Marination System of Sharmin Jewelers



Prepared for:

Mr. Pijush Kanti Paul Associate Professor East West University

Prepared by:

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Date: April 1, 2000.



Date: April 1, 2000.

Mr. Pijush Kanti Paul

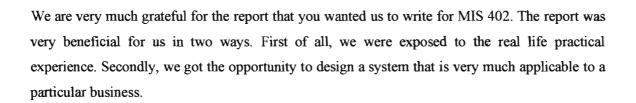
Associate Professor

East West University

Mohkhali, Dhaka.

Subject: Letter of Transmittal

Dear Sir:



Charles Charles

We would like to thank you heartily for this report. We really enjoyed our report. We hope that our accumulated practical experience through this report will help us a lot in our future.

Sincerely yours,

Mokhlesur Rahman

Shafkat Kibriya

Nafisa Shamsuddin

Acknowledgement:

We would like to thank a few persons without whose we would not have been able to complete our report. Our earnest thanks to Mr. Pijush Kanti Paul who is the course teacher of MIS 402. We would also like to thank Mr. Syed Akhter Hossain, Mr. Asad Uzzaman, the Manager and employees of the jewelry shop. Without these persons help our efforts would go in vain. We wish all the best to these persons.

Executive summary:

This report has been written as a partial requirement of MIS-402 (System Analysis & Design). Our faculty wanted us to apply our knowledge, gathered from the books, to an applied field. We chose a jewelry shop for this purpose. We chose this particular field because most of us are more or less familiar with the business and in most of the shops, the existing system is very primitive in nature.

We had to conduct a questionnaire survey to find out how the jewelry shop was operating. We found out that there were several difficulties with the previous system. For example, in the existing system there is an unbalance between price and measurement of gold. The shopkeepers show price in gram but they sell in "bhari". Customers as well as the shopkeepers are sometimes mislead by the unbalanced measurement. Another problem is the record keeping. The owner has to believe in the recorded sale. So the manual system is very much exposed to gold missing. There are many other problems with the existing system encountered by the shopkeepers and the owner. For example, desired information is very difficult to find out and also very time consuming. They are now keeping the records in books that are hand written. So, if anyone wants to see a record that is very old, might be damaged.

All these problems badly require a system that is free from all the current errors and projected difficulties. Through our survey we have found out what are the user requirements and designed a-computer based information system that is applicable to the jewelry shop. This software will be (1) able to fight all the previous errors, (2) will eliminate theft, (3) minimize the costs and will (3) maximize the profit.

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- 4. Implementation Detail
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- **3.** DFD 0
- **4.** DFD 1
- **5.** DFD 2

Introduction:

This report is a partial fulfillment of the course "System Analysis and Design" (MIS 402). Our faculty of this course Mr. Pijush Kanti Paul wanted us to apply our theoretical knowledge to a practical field. We became very interested to get an opportunity to experience the real world. We were very much interested to design a computer based information system of a jewelry shop because most of us are very much familiar with this business but in most shops there is no formal computer based information system existing currently.

We conducted a survey to find out the user requirements and the errors of the existing manual system. This new information system will facilitate the shop to better keep the inventory record that will stop any kind of inventory loss. It will also maintain all the records, for example, customer record, employee record, broker's information, goldsmith information and so on. It will store, manage, update, and also check, the customer balance. This proposed system would not cover the accounting section and gold purchase section. But the system has the flexibility to cover these sections in future

Origin of the report:

This report is written as a course requirement of MIS 402 (System Analysis and Design) submitted to Mr. Pijush Kanti Paul, faculty of East West University on April 1, 2000 who orally authorised our group members to carry on with this report.

Purpose and objective:

- 1. To fulfill the course requirement of MIS 402.
- 2. To build up the information system of an institution to gather practical experience.
- 3. To make the existing system easier, flexible, error free, less time consuming and to have easier access to different information for the authorized end users.
- 4. To reduce cost and to maximize profit by eliminating any kind of inventory loss.
- 5. To have the information controlling power for the manager to save mismanagement of gold.

In the following, we would like to include the sample questions that we used for the interviewing purpose. These questions were asked to find out the problems and user requirements.

Questionnaire

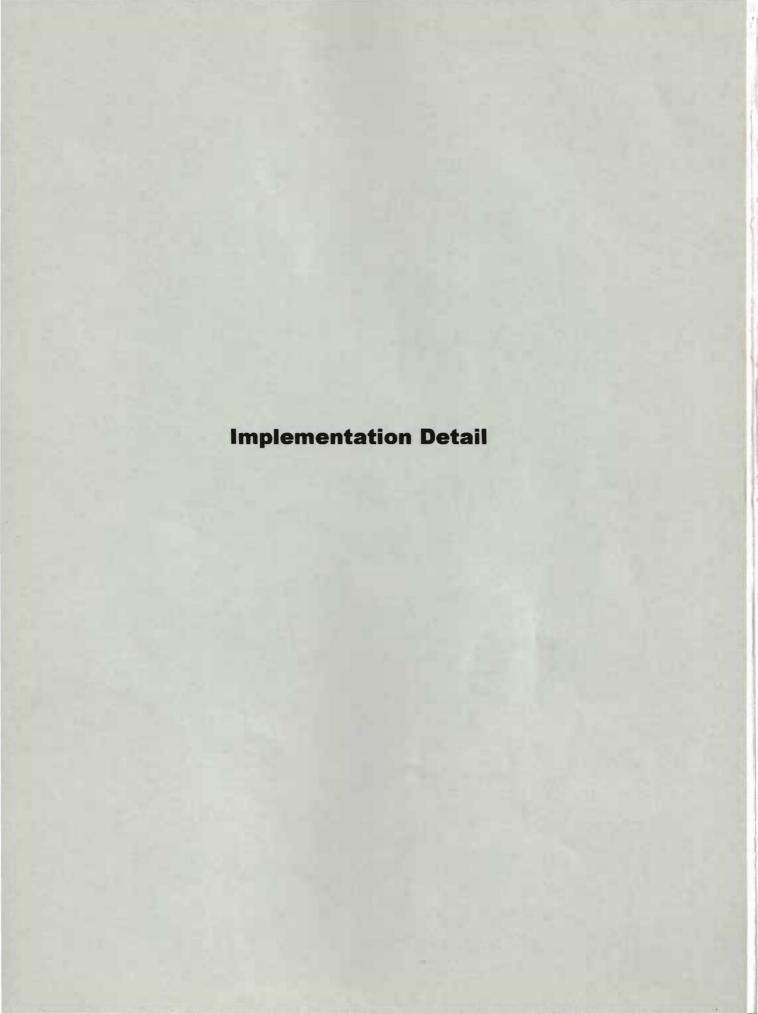
- 1. How many records do you have to maintain for individual item?
- 2. How do you keep the sales records?
- 3. How do you keep the inventory record?
- 4. Who updates the records and have the authority to reject or accept a record?
- 5. Do you maintain a customer profile?
- 6. How do you keep the record of gold?
- 7. Do you keep the record of goldsmith?
- 8. Do you have the information on brokers?
- 9. How do you keep the record of sales and payment?

