

Woldia University Student Launch System

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***Acknowledgement***

*First of all we would like to thank my Teacher Instructor Daniel Tefera for his supports and the entire group member for their initiation.*

***Introduction***

*This project is mainly designed for woldia university student launch system.as we know an old information management system is so bored and resource intensive. Most people in the past store data’s in the form of paper and card. This method takes so many things human power, resources, also we can’t retrieve the data fast when we want and other things.so to solve those problems we have to design database.*

***CHAPTER -1***

***1.1 objectives***

***1.1.1 General objective***

*The general objective of this project is to develop a database in titled in woldia university student lounge system.to make it simple and efficient also to facilitate the old process.*

***1.1.2 Specific objective***

* *specific objective of the project is as follows:*
* *Allow the manager to register the customer information especially non cafe student customer.*
* *Allow the manager to register the employee’s information.*
* *Allow the manager to register the product information.*
* *Allow the cashier to calculate the annual income and outcome of the lounge.*
* *Allow the customer and employee to enter data.*
* *Allow the manager to generate reports when wants.*
* *Allow the customer to have simple access and cost saving manner.*
* *Allow the manager to order the supplier.*

* 1. ***purpose of the system***
* *the main purpose of this system is to replace the old manual lounge system by a new database system*
* *To give special works for customer, employees also for the manager.*
* *To decrease the overall resource that is needed by customer, manager and also employees. Like time, money ….*
  1. ***scope of the system***
* *Allow the employee to enter data.*
* *Allow the manager to generate reports.*
* *Allow the customer to record data’s what they eat per day especially for non-cafe students.*
* *Control unnecessary deletion of data.*
* *The system support user account management.*
* *The system prevent from unnecessary deletion of data from the system.*
* *The user can search from the system by their unique primary key.*
  1. ***out of the scope***
* *This system doesn’t allow the user or the customer to make order at distant area because the system doesn’t have network programing.*
* *This system doesn’t allow the manager to pay his annual tax online.*
* *This system does not allow the employee to receive their salary online.*
* *This system does not allow the manager to order the supplier to get his raw materials in online.*
* *It takes time to train the user of this system because this is unfamiliar for the user that who is illiterate people.*
* *The user cannot change the password of another account*
  1. ***problems of the current system***
* *The systems do not allow to access for illiterate employee, customer and manager.*
* *Also difficult to use for beginners.*
* *Difficult for troubleshooting when problem is occur.*
* *Difficult to trouble shoot when the error is occurred simply it needs the skilled person to trouble shoot.*
* *Difficulties to cross check, to order, the availability of the product in the system.*
  1. ***proposed system***

*The new woldia university student launch system make the process efficient, accurate and user friendly generally solve the problem of the existing system by:*

* *Automating the system(WDULaunch system)*
* *Providing easy communication between customer and employee also between employee and supplier.*
* *Generating reports for the authorized user when needed.*
  1. ***Feasibility analysis***
     1. ***Budget***

*For the woldia university student launch management system we spened the following materials and their costs*

|  |  |  |  |
| --- | --- | --- | --- |
| *Number* | *Description* | *price* | *Total* |
| *1* | *Desktop computer* | *10,000* | *10,000* |
| *2* | *HP Laptopcomputer* | *12,000* | *12,000* |
| *3* | *Mysql server* | *100* | *100* |
| *4* |  |  |  |
| *5* |  |  |  |
|  | *Total* |  | *22,100* |

*Table 1.1*

* + 1. ***Schedule***

|  |  |  |
| --- | --- | --- |
| ***Project phase*** | ***Project start date*** | ***Project end date*** |
| *Phase 1: Project initiation* | *March 1,2009* | *March 5,2009* |
| *Phase 2: Conceptual and logical database design* | *March 5,2009* | *March 26,2009* |
| *Phase 3: Physical database design/implementation* | *April 1,2009* | *April 10,2009* |
| *Phase 4: Application develop and demonstration* | *April 15,2009* | *April 28,2009* |
| *Phase 5: Peer to peer review* | *Jun 9,2009* | *May 10,2009* |
| *Project submission date* | | *Jun 10,2009* |

*Table 1.2*

* 1. ***System requirement***
     1. ***functional requirement***
* *The system allow cashier to generate report*
* *The system allow the manager to enter username and password*
  + 1. ***Hardware and software requirements***
* ***Hardware requirement***
* *Pc, Pentium 4, 4GB RAM, 2.0 GHZ and above, 400 GB Hard Disk and above.*
* ***Software Requirements***
* *Windows 8 and above*
* *SQL 2005*
* *Anti-virus like smadave,Avast*
  1. ***methodology***

