BUSINESS NARRATIVE

Handling tasks in a Pharmacy

1) Describe how the business currently operates

   The Pharmacy named PSL (Pharmacists Save Life) coopetare with a establishments supplying drug materials called Friends of Pharmacist (FOP) then dispense their own medicine. Before publicing and selling them to customers, Drug administration department (DAD) will check and sign the license if their products meet the standards.

2) Describe the data that is involved

   PSL has Apothecary ID, Apothecary Name.

   FOP has Materials ID, Materials Name.

   When PSL and FOP trading, Materials Quantity and Materials Money will be recorded.

   DAD will have Checker ID, Checker Name.

   Customers will have Customers ID, Name, Age

   Trading process will record Medicine Name and Trading Money.

3) Describe why it is useful for this organisation to use a database rather than someother application/solution

   This organisation should use database instead of other solutions because:

   + It can help manage data better: figure out which medicine people usually need in specific terms will help the pharmacy meet customers' demand.

   + See the data in variety ways which they can observe their business links with other organisations and people.

+ It can illustrate the amount of production and consumption to calculate profits and make up a suitable strategy.

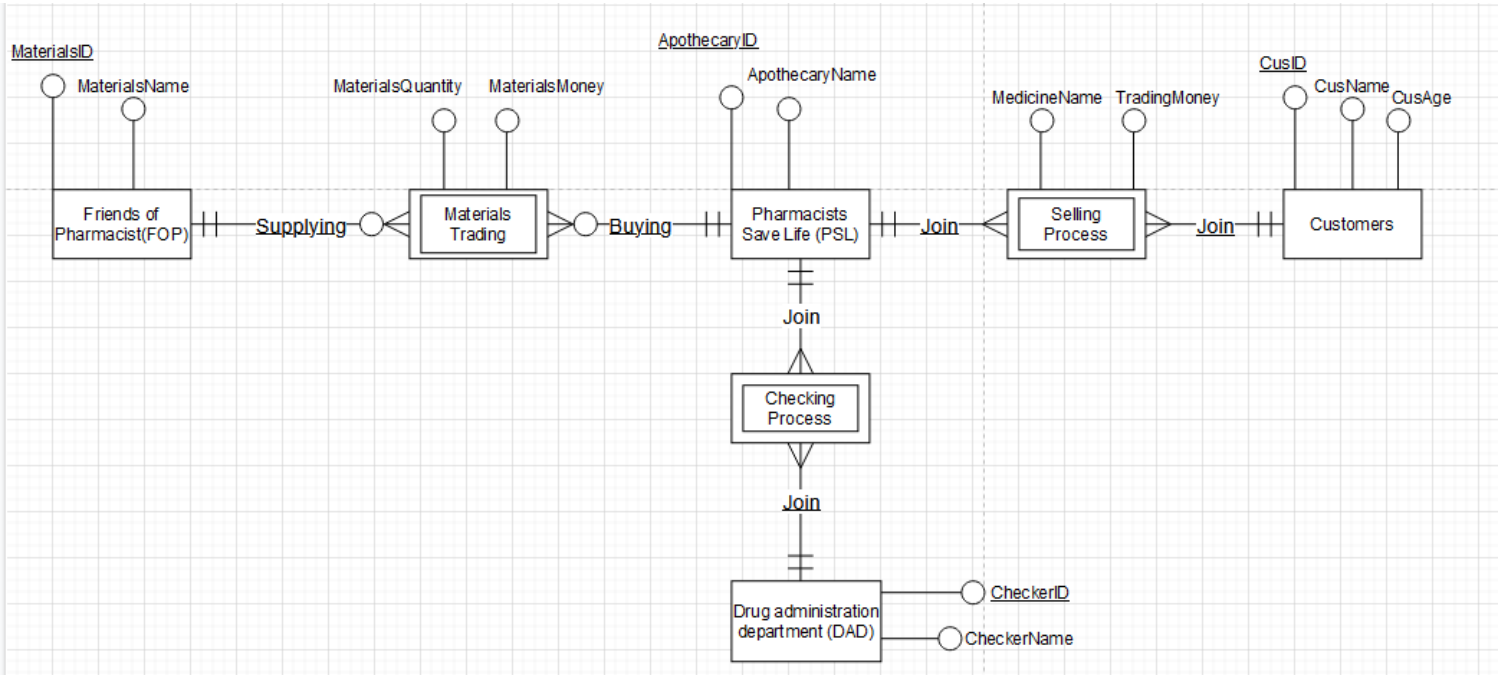
4) Describe the business rules that apply to the data you want to store

- Information security: the information provided by customers and other organizations must be private and not be publiced without agreement.
- Provide purchase history for consumers when they require.
- The data customers provided must be up-to-date, accuracy and clear.