User requirement:

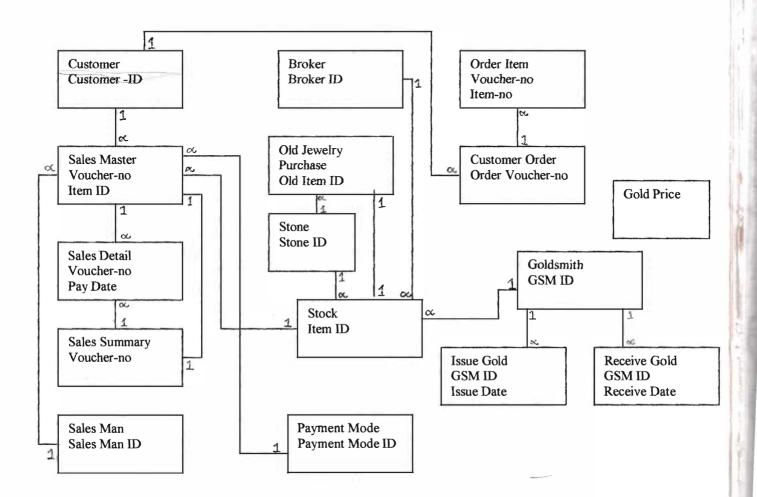
- 1. The owner wants to keep the records about the goldsmith, broker, salesman, customer, and inventory.
- In the jewelry shop they want to have balance between the mass of gold and price.
 Currently there is an unbalance between these two factors. They want to balance it accurately on a daily basis.
- 3. The owner wants to record the sale of gold precisely. He wants to precisely balance the amount of gold taken out from inventory with the sale of gold. If there is an unbalanced situation, at the end of the year they might end up with some amounts of gold missing or no record of that amount.
- 4. They want to record how much gold each customer buys and whether there is any customer failed to pay off his/her debts.
- They want to reward each salesman for his/her effort for additional sale and for precise record keeping.
- 6. They want a better and fast searching system.
- They want to check all types of information within a second, for example, sales, customer record, customer order, inventory information and so on because manual operation is very time consuming.

Proposed System:

The new computer based information system has quiet a lot of positive sides to notice. The whole system will have a dynamic change when the proposed system will be applied. The employees will be able to find customer information within seconds. If there is any debts outstanding, the accounting department will be able to detect it very quickly and to do so they will not depend on the hand written information that might be damaged. With the system the manager can have the full power to have the records of each employee, customer and the inventory as well that are very important. Because, in the previous year they experienced a huge portion of gold missing from the inventory. The manager will also be able to reward the employees from the record of how much they could sell in a given period of time. The accurate weight of gold can also be easily matched with price.