*The methodology that we use for this project is:*

* *Observation*
* *Interview*

***CHAPTER 2***

1. ***Database design***

***2.1 conceptual designs***

***2.1.1 Entity identification and their description***

*Woldia university student launch management systems have the following entities.*

1. *Employee: employee is the major actors for this system they have different characteristics (attributes).*
2. *Customer: customer has a vital role in this system also it have different characteristics (attributes).*
3. *Order: is another important entity in the system also it have different characteristics (attributes).*
4. *Supplier: is another important entity in the system that supplies raw materials and soft drinks to the launch.*
5. *Food: the major important entity in the system that is supplied to the customer is food and it has different type and characteristics (attributes).*

***2.1.2 Entity and their attributes***

*For the above entity they do have the following attributes:*

|  |  |
| --- | --- |
| *Entity* | *Corresponding attributed* |
| *Customer* | *FName* |
| *LName* |
| *Sex* |
| *Cust Age* |
| *P code* |
| *Cust ID* |
| *Cust tel* |
| *Cust city* |

*Table 2.1*

|  |  |
| --- | --- |
| *Entity* | *Corresponding attributes* |
| *Order* | *Order date* |
| *Payment type* |
| *Paid date* |
| *Order quality* |
| *Order quantity* |
|  |

*Table 2.2*

|  |  |
| --- | --- |
| *Entity* | *Corresponding attributes* |
| *Food* | *Food name* |
| *Food number* |
| *Quantity* |
| *Price* |
| *Product code* |
| *Soft drink* |
| *Hot drink* |
| *Breakfast* |
| *Dinner* |
| *Lunch* |

*Table 2.3*

|  |  |
| --- | --- |
| *Entity* | *Corresponding attributes* |
| *Employee* | *FName* |
| *LName* |
| *Emp ID* |
| *Salary* |
| *Emp position* |
| *Emp tel* |
| *BOD* |
| *Sex* |
| *Hire Date* |
| *Experience* |
| *Quallification* |
| *Emp City* |
| *Emp age* |
|  |

*Table 2.4*

|  |  |
| --- | --- |
| *Entity* | *Corresponding attributes* |
| *Supplier* | *Sup tel* |
| *Sup city* |
| *Supplier name* |
| *Supplier city* |
| *Supplier no* |

*Table 2.5*

***2.1.3 Relationship identification and their description***

* *Relationship that we use in the system is listed below with their identification.*

1. *Supplied for:-This relationship is between Customer and Food.it has one to many relationship.*
2. *Make: -This relationship is between Customer and Order.it has one to many relationship one order can be made by only one Customer but one Customer can make many Order.*
3. *Receive:-This relationship is between Employee and Order. An employee receives an order. It has one to many relationship one order can be received by only one employee but employee can receive many orders.*
4. *Prepared for:-This relationship is Food and Customer. It has many to many relationship with many food can be prepared for many customer.*
5. *Receive order from:-This relationship is between Supplier and Employee. It has many to many relationships.*

***ERDiagram***



***Mapping the ERDiagram***



* ***Unnormalized table***

***Customer***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ***Cust Id*** | ***FName*** | ***LName*** | ***Cust tel*** | ***Sex*** | ***Cust city*** | ***Cust age*** | ***P code*** |
| *001* | *Daniel* | *Tefera* | *0978548765*  *0945214578* | *M* | *DB* | *21* | *Sd* |
| *002* | *Biruk* | *Debebe* | *0910204519*  *0932305176* | *M* | *Dessie* | *45* | *Hd* |
| *003* | *Beset* | *Mitiku* | *0905659874*  *0948981965* | *M* | *Gonder* | *78* | *L* |
| *004* | *Birhan* | *Solomon* | *0911550845*  *0945983312* | *M* | *DB* | *21* | *B* |
| *005* | *Deguale* | *Kelemu* | *0933268874*  *0906215489* | *M* | *Gojam* | *22* | *B* |
| *006* | *Biniam* | *Bekele* | *0911235489*  *0922365897* | *M* | *Solomalia* | *54* | *d* |

