**courierService class**

/\*

\* To change this license header, choose License Headers in Project Properties.

\* To change this template file, choose Tools | Templates

\* and open the template in the editor.

\*/

package courierservice;

import java.sql.\*;

import java.math.\*;

import java.util.Scanner;

public class CourierService {

static final String user = "root";

static final String pass = "aayush@123";

static Connection conn = null;

static Statement stmt = null;

public static void connectDB(){

try{

Class.forName("com.mysql.cj.jdbc.Driver");//Register JDBC Driver.

System.out.println("Connecting to database");

Connection conn=DriverManager.getConnection("jdbc:mysql://localhost:3306/courier\_service",user,pass);

System.out.println("Connected to database successfully");

stmt = conn.createStatement();

String sql = "show tables";

}

catch(SQLException e){

e.printStackTrace();

}

catch(Exception e){

e.printStackTrace();

}

}

public static void main(String[] args) {

connectDB();

Scanner sc = new Scanner(System.in);

System.out.println("---------------------Courier Service Management System--------------------\n");

System.out.print("Customer or DeliveryBoy [C/d] :");

String ch1 = sc.next();

if(ch1.compareTo("c")==0 || ch1.compareTo("C")==0){

Customer cs = new Customer();

System.out.println("Are you a new Customer [Y/n] :");

String ch2 = sc.next();

if(ch2.compareTo("y")==0 || ch2.compareTo("Y")==0)

cs.addCustomer(stmt);

else if(ch2.compareTo("n")==0 || ch2.compareTo("N")==0)

cs.selectCustomer(stmt);

System.out.println("Thank you.");

}

else if(ch1.compareTo("D")==0 || ch1.compareTo("d")==0){

DeliveryBoy b = new DeliveryBoy(stmt);

System.out.println("Thank You.");

}

try{

stmt.close();

//conn.close();

}

catch(SQLException e){

e.printStackTrace();

}

catch(Exception e){

e.printStackTrace();

}

}

}

**Customer Class**

package courierservice;

import java.util.\*;

import java.sql.\*;

public class Customer {

private String customerID;

private String customerName;

private Long phoneNo;

private String email;

private String password;

private String gender;

public void addCustomer(Statement stmt){

Scanner sc = new Scanner(System.in);

System.out.print("Enter Customer ID :");

customerID = sc.next();

sc.nextLine();

System.out.print("Enter Your Full Name :");

customerName = sc.nextLine();

System.out.print("Enter your Contact Number :");

phoneNo = sc.nextLong();

System.out.print("Enter your Gender [F/M/O]: ");

gender = sc.next();

System.out.print("Enter your Email ID : ");

email = sc.next();

System.out.print("Enter your Password : ");

password = sc.next();

try{

System.out.println("Signing in to the System...");

stmt.execute("insert into customer values ('" + customerID +"','" + customerName + "',"+ phoneNo +",'" + email +"','"+ password + "','"+ gender +"')");

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("Signed in to the System Successfully.");

this.customerOptions(stmt);

}

public void selectCustomer(Statement stmt){

Scanner sc = new Scanner(System.in);

System.out.println("Enter your customerID :");

String checkID = sc.nextLine();

System.out.println("Enter your password : ");

String checkPass = sc.nextLine();

String sql = "select count(customerID) from customer where customerID = '"+ checkID + "' and password = '"+ checkPass +"'";

this.customerID = checkID;

this.password = checkPass;

int tmp = 0;

try{

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

tmp = rs.getInt(1);

}

rs.close();

}

catch(SQLException e){

e.printStackTrace();

}

if(tmp==0){

System.out.println("customerID or password is incorrect.");

this.selectCustomer(stmt);

}

else{

System.out.println("Logged in to the System successfully.\n");

this.customerOptions(stmt);

}

}

public void customerOptions(Statement stmt){

Shipment sp = new Shipment();

Scanner sc = new Scanner(System.in);

while(true){

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

System.out.println("PRESS 1 : To Place New Shipment.");

System.out.println("PRESS 2 : To track your Shipment.");

System.out.println("PRESS 3 : To cancel your Shipment.");

System.out.println("PRESS 4 : To Show your Information.");

System.out.println("PRESS 5 : To edit your Information.");