5) Describe the types of queries, reports and/or visualisations that you believe will provide useful outcomes

- Queries types: select, make table, append, update, delete (they can be used to modify the data which changes frequently)
- Reports Types: Internal and External Reports (revenue management), Periodic Reports (understand the situation of the pharmarcy).
- Visualizations Types: bar chart, line chart, pie chart, etc.(they can provide statistics which help analyzation and orientation for the pharmacy.

ERD



Relational Schema

Friends of Pharmacist (FOP) (MaterialsID, MaterialsName)

Primary Key (MaterialsID)

Materials Trading (Materials Quantity, Materials Money, MaterialsID, ApothecaryID)

Primary Key (MaterialsID, ApothecaryID)

Foreign Key (MaterialsID) references Friends of Pharmacist (FOP)

Foreign Key (ApothecaryID) references Pharmacists Save Life (PSL)

Pharmacists Save Life (PSL) (Apothecary ID, Apothecary Name)

Primary Key (ApothecaryID)

Checking Process (Apothecary ID, ChekerID)

Primary Key (ApothecaryID, ChekerID)

Foreign Key (ApothecaryID) references Pharmacists Save Life (PSL)

Foreign Key (ChekerID) references Drug administration department (DAD)

Drug administration department (DAD) (CheckerID, CheckerName)

Primary Key (CheckerID)

Selling Process (MedicineName, TradingMoney, ApothecaryID, CusID)

Primary Key (ApothecaryID, CusID)

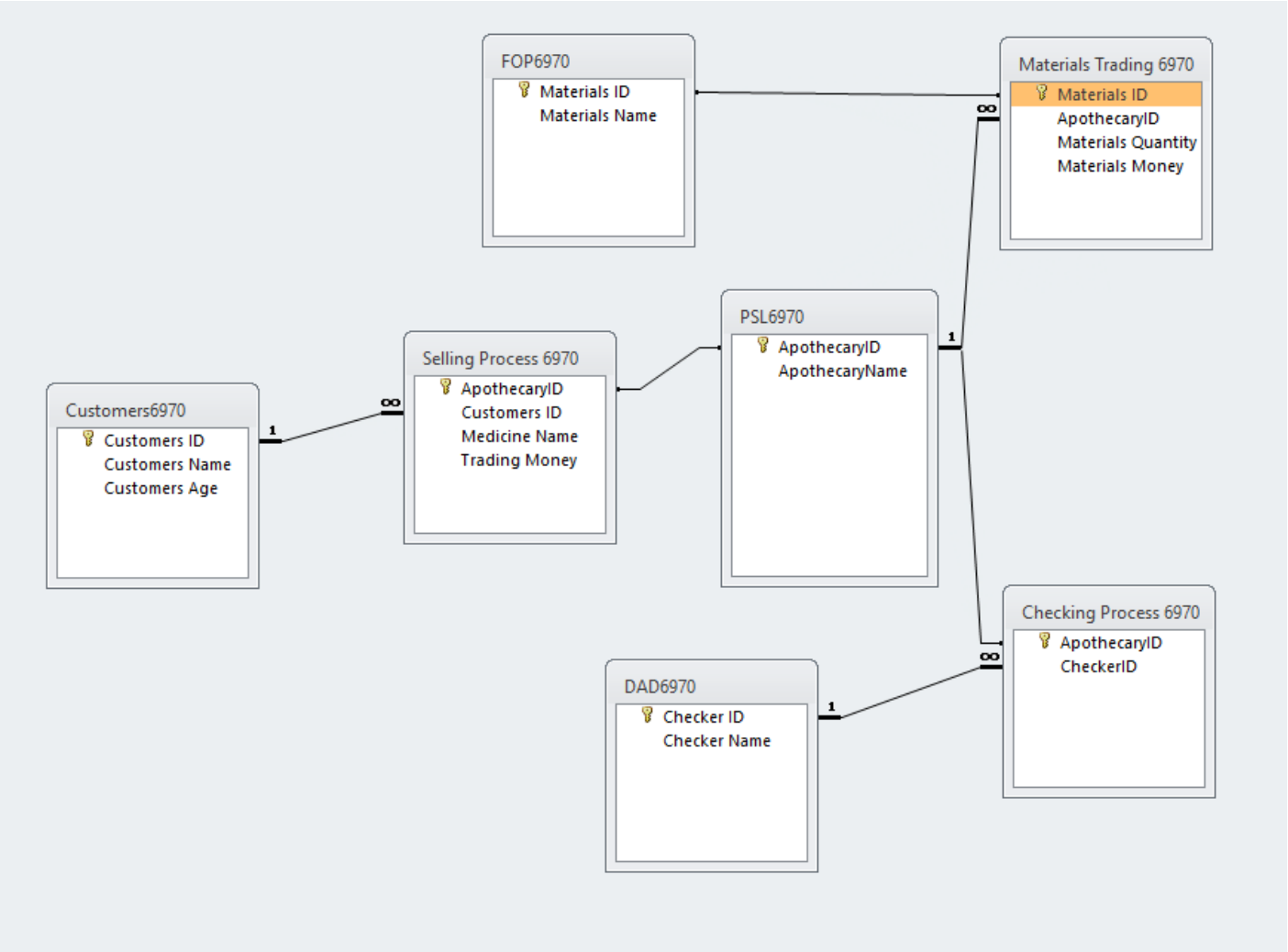
Foreign Key (ApothecaryID) references Pharmacists Save Life (PSL)