Table 2.6

***First Normal Form(1NF)***

***It needs first normalization because it has Multi valued cells.***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Cust ID** | ***FName*** | **LName** | **Cust te*l*** | **Sex** | **Cust City** | **Cust Age** | **P code** |
| 001 | Daniel | Tefera | *0978548765* | M | DB | 21 | Sd |
| 001 | Daniel | Tefera | *0945214578* | M | DB | 21 | Sd |
| 002 | Biruk | Debebe | *0910204519* | M | Dessie | 45 | Hd |
| 002 | Biruk | Debebe | *0932305176* | M | Dessie | 45 | Hd |
| 003 | Beset | Mitiku | *0905659874* | M | Gonder | 78 | l |
| 003 | Beset | Mitiku | *0948981965* | M | Gonder | 78 | L |
| 004 | Birhan | Solomon | *0911550845* | M | DB | 21 | B |
| 004 | Birhan | Solomon | *0945983312* | M | DB | 21 | B |
| 005 | Deguale | Kelemu | *0933268874* | M | Gojam | 22 | B |
| 005 | Deguale | Kelemu | *0906215489* | M | Gojam | 22 | B |
| 006 | Biniam | Bekele | *0911235489* | M | Somalia | 54 | D |
| 006 | Biniam | Bekele | *0922365897* | M | Somalia | 54 | D |

Table 2.7

We can not go further because the table 2.6 has no second normal form(2NF) and Third normal form(3NF).It simply stop on the first normal form(1NF).

***CHAPTER 3***

***Physical database design of the project***

***Data dictionary***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Customer*** | | | | |
| ***Column*** | ***Data definition*** | ***Data type*** | ***Length*** | ***Allow null*** |
| *FName* | *Customer First Name* | *Char* | *20* | *No* |
| *LName* | *Customer Last Name* | *Char* | *20* | *No* |
| *Sex* | *Customer sex* | *Char* | *6* | *No* |
| *Cust age* | *Customer age* | *Int* | *2* | *No* |
| *P code* | *Product code* | *VarChar* | *20* | *No* |
| *Cust ID* | *Customer Identification* | *VarChar* | *15* | *No, Primary key* |
| *Cust tel* | *Customer Telephone number* | *Int* | *10* | *No* |
| *Cust city* | *Customer City* | *Char* | *20* | *No* |

*Table 3.1*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Order*** | | | | |
| ***Column*** | ***Data defination*** | ***Data type*** | ***Length*** | ***Allow null*** |
| *Ord date* | *Order date* | *Varchar* | *10* | *No* |
| *Pay type* | *Payment type* | *Char* | *6* | *No* |
| *Paid date* | *Order paid date* | *Varchar* | *10* | *No* |
| *Ord qual* | *Order quality* | *Char* | *6* | *No* |
| *Ord quan* | *Order quantity* | *Int* | *20* | *No* |
| *Ord no* | *Order number* | *Int* | *20* | *No, primary key* |

*Table 3.2*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Supplier*** | | | | |
| ***Column*** | ***Data definition*** | ***Data type*** | ***length*** | ***Allow null*** |
| *Sup no* | *Supplier number* | *Int* | *10* | *No, primary key* |
| *Sup name* | *Supplier name* | *Char* | *20* | *No* |
| *Sup city* | *Supplier city* | *Char* | *15* | *No* |
| *Email* | *Supplier email* | *Varchar* | *20* | *No* |
| *Sup tel* | *Supplier tel* | *Int* | *10* | *No* |

*Table 3.3*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Employee*** | | | | |
| ***Column*** | ***Data definition*** | ***Data type*** | ***Length*** | ***Allow null*** |
| *FName* | *Employee first name* | *Char* | *15* | *No* |
| *LName* | *Employee last name* | *Char* | *15* | *No* |
| *Emp ID* | *Employee identification* | *VarChar* | *10* | *No,primary key* |
| *Salary* | *Employee Salary* | *Int* | *8* | *No* |
| *Emp pos* | *Employee Position* | *Char* | *15* | *No* |
| *Emp tel* | *Employee telephone* | *Int* | *10* | *No* |
| *BOD* | *Birth of Date* | *VarChar* | *10* | *No* |
| *Sex* | *Employee sex* | *Char* | *6* | *No* |
| *Hire Date* | *Employee hire date* | *VarChar* | *10* | *No* |
| *Experience* | *Employee experience* | *Int* | *10* | *No* |
| *Quali* | *Employee qualification* | *Varchar* | *15* | *No* |
| *Emp city* | *Employee city* | *Char* | *10* | *No* |
| *Emp Age* | *Employee Age* | *Int* | *2* | *No* |
| *Sup no* | *Supplier number* | *Int* | *10* | *No, foreign key* |

*Table 3.4*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Food*** | | | | |
| ***Column*** | ***Data definition*** | ***Data type*** | ***Length*** | ***Allow null*** |
| *FoName* | *Food name* | *Char* | *10* | *No* |
| *Fo\_no* | *Food number* | *Int* | *10* | *No* |
| *Quan* | *Food quantity* | *Int* | *10* | *No* |
| *Price* | *Food price* | *Int* | *10* | *No* |
| *Pcode* | *Product code* | *Varchar* | *10* | *No, primary key* |
| *Dinner* | *Food dinner* | *Char* | *10* | *No* |
| *S drink* | *Soft drink* | *Char* | *15* | *No* |
| *H drink* | *Hot drink* | *Char* | *15* | *No* |
| *Breakfast* | *Food breakfast* | *Char* | *15* | *No* |
| *Lunch* | *Food lunch* | *Char* | *15* | *No* |