System.out.println("PRESS 6 : To Log out from the System.\n");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

System.out.print("Enter your choice : ");

int ch = sc.nextInt();

switch(ch){

case 1 : sp.placeShipment(stmt,this.customerID);

break;

case 2 : sp.trackShipment(stmt,this.customerID);

break;

case 3 : sp.cancelShipment(stmt,this.customerID);

break;

case 4 : this.showDetails(stmt);

break;

case 5 : this.editDetails(stmt);

break;

case 6 : System.out.println("Logging out of the System...");

break;

default : System.out.println("Invalid option , Please Enter again.");

}

if(ch==6) break;

}

}

public void showDetails(Statement stmt){

//System.out.print("Enter your customerID : ");

String checkId = this.customerID; //sc.next();

//System.out.println("Enter your Password : ");

String checkPass = this.password; //sc.nextLine();

String sql = "select \* from customer where customerID='"+ checkId +"'and password ='"+ checkPass +"';";

try{

ResultSet rs2 = stmt.executeQuery(sql);

System.out.println("----------------------CUSTOMER DETAILS--------------------------\n");

while(rs2.next()){

System.out.print("CUSTOMER ID : \t");

System.out.println(rs2.getString(1));

System.out.print("CUSTOMER NAME : ");

System.out.println(rs2.getString(2));

System.out.print("CONTACT NO : \t");

System.out.println(rs2.getLong(3));

System.out.print("EMAIL ID : \t");

System.out.println(rs2.getString(4));

System.out.print("GENDER : \t");

System.out.println(rs2.getString(6));

System.out.println("-------------------------------------------------------------\n");

}

rs2.close();

}

catch(SQLException e){

e.printStackTrace();

}

}

public void editDetails(Statement stmt){

System.out.println("-----------------------------EDIT DETAILS---------------------------\n");

while(true){

Scanner sc = new Scanner(System.in);

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

System.out.println("PRESS 1 : To Change Your Name.");

System.out.println("PRESS 2 : To Change Your Contact Number.");

System.out.println("PRESS 3 : To Change Your Email ID.");

System.out.println("PRESS 4 : To Change Your Gender.");

System.out.println("PRESS 5 : To Change Your Password.");

System.out.println("PRESS 6 : To Go Back.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

System.out.print("Enter Your Choice : ");

int check = sc.nextInt();

switch(check){

case 1 : sc.nextLine();

System.out.print("Enter your new name : ");

String newName = sc.nextLine();

this.setName(newName,stmt);

break;

case 2 : System.out.print("Enter your new Contact Number : ");

Long newNumber = sc.nextLong();

this.setPhoneNumber(newNumber,stmt);

break;

case 3 : System.out.print("Enter your new emailID : ");

String newEmail = sc.next();

this.setEmailID(newEmail,stmt);

break;

case 4 : System.out.print("Enter your gender [F/M/O]: ");

String newGender = sc.next();

this.setGender(newGender,stmt);

break;

case 5 : System.out.print("Enter your new password : ");

String newPass = sc.next();

this.setPassword(newPass,stmt);

break;

case 6 : System.out.println("Going Back...");

break;

default : System.out.println("Invalid Option , Please Try Again.");

}

if(check==6)

break;

}

System.out.println("-------------------------------------------------------------\n");

}

private void setName(String newName,Statement stmt){

this.customerName = newName;

try{

stmt.executeUpdate("update customer set customerName = '"+ newName +"' where customerID = '"+ this.customerID+"';");

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("Your Name is changed successfully.");

}

private void setPhoneNumber(Long newNumber,Statement stmt){

this.phoneNo = newNumber;

try{

stmt.executeUpdate("update customer set phoneNumber = '"+ newNumber +"' where customerID = '"+ this.customerID+"';");

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("Your Contact Number is changed successfully.");

}

private void setEmailID(String newEmail,Statement stmt){

this.email = newEmail;

try{

stmt.executeUpdate("update customer set email = '"+ newEmail +"' where customerID = '"+ this.customerID+"';");

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("Your Email is changed successfully.");

}

private void setGender(String newGender,Statement stmt){

this.gender = newGender;

try{

stmt.executeUpdate("update customer set gender = '"+ newGender +"' where customerID = '"+ this.customerID+"';");

