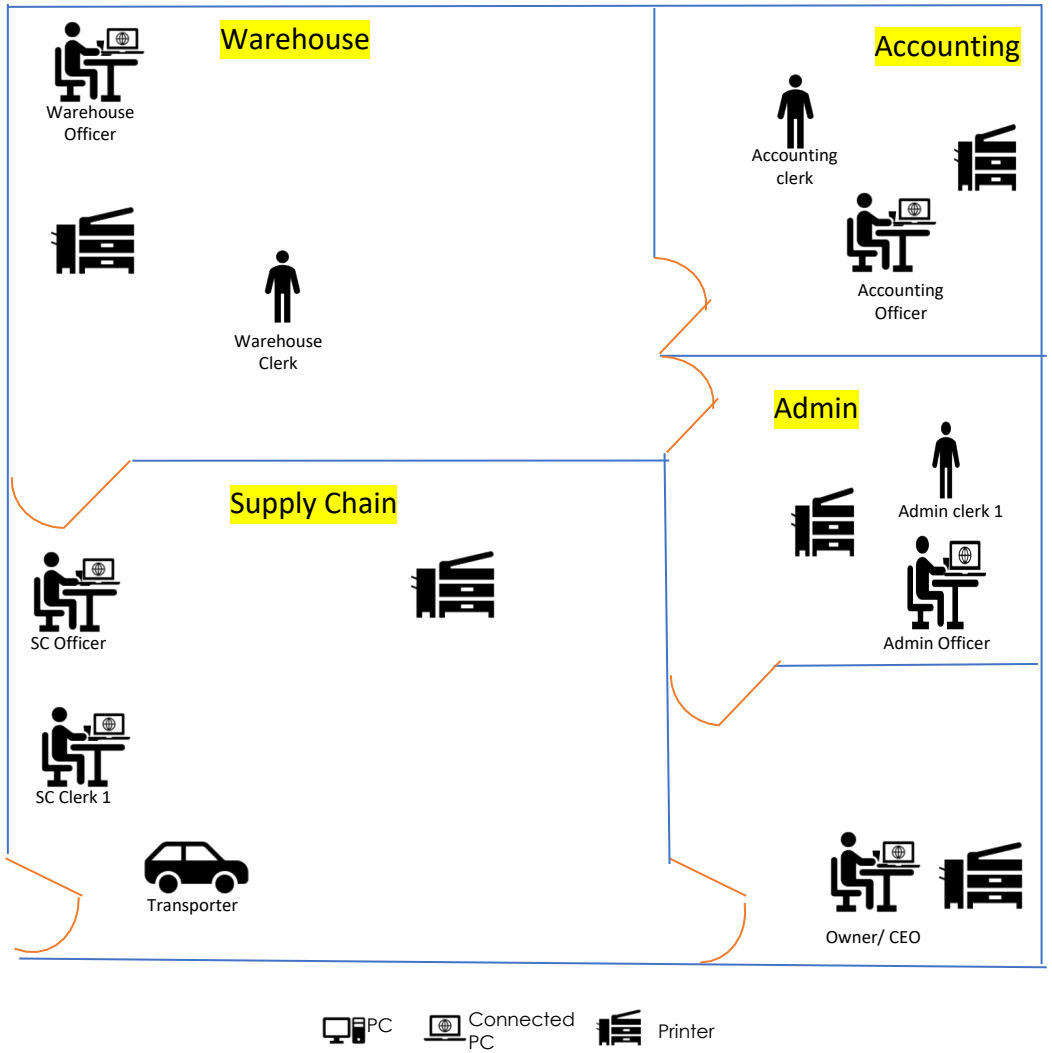
The organization chart show the hierarchical structure of the Ch's drug store. The purpose of defining the hierarchical organization of enterprise is to streamline the description of the enterprise, consolidating similar task group into organizational units. Chowdhury's drug has three broad department and they are Pharmacy, Office and Customer service. The owner or his representative is at the top of this organogram. The pharmacy is run by a pharmacist and he is key personnel of all the management in pharmaceutical sector of this store. The pharmacy department has three section named prescription drug, other items and quality control section. The prescription drug has one assistant pharmacist and two assistants. The other items has two sales persons and the quality control section has one Quality control specialist and one assistant. The office section is headed by a manager and the three section named Admin, Supply chain and Accounting report to him. The Supply chain take care of the stock and warehouse management along with the transportation. A total of eleven employee works at the office section.

The customer care department is headed by a manger and the department has 24/7 customer service section, return and exchange section and photo processing section. The responsibility of the 24/7 customer service is to provide the uninterrupted customer service by answering phone call and in person help. The photo processing section is run by one specialist, one technician and one assistant.

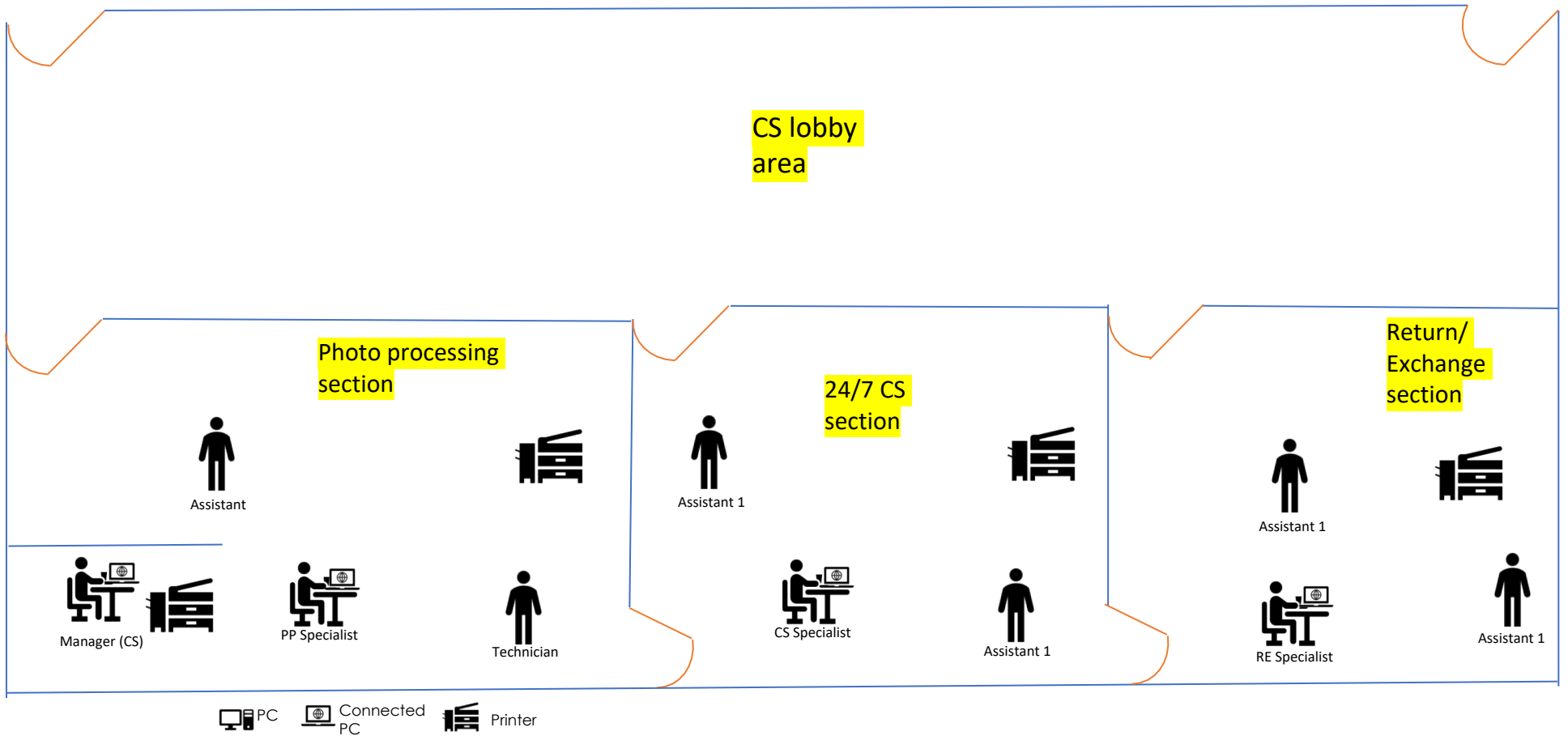
Network and component configuration : Pharmacy section