*Table 3.5*

***CHAPTER 4***

***4. Implementation and support***

***4.1 Data definition language(DDL)***

create database WDULaunchSystem;

use WDULaunchSystem;

create table Customer(

FName char(20) not null,

LName char(20) not null,

Sex char(6) not null,

Cust\_age int not null,

Pcode Varchar(20) not null,

CustID Varchar(20) not null primary key,

Custel int not null,

CustCity Char(20) not null

);

Create table Orderr(

Orderdate Varchar(20) not null,

Paytype char(10) not null,

Paiddate varchar(15) not null,

Orderquality Char(10) not null,

Orderquantity int not null,

Orderno int not null primary key

);

create table Supplier(

Supno int primary key,

Supname Char(20) not null,

Supcity Char(20) not null,

Email VarChar(20) not null ,

Suptel int not null

);

create table Employee(

FName Char(20) not null,

LName Char(20) not null,

EmpID VarChar(25) not null primary key,

Salary int not null,

Empposition Char(20) not null,

Emptel int not null,

BOD VarChar(20) not null,

Sex Char(6) not null,

HireDate VarChar(20) not null,

Experience int not null,

Qualfication VarChar(20) not null,

Empcity Char(15) not null,

EmpAge int not null,

Supno int not null

);

Create table Food(

FoName Char(20) not null,

Fono int not null,

Quantity int not null,

price int not null,

PCode VarChar(25) not null primary key,

Dinner Char(15) not null,

Sdrink Char(15) not null,

Hdrink Char(15) not null,

Breakfast Char(15) not null,

Lunch Char(15) not null

);

**4.2 Data Manipulation Language(DML)**

insert into Customer values('Daniel','Tefera','Male',21,'mag','1699/08',0919319791,'DB');

insert into Customer values('Deguale','Kelemu','Male',27,'fan','1234/08',0987654532,'Gojam');

insert into Customer values('Beniam','Bekele','Male',23,'ko','3423/08',0989785645,'Dire');

insert into Customer values('Biruk','Debebe','Male',22,'fir','7856/08',0912321434,'Dessie');

insert into Customer values('Birhan','Solomon','Male',14,'ke','2233/07',0967564532,'DB');

insert into Customer values('Beset','Mitiku','Male',20,'kj','9989/08',0989764453,'Gonder');

insert into Customer values('Lidiya','Yitna','Female',22,'gt','5645/08',0932426543,'DS');

insert into Customer values('Kalkidan','Fikir','Female',23,'hy','7676/08',0911232123,'Wuchale');

insert into Customer values('Abere','Maru','Male',15,'se','3432/08',0943234312,'Gojam');

insert into Customer values('Yohanes','Tiruneh','Male',23,'din','0786/08',0987654321,'Wolo');

insert into Customer values('Rehaset','Tesfaye','Female',22,'fre','4543/08',0934231287,'Kobo');

insert into Customer values('Zewdw','Ayalew','Female',25,'frt','0303/07',0987676543,'Gonder');

insert into Customer values('Senait','Anteneh','Female',22,'der','1858/08',0912321265,'Woldia');

insert into Customer values('Mintamer','Liku','Female',23,'gtr','1898/08',0948771038,'Tilili');

insert into Customer values('Kidafte','Gebre','Female',24,'gtf','6765/08',0987675645,'Tigray');

insert into Customer values('Alem','Kebede','Female',23,'hyt','87987/09',0945432321,'DB');

insert into Customer values('Mitisha','Desale','Female',19,'gf','98778/09',0989876545,'DB');

insert into Customer values('Ayelech','Nigussie','Female',23,'fr','9989/009',0911223344,'DB');

insert into Customer values('Tefera','Teshome','Male',48,'trf','8888/02',0922353229,'AA');

insert into orderr values('23/12/08','Cash','21/09/09','High',50,1);

insert into orderr values('23/12/08','Check','21/09/09','High',43,2);

insert into orderr values('23/12/08','Cash','21/09/09','Low',22,3);

insert into orderr values('23/12/08','Check','21/09/09','High',33,4);

insert into orderr values('21/09/09','Cash','23/12/08','Medium',44,5);

insert into orderr values('21/09/09','Check','23/12/08','High',44,6);

insert into orderr values('21/09/09','Cash','23/12/08','High',55,7);