Foreign Key (CusID) references Customers

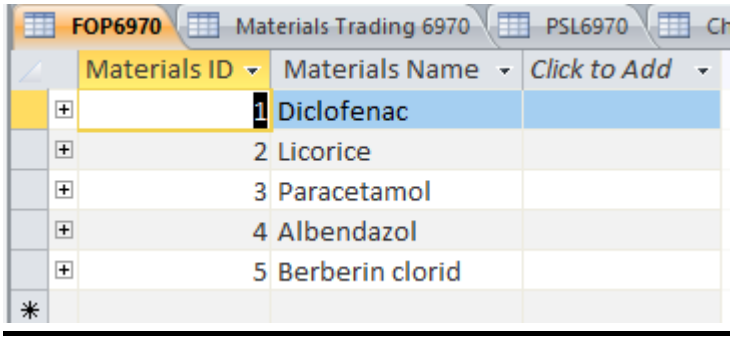
Customers(CusID, CusName, CusAge)

Primary Key (CusID)

Relational Diagram (MS Access)



Result set of the simple Queries



Materials Trading 6970

Materials ID	ApothecaryI	Materials Quantity	Materials Money
1	1357	32 kg	$61
1	1357	10 kg	$20
1	1357	45 kg	$90
3	1357	22 kg	$44
2	3581	89 kg	$233
3	3581	14 kg	$37
4	3581	20 kg	$52
5	3581	34 kg	$89
1	4592	23 kg	$104
4	4592	12 kg	$54
4	4592	100kg	$452
5	4592	31 kg	$140
2	7503	56 kg	$120
2	7503	21 kg	$45
4	7503	72 kg	$154
5	7503	20 kg	$43
2	103436970	13 kg	$26
3	103436970	90 kg	$180
3	103436970	50 kg	$100
5	103436970	82 kg	$164

FOP6970 | Materials Trading 6970 | PSL6970 | Checkin

ApothecaryID	ApothecaryName	Click to Add
1357	Golda Meir	
3581	Nguyen Thanh Tung	
4592	Tran Thi Oanh	
7503	Vladimir Putin	
103436970	Pham The Viet	

Checking Process 6970

Apothecaryl	CheckerID
1357	H78
1357	I62
1357	J97
1357	N23
1357	P42
3581	H78
3581	I62
3581	J97
3581	N23
3581	P42
4592	H78
4592	I62
4592	N23
4592	P42
7503	H78
7503	I62
7503	J97
7503	N23
7503	P42
103436970	H78
103436970	I62
103436970	J97

DAD6970 | Selling Process 6970 | Customers6970

Checker ID	Checker Name	Click to Add
H78	Holly William	
I62	Ibraham Core	
J97	Jack Wilston	
N23	Putter Clock	
P42	Oliver Chris	