Network and component configuration : Office section



Network and component configuration : Customer Service(CS)



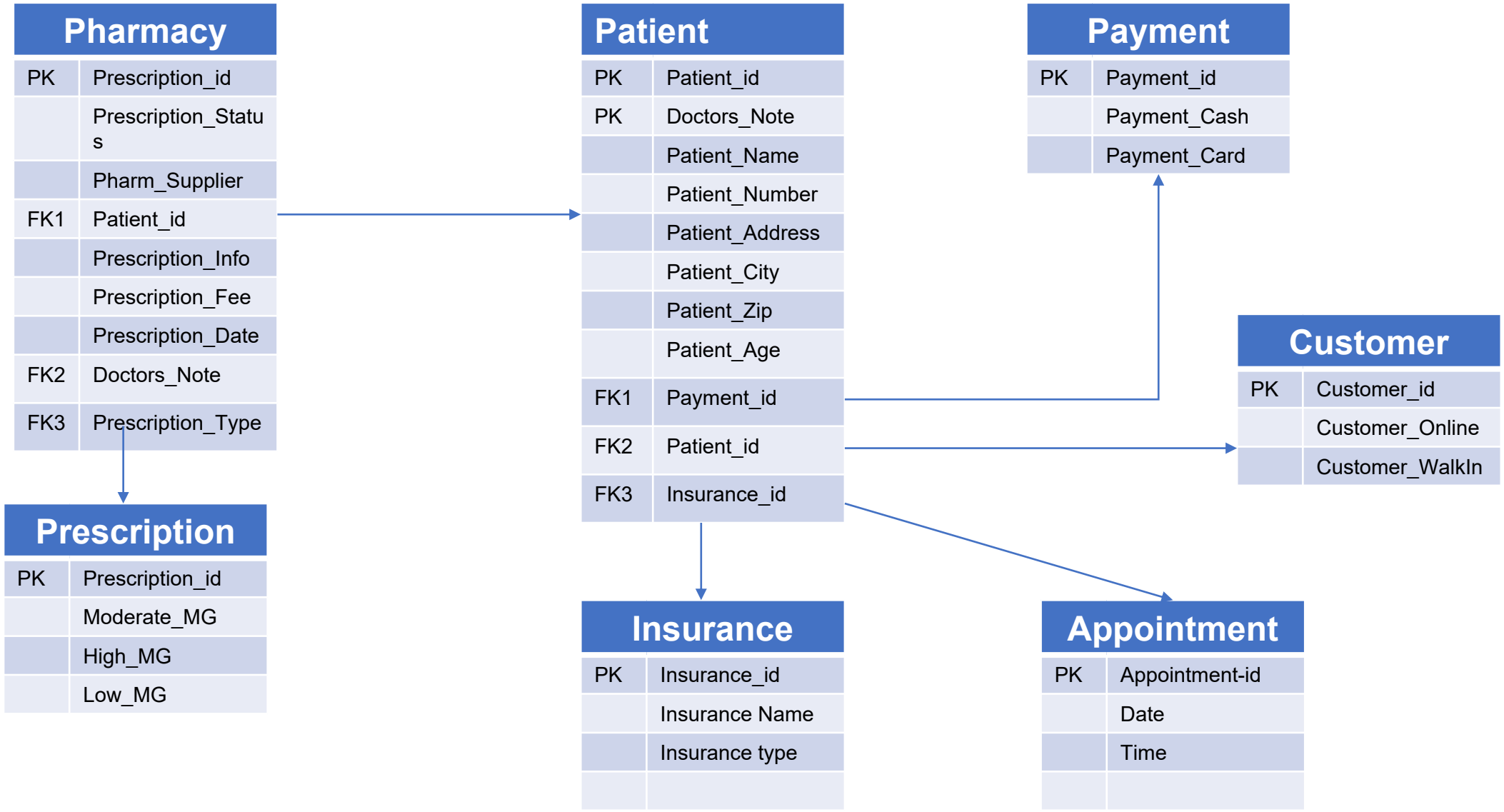
Description of Network and component diagram:

The network and component diagram has three part or section. One is for the pharmacy section which is just beside the entrance. The pharmacy section has a big lobby area where the patients or customers can wait for the drug to be prepared. The diagram shows the working stations of nine persons. The pharmacist sits at the insider portion of near to the quality control section.

The office department of this pharmacy is situated at the inner most corner because they have not enough public interactions. The office department illustrates the layout of supply chain, warehouse, accounting and admin section. The owner office is also situated in office layout.

The third diagram shows the customer care department. The office of the manager of this department is also located here. The 24/7 customer care, return/exchange and photo processing section are situated in this layout. It also contain a big lobby area where the customers can wait in line or sit for reaching the services.

Data view


Pharmacy
PK Prescription_id
Prescription_Status
Pharm_Supplier
FK1 Patient_id
Prescription_Info
Prescription_Fee
Prescription_Date
FK2 Doctors_Note
FK3 Prescription_Type
Prescription
PK Prescription_id
Moderate_MG
High_MG
Low_MG
Patient
PK Patient_id
PK Doctors_Note
Patient_Name
Patient_Number
Patient_Address
Patient_City
Patient_Zip
Patient_Age
FK1 Payment_id
FK2 Patient_id
FK3 Insurance_id
Insurance
PK Insurance_id
Insurance Name
Insurance type
Payment
PK Payment_id
Payment_Cash
Payment_Card
Customer
PK Customer_id
Customer_Online
Customer_WalkIn
Appointment
PK Appointment-id
Date
Time