insert into orderr values('23/12/08','Check','21/09/09','Medium',66,8);

insert into orderr values('23/12/08','Cash','21/09/09','Low',77,9);

insert into orderr values('23/12/08','Check','21/09/09','High',77,10);

insert into orderr values('11/07/08','Check','23/12/08','Low',100,11);

insert into orderr values('21/09/09','Check','11/07/08','High',200,12);

insert into orderr values('21/09/09','Cash','11/07/08','High',250,13);

insert into Supplier values(1,'Awash','DB','Awash78@gmail.com',0954654322);

insert into Supplier values(2,'Tsegu','Woldia','Tsegu79@gmail.com',0987786765);

insert into Supplier values(3,'Alma','Dessie','Alma34@gmail.com',0922124323);

insert into Supplier values(4,'Awash','Dessie','Awash78@gmail.com',09343217653);

insert into Supplier values(5,'Tere','Woldia','Tere88@gmail.com',0987786765);

insert into Supplier values(6,'Tsegu','AA','Tse99@gmail.com',0945342321);

insert into Supplier values(7,'Tere','AA','Tere88@gmail.com',0987786765);

insert into Supplier values(8,'Awash','Woldia','Awash78@gmail.com',0988997766);

insert into Supplier values(9,'Tsegu','Dessie','Tsegu79@gmail.com',09343217653);

insert into Supplier values(10,'Tere','Dessie','Ter88@gmail.com',0987786765);

insert into Supplier values(11,'Alma','AA','Alma34@gmail.com',0922124323);

insert into Supplier values(12,'Tsegu','Woldia','Tsegu79@gmail.com',0945342321);

insert into Supplier values(13,'Awash','Woldia','Awash78@gmail.com',0987786765);

insert into Supplier values(14,'Tere','Awasa','Tere88@gmail.com',0987786765);

insert into Supplier values(15,'Tsegu','AA','Tsegu79@gmail.com',0988997766);

insert into Supplier values(16,'Tere','Woldia','Tere88@gmail.com',09343217653);

insert into Supplier values(17,'Alma','DB','Alma34@gmail.com',0987786765);

insert into Supplier values(18,'Tere','DB','Ter88@gmail.com',0987786765);

insert into Supplier values(19,'Tsegu','Bahirdar','Tseg78@gmail.com',0988997766);

insert into Supplier values(20,'Awash','Kobo','Awash998@gmail.com',0987786765);

insert into Supplier values(21,'Alma','AA','Alma34@gmail.com',0922124323);

insert into Supplier values(22,'Tsegu','Woldia','Tsegu79@gmail.com',0945342321);

insert into Supplier values(23,'Awash','Woldia','Awash78@gmail.com',0987786765);

insert into Supplier values(24,'Tere','Awasa','Tere88@gmail.com',0987786765);

insert into Supplier values(15,'Tsegu','AA','Tsegu79@gmail.com',0988997766);

insert into Supplier values(26,'Tere','Woldia','Tere88@gmail.com',09343217653);

insert into Supplier values(27,'Alma','DB','Alma34@gmail.com',0987786765);

insert into Supplier values(28,'Tere','DB','Ter88@gmail.com',0987786765);

insert into Supplier values(29,'Tsegu','Bahirdar','Tseg78@gmail.com',0988997766);

insert into Supplier values(30,'Awash','Kobo','Awash998@gmail.com',0987786765);

insert into Employee values('Daniel','Tefera','16654',30000,'DA',0989876556,'21/09/09','Male','25/11/20',5,'Msc','DB',25,1);

insert into Employee values('Tefera','Alemu','3431',20000,'Waiter',0934321232,'11/20/05','Male','21/09/09',4,'PHD','AA',23,2);

insert into Employee values('Alemu','Teddy','456345',40000,'Cashier',0923216545,'23/03/06','Male','23/03/06',3,'BAdegree','AA',23,3);

insert into Employee values('Tefera','Negash','76878',40987,'Tsidat',0934321232,'21/09/09','Male','21/09/09',0,'Msc','AA',44,4);

insert into Employee values('Teddy','Nibret','8954',54345,'Waiter',0988997766,'11/20/05','Male','09/09/09',0,'BAdegree','AA',66,5);

insert into Employee values('Daniel','Alemu','46575',7000,'Cashier',0934321232,'21/09/09','Male','21/09/09',0,'PHD','AA',55,6);

insert into Employee values('Alemu','Nigussie','75456',7898,'Waiter',0923216545,'09/09/09','Male','11/20/05',5,'Msc','AA',66,7);

insert into Employee values('Nibret','Lemma','46443',9000,'Tsidat',0934321232,'21/09/09','Male','21/09/09',8,'BAdegree','Awasa',65,8);