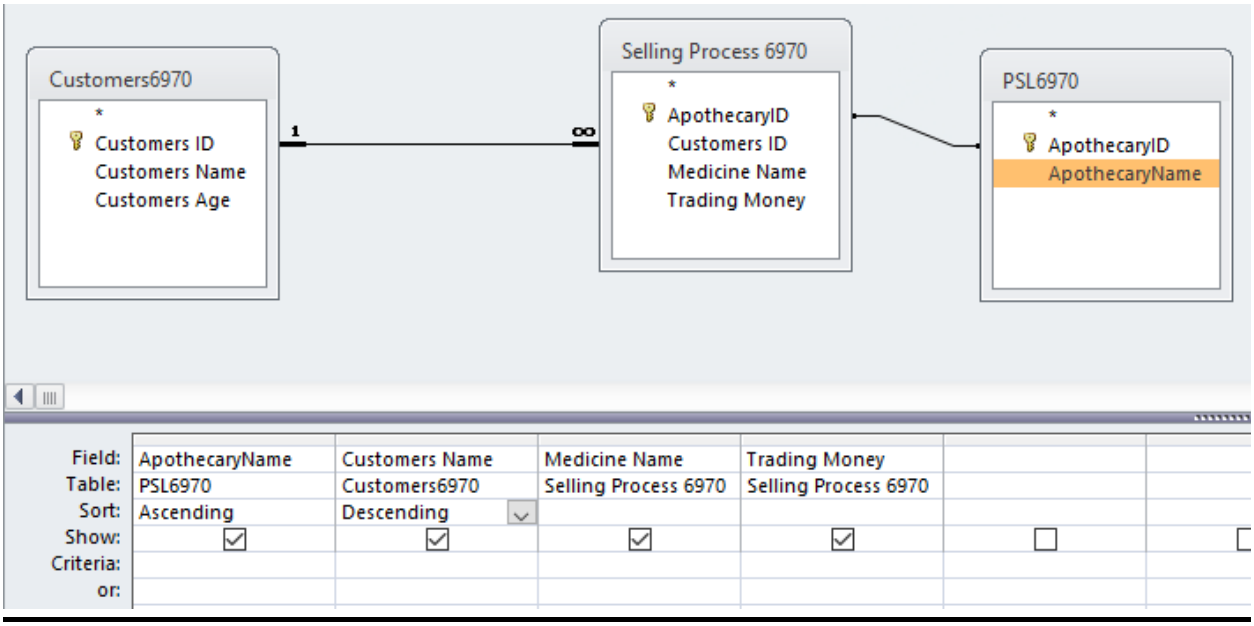
Selling Process 6970

ApothecaryID	Customers ID	Medicine Name	Trading Money
1357	K98	DGLZ	$55
1357	C82	DGLZ	$55
1357	K98	NSAIDK	$32
3581	A15	DGLZ	$55
3581	C82	ParacetamolY	$10
3581	C82	ParacetamolY	$10
4592	K98	DGLZ	$55
4592	O24	ZentelR	$49
4592	A15	ZentelR	$49
7503	O24	BerberineX	$2
7503	A15	BerberineX	$2
7503	B59	NSAIDK	$32
103436970	A15	BerberineX	$2
103436970	B59	ParacetamolY	$10
103436970	C82	ZentelR	$49

DAD6970 | Selling Process 6970 | Customers6970

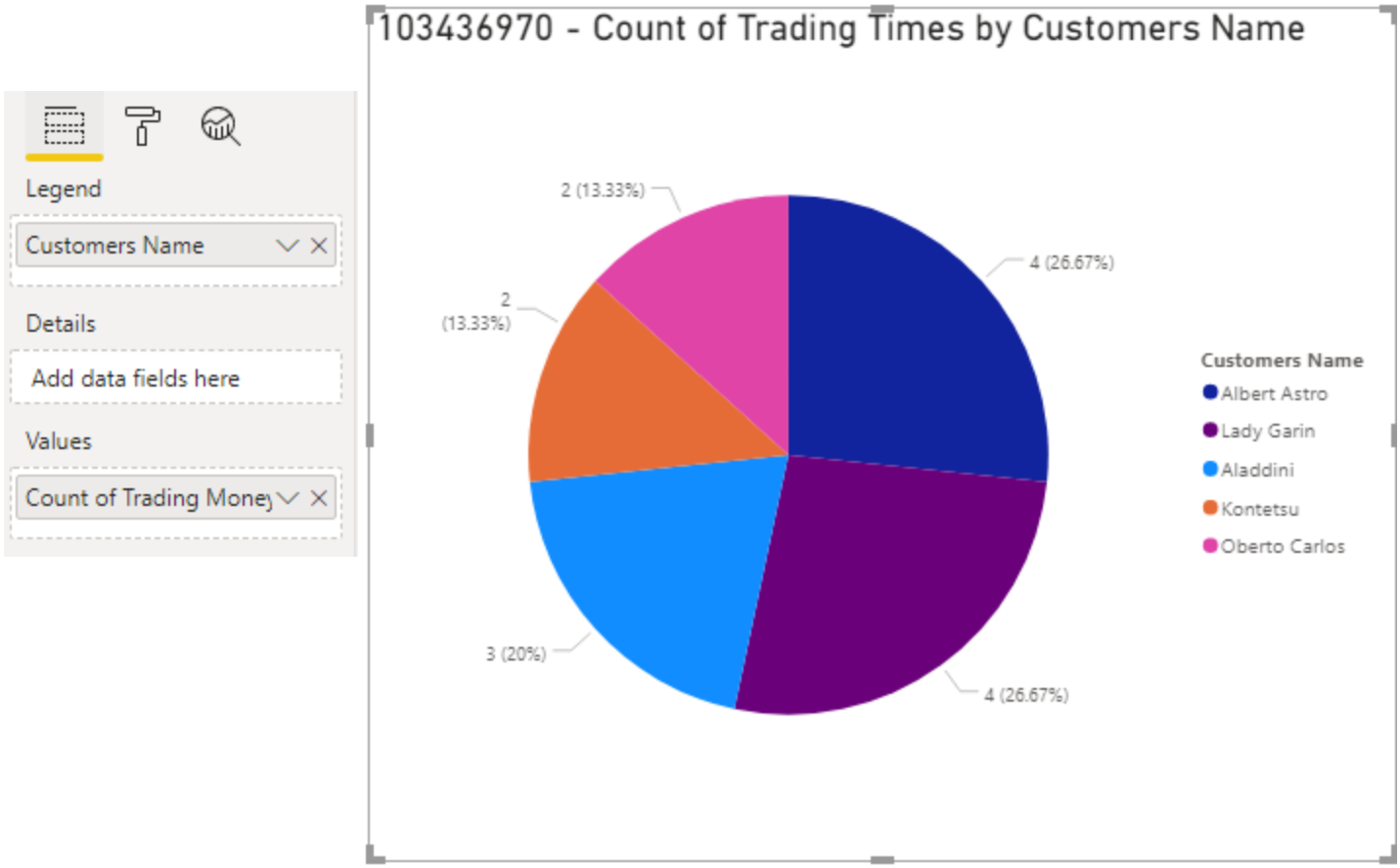
Customers ID	Customers Name	Customers Age	Click to Add
A15	Lady Garin	13	
B59	Kontetsu	25	
C82	Albert Astro	67	
K98	Aladdini	45	
O24	Oberto Carlos	39	