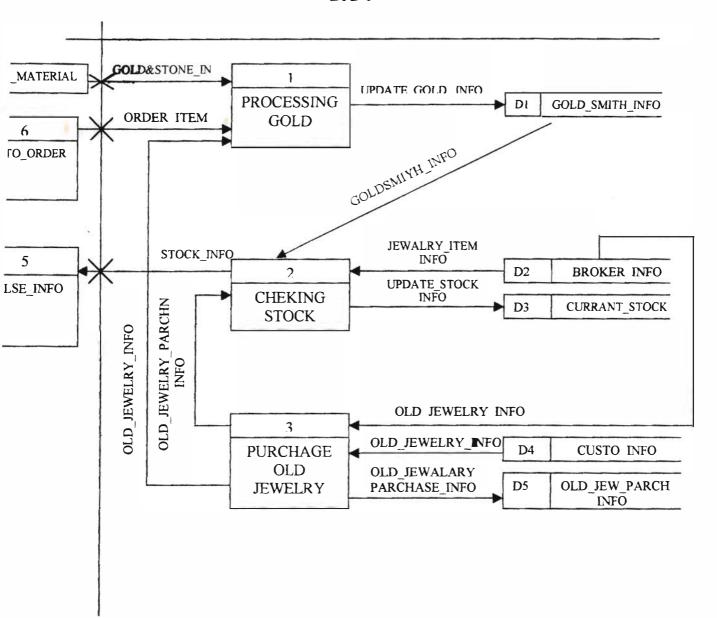
E-R Diagram of the proposed system

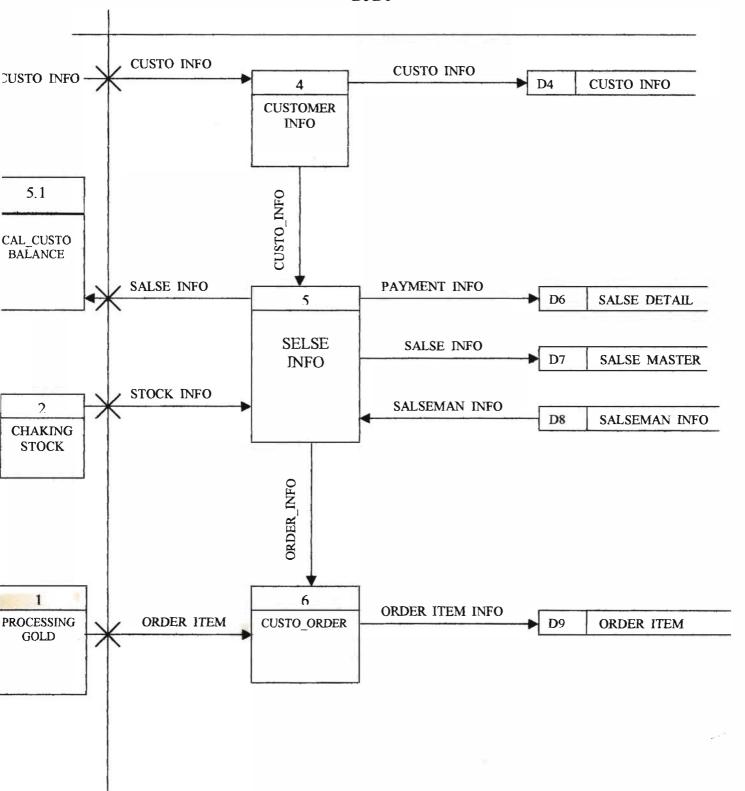


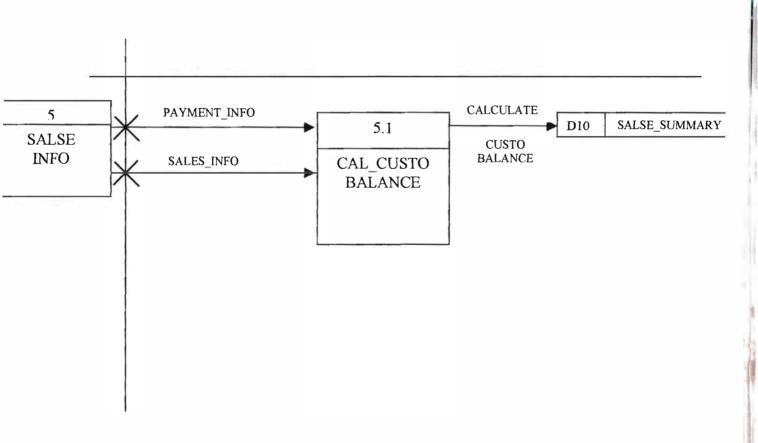
Existing Layout

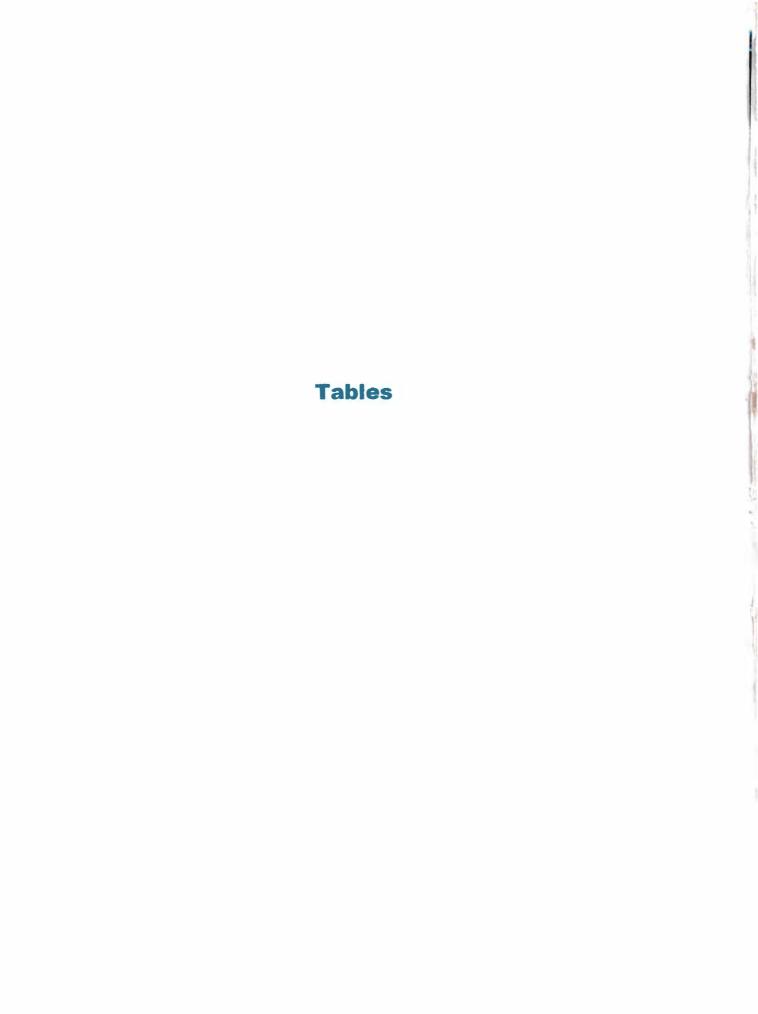












# (4) (4)	ACR: TABLE			
	Field Name	Data Type	Description	
Customer	r ID	Text	Field size:10, No Duplication, Not Null	
Customer	r Name	Text	Field size:50, Not Null	
Address		Text	Field size:100	
Telephon	е	Number	Field size:Long Integer	
		100000		