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("Your Gender is changed successfully.");

}

private void setPassword(String newPass,Statement stmt){

this.password = newPass;

try{

stmt.executeUpdate("update customer set password = '"+ newPass +"' where customerID = '"+ this.customerID+"';");

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("Your Password is changed successfully.");

}

}

**Shipment Class**

package courierservice;

import java.sql.\*;

import java.util.\*;

public class Shipment {

private int shipmentID;

private int officeID;

private int deliveryManID;

private double cost;

private String status;

public void placeShipment(Statement stmt,String customerID){

System.out.println("------------------------NEW SHIPMENT-----------------------\n");

System.out.println("Genrating shipment...");

Scanner sc = new Scanner(System.in);

int tmp=0;

this.shipmentID = tmp;

this.officeID = tmp % 4;

this.deliveryManID = tmp % 8;

Random rand =new Random();

int upperbound = 600;

shipmentID = rand.nextInt(upperbound);

officeID = shipmentID % 4;

deliveryManID = shipmentID %8;

System.out.print("Enter pickup date (YYYY-MM-DD): ");

String pickupDate = sc.next();

System.out.print("Enter expected delivery date (YYYY-MM-DD): ");

String deliveryDate = sc.next();

//--------------------------------------------------------------//

System.out.println("\nENTER PARCEL DETAILS : ");

System.out.print("Enter weight of parcel (in Kg): ");

double weight=sc.nextDouble();

System.out.print("Enter size of parcel (in cubic-meter): ");

double dimension = sc.nextDouble();

System.out.print("Enter type of parcel : ");

String type = sc.next();

cost = (weight \* dimension)/2;

status = "Not fetched yet";

String sql = "insert into shipment values ("+ shipmentID +","+ officeID +","+ deliveryManID+","+ cost +",'"+ status +"','"+ customerID +"','"+ pickupDate +"','"+deliveryDate+"');";

try{

stmt.execute(sql);

}

catch(SQLException e){

e.printStackTrace();

}

sql = "insert into parcel values ("+ shipmentID + ","+ weight +","+ dimension +",'"+ type+"');";

try{

stmt.execute(sql);

}

catch(SQLException e){

e.printStackTrace();

}

//-------------------------------------------------------------//

System.out.println("ENTER LOCATION DETAILS : \n");

sc.nextLine();

System.out.println("Enter pickup street :");

String pickupStreet = sc.nextLine();

System.out.println("Enter pickup city : ");

String pickupCity = sc.next();

System.out.println("Enter pickup State : ");

String pickupState = sc.next();

sc.nextLine();

System.out.println("\nEnter delivery street : ");

String deliveryStreet = sc.nextLine();

System.out.println("Enter delivery city : ");

String deliveryCity = sc.next();

System.out.println("Enter delivery State : ");

String deliveryState = sc.next();

sql = "insert into location values ("+ shipmentID +",'"+ pickupStreet +"','"+ pickupCity +"','"+ pickupState +"','"+ deliveryStreet +"','"+ deliveryCity +"','"+ deliveryState +"');";

try{

stmt.execute(sql);

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("Your Shipment is Placed . Go to 'track shipment' to locate your shipment.");

}

public void trackShipment(Statement stmt,String customerID){

System.out.println("---------------------------------TRACK SHIPMENT----------------------------\n");

Scanner sc = new Scanner(System.in);

while(true){

System.out.println("\n---------------------------------------------");

System.out.println("PRESS 1 : To show all shipments.");

System.out.println("PRESS 2 : To track current shipment.");

System.out.println("PRESS 3 : To go back.\n");

System.out.println("---------------------------------------------\n");

System.out.print("Enter your choice : ");

int check = sc.nextInt();

if(check==1){

try{

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*YOUR SHIPMENTS\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

ResultSet rs = stmt.executeQuery("select \* from shipment where customerID = '"+ customerID+"';");

while(rs.next()){

System.out.println("SHIPMENT ID:"+rs.getInt(1)+" OFFICE ID:"+rs.getInt(2)+" DELIVERYMAN ID:"+rs.getInt(3)+" COST:"+rs.getDouble(4)+" STATUS:"+rs.getString(5)+" CUSTOMER ID:"+rs.getString(6)+" PICKUP DATE:"+rs.getDate(7)+" DELIVERY DATE:"+rs.getDate(8));