Queries, Reports, Visualisations



Query 1 - 6970

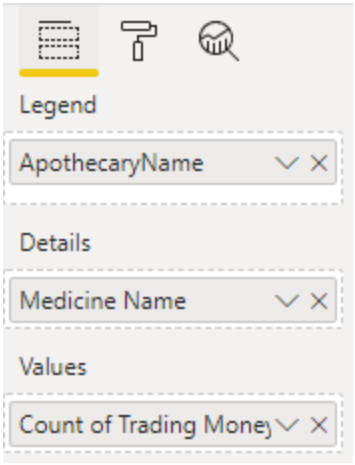
ApothecaryName	Customers Name	Medicine Name	Trading Money
Golda Meir	Albert Astro	DGLZ	$55
Golda Meir	Aladdini	NSAIDK	$32
Golda Meir	Aladdini	DGLZ	$55
Nguyen Thanh Tung	Lady Garin	DGLZ	$55
Nguyen Thanh Tung	Albert Astro	ParacetamolY	$10
Nguyen Thanh Tung	Albert Astro	ParacetamolY	$10
Pham The Viet	Lady Garin	BerberineX	$2
Pham The Viet	Kontetsu	ParacetamolY	$10
Pham The Viet	Albert Astro	ZentelR	$49
Tran Thi Oanh	Oberto Carlos	ZentelR	$49
Tran Thi Oanh	Lady Garin	ZentelR	$49
Tran Thi Oanh	Aladdini	DGLZ	$55
Vladimir Putin	Oberto Carlos	BerberineX	$2
Vladimir Putin	Lady Garin	BerberineX	$2
Vladimir Putin	Kontetsu	NSAIDK	$32
*			