ALC: N	Field Name	Data Type	Description	
2	GSM ID	Text	Field size: 10, No Duplication, Not Null	
	GSM Name	Text	Field size:50, Duplication, Not Null	
	Address	Text	Field size: 100	
	Telephone	Number	Field size:Long Intger	
7				

	Field Name	Data Type	Description	
7	Bro ID	Text	Field size: 10, No Duplication, Not Null	1
1	Bro Name	Text	Field size:50, Duplication, Not Null	
	Address	Text	Field size: 100	
	Telephone	Number	Field size:Long Integer	

Field Name	Data Type	Description	
Item ID	Text	Field size: 10, No Duplication, Not Null	
Item Name	Text	Field size:30, Duplication, Not Null	
Weight	Number	Field size:4,2	
Gold price	Number	Field size:8,2	
Made by	Text	Field size: 20,	
Status	Text	Field size:10,	
Stone ID	Text	Field size:4, Duplication, Foreign key	
Carat	Number	Field size:2	
Date in	Date/Time	Field size:Long Date	
Date out	Date/Time	Field size:Long Date	
GSM ID	Text	Field size: 10, Duplication, Foreign key	
Bro ID	Text	Field size: 10, Duplication, Foreign key	
Voucher No	Text	Field size: 10, Duplication, Foreign key	

Field Name	Data Type	Description	
Voucher No	Text	Field size: 10, Duplication, Not Null	
Item ID	Text	Field size: 10, Duplication, Not Null	
Sale Cost	Number	Field size:8,2	
Salesman ID	Text	Field size:10, Duplication, Not Null	
Customer ID	Text	Field size:10, Duplication,	
Weight	Number	Field size:4,2	

Field Name	Data Type	Description	
Voucher No	Text	Field size:10, Duplication, Not Null	
Pay date	Date/Time	Field size:Long Date, Duplication, Not Null	
Pay Mode ID	Text	Field size: 2, Duplication, Not Null	
Pay Amount	Number	Field size:8,2	A A

100	MIT MANAGERY: I	181.0		
	Field Name	Data Type	Description	
	Voucher No	Text	Field size: 10, No Duplication, Not Null	
	Balance	Number	Field size:6,2	
2				
100				
OH S				

	PAYMENT MODE. T	ASLE		_ O X
	Fleid Name	Data Type	Description	
8	Pay Mode ID	Text	Field size:2, No Duplication, Not Null	
D	Description	Text	Field size:10,	
THE REAL PROPERTY.				

issue opid . Table		
Field Name	Data Type	Description
GSM ID	Text	Field size: 10, Duplication, Not Null
Issue date	Date/Time	Field size:Long Date, Duplication, Not Null
Issue gold	Number	Field size:4,2

pertive all Table				
Field Name	Data Type	Description		
GSM ID	Text	Field size: 10, Duplication, Not Null		
Receive date	Date/Time	Field size:Long Date, Duplication, Not Null		
Receive gold	Number	Field size:4,2		

	Field Name	Data Type	Description
g	Order Voucher No	Text	Field size:10,No Duplication, Not Null
	Order date	Date/Time	Field size:Long Date, Duplication, Not Null
	Customer ID	Text	Field size:10, Duplication, Not Null, Foreign Key
1	Deliver date	Date/Time	Field size:Long Date, Duplication, Not Null
	Design Ref	Text	Field size:50

	Field Name	Data Type	Description	
3	Voucher No	Text	Field size: 10, Duplication, Foreign key, Not Null	
3	Item No	Number	Field size: 10, Duplication, Foreign key, Not Null	Miller
	Weight Of Gold	Number	Field size:4,2	
	Carat	Number	Field size:2	
	Stone ID	Text	Field size:4, Duplication, Foreign key	
	Cost of Gold	Number	Field size:8,2	
3	GSM ID	Text	Field size: 10, Duplication, Foreign key, Not Null	

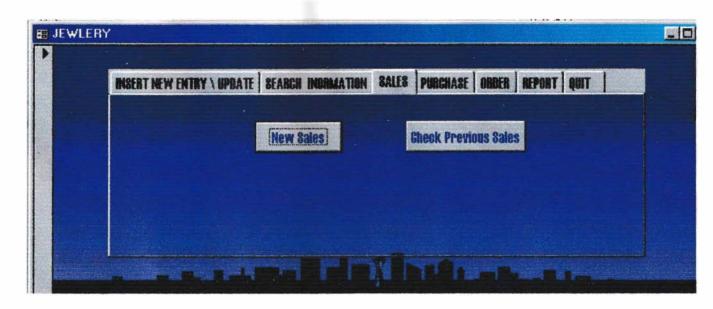
11.18	GOLD PRICE TABLE				- OX
	Field Name	Data Type		Description	
8	Price	Number	Field size: 6,2	**************************************	

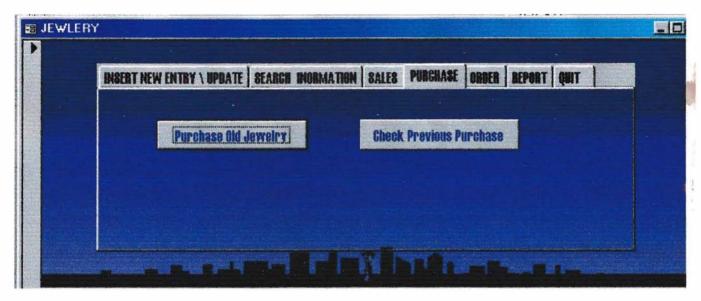
(LD (EWELPY PO			
of the second se	Data Type	Description	
Old Item ID	Text	Field size: 10, No Duplication, Not Null	
Voucher No	Text	Field size: 10, Duplication,	
Weight of Gold	Number	Field size:4,2	
Price of Gold	Number	Field size:8,2	
Stone ID	Text	Field size:4, Duplication, Foreign key	
Made by	Text	Field size:20,	
Carat	Number	Field size:2,	
Date in	Date/Time	Field size:Long Date	
Date out	Date/Time	Field size:Long Date	