Data view

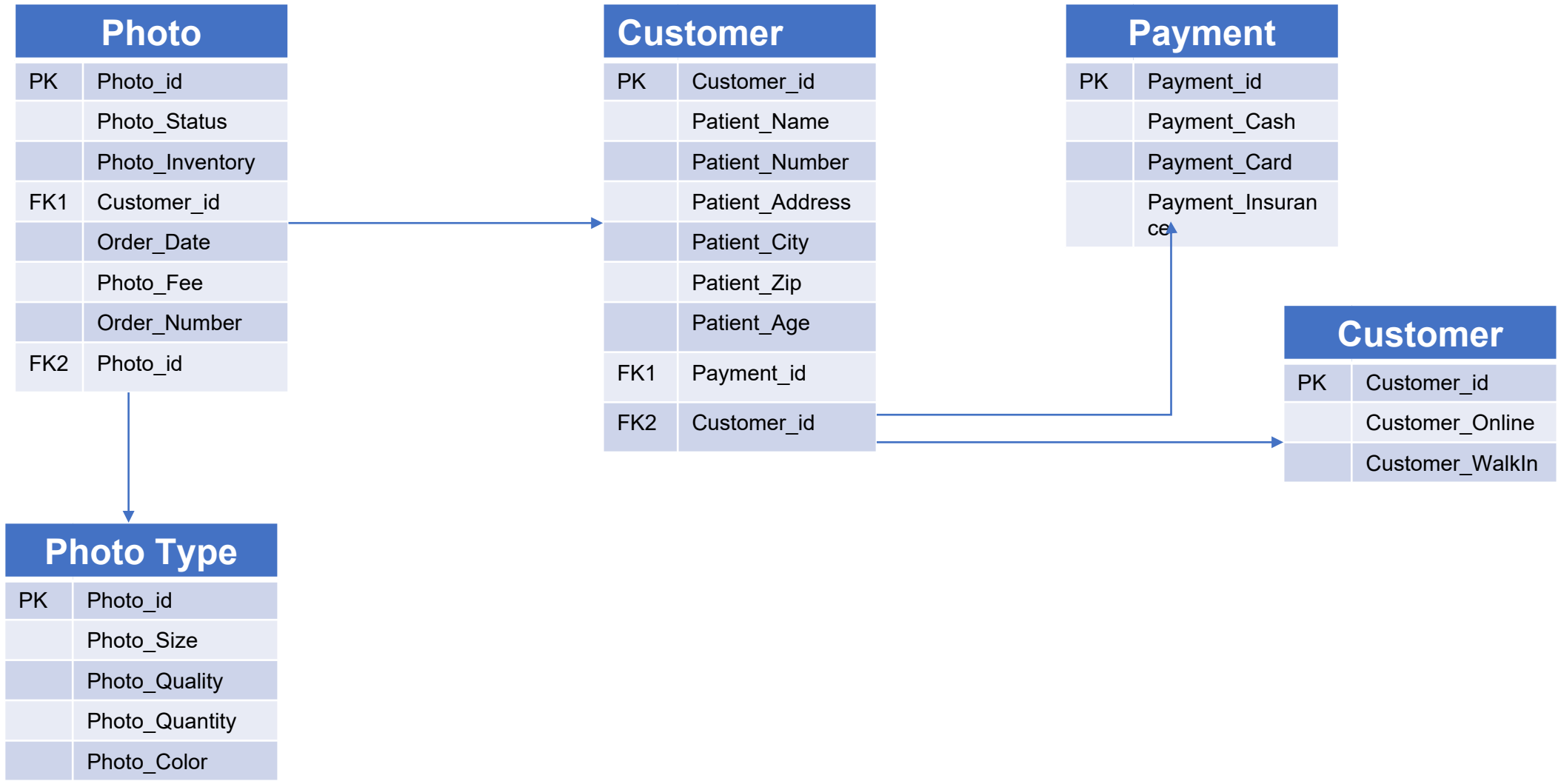
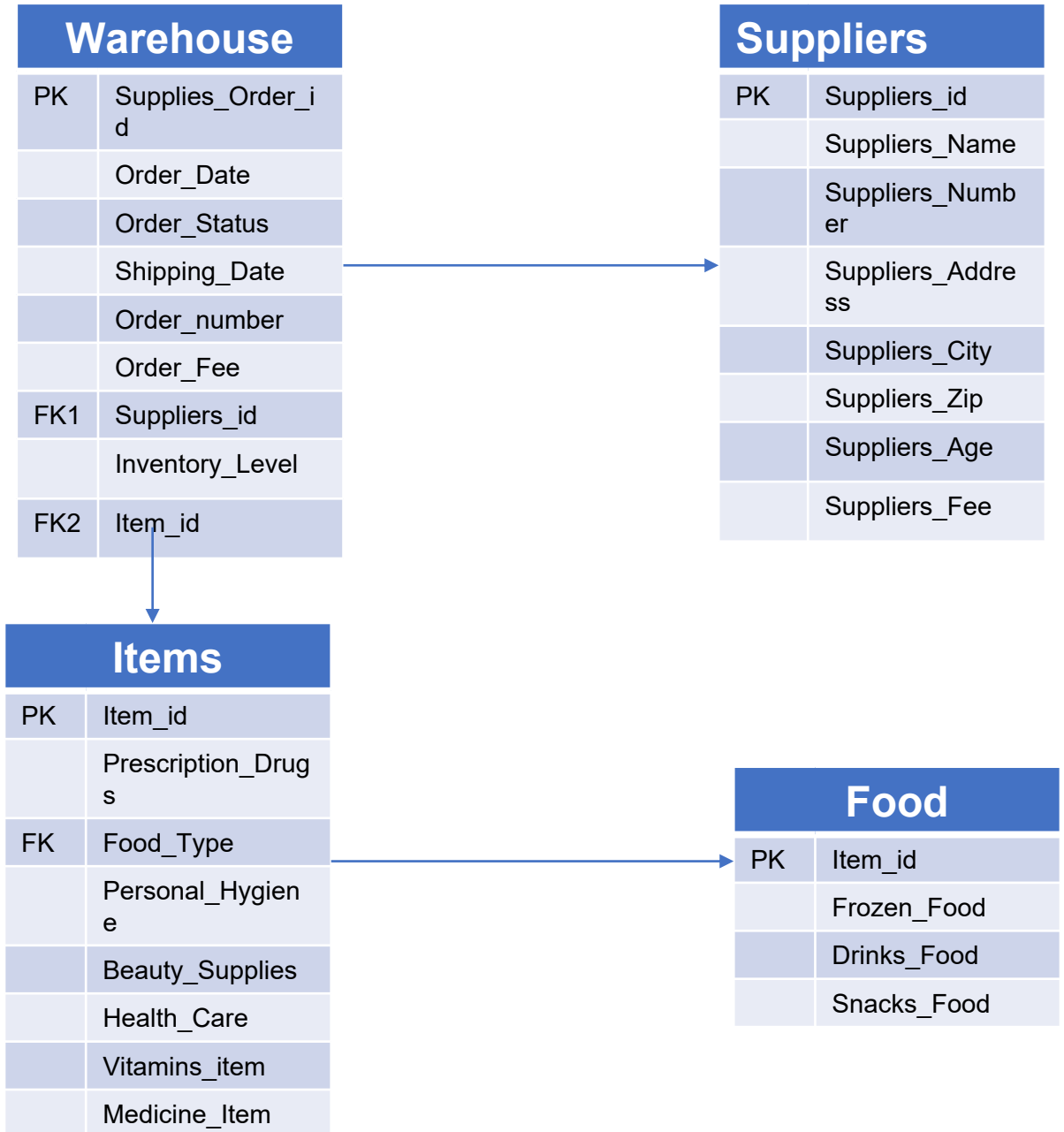
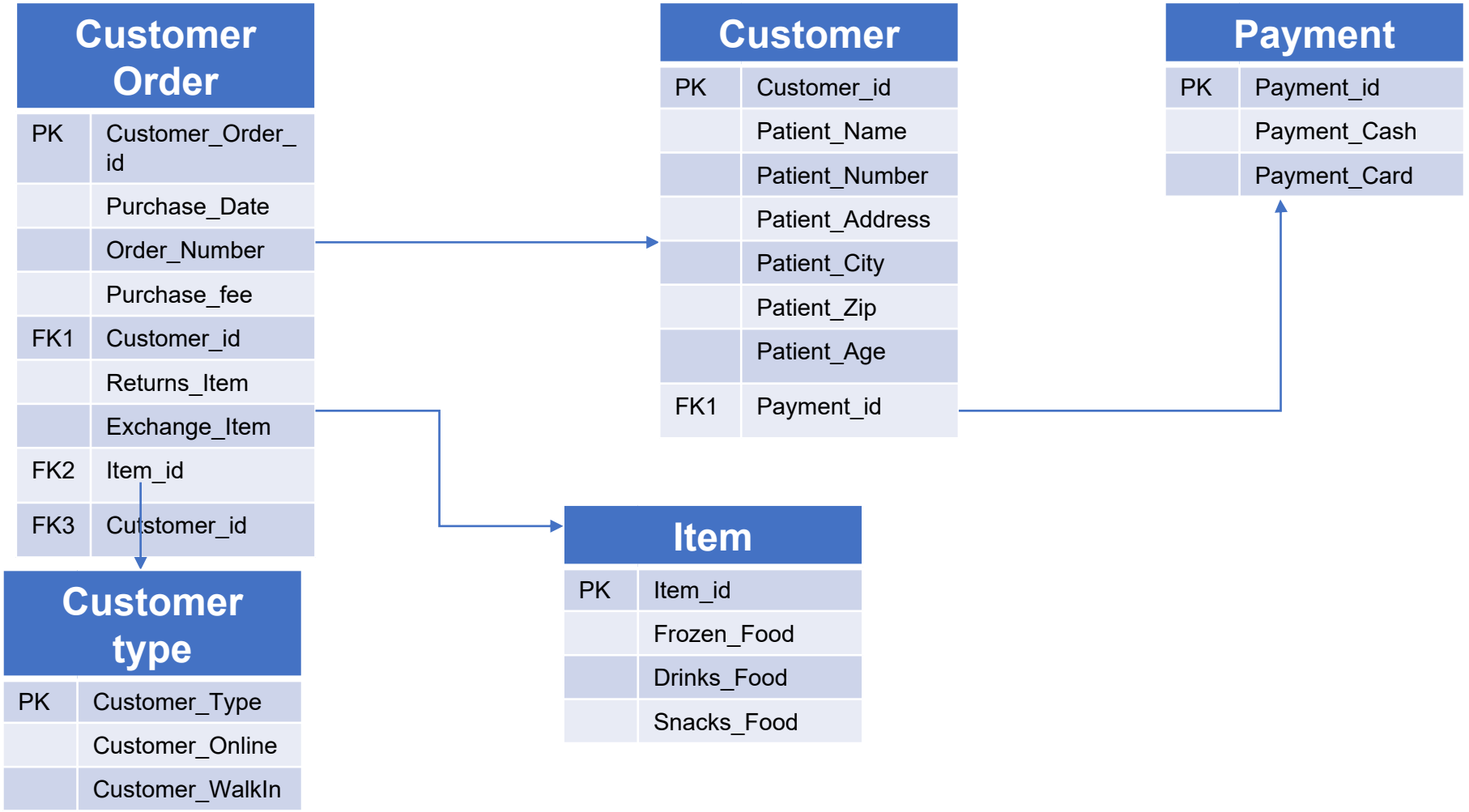