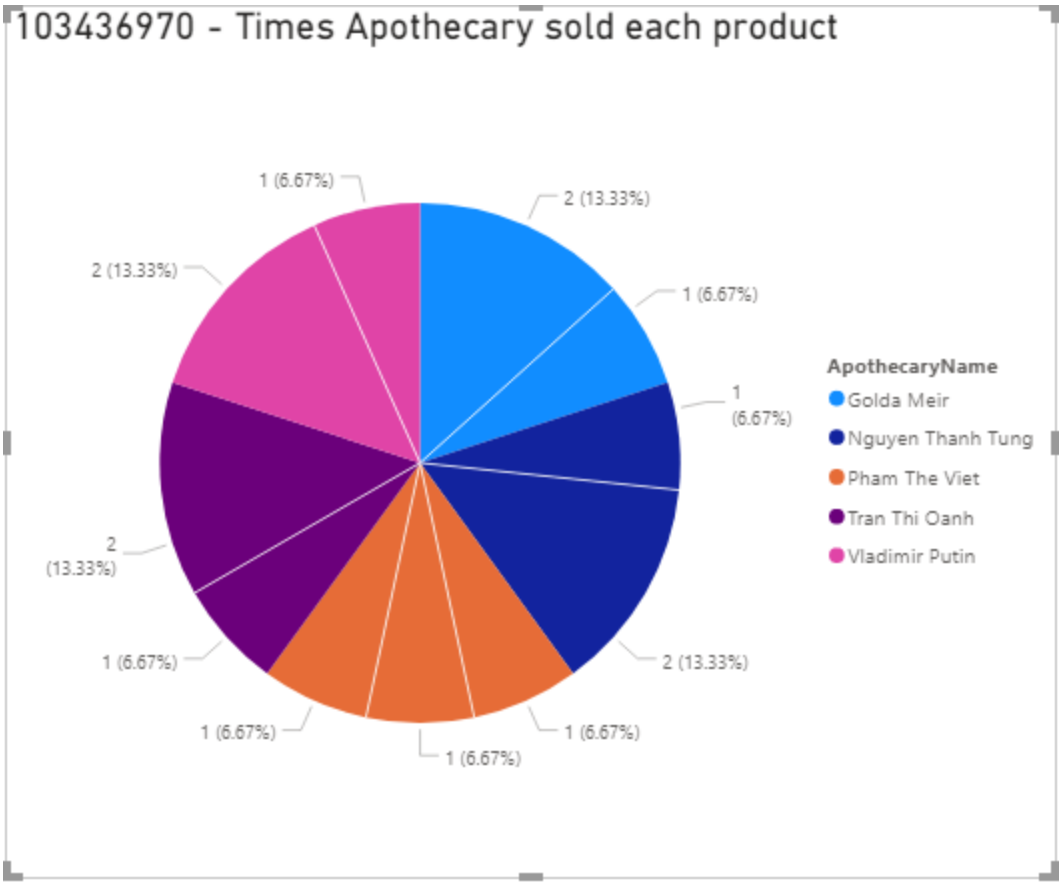


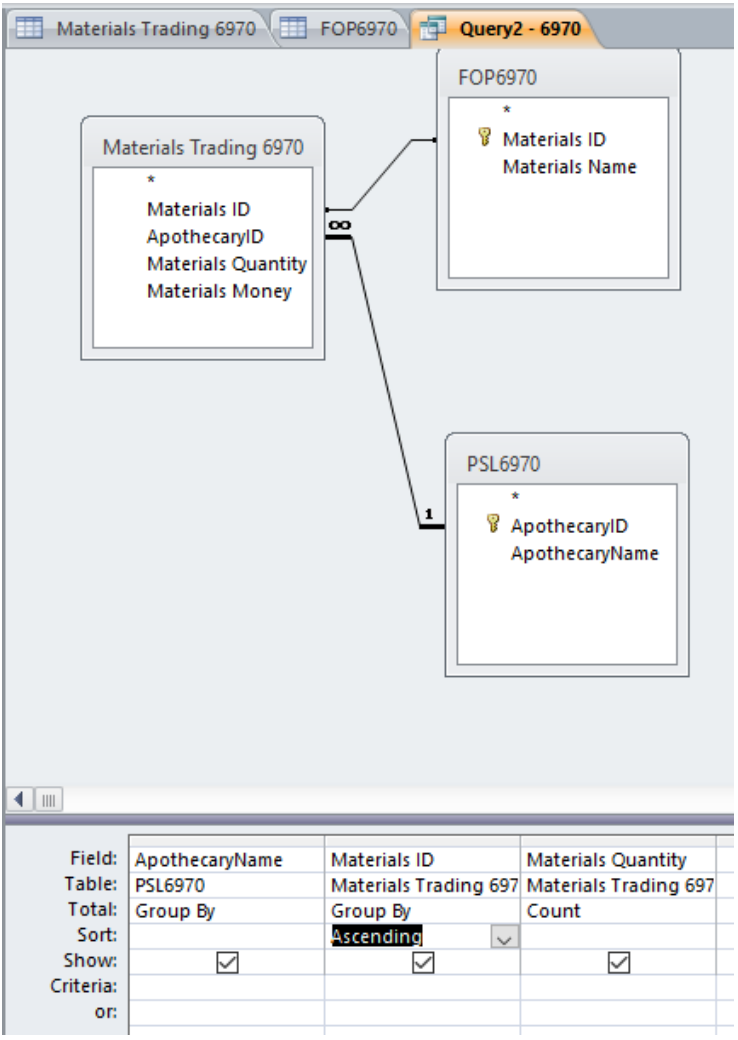
Field:	ApothecaryID	ApothecaryName	Checker ID
Table:	PSL6970	PSL6970	DAD6970
Total:	Group By	Group By	Count
Sort:	Ascending		
Show:	☑	☑	☑
Criteria:	>2000		
or:			

Query3 - 103436970

ApothecaryID	ApothecaryName	CountOfChecker ID
3581	Nguyen Thanh Tung	5
4592	Tran Thi Oanh	4
7503	Vladimir Putin	5
103436970	Pham The Viet	3