}

rs.close();

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

}

else if(check==2){

System.out.println("\n---------------------------------------------");

System.out.println("PRESS 1 : To check location.");

System.out.println("PRESS 2 : To Show Delivery Man's Details.");

System.out.println("PRESS 3 : To show parcel Details.");

System.out.println("PRESS 4 : To show office Details.");

System.out.println("PRESS 5 : To show vehicle Details.");

System.out.println("PRESS 6 : To show cost.");

System.out.println("PRESS 7 : To show Status.");

System.out.println("PRESS 8 : To go back.");

System.out.println("---------------------------------------------\n");

System.out.print("Enter your choice : ");

int ch2 = sc.nextInt();

switch(ch2){

case 1 : new PickupLocation().getAddress(stmt,customerID);

new DeliveryLocation().getAddress(stmt, customerID);

break;

case 2 : new DeliveryBoy(stmt,customerID);

break;

case 3 : new Parcel(stmt,customerID);

break;

case 4 : new Office(stmt,customerID);

break;

case 5 : new Vehicle(stmt,customerID);

break;

case 6 : this.getCost(stmt, customerID);

break;

case 7 : this.getStatus(stmt,customerID);

break;

case 8 : System.out.println("Going Back");

break;

default: System.out.println("Invalid Option , Going Back.");

break;

}

}

else if(check==3)

{

System.out.println("Going back...");

System.out.println("-----------------------------------------------------------------\n");

break;

}

else System.out.println("Invalid Option , Try Again.");

}

}

public void getCost(Statement stmt,String customerID){

try{

String sql = "select cost from shipment where customerID ='"+customerID+"'"

+ " order by pickupDate desc limit 1";

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println("COST : "+rs.getDouble(1));

}

}

catch(SQLException e){

e.printStackTrace();

}

}

public void getStatus(Statement stmt,String customerID){

try{

String sql = "select status from shipment where customerID ='"+customerID+"'"

+ " order by pickupDate desc limit 1";

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println("STATUS : "+rs.getString(1));

}

}

catch(SQLException e){

e.printStackTrace();

}

}

//------------------------------------------------------------------------------------------------------------//

public void cancelShipment(Statement stmt,String customerID){

Scanner sc= new Scanner(System.in);

System.out.println("-------------------------CANCEL SHIPMENT--------------------------\n");

String sql = "select shipmentID from shipment where customerID = '"+customerID+"' order by pickupDate desc limit 1";

try{

ResultSet rs = stmt.executeQuery(sql);

if(rs.next()){

this.shipmentID = rs.getInt(1);

System.out.println("SHIPMENT ID : "+rs.getInt(1));

System.out.println("Do you want to cancel your shipment [Y/n]:");

String check = sc.next();

if(check.compareTo("Y")==0 || check.compareTo("y")==0){

sql = "delete from location where shipmentID ="+ this.shipmentID;

stmt.execute(sql);

sql = "delete from parcel where parcelID = "+ this.shipmentID;

stmt.execute(sql);

sql = "delete from shipment where shipmentID = "+ this.shipmentID;

stmt.execute(sql);

System.out.println("Shipment is cancelled Successfully.");

}

else if(check.compareTo("N")==0 || check.compareTo("n")==0){

System.out.println("Going Back...");

}

}

else System.out.println("No Shipment Placed.");

}

catch(SQLException e){

e.printStackTrace();

}

/\*try{

String sql = "select shipmentID from shipment where"

+ " customerID = '"+customerID+"'"

+ " order by pickupDate desc limit 1";

ResultSet rs = stmt.executeQuery(sql);

if(rs.next()){

tmp = true;

while(rs.next()){

this.shipmentID = rs.getInt(1);

}

}

}

catch(SQLException e){

e.printStackTrace();

}

if(tmp){

System.out.println("Do you want to cancel your current Shipment [Y/n]:");

String check = sc.next();

if(check.compareTo("Y")==0 || check.compareTo("y")==0){

try{

String sql = "delete from location where shipmentID ="+ this.shipmentID;

stmt.execute(sql);