	STORYE: TARLE			_ O X
	Field Name	Data Type	Description	La L
7	Stone ID	Text	Field size:4,No Duplication,Not Null	
	Stone Name	Text	Field size:30, Duplication, Not Null	
	Stone Color	Text	Field size:30, Duplication, Not Null	
100	Weight	Number	Field size:4,2	
2				
				To the second
100				

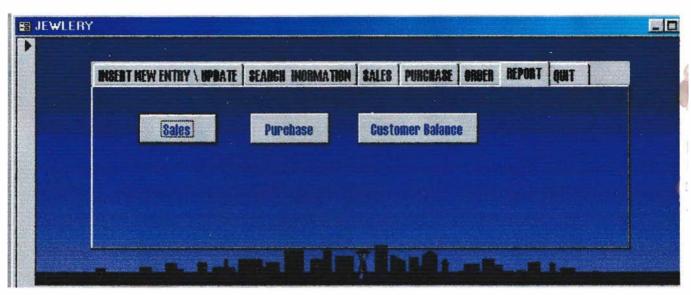
SALESAMAN: TABLE			- O X
Field Name	Data Type	Description	
Salesman ID	Text		
Salesman Name	Text		
Address	Memo		
Telephone	Number		

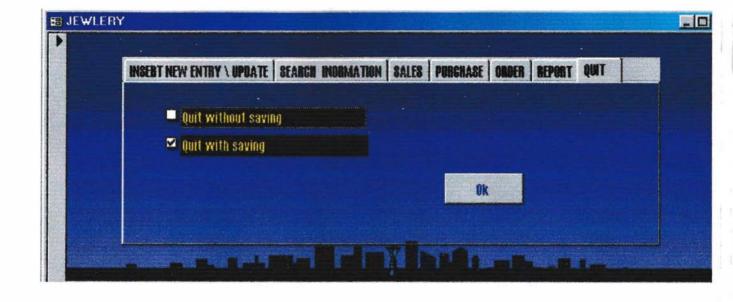
Main Screen



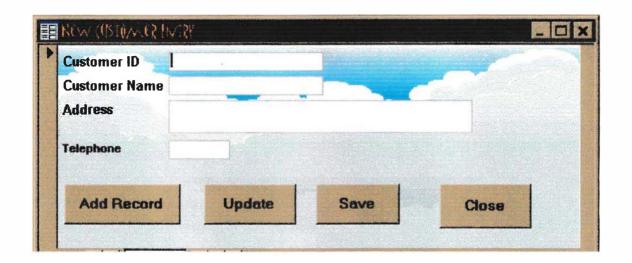




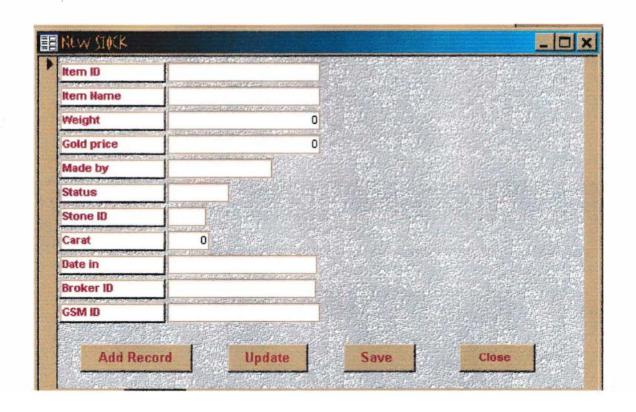




Forms

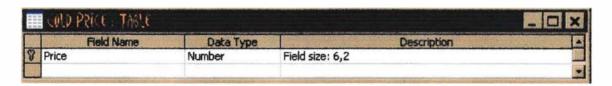


4		Data Type	Field Name	
	Field size:30, No Duplication, Not Null	Text	Customer ID	3
	Field size:50, Not Null	Text	Customer Name	
	Field size:100	Text	Address	
	Field size:Long Integer	Number	Telephone	
	Tiou Sectoring Integer	Natibel	Toophone	



STOCK: TABLE			_ O ×
Field Name	Data Type	Description	
Item ID	Text	Field size: 10, No Duplication, Not Null	
Item Name	Text	Field size:30, Duplication, Not Null	
Weight	Number	Field size:4,2	
Gold price	Number	Field size:8,2	
Made by	Text	Field size: 20,	
▶ Status	Text	Field size:10,	The state of the s
Stone ID	Text	Field size:4, Duplication, Foreign key	
Carat	Number	Field size:2	
Date in	Date/Time	Field size:Long Date	
Date out	Date/Time	Field size:Long Date	
GSM ID	Text	Field size:10, Duplication, Foreign key	
Bro ID	Text	Field size:10, Duplication, Foreign key	7.0
Voucher No	Text	Field size: 10, Duplication, Foreign key	0.5
			9