Materials Trading 6970 | FOP6970 | **Query2 - 6970**

ApothecaryName	Materials ID	CountOfMaterials Quantity
Golda Meir	1	3
Tran Thi Oanh	1	1
Nguyen Thanh Tung	2	1
Pham The Viet	2	1
Vladimir Putin	2	2
Golda Meir	3	1
Nguyen Thanh Tung	3	1
Pham The Viet	3	2
Nguyen Thanh Tung	4	1
Tran Thi Oanh	4	2
Vladimir Putin	4	1
Nguyen Thanh Tung	5	1
Pham The Viet	5	1
Tran Thi Oanh	5	1
Vladimir Putin	5	1

Legend

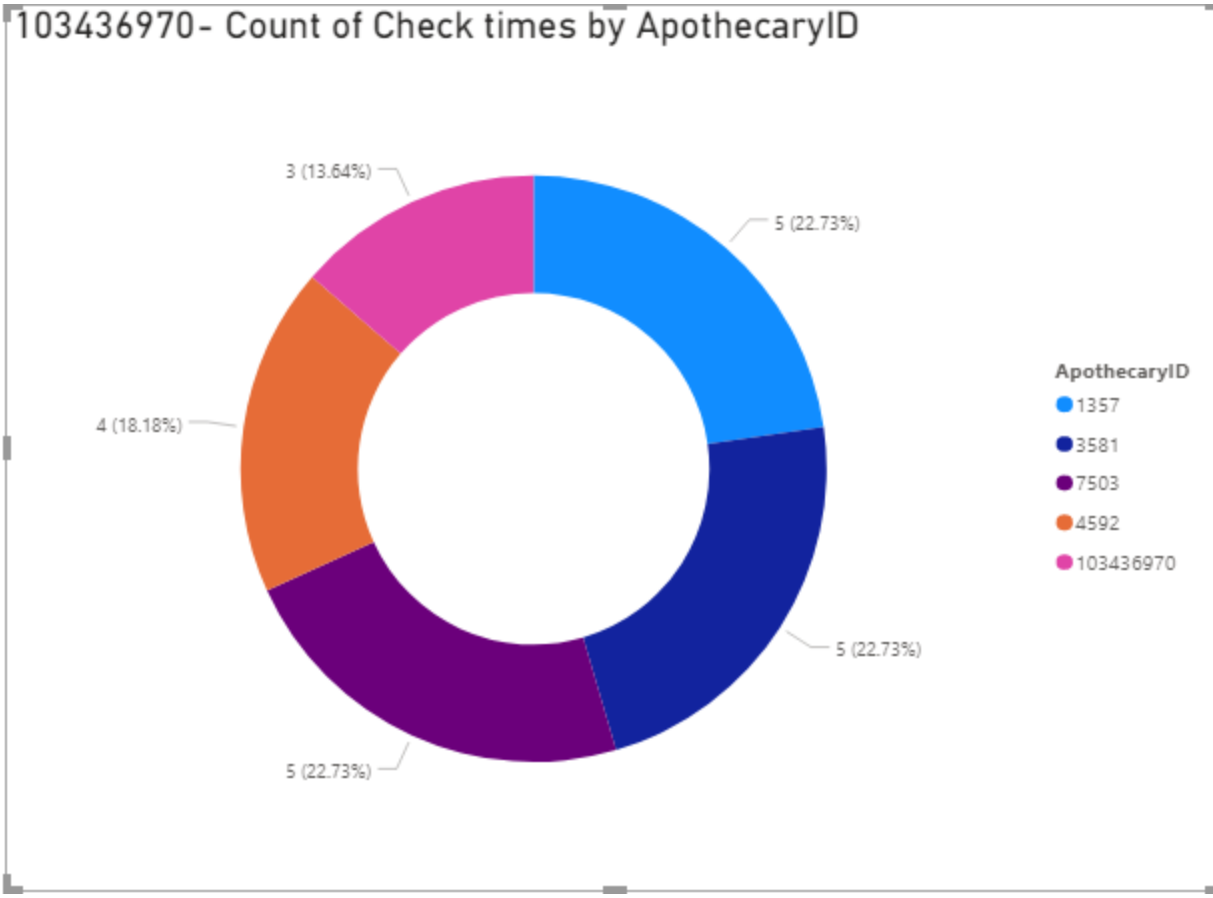
ApothecaryID

Details

Add data fields here

Values

Count of CheckerID



Field:	ApothecaryName	Medicine Name	Materials Quantity	CheckerID
Table:	PSL6970	Selling Process 6970	Materials Trading 697	Checking Process 697
Total:	Group By	Group By	Group By	Count
Sort:	Ascending			
Show:	☑	☑	☑	☑
Criteria:			>="20"	
or:				