}

catch(SQLException e){

e.printStackTrace();

}

try{

String sql = "delete from parcel where parcelID = "+ this.shipmentID;

stmt.execute(sql);

}

catch(SQLException e){

e.printStackTrace();

}

try{

String sql = "delete from shipment where shipmentID = "+ this.shipmentID;

stmt.execute(sql);

System.out.println("Your Shipment is cancelled Successfully.");

}

catch(SQLException e){

e.printStackTrace();

}

}

else if(check.compareTo("N")==0 || check.compareTo("n")==0){

System.out.println("Going Back...");

}

}

else System.out.println("No New Shipment is placed");

}\*/

}

}

**Location Class**

package courierservice;

import java.sql.\*;

abstract class Location {

private int shipmentID;

private String street;

private String city;

private String state;

abstract void getAddress(Statement stmt,String customerID);

//abstract void setAddress();

}

**DeliveryBoy Class:**

package courierservice;

import java.sql.\*;

import java.util.\*;

public class DeliveryBoy extends Employee{

private int deliveryManID;

private String name;

private int vehicleID;

private Double rating;

private Long phoneNumber;

public DeliveryBoy(){

}

//overload constructor

public DeliveryBoy(Statement stmt, String customerID){

this.getDetails(stmt,customerID);

}

public DeliveryBoy(Statement stmt){

this.selectDeliveryBoy(stmt);

}

public void getDetails(Statement stmt,String customerID){

System.out.println("DELIVERY BOY DETAILS:");

try{

String sql = "select d.\* from deliveryBoy d"

+ " inner join (select deliveryManID from shipment"

+ " where customerID = '"+ customerID +"'"

+ " order by pickupDate desc limit 1) s"//

+ " on d.deliveryManID = s.deliveryManID;";

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println("DELIVERYMAN ID:"+rs.getInt(1)+"\nNAME : "+rs.getString(2)+"\nVEHICLE ID: "+rs.getInt(3)+"\nRATING: "+rs.getDouble(4)+"\nPHONE NUMBER "+ rs.getLong(5));

}

rs.close();

}

catch(SQLException e){

e.printStackTrace();

}

}

public void selectDeliveryBoy(Statement stmt){

Scanner sc = new Scanner(System.in);

System.out.print("Enter Your ID : ");

int checkID = sc.nextByte();

String sql = "select \* from deliveryBoy where DeliveryManID = "+checkID+";";

try{

ResultSet rs = stmt.executeQuery(sql);

if(rs.next()){

this.deliveryManID = rs.getInt(1);

this.name = rs.getString(2);

this.vehicleID = rs.getInt(3);

this.rating = rs.getDouble(4);

this.phoneNumber = rs.getLong(5);

System.out.println("Logging In...");

this.deliveryBoyOptions(stmt);

}

else{

System.out.println("Invalid ID , Please try again.");

this.selectDeliveryBoy(stmt);

}

}

catch(SQLException e){

e.printStackTrace();

}

}

public void deliveryBoyOptions(Statement stmt){

Scanner sc = new Scanner(System.in);

while(true){

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

System.out.println("PRESS 1 : To set status of shipment.");

System.out.println("PRESS 2 : To Show Shipments remaining to be fetched ");

System.out.println("PRESS 3 : TO show your Details");

System.out.println("PRESS 4 : To Log Out.");

System.out.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

System.out.println("Enter your choice : ");

int check = sc.nextInt();

switch(check){

case 1 : this.setStatus(stmt);

break;

case 2 : this.getRemainingShipment(stmt);

break;

case 3 : this.showDetails(stmt);

break;

case 4 : System.out.println("Logging out....");

break;

default : System.out.println("Invalid option , Try again.");

}

if(check==4) break;

}

}

public void setStatus(Statement stmt){

Scanner sc = new Scanner(System.in);

System.out.println("------------------------------SET STATUS----------------------------------\n");

System.out.print("Enter Customer ID :");

String checkID = sc.next();

System.out.print("Enter Status [fetched/shipped/delivered] : ");

String newStatus = sc.next();

try{

String sql = "update shipment set status = '"+newStatus+"'"