insert into Employee values('Daniel','Teddy','234',10000,'Tsidat',0998765643,'11/20/05','Male','09/09/09',5,'PHD','Awasa',22,9);

insert into Employee values('Alemu','Negash','4444',26780,'Cashier',0934321232,'09/09/09','Male','11/20/05',9,'Msc','AA',12,10);

insert into Employee values('Tefera','Lemma','5555',8976,'Waiter',0923216545,'21/09/09','Male','21/09/09',2,'PHD','Awasa',78,11);

insert into Employee values('Daniel','Negash','687879',5465,'Waiter',0934321232,'09/09/09','Male','11/20/05',4,'Msc','AA',98,13);

insert into Employee values('Teddy','Nibret','8987',9900,'Cashier',0956543443,'11/20/05','Male','23/03/06',8,'PHD','Awasa',98,12);

insert into Employee values('Alemu','Tefera','7y7tv',5660,'Waiter',0934321232,'23/03/06','Male','21/09/09',8,'Msc','AA',54,14);

insert into Employee values('Daniel','Negash','453e',565450,'Cashier',0988997766,'11/20/05','Male','21/09/09',2,'BAdegree','Awasa',34,15);

insert into Food values('Vegetable',1,2,50,'dre','Dinich','Fanta','Tea','Selata','Beyaynet');

insert into Food values('Apetaizer',2,3,56,'dssse3','Ruz','Pepsi','Coffee','Enkulal','KeyWot');

insert into Food values('Vegetable',3,1,36,'cdf45','Shiro','Fanata','Spris','Enkulal','Beyaynet');

insert into Food values('Fat',4,1,43,'df54','Shiro','Mirinda','Coffee','Sanduch','KeyWot');

insert into Food values('Apetaizer',5,2,98,'hy76','Makaroni','Pepsi','MangoTea','Beyaynet','Pasta');

insert into Food values('Vegetable',6,3,123,'de43','Ruz','Fanata','Spris','Enkulal','Beyaynet');

insert into Food values('Starter',7,1,42,'sw23','Shiro','Pepsi','Coffee','Sanduch','KeyWot');

insert into Food values('Fat',8,2,67,'54re','Makaroni','Mirinda','Spris','Sanduch','Pasta');

insert into Food values('Starter',9,4,231,'bg65','Ruz','Pepsi','MangoTea','Enkulal','Pasta');

insert into Food values('Vegetable',10,2,76,'cd34','Makaroni','Mirinda','Coffee','Enkulal','Beyaynet');

insert into Food values('Starter',11,1,43,'cd33','v','Mirinda','MangoTea','Sanduch','KeyWot');

insert into Food values('Apetaizer',12,2,65,'xs11','Ruz','Pepsi','Spris','KuantaFirfir','Pasta');

insert into Food values('Vegetable',13,3,109,'ki88','Makaroni','Mirinda','MangoTea','Enkulal','Beyaynet');

insert into Food values('Starter',14,1,65,'hu88','Makaroni','Fanata','Coffee','KuantaFirfir','KeyWot');

insert into Food values('Fat',15,3,121,'po09','Ruz','Pepsi','MangoTea','Sanduch','KeyWot');

insert into Food values('Starter',16,1,45,'fg67','Makaroni','Fanata','MangoTea','Enkulal','Beyaynet');

insert into Food values('Vegetable',17,1,34,'jh54','Makaroni','Pepsi','Coffee','KuantaFirfir','KeyWot');

insert into Food values('Apetaizer',18,2,90,'ki99','Ruz','Fanata','Spris','Sanduch','Pasta');

insert into Food values('Fat',19,1,34,'xs22','Shiro','Pepsi','Spris','Enkulal','Beyaynet');

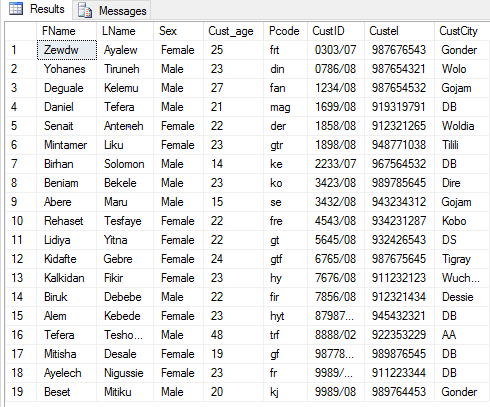
insert into Food values('Vegetable',20,2,87,'hu89','Ruz','Pepsi','Coffee','Enkulal','KeyWot');

insert into Food values('Fat',21,1,65,'mn65','Shiro','Pepsi','Spris','Sanduch','KeyWot');

insert into Food values('Vegetable',22,2,70,'xz21','Shiro','Fanata','Coffee','Enkulal','Beyaynet');