Photo
PK Photo_id
Photo_Status
Photo_Inventory
FK1 Customer_id
Order_Date
Photo_Fee
Order_Number
FK2 Photo_id
Customer
PK Customer_id
Patient_Name
Patient_Number
Patient_Address
Patient_City
Patient_Zip
Patient_Age
FK1 Payment_id
FK2 Customer_id
Payment
PK Payment_id
Payment_Cash
Payment_Card
Payment_Insurance
Customer
PK Customer_id
Customer_Online
Customer_WalkIn
Photo Type
PK Photo_id
Photo_Size
Photo_Quality
Photo_Quantity
Photo_Color

Data view


Warehouse
PK
Supplies_Order_id
Order_Date
Order_Status
Shipping_Date
Order_number
Order_Fee
FK1
Suppliers_id
Inventory_Level
FK2
Item_id
Suppliers
PK
Suppliers_id
Suppliers_Name
Suppliers_Number
Suppliers_Address
Suppliers_City
Suppliers_Zip
Suppliers_Age
Suppliers_Fee
Items
PK
Item_id
Prescription_Drugs
FK
Food_Type
Personal_Hygiene
Beauty_Supplies
Health_Care
Vitamins_item
Medicine_Item
Food
PK
Item_id
Frozen_Food
Drinks_Food
Snacks_Food

Data view


Customer Order
PK
Customer_Order_id
Purchase_Date
Order_Number
Purchase_fee
FK1
Customer_id
Returns_Item
Exchange_Item
FK2
Item_id
FK3
Customer_id
Customer
PK
Customer_id
Patient_Name
Patient_Number
Patient_Address
Patient_City
Patient_Zip
Patient_Age
FK1
Payment_id
Payment
PK
Payment_id
Payment_Cash
Payment_Card
Customer type
PK
Customer_Type
Customer_Online
Customer_WalkIn
Item
PK
Item_id
Frozen_Food
Drinks_Food
Snacks_Food

Data Table Layout

Prescription		
Name	Type	Length
Prescription_ID	Integer	9
Prescription_Status	Char	40
Patient_ID	Integer	9
Pharm_Supplier	Char	50
Prescription_Info	Char	50
Prescription_Fee	Integer	4
Prescription_Date	Date	8
Doctors_Note	Char	50
Prescription_Type	Char	40

Patient		
Name	Type	Length
Patient_ID	Integer	9
Doctors_Note	Char	40
Patient_Name	Char	40
Patient_Address	Char	40
Patient_City	Char	40
Patient_Zip	Integer	5
Patient_Age	Integer	3
Payment_ID	Integer	9
Insurance_ID	Integer	9

Data Table Layout

Prescription		
Name	Type	Length
Prescription_ID	Integer	9
Moderate_MG	Integer	9
High_MG	Integer	9
Low_MG	Integer	9