+ " where deliveryManID = "+this.deliveryManID

+ " and customerId = '"+checkID+"';";

int check = stmt.executeUpdate(sql);

if(check>0){

System.out.println("Status Changed Successfully.");

}

else if(check==0) System.out.println("No Shipment From This Customer Is Available For You.");

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("---------------------------------------------------------------------------\n");

}

public void getRemainingShipment(Statement stmt){

System.out.println("-----------------------------REMAINING SHIPMENTS-------------------------------\n");

try{

String sql = "select \* from shipment where deliveryManID = "+ this.deliveryManID+" and status = 'Not fetched yet'";

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println("SHIPMENT ID : "+rs.getInt(1)+" OFFICE ID : "+rs.getInt(2)+" COST : "+rs.getDouble(4)+" CUSTOMER ID : "+rs.getString(6)+" PICKUP DATE : "+rs.getDate(7)+" DELIVERY DATE : "+rs.getDate(8));

}

}

catch(SQLException e){

e.printStackTrace();

}

System.out.println("-----------------------------------------------------------------------\n");

}

public void showDetails(Statement stmt){

System.out.println("---------------------------DELIVERY BOY DETAILS-----------------------------\n");

try{

String sql = "select \* from deliveryBoy where deliveryManID ="+this.deliveryManID;

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println("DELIVERYMAN ID : "+rs.getInt(1));

System.out.println("NAME : "+rs.getString(2));

System.out.println("VEHICLE ID : "+rs.getInt(3));

System.out.println("RATING : "+rs.getDouble(4));

System.out.println("PHONE NUMBER : "+rs.getLong(5));

}

}

catch(SQLException e){

e.printStackTrace();

}

}

public int getDeliverManID(){

return deliveryManID;

}

}

**Parcel Class**

/\*

\* To change this license header, choose License Headers in Project Properties.

\* To change this template file, choose Tools | Templates

\* and open the template in the editor.

\*/

package courierservice;

import java.sql.\*;

import java.util.\*;

public class Parcel {

private int parcelId;

private double weight;

private double volume;

private String type;

public Parcel(){

}

public Parcel(Statement stmt,String customerID){

this.getDetails(stmt,customerID);

}

public void getDetails(Statement stmt,String customerID){

System.out.println("PARCEL DETAILS:");

try{

String sql = "select p.weight,p.dimension,p.type"

+ " from parcel p"

+ " inner join (select shipmentID from shipment"

+ " where customerID = '"+ customerID +"'"

+ " order by pickupDate desc limit 1) s"

+ " on p.parcelID = s.shipmentID";

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println("WEIGHT:"+rs.getDouble(1)+" VOLUME:"+rs.getDouble(2)+" TYPE:"+rs.getString(3));

}

}

catch(SQLException e){

e.printStackTrace();

}

}

}

**PickupLocation Class**

package courierservice;

import java.util.\*;

import java.sql.\*;

public class PickupLocation extends Location{

public void getAddress(Statement stmt,String customerID){

System.out.print("PICKUP LOCATION : ");

try{

String sql = "select l.pickupStreet,l.pickupCity,l.pickupState from location l"

+ " inner join (select shipmentID from shipment where"

+ " customerID='"+customerID+"'"

+ " order by pickupDate desc limit 1)s"

+ " on l.shipmentID = s.shipmentID";

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println(rs.getString(1)+" ,"+ rs.getString(2)+" ,"+ rs.getString(3));

}

}

catch(SQLException e){

e.printStackTrace();

}

}

}

**DeliveryLocation Class**

package courierservice;

import java.util.\*;

import java.sql.\*;

public class DeliveryLocation extends Location{

public void getAddress(Statement stmt,String customerID){

System.out.print("DELIVERY LOCATION : ");

try{

String sql = "select l.deliveryStreet,l.deliveryCity,l.deliveryState from location l"

+ " inner join (select shipmentID from shipment where"

+ " customerID = '"+customerID+"'"

+ " order by pickupDate desc limit 1)s"

+ " on l.shipmentID = s.shipmentID";

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println(rs.getString(1)+" ,"+ rs.getString(2)+" ,"+ rs.getString(3)+"\n");

}

}

catch(SQLException e){

e.printStackTrace();