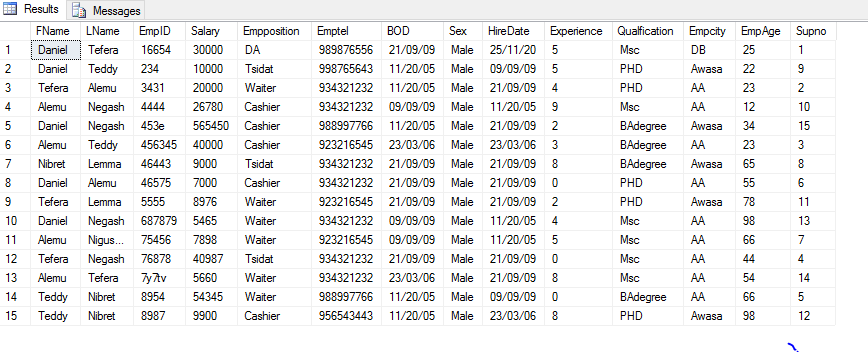
-- customer in the Database

select \* from Customer;



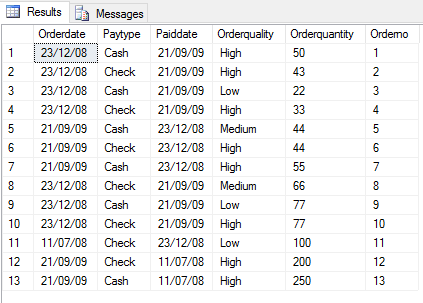
-- Employee in the Database

select \* from Employee;



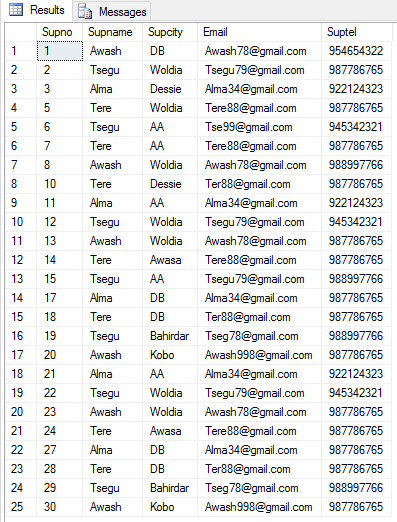
-- Order in the Database

select \* from Orderr;



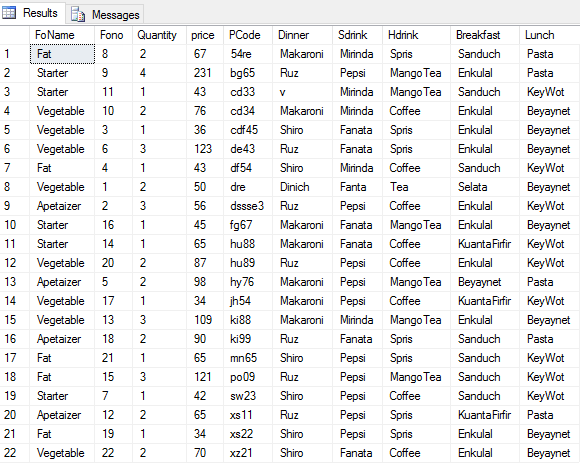
-- Supplier in the Database

select \* from Supplier;



-- Food in the Database

select \* from Food;



***CHAPTER 5***

**Database security and authorization (logins, users,scemas,permissions)**

--------login-----------

createlogin Administrator1 withpassword=’pass1’

createlogin Administrator2 withpassword=’pass2’

createlogin Administrator3 withpassword=’pass3’

createlogin Administrator4 withpassword=’pass4’

---------- - - -create users---------

CREATEUSER Daniel FORLOGIN Administrator1

CREATEUSER Senait FORLOGIN Administrator2

CREATEUSER Rehaset FORLOGIN Administrator3

CREATEUSER Alem FORLOGIN Administrator4

---------- - -give permission for user---------

grantcreateschemato Daniel

grantcreatetableto Daniel

grantinserton Customer to Daniel

grantdeleteon Customer to Daniel

grantselecton Employee to Daniel

grantselecton Employee to Daniel

grantselecton Customer to Daniel

grantdeleteon Customer to Daniel withgrantoption

Grantcreateschemato Akalu

Grantcreatetableto Akalu

grantinserton Food to Senait

grantupdateon Food to Senait withgrantoption

grantselecton Food to Senait withgrantoption

grantdeleteon Food to Senait withgrantoption

grantselecton Orderr to Rehaset

grantdeleteon Orderrto Rehaset withgrantoption

grantselecton Suplier to Alem

grantinserton Suplier to Alem withgrantoption

***CHAPTER 6***

***Query Processing***

Now we are trying to do some Concept of query processing like query tree, query graph, tree representation of some sql .Example