Insurance		
Name	Type	Length
Insurance_ID	Integer	9
Insurance_Name	Char	16
Insurance_Type	Char	9

Payment		
Name	Type	Length
Payment_ID	Integer	9
Payment_Cash	Integer	16
Payment_Card	Integer	9
Payment_Insurance	Integer	9

Customer		
Name	Type	Length
Customer_ID	Integer	9
Customer_Online	Char	9
Customer_WalkIn	Char	9

Data Table Layout

Customer		
Name	Type	Length
Customer_ID	Integer	9
Customer_Online	Char	9
Customer_WalkIn	Char	9

Appoinment		
Name	Type	Length
Appointment_ID	Integer	9
Appointment_Date	Date	9
Appointment_Time	Integer	9

Photo		
Name	Type	Length
Photo_ID	Integer	9
Photo_Status	Char	40
Photo_Inventory	Integer	9
Photo_Fee	Integer	4
Customer_ID	Integer	9
Order_Date	Date	8
Order_Number	Integer	8

Photo Type		
Name	Type	Length
Photo_ID	Integer	9
Photo_Size	Char	40
Photo_Quantity	Integer	9
Photo_Quality	Char	4
Photo_Color	Char	40

Customer		
Name	Type	Length
Customer_ID	Integer	9
Customer_Name	Char	40
Customer_Address	Char	40
Customer_City	Char	40
Customer_Zip	Integer	5
Customer_Age	Integer	3
Payment_ID	Integer	9

Data Table Layout

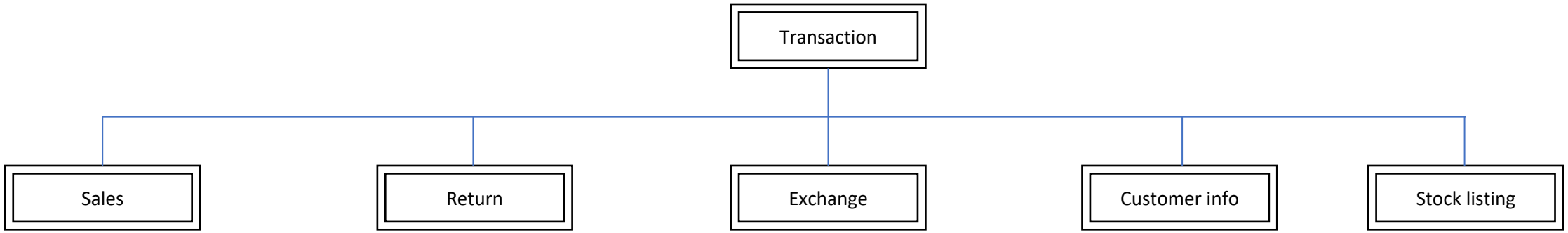
Suppliers		
Name	Type	Length
Supplier_ID	Integer	9
Supplier_Name	Char	40
Supplier_Address	Char	40
Supplier_City	Char	40
Supplier_Zip	Integer	5
Supplier_Fee	Integer	5

WareHouse		
Name	Type	Length
Supplier_Order_ID	Integer	9
Order_Date	Date	8
Order_Status	Char	50
Shipping_Date	Date	8
Order_Number	Integer	9
Order_Fee	Integer	9
Suppliers_ID	Integer	9
Inventory_Level	Integer	9
Item_ID	Integer	9

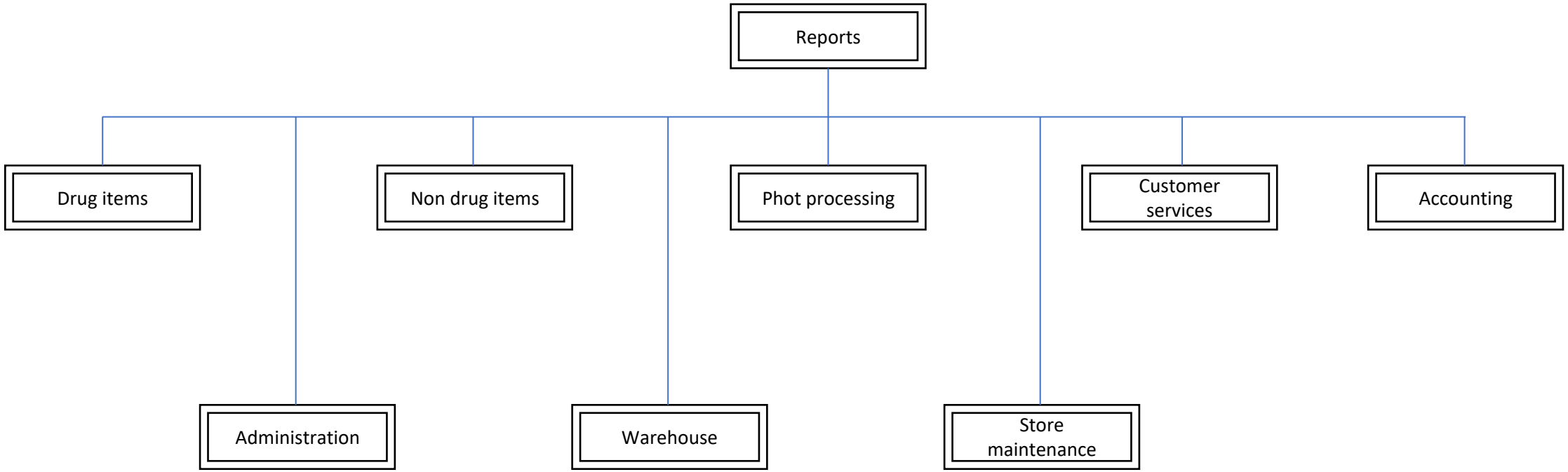
Items		
Name	Type	Length
Item_ID	Integer	9
Prescription_Drugs	Char	50
Food_Type	Char	50
Personal_Hygenie	Char	50
Beauty_Supplies	Char	50
Health_Care	Char	50
Vitamins_ID	Char	50
Medicine_Item	Char	50

Food		
Name	Type	Length
Food_Type	Char	50
Frozen-Food	Char	50
Drinks_Food	Char	50
Snacks_Food	Char	50