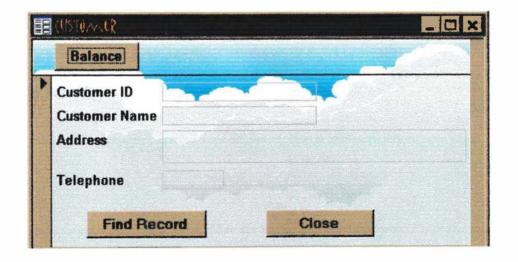


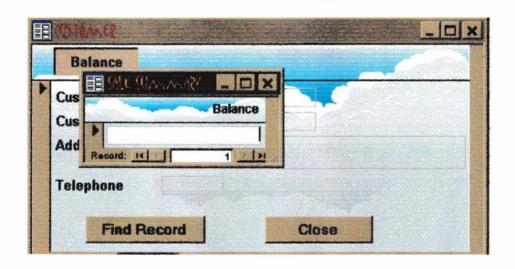


222	issue gold: Thele			
	Field Name	Data Type	Description	
8	GSM ID	Text	Field size: 10, Duplication, Not Null	
3	Issue date	Date/Time	Field size:Long Date, Duplication, Not Null	
	Issue gold	Number	Field size:4,2	



RECEIVE GOLD TABL	ť.		_ O X
Field Name	Data Type	Description	
GSM ID	Text	Field size:10, Duplication, Not Null	
Receive date	Date/Time	Field size:Long Date, Duplication, Not Null	
Receive gold	Number	Field size: 4.2	
	Field Name	GSM ID Text Receive date Date/Time	Field Name Data Type Description GSM ID Text Field size:10, Duplication, Not Null Receive date Date/Time Field size:Long Date, Duplication, Not Null





Field Name	Data Type	Description	
Voucher No	Text	Field size: 10, Duplication, Not Null	
Item ID	Text	Field size: 10, Duplication, Not Null	
Sale Cost	Number	Field size:8,2	
Salesman ID	Text	Field size:10, Duplication, Not Null	The state of the s
Customer ID	Text	Field size:10, Duplication,	
Weight	Number	Field size:4,2	

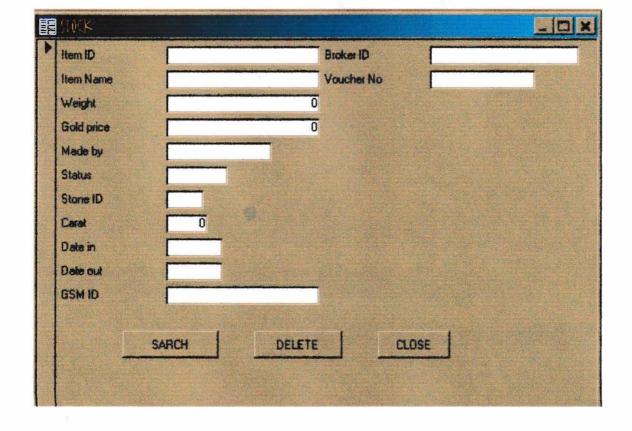
E.	Field Name	Data Type	Description	
1	Voucher No	Text	Field size: 10, No Duplication, Not Null	
6	Balance	Number	Field size:6,2	
3				
1				
10 M				

Field Name	Data Type	Description	
Customer ID	Text	Field size: 10, No Duplication, Not Null	
Customer Name	Text	Field size:50, Not Null	
Address	Text	Field size:100	
Telephone	Number	Field size:Long Integer	
		The state of the s	

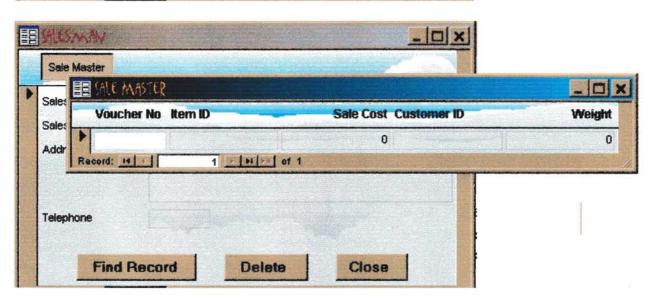


Field Name	Data Type	Description
o ID	Text	Field size: 10, No Duplication, Not Null
o Name	Text	Field size:50, Duplication, Not Null
idress	Text	Field size:100
lephone	Number	Field size:Long Integer
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Field Name	Data Type	Description	
Item ID	Text	Field size:10, No Duplication, Not Null	
Item Name	Text	Field size:30, Duplication, Not Null	
Weight	Number	Field size:4,2	
Gold price	Number	Field size:8,2	
Made by	Text	Field size:20,	
Status	Text	Field size:10,	
Stone ID	Text	Field size:4, Duplication, Foreign key	
Carat	Number	Field size:2	
Date in	Date/Time	Field size:Long Date	
Date out	Date/Time	Field size:Long Date	
GSM ID	Text	Field size:10, Duplication, Foreign key	
Bro ID	Text	Field size:10, Duplication, Foreign key	
Voucher No	Text	Field size:10, Duplication, Foreign key	
4			

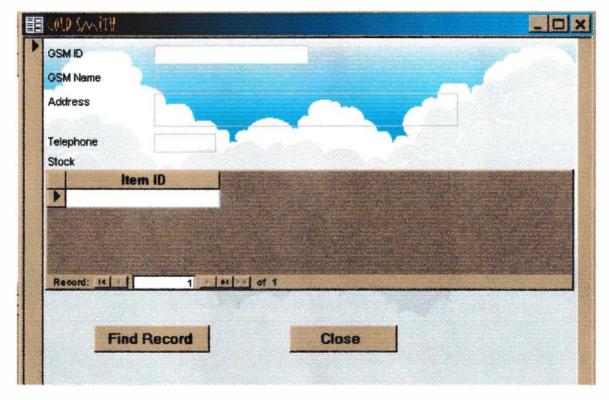


Field Name	Data Type	Description	
Item ID	Text	Field size: 10, No Duplication, Not Null	
Item Name	Text	Field size:30, Duplication, Not Null	
Weight	Number	Field size:4,2	
Gold price	Number	Field size:8,2	
Made by	Text	Field size: 20,	
Status	Text	Field size:10,	
Stone ID	Text	Field size:4, Duplication, Foreign key	
Carat	Number	Field size:2	
Date in	Date/Time	Field size:Long Date	
Date out	Date/Time	Field size:Long Date	
GSM ID	Text	Field size: 10, Duplication, Foreign key	
Bro ID	Text	Field size:10, Duplication, Foreign key	
Youcher No	Text	Field size: 10, Duplication, Foreign key	



