



American International University- Bangladesh

CSC 2209: Object Oriented Programming 1 (JAVA)

CO1 Evaluation Project Summary Report Summer 18-19

Group No: K03
Project Title: BUSINESS TOOL

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BUSINESS TOOL

Introduction:

Now a days it is very difficult to run a business without a software. What ever the business is, it requires to manage employees, manage products, manage inventories, manage sales and sales history, etc. Our project is on this field. Our project will help to manage employees, products, sales and sales history of a particular business.

User Category:

There are three types of Users here. They are:

- ADMIN
- MANAGER
- SALESMAN

Feature List:

In this project the “ADMIN” has the following features:

- Manage Employees List (Search, Insert, Update, Delete)
- Manage Products List (Search, Insert, Update, Delete)
- Explore Sells History (Search)
- Change Password

In this project the “MANAGER” has the following features:

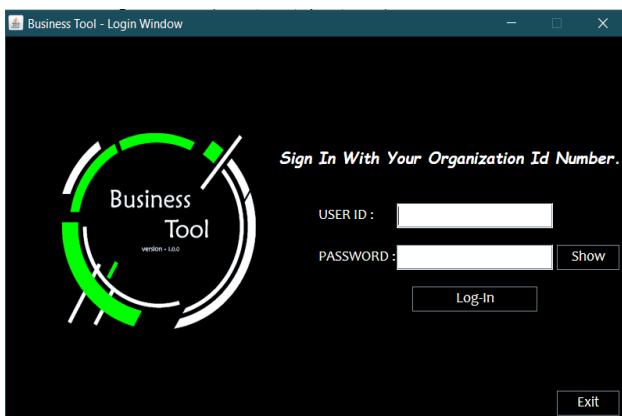
- Explore Employees List (Search)
- Manage Products List (Search, Insert, Update, Delete)
- Explore Sells History (Search)
- Change Password

In this project the “MANAGER” has the following features:

- Explore Employees List (Search)
- Explore Products List (Search)
- Sell Products (Insert)
- Change Password

GUI Description:

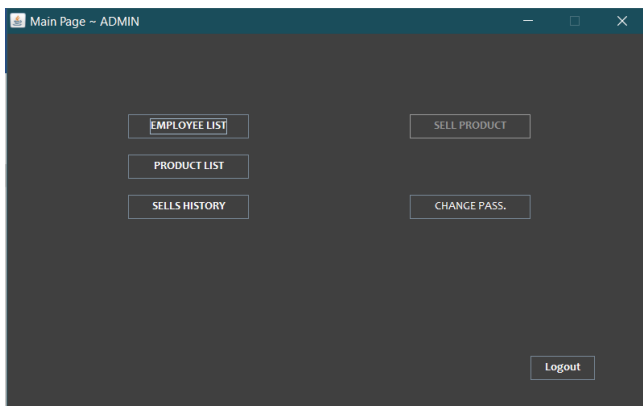
LOGIN GUI:



In Login frame all the employees will be able to login for their own account. By putting their Id and their password and by checking their accessibility they can login.

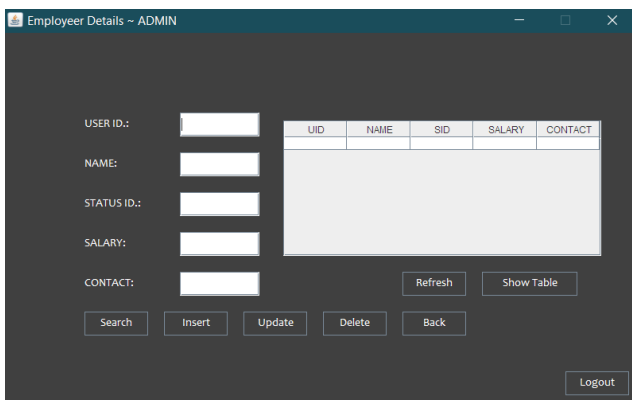
BUSINESS TOOL

HOME GUI:



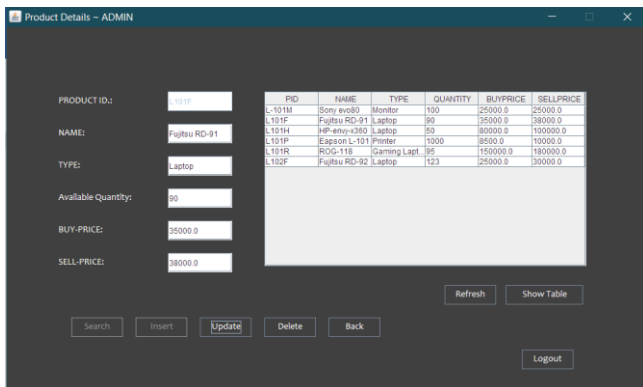
In main frame there are 5 Options. They are employee list, product list, sells history, sell product and password change. All the employees have access to these options by their designation. And everyone can logout from that page.