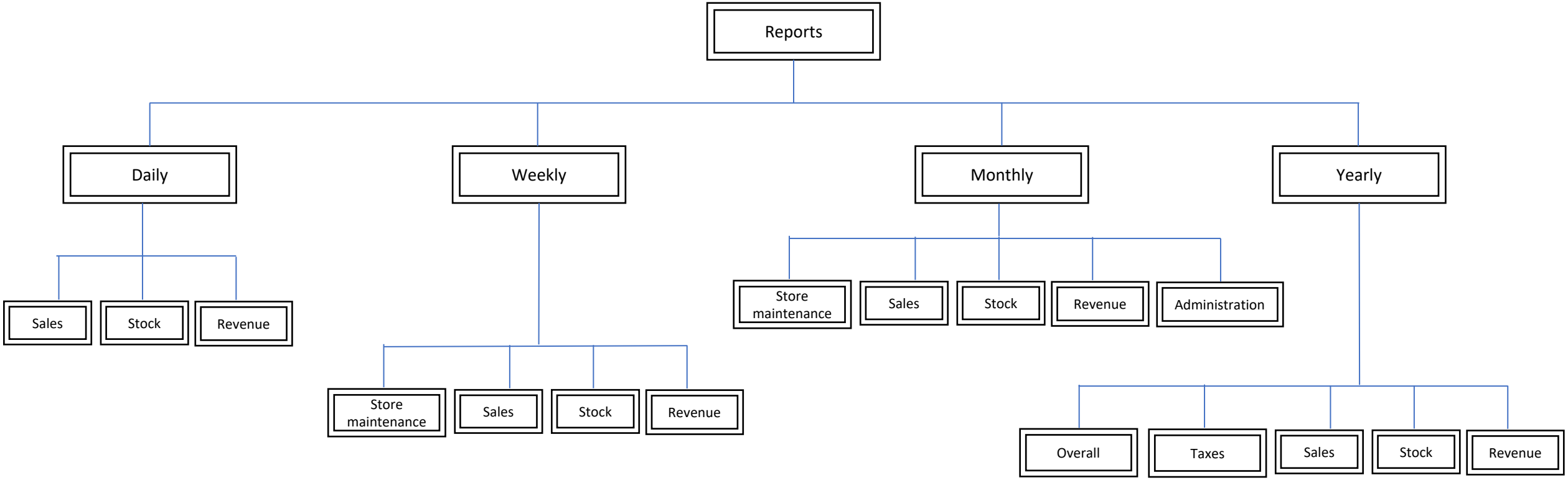
Output view: Product tree model: Transaction



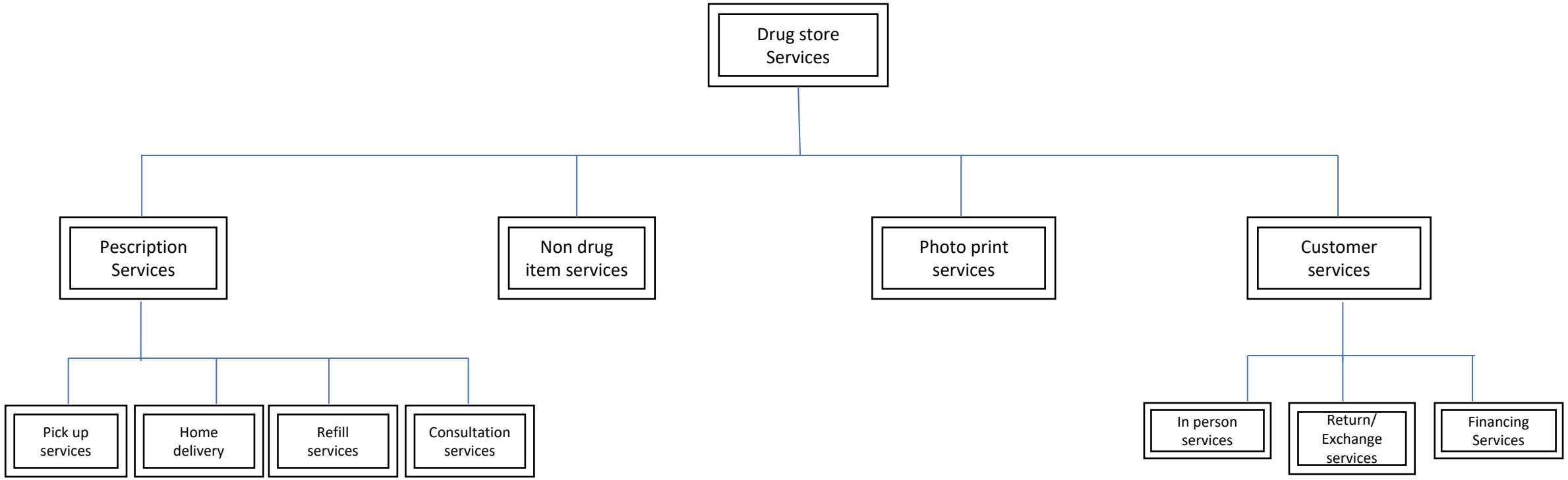
Output view: Product tree model: Reports by departments



Output view: Product tree model: Reports by frequency



Output view: Tree model: Services



Description of Output view:

Output is the result of processes, with the demand for input driving the execution of processes. Describing output is one of the key processes in describing business processes. Containing various types of output such as material output and services, the term output is heterogeneous and can be used as various levels of details.

In the context of Ch’s drug store we showed four diagrams to illustrate the output view of this organization. Both product and services were shown here.

The first diagram shows the output of transaction. The second diagram illustrates the reports generated by various section and departments of this business. The third diagram shows the frequency of reports in terms of daily, weekly, monthly and yearly manners.

The last diagram of output view represents the output tree of various services offered by this drug store. For example, this drug store provides mainly four services such as prescription services, non drug item services, photo print services and customer services.

Control view: Function-data allocation diagram for Provide prescription order

Functions \ Data	Customer id	Customer name	Customer address and contact	Health insurance name	Health insurance id	Time	Date	Appointment id	Pescription id	Order id	Payment card number	Payment card type	Bill id	Bill amount	Refill id	Refill type
Schedule a Pick-Up by online	x	x	x			x	x	x								
Schedule a Pick-Up by telephone	x	x	x			x	x	x								
Request a refill by online	x	x		x	x		x		x					x	x	
Deliver to home	x	x	x													
Request a refill by a walk-in	x	x		x	x				x					x	x	x
Request a refill by telephone	x	x		x	x				x					x	x	x
Customer submit an order through online	x	x	x						x	x						
Customers shows a proof of a doctor's note	x	x	x						x							
Customer pay with health insurance																
Doctor fax the prescription order for customer									x							
Customers pay by a credit/debit card											x	x	x	x		
Customers pay by cash											x	x	x	x		

X= function has this data

Control view: Function-data allocation diagram for Maintain store

Functions \ Data	Item id	Item name	Item quantity	Isle number	Isle name	Order id	Order type	Time	Date	Employee id	Employee name	Payment id	Payment type	Cleaning type	
Put the items on the aisle	x	x	x	x	x				x						
Organize new items	x	x	x	x	x				x						
Organize returned items	x	x	x	x	x				x						
Store Clerk order items online						x	x		x	x	x	x	x		
Store Clerk order items by phone						x	x		x	x	x	x	x		
Disinfect the store								x	x					x	
Vacuum the store								x	x					x	
Mop the store								x	x					x	

X= function has this data

Control view: Function-data allocation diagram for Customer service

Functions \ Data	Customer id	Customer name	Customer address and contact	Time	Date	Payment card number	Payment type	Isle number	Isle name	Bill id	Bill amount	Photo processing number	Photo type	Appointment id	
Customer Submit photos online	x	x	x									x	x		
Customer bring media devices to print	x	x	x									x	x		
Customer bring memory card	x	x	x									x	x		
Ring out customer's items								x	x	x	x				
Return /Exchange customer items								x	x	x	x				
Answer questions in person														x	
Answer questions by phone calls															
Provide direction to customer								x	x						

X= function has this data

Description of Control view:

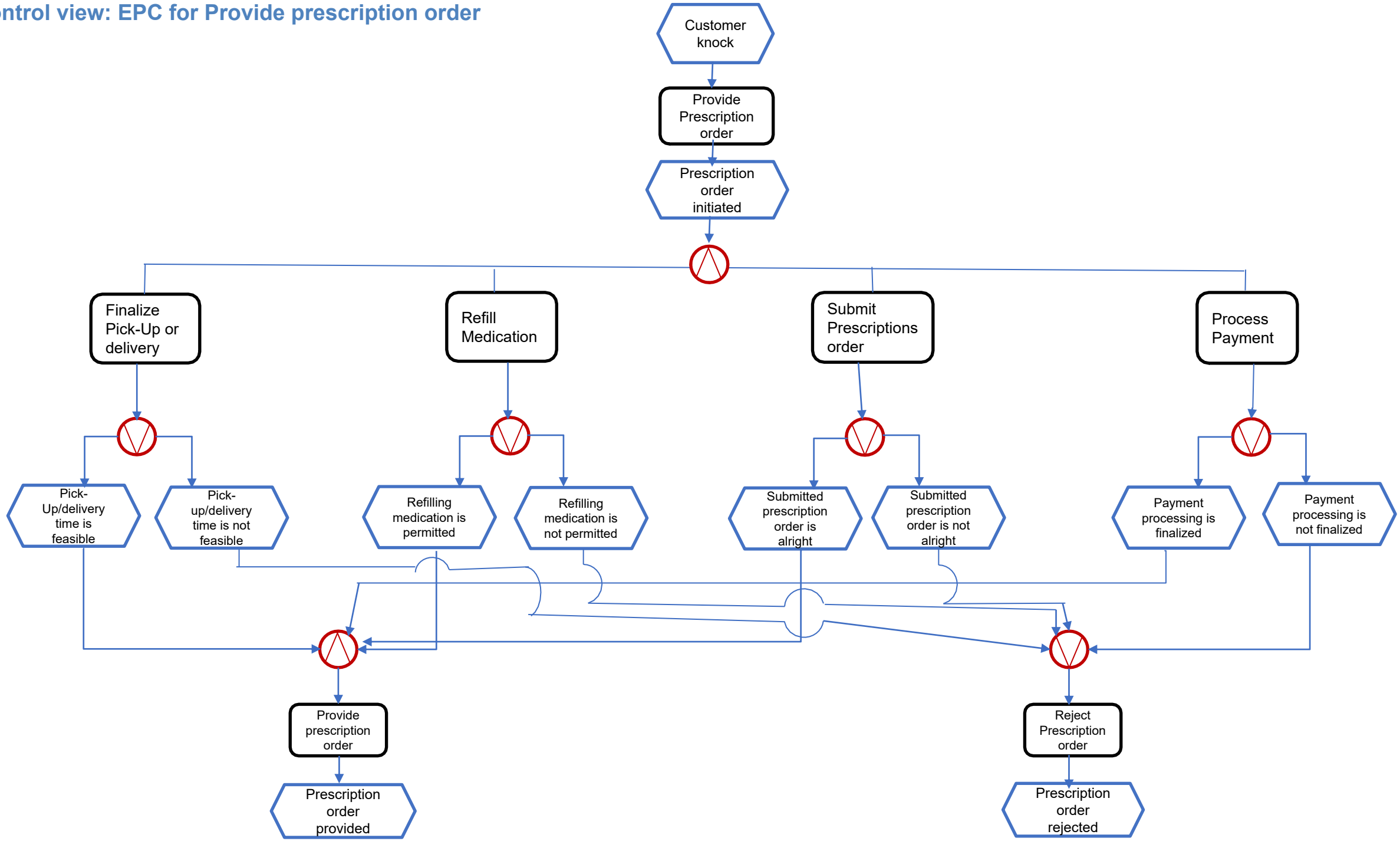
Function data allocation diagram:

The function data allocation diagram shows functions at the rows and corresponding data associated with this function on the columns. As mentioned earlier, this drug store has mainly three functions such as provide prescription order, maintain store and provide customer service. We illustrated the function data allocation diagram in this way. The first diagram shows the allocation of function and data for provide prescription order and so one. We considered the elementary functions.

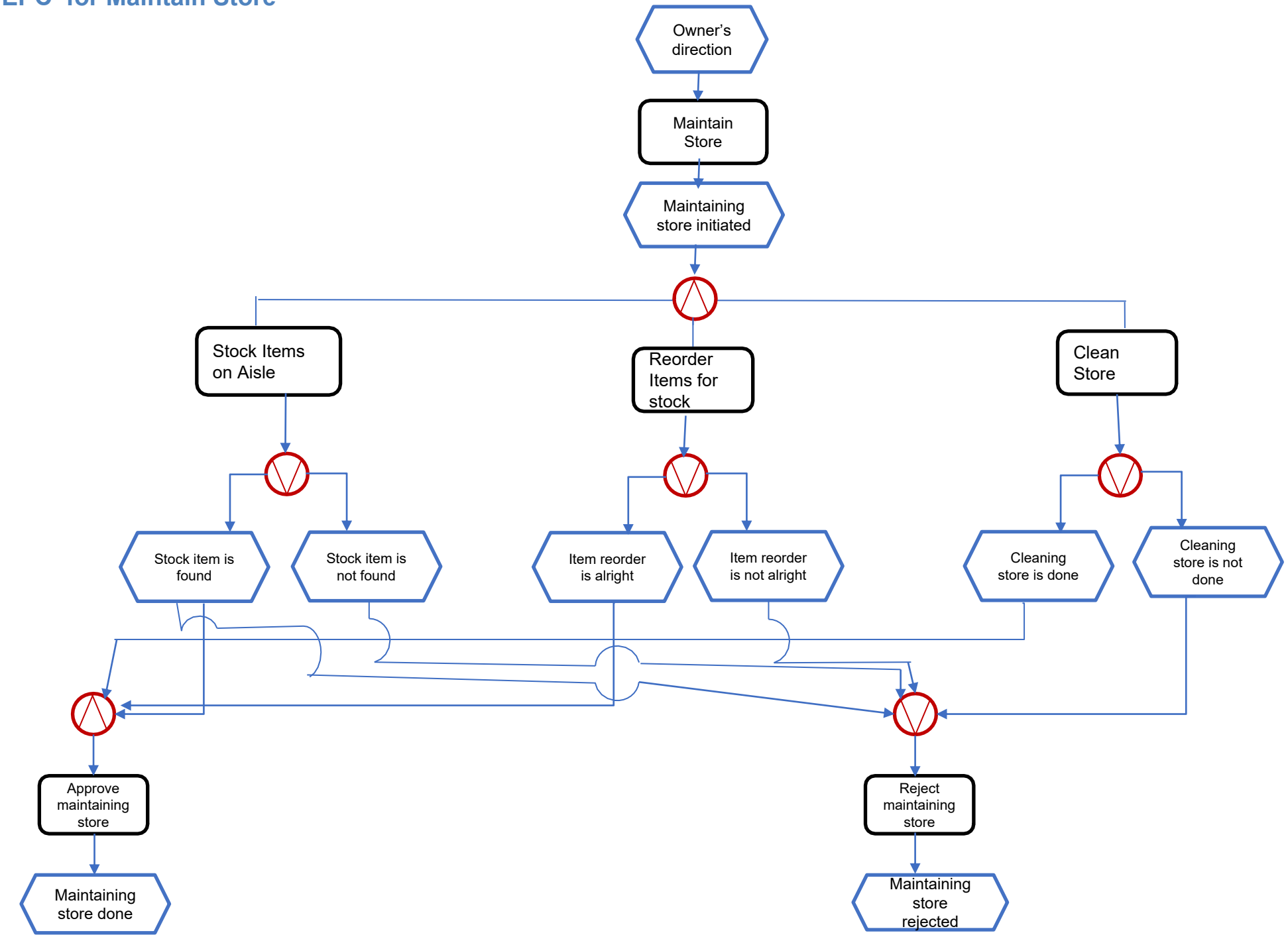
EPC diagram:

In ARIS business process models, events are created by processing functions or by actors outside of the model. Relevant events are selected during the modeling process, so only events impacting the business process are included in the model. Multiple functions can result from an event. On the other hand, multiple functions sometimes need to be concluded before an event can be triggered. We did not included the message portion in the EPC diagrams. A total of three diagrams were shown to represent the EPC. This drug store has three main functions. For each of these three functions, one EPC diagram was dedicated. In EPC diagram, the function ‘’provide prescription order’’ starts when a customer knocks for getting a prescript order. The path then follows 
And notation and then split into four sub functions. Each of these four sub functions are then tested for fishability or non feasibility  (exclusive or) by the exclusive or. If every condition is alright the function is done or else it is rejected.

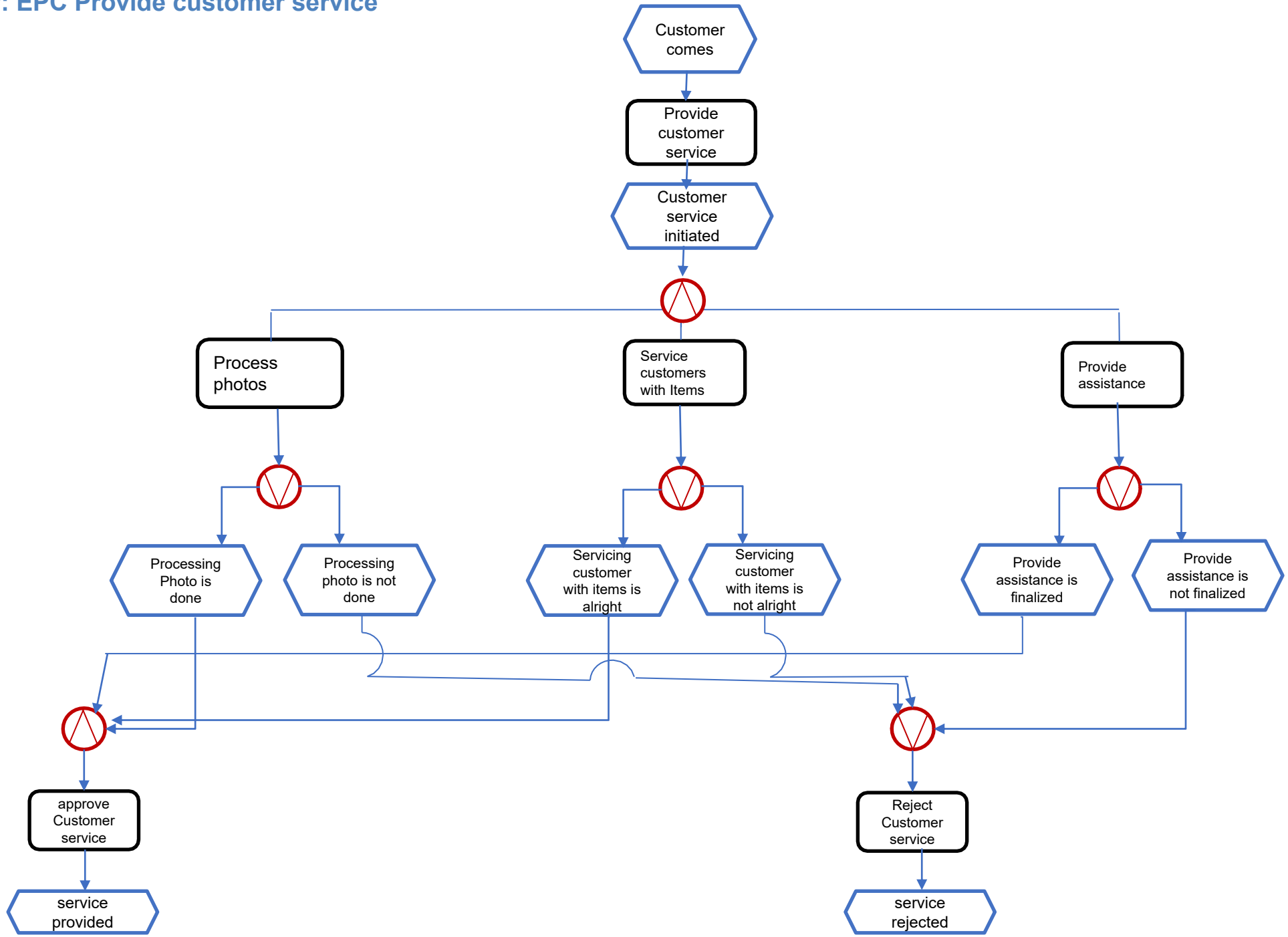
Control view: EPC for Provide prescription order



Output view: EPC for Maintain Store



Output view: EPC Provide customer service



Summary:

Ch's drug store, an imaginary one, situated in the city of Dearborn, has only one outlet. It provides the medication services mainly along with selling of other commodities and photo printing. The business activities of Ch's drug store was analyzed and modeled based on the techniques that was mentioned in ARIS concept. This project was done by three participants of the IMSE-5715 course at University of Michigan, Dearborn for the requirement of this course. The project starts with the short description of the drug store and the activities of it. The context diagram showed the boundary of the jurisdictions and the Data flow diagram presented the flow of data in a business information system. DFD described the processes that are involved in a system to transfer data from the input to the file storage and reports generation. All the important ARIS views (Scheer, A.-W., ARIS -Business Process Modeling, 3rd ed., Springer-Verlag, ISBN: 3-540-65835-1) were illustrated in the case of this drug store. The function view, the module design, the pseudo codes for several functions were presented. In addition, the organization and relevant network and configuration diagram were shown to represent the ARIS views. The data view and data dictionary illustrated the data with constrains and keys. We also captured the output view in terms of product tree model. At the end, function data allocation diagram and the EPC diagram illustrated the output view.

This project work aims to fulfill the requirements of an enterprise information system in the context of the mentioned drug store. The framework used here is based on a division of the model into description views and levels that describes individual elements rather than the entire model. This methodology can be considered to serve as the system development life cycle for mapping and optimizing business processes.