}

}

}

**Office Class**

package courierservice;

import java.sql.\*;

import java.util.\*;

public class Office {

private int officeID;

private Long contactNo;

private String emailID;

private String address;

public Office(){

}

public Office(Statement stmt, String customerID){

this.getDetails(stmt,customerID);

}

public void setOfficeID(int id){

officeID=id;

}

public int getOfficeID(){

return this.officeID;

}

public void setContactNo(Long id){//

contactNo=id;

}

public Long getContacNo(){

return this.contactNo;

}

public void getDetails(Statement stmt , String customerID){

System.out.println("OFFICE DETAILS:");

String sql = "select o.\* from office o"

+ " inner join (select officeID from shipment"

+ " where customerID ='"+ customerID+"'"

+ " order by pickupDate desc limit 1)s"

+ " on o.officeID = s.officeID;";

try{

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println("OFFICE ID : "+rs.getInt(1));

System.out.println("CONTACT NO: "+ rs.getLong(2));

System.out.println("EMAIL ID : "+ rs.getString(3));

System.out.println("ADDRESS : "+ rs.getString(4)+"\n");

}

rs.close();

}

catch(SQLException e){

e.printStackTrace();

}

}

public void addOffice(Statement stmt){

Scanner sc = new Scanner(System.in);

System.out.println("--------------------------NEW OFFICE-----------------------------\n");

try{

ResultSet rs = stmt.executeQuery("select count(office) from office;");

while(rs.next()){

this.officeID = rs.getInt(1)+1;

}

}

catch(SQLException e){

e.printStackTrace();

}

System.out.print("Enter Contact Number : ");

this.contactNo = sc.nextLong();

System.out.print("Enter Email Id : ");

this.emailID = sc.next();

sc.nextLine();

System.out.print("Enter Address : ");

this.address = sc.nextLine();

try{

String sql = "insert into office values ('"+this.officeID +"',"+this.contactNo+",'"+this.emailID+"','"+this.address+"')";

stmt.executeUpdate(sql);

}

catch(SQLException e){

e.printStackTrace();

}

}

}

**Vehicle Class**

package courierservice;

import java.sql.\*;

import java.util.\*;

public class Vehicle {

private int vehicleId;

private int registrationNo;

private String manf\_company;

private double capacity;

private float cost;

private double distanceTravelled;

public Vehicle(Statement stmt,String customerID){

this.getDetails(stmt, customerID);

}

public void getDetails(Statement stmt, String customerID){

System.out.println("VEHICLE DETAILS:");

String sql = "select v.\* from vehicle v"

+ " inner join (select d.vehicleID from"

+ " deliveryBoy d inner join (select deliveryManID"

+ " from shipment"

+ " where customerID = '"+customerID+"'"

+ " order by pickupDate desc limit 1)s"

+ " on d.deliveryManID = s.deliveryManID)tmp"

+ " on v.vehicleID = tmp.vehicleID;";

try{

ResultSet rs = stmt.executeQuery(sql);

while(rs.next()){

System.out.println("VEHICLE ID : "+ rs.getInt(1));

System.out.println("VEHICLE NAME : "+ rs.getString(2));

System.out.println("REGISTRATION NO: "+ rs.getString(3));

System.out.println("COST : "+ rs.getDouble(4));

System.out.println("CAPACITY : "+ rs.getDouble(5));

System.out.println("DISTANCE : "+ rs.getInt(6)+"\n");

}

rs.close();

}

catch(SQLException e){

e.printStackTrace();

}

}

}

**Employee Class**

package courierservice;

public class Employee {

protected int empID;

protected String empName;

protected String empAddr;

protected int contactNo;

protected double salary;

protected char gender;

protected String date;//"dd-mm-yyyy"

public void setEmpID(int id){//

empID=id;

}

public int getEmpID(){

return this.empID;

}

public void setEmpName(String name){//

empName=name;

}

public String getEmpName(){

return this.empName;

}

public void setContactNo(int num){//

contactNo=num;

}

public int getContacNo(){

return this.contactNo;

}

public void setSalary(double sal){//

salary = sal;

}

public double getSalary(){

return this.salary;

}

public void setAddress(String addr){//

empAddr = addr;

}

public String getAddress(){

return this.empAddr;

}

}