EMPLOYEE DETAILS:



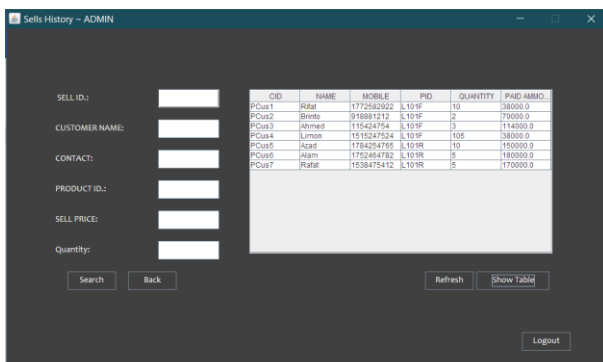
In Employee details every employee can check their details and they can update, delete and search their details. Only admin can insert a new employee to the database. Every employee can logout anytime from here.

PRODUCT LIST:



In Product details every employee can check the product details and they can update, delete and search product details. Every employee (ADMIN & MANAGER) can insert a new product to the database. Every employee can logout anytime from here.

SELLS HISTORY:



In Sells history that will show the updated situation of all the product if sold. That will add how much quantity has been sold. And that will also show the total amount of quantity sold. And only admin and manager have access to Sells History.

SELL PRODUCT:

BUSINESS TOOL

Sell Product - SALESMAN

SELL ID:

CUSTOMER NAME:

CONTACT NO.:

PRODUCT ID:

QUANTITY:

PRICE:

PID	NAME	TYPE	QUANTITY	BUYPRICE	SELLPRICE
L-101M	Some avail0	Monitor	1000	250000.0	250000.0
L-101F	Fujitsu RD-91	Laptop	90	340000.0	340000.0
L-101H	HP-envy-x360	Laptop	90	800000.0	1000000.0
L-101P	Epson L-150	Printer	10000	85000.0	100000.0
L-101R	ROG-116	Gaming Lapt	95	1600000.0	1800000.0
L-102F	Fujitsu RD-92	Laptop	1200	250000.0	300000.0

Only salesman can access to Sell Product to sell products. And all the sales and total calculated amount will be added to Sells History. For each sell, the quantity of each product will be updated.

CHANGE PASSWORD:

Change Password

USER ID:

Old Password:

New Password:

Confirm Password:

Every user can update or change their own password.

Database Table Description:

Server: 127.0.0.1 » Database: k3

Structure SQL Search Query Export Import Operations Privileges Routines

Filters

Containing the word:

Table	Action	Rows	Type	Collation	Size	Overhead
employee		12	InnoDB	latin1_swedish_ci	32 KiB	-
login		12	InnoDB	latin1_swedish_ci	16 KiB	-
product		6	InnoDB	latin1_swedish_ci	16 KiB	-
sales		7	InnoDB	latin1_swedish_ci	16 KiB	-
status		3	InnoDB	latin1_swedish_ci	16 KiB	-
5 tables	Sum	40	InnoDB	latin1_swedish_ci	96 KiB	0 B

Server: 127.0.0.1 » Database: k3 » Table: employee

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	UID	varchar(10)	latin1_swedish_ci		No	None			
2	NAME	varchar(50)	latin1_swedish_ci		No	None			
3	SID	int(2)			No	None			
4	SALARY	double(10,2)			No	None			
5	CONTACT	int(11)			No	None			

Check all With selected Browse Change Drop Primary Unique Index Add to central columns Remove from central columns

Print Propose table structure Track table Move columns Improve table structure

Add 1 column(s) after CONTACT Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
	PRIMARY	BTREE	Yes	No	UID	12	A	No	
	CONTACT	BTREE	Yes	No	CONTACT	12	A	No	

Server: 127.0.0.1 » Database: k3 » Table: login

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	UID	varchar(10)	latin1_swedish_ci		No	None			
2	SID	int(2)			No	None			
3	PASS	varchar(12)	latin1_swedish_ci		No	None			

Check all With selected Browse Change Drop Primary Unique Index Add to central columns Remove from central columns

Print Propose table structure Track table Move columns Improve table structure

Add 1 column(s) after PASS Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
	PRIMARY	BTREE	Yes	No	UID	12	A	No	

Server: 127.0.0.1 » Database: k3 » Table: product

Table structure Relation view

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	PID	varchar(10)	latin1_swedish_ci		No	None			
2	NAME	varchar(50)	latin1_swedish_ci		No	None			
3	TYPE	varchar(50)	latin1_swedish_ci		No	None			
4	QUANTITY	int(7)			No	None			
5	BUYPRICE	double(8,2)			No	None			
6	SELLPRICE	double(8,2)			No	None			

Check all With selected Browse Change Drop Primary Unique Index Add to central columns Remove from central columns

Print Propose table structure Track table Move columns Improve table structure

Add 1 column(s) after SELLPRICE Go

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
	PRIMARY	BTREE	Yes	No	PID	6	A	No	