* *Select FName, LName, EMPID from Employee where salary > 500;*

*Equivalent Algebraic expression is:*

* *Π FName,LName,EMPID α Salary > 500(Employee)*
* *Tree representation of the above SQL Statement is given below*

*Π FName, LName,EMPID*

*α Salary > 500*

*Employee*

*Select FName, LName, CustID, Sex from Customer Where age < (Select max(Salary)from Customer Where CustID = 001);*

* *Equivalent Algebraic expression is:*
* *Select max(Salary)from Customer Where CustID = 001*
* *Π max(Salary) α CustID = 011(Customer)*
* *pΠ max(Salary) α CustID = 011(Customer) = x*
* *Select FName, LName, CustID, Sex from Customer Where age < x*
* *Π FName,LName,CustID,Sex α age < x (Customer)*
* *Tree representation of the above SQL Statement is given below*

*Π FName,LName,CustID,Sex*

*α age < x*

*pΠ max(Salary)*

*α CustID = 011*

*Π max(Salary)*

*α CustID = 011*

CUSTOMER

**Query Tree and Query Graph**

Select E.FName, E. EMPID, C.CustAge, C.CustID, S.Supno, S.Suptel from Employee As E,Customer As C, Suplier As S

Where E.EMPSex = S.SupSex And C.CustCity = S.SupCity And C.LName = ‘Adam’;

* Equivalent relational algebra expression is given below
* Π E.FName, E. EMPID, C.CustAge, C.CustID, S.Supno, S.Suptel from Employee As E,Customer As C, Suplier As S(((σ C.LName = ‘Adam’(Customer)) (Suplier)) (Employee))

C.CustCity = S.SupCity S.SupCity = E.EMPAge

**1.Query Tree**

A tree data structure that corresponds to a relational algebra expression.It represents the input relation/table of the query as leaf node of the tree and represent relational algebra operation (like projection, selection,join, ….)as internal nodes.

Π E.FName, E. EMPID, C.CustAge, C.CustID, S.Supno, S.Suptel

(SUPLIER)

S.Supno = E.Emp age(EMPLOYEE)

EMPLOYEE

(CUSTOMER)

C.CustCity = S.SupCity

SUPLIER

σ C.LName = ‘Adam’

CUSTOMER

**2. Query Graph**

A graph data structure that corresponds to a relational calculus expression. It does not indicate an order on which operation to perform first. There is only a single graph corresponding to each graph.

**[**E.EmpID, E.FName**]** [ S.Supno, S.Suptel ] [ C.CustID, C.CustAge]

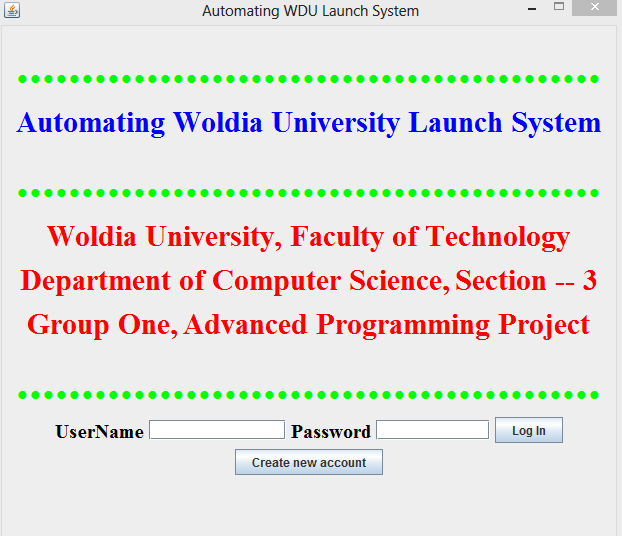
E.EmpAge = S.Supno S.SupCity = C.CustCity

Adam

**Java Implementation**

We are also trying to do This database design implementation in Object Oriented programing (OOP) or java. Basically we are trying to do the implementation based on the database Entity, Attributes, Relationships.

Here simply we would like to show the log in page that when the manager wants to enter to the system it is asked to enter username and password unless and otherwise no one can enter to the system.



References

* Fundamentals of database management system Emissary third and fourth edition text book.
* Your exercise book
* Your fundamental and advanced data base hand out
* Webpage:Google

Thank you!!!