	Field Name	Data Type	Description	
7	/oucher No	Text	Field size: 10, Duplication, Not Null	
I	item ID	Text	Field size: 10, Duplication, Not Null	
9	Sale Cost	Number	Field size:8,2	
9	Salesman ID	Text	Field size:10, Duplication, Not Null	
1	Customer ID	Text	Field size: 10, Duplication,	
٧	Weight	Number	Field size:4,2	
3				

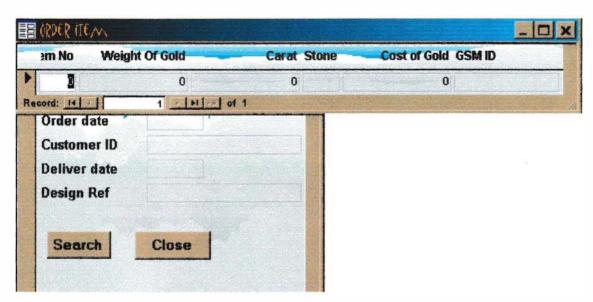
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Field Name	Data Type	Description	
Salesman ID	Text		
Salesman Name	Text		
Address	Memo		
Telephone	Number		



	Field Name	Data Type	Description	
G	ISM ID	Text .	Field size: 10, No Duplication, Not Null	
G	SM Name	Text	Field size:50, Duplication, Not Null	
A	ddress	Text	Field size:100	
T	elephone	Number	Field size:Long Intger	
3				

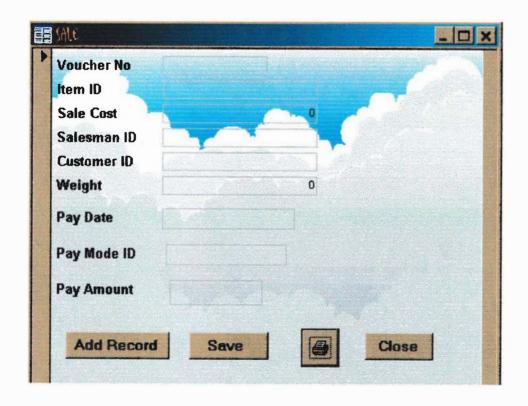
. Field Name	Data Type	Description • '	
Item ID	Text	Field size: 10, No Duplication, Not Null .	1
Item Name	Text	Field size:30, Duplication, Not Null	
Weight	Number	Field size:4,2	The state of the s
Gold price	Number	Field size:8,2	
Made by	Text	Field size:20,	
Status	Text	Field size:10,	
Stone ID	Text	Field size:4, Duplication, Foreign key	
Carat	Number	Field size:2	
Date in	Date/Time	Field size:Long Date	
Date out	Date/Time	Field size:Long Date	
GSM ID	Text	Field size:10, Duplication, Foreign key	
Bro ID	Text	Field size:10, Duplication, Foreign key	
Voucher No	Text	Field size:10, Duplication, Foreign key	
			15





	Field Name	Data Type	Description	
3	Order Voucher No	Text	Field size: 10, No Duplication, Not Null	
	Order date	Date/Time	Field size:Long Date, Duplication, Not Null	
1	Customer ID	Text	Field size: 10, Duplication, Not Null, Foreign Key	
	Deliver date	Date/Time	Field size:Long Date, Duplication, Not Null	
	Design Ref	Text	Field size:50	
1				

	ORDER TELMS: TABLE				
	Field Name	Data Type	Description		
8	Voucher No	Text	Field size:10, Duplication, Foreign key, Not Null		
3	Item No	Number	Field size:10, Duplication, Foreign key, Not Nufl		
	Weight Of Gold	Number	Field size:4,2		
100	Carat	Number	Field size:2		
	Stone ID	Text	Field size:4, Duplication, Foreign key		
2010	Cost of Gold	Number	Field size:8,2		
	GSM ID	Text	Fi Id size:10, Duplication, Foreign key, Not Null	1	



SALE MASTER: TABLE			
Field Name	Data Type	Description	
Voucher No	Text	Field size: 10, Duplication, Not Null	
Item ID	Text	Field size: 10, Duplication, Not Null	
Sale Cost	Number	Field size:8,2	
Salesman ID	Text	Field size:10, Duplication, Not Null	
Customer ID	Text	Field size:10, Duplication,	
Weight	Number	Field size:4,2	

Field Name	Data Type	Description	
Voucher No	Text	Field size:10, Duplication, Not Null	
Pay date	Date/Time	Field size:Long Date, Duplication, Not Null	
Pay Mode ID	Text	Field size:2, Duplication, Not Null	
Pay Amount	Number	Field size:8,2	

Sale Summary

Vo. No. Balance Sale Cost Salesman Customer Weight Item Carat Date out Stone Name





Field Name	Data Type	Description	
Voucher No	Text	Field size: 10, Duplication, Not Null	and the second
Item ID	Text	Field size: 10, Duplication, Not Null	
Sale Cost	Number	Field size:8,2	
Salesman ID	Text	Field size: 10, Duplication, Not Null	
Customer ID	Text	Field size:10, Duplication,	
Weight	Number	Field size:4,2	