Query 4 - 6970

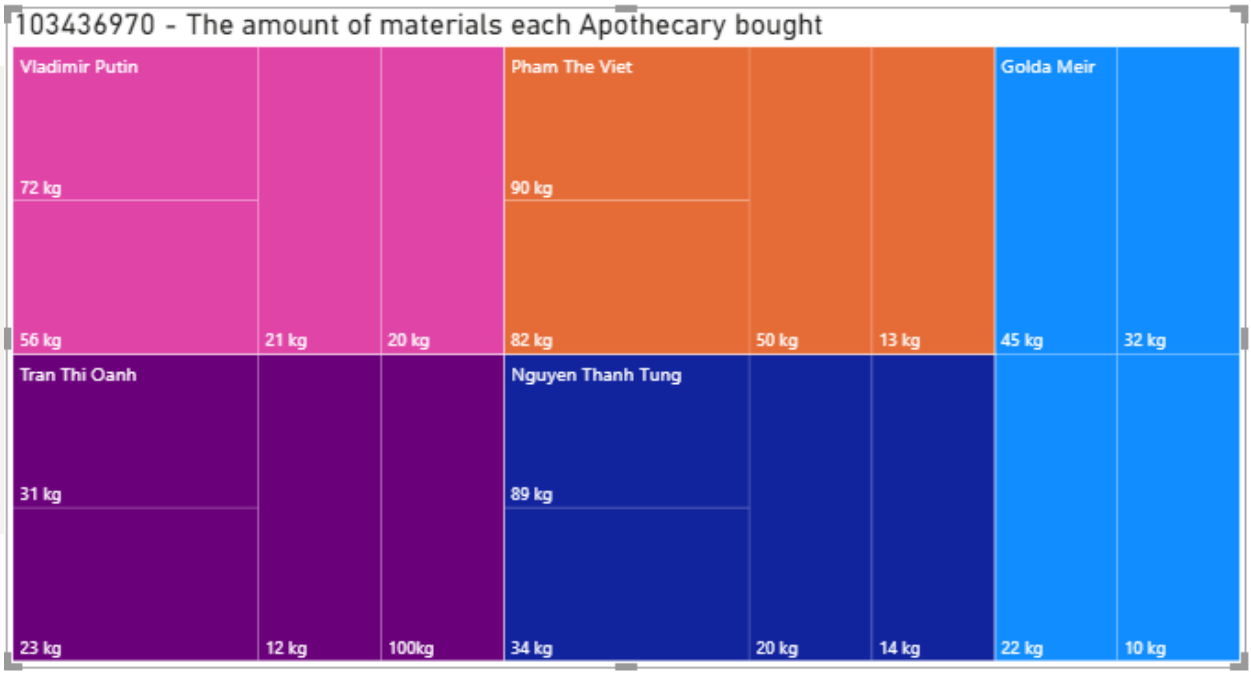
ApothecaryName	Medicine Name	Materials Quantity	CountOfCheckerID
Golda Meir	DGLZ	22 kg	10
Golda Meir	DGLZ	32 kg	10
Golda Meir	DGLZ	45 kg	10
Golda Meir	NSAIDK	22 kg	5
Golda Meir	NSAIDK	32 kg	5
Golda Meir	NSAIDK	45 kg	5
Nguyen Thanh Tung	DGLZ	20 kg	5
Nguyen Thanh Tung	DGLZ	34 kg	5
Nguyen Thanh Tung	DGLZ	89 kg	5
Nguyen Thanh Tung	ParacetamolY	20 kg	10
Nguyen Thanh Tung	ParacetamolY	34 kg	10
Nguyen Thanh Tung	ParacetamolY	89 kg	10
Pham The Viet	BerberineX	50 kg	3
Pham The Viet	BerberineX	82 kg	3
Pham The Viet	BerberineX	90 kg	3
Pham The Viet	ParacetamolY	50 kg	3
Pham The Viet	ParacetamolY	82 kg	3
Pham The Viet	ParacetamolY	90 kg	3
Pham The Viet	ZentelR	50 kg	3
Pham The Viet	ZentelR	82 kg	3
Pham The Viet	ZentelR	90 kg	3
Tran Thi Oanh	DGLZ	23 kg	4
Tran Thi Oanh	DGLZ	31 kg	4
Tran Thi Oanh	ZentelR	23 kg	8
Tran Thi Oanh	ZentelR	31 kg	8
Vladimir Putin	BerberineX	21 kg	10
Vladimir Putin	BerberineX	56 kg	10
Vladimir Putin	BerberineX	72 kg	10
Vladimir Putin	NSAIDK	21 kg	5
Vladimir Putin	NSAIDK	56 kg	5
Vladimir Putin	NSAIDK	72 kg	5

Group

ApothecaryName

Details

Materials Quantity

Values

Count of Materials Mon