BUSINESS TOOL

Table structure

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	CID	varchar(10)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext Distinct values More
2	NAME	varchar(50)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext Distinct values More
3	CONTACT	int(11)			No	None			Change Drop Primary Unique Index Spatial Fulltext Distinct values More
4	PID	varchar(10)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext Distinct values More
5	QUANTITY	int(7)			No	None			Change Drop Primary Unique Index Spatial Fulltext Distinct values More
6	SELLPRICE	double(8,2)			No	None			Change Drop Primary Unique Index Spatial Fulltext Distinct values More

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit	PRIMARY	BTREE	Yes	No	CID	7	A	No	

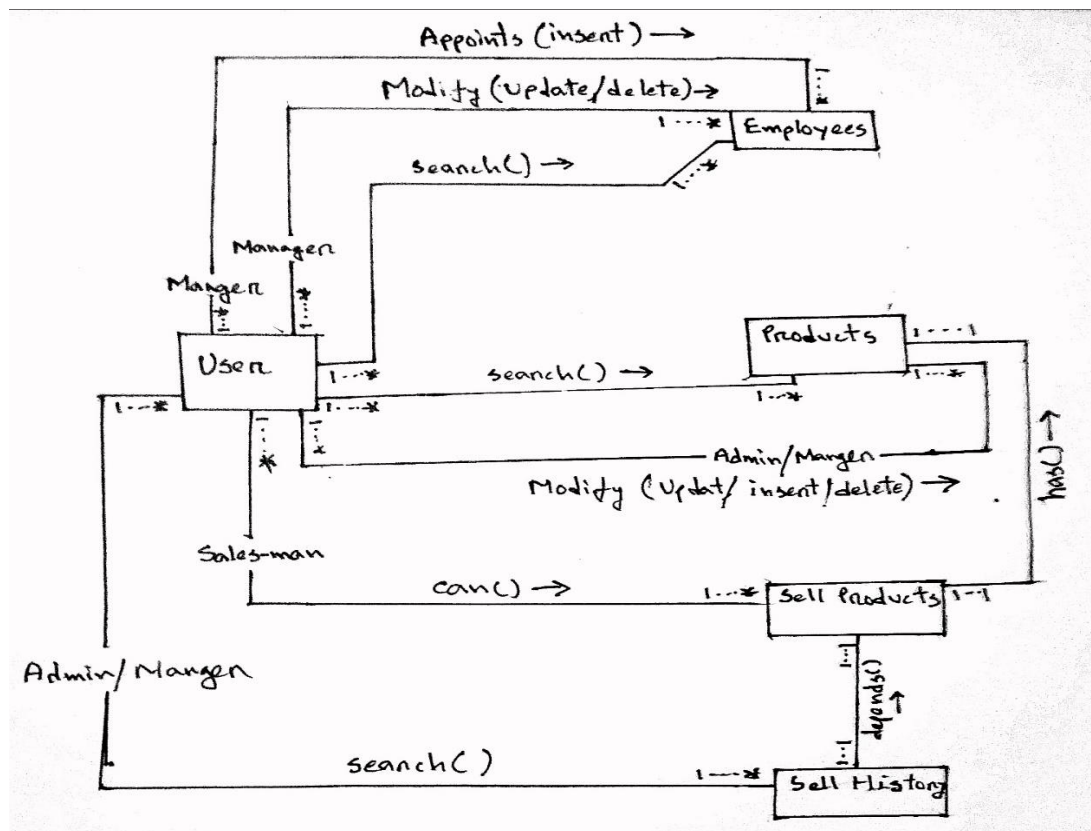
Table structure

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	SID	int(2)			No	None			Change Drop Primary Unique Index Spatial Fulltext Distinct values More
2	DESIGNATION	varchar(50)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial Fulltext Distinct values More

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit	PRIMARY	BTREE	Yes	No	SID	2	A	No	

Class Diagram:



Tools Used:

To develop this project we have used the following:

- NOTEPAD ++
- JDK 8
- XAMPP v3.2.2
- PHOTOSHOP ILLUSTRATOR

BUSINESS TOOL

OOP and Java Concepts Used:

- Abstraction: has been used on interface classes (interfaces folder). All the methods of that classes are abstract and has been over-ride in repository classes (repository folder).
- Inheritance: has been used in frame classes (GUI). All the frame classes (frames folder) inherits JFrame class.
- Polymorphisms: has been used on some interfaces (method over-loading). Methods of repository over-ride the methods of interfaces.
- Encapsulation: in entity classes each attribute has been bind with methods. So, in entity classes we have been used encapsulation.
- Array-List: Array-List has been used in searching products and employees.
- Interface: has been used in interface classes (like ILoginRepo, IEmployeeRepo, etc).
- Random Number: has been used to generate password for each user insertion.
- Association: has been used in entity classes.

Impact of this Project:

Now a days it is very difficult to run a business without a software. What ever the business is, it requires to manage employees, manage products, manage inventories, manage sales and sales history, etc. Our project is on this field. Our project will help to manage employees, products, sales and sales history of a particular business.

Limitations and Possible Future Improvements:

Our project is not perfect. As it can not calculates total profit of a business. If any one wants to work with our project they should work on those calculation parts.