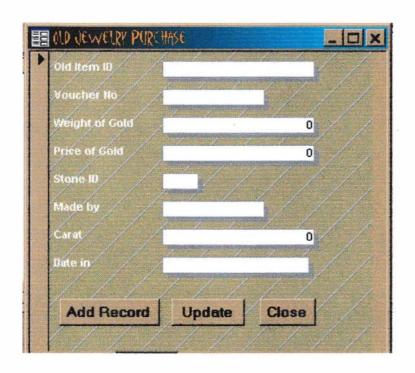
1	Field Name	Data Type	Description	All and the second
3	Voucher No	Text	Field size:10, Duplication, Not Null	
1	Pay date	Date/Time	Field size:Long Date, Duplication, Not Null	
100	Pay Mode ID	Text	Field size:2, Duplication, Not Null	
1	Pay Amount	Number	Field size:8,2	
Þ	The state of the s			

Field Name	Data Type	Description	
Voucher No	Text	Field size: 10, No Duplication, Not Null	
Balance	Number	Field size:6,2	
			1
		100	

Sale Record

Voucher Item ID Sale Cost Salesman ID Customer ID Weight date Pay Mode ID Pay Amount

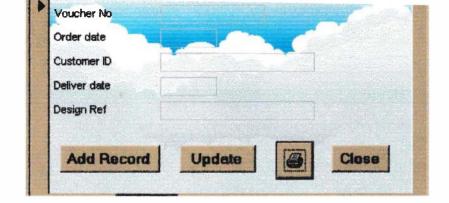
Friday, March 31, 2000



	Field Name	Data Type	Description	
3	Old Item ID	Text	Field size: 10, No Duplication, Not Null	
	Voucher No	Text	Field size:10, Duplication,	
To the	Weight of Gold	Number	Field size:4,2	
	Price of Gold	Number	Field size:8,2	
100	Stone ID	Text	Field size: 4, Duplication, Foreign key	
	Made by	Text	Field size:20,	
1	Carat	Number	Field size:2,	
	Date in	Date/Time	Field size:Long Date	
-	Date out	Date/Time	Field size:Long Date	



	Field Name	Data Type	Description	E
8	Old Item ID	Text	Field size:10, No Duplication, Not Null	
	Voucher No	Text	Field size: 10, Duplication,	
OHY S	Weight of Gold	Number	Field size:4,2	
	Price of Gold	Number	Field size:8,2	
	Stone ID	Text	Field size: 4, Duplication, Foreign key	
	Made by	Text	Field size: 20,	
	Carat	Number	Field size: 2,	
	Date in	Date/Time	Field size:Long Date	
100	Date out	Date/Time	Field size:Long Date	



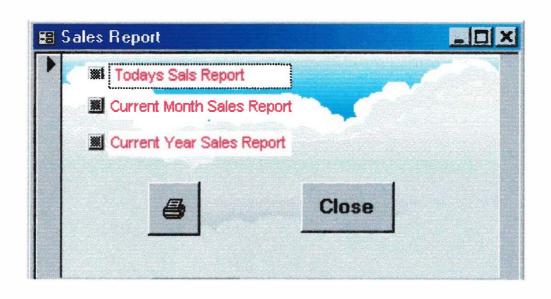
	ORDER HEAVY TABLE				
	Field Name	Data Type	Description		
3	Youcher No	Text	Field size: 10, Duplication, Foreign key, Not Null		
3	Item No	Number	Field size: 10, Duplication, Foreign key, Not Null	1000	
100	Weight Of Gold	Number	Field size:4,2		
	Carat	Number	Field size:2	TO STATE OF	
	Stone ID	Text	Field size:4, Duplication, Foreign key		
	Cost of Gold	Number	Field size:8,2		
1	GSM ID	Text	Field size: 10, Duplication, Foreign key, Not Null		

Voucher No

Deliver date Design Ref

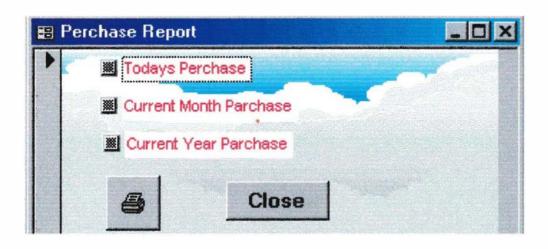
Friday, March 31, 2000

Puge 1 of 1



Sale Record

Voucher Item ID Sale Cost Salesman ID Customer ID Weight date Pay Mode ID Pay Amount



Old Jewelry Purchase

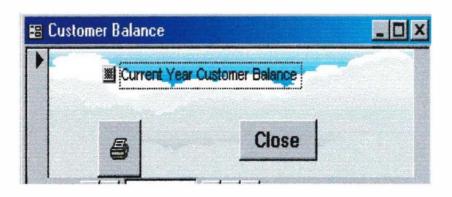
Old Item ID Vo. No Weight Price Stone ID Made by

Carat

Date in

Date out

Friday, March 31, 2000



Customer

Customer ID Customer Name Address Telephone Balance

Conclusion:

The jewelry shop experienced so many problems with the previous manual system. Keeping those problems in mind, the new information system is designed. It will eliminate all apparent errors and difficulties and it will also have the flexibility to update over time that so many softwares do not have. The new system currently only lacks the option of accounting and gold purchase. But this system has the flexibility to add these two options if the shop finds it very necessary for them. Besides, if the shop want to have business in a chain, they can use the software to get support from network. It can be used to create web page and it can also be used to carry out E-COMMERCE.

According to our view, this new proposed system will go a long way to further the business of the jewelry shop. We hope all the best for the people of that shop and also for the business.

Development Platform:

- 1. Windows 95, 98.
- 2. Visual Basic connected with MS Access.
- 3. MS Access.
- 4. Hardware Pentium II IBM compatible.

