JAVA SWING BASED - AIR LINES QUALITY AND INFORMATION MANAGEMENT SYSTEM-SQL CONNECTIVITY USING JDBC

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Report

Submitted in partial fulfilment of the Requirements for the award of the Degree of

IN INFORMATION TECHNOLOGY By

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BONAFIDE CERTIFICATE

This to Certify that the project report titled "AIRLINES QUALITY AND INFORMATION MANAGEMENT SYSTEM" project work of Mr.M.MANEETH bearing Roll.no:1602-18-737-082 who carried out this project under my supervision in the IV semester for the academic year 2019-2020.

<u>Signature</u>

Signature

external examine

internal examine

ABSTRACT

This is project "Air lines quality and information management system". Product quality has entered the consciousness of organizations with a vengeance. It has become crystal clear that high-quality products have a distinct advantage in the market place, that market share can be gained or lost over the quality issue. Therefore, quality is a competitive priority. Quality is the only factor that ensures an organization's survival and growth. Quality focuses on meeting consumer need, meeting the competition, improving continuously and extending these concerns to all phases of business. Today, it has been well understood by managers that the real price of poor quality is lost consumers and ultimately, the death of an organization. Therefore, to be successful in today's business environment, organizations must pay attention to quality. Hence, a systematic procedure has to be evolved and followed and different concepts of quality management have to be understood clearly for designing and executing the quality management programme effectively and every information regarding the product should be crystal clear and this project gives us the quality and information about the product.so the product can be redesigned again for further improvement and development.

Introduction:

REQUIREMENT ANALYSIS

List of tables:

- ASSESS
- COMPANY
- FEEDBACK
- GIVES
- PRODUCT
- SENDS
- TEST

List of attributes with their domain types:

Company:

Company id:cid -Number()

Company name:cname-varchar()

Phone no:p no-number(10)

Email: email id -varchar(20)

Product:

Product id: pid -number(5)

Product name: p_name-varchar(20)
Type of product: type -varchar(15)
Cost of product: cost-number(6)
Quantity:quantity-number(5)

Test:

Tester id: tid-number(5)

Test Manager:pilot/tester-varchar(5)
Quality report:quality-varchar(10)
Specified in: specified_in -varchar(20)

Condition: condition-varchar(30)

Feedback:

Feedback id: fid-number(5)
Product id: pid-number(5)

Product name=P_name-varchar(15)

Message: message-varchar(30) Rating: rating-number(3,1)

.

Sends:

Date: day-date

Gives:

Date: day-date

Assess:

Date: day-date

THROUGH THE PROJECT:

This project helps to store data in a efficient way and it can be achieved through various sql commands and we can also store this for any future use and also we can save our data in a many different areas so we cannot lost all the data at once. The quality and product details are must in now a days because quality matters every where, these project stores details and feedback and testing details in database so that whenever it is necessary to know how and when a product can be used.

ARCHITECTURE AND TECHNOLOGY USED:

SOFTWARE USED:

Java Eclipse, Oracle 11g Database, Java SE version 8, SQL Plus.

Java SWING:

Swing is a GUI widget toolkit for Java. It is part of Oracle's Java Foundation Classes (JFC) – an API for providing a graphical user interface (GUI) for Java programs.

Swing was developed to provide a more sophisticated set of GUI components than the earlier AWT. Swing provides a look and feel that emulates the look and feel of several platforms, and also supports a pluggable look and feel that allows applications to have a look and feel unrelated to the underlying platform. It has more powerful and flexible components than AWT. In addition to familiar components such as buttons, check boxes and labels, Swing provides several advanced components such as tabbed panel, scroll panes, trees, tables, and lists.

SQL:

Structure Query Language (SQL) is a database query language used for storing and managing data in Relational DBMS. SQL was the first commercial language introduced for E.F Codd's **Relational** model of database. Today almost all RDBMS (MySql, Oracle, Infomix, Sybase, MS Access) use **SQL** as the standard database query language. SQL is used to perform all types of data operations in RDBMS.

Java-SQL Connectivity using JDBC:

Java Database Connectivity (JDBC) is an application programming interface (API) for the programming language Java, which defines how a client may access a database. It is a Java-based data access technology used for Java database connectivity. It is part of the Java Standard Edition platform, from Oracle Corporation. It provides methods to query and update data in a database and is oriented towards relational databases.

The connection to the database can be performed using Java programming (JDBC API) as:

```
try
        Class.forName("oracle.jdbc.driver.OracleDriver");
catch (Exception e)
        System.err.println("Unable to find and load driver");
        System.exit(1);
public void connectToDB()
                 try
                 {
                  connection =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1522:ORCL","mydbms","mydbms");
                  statement = connection.createStatement();
                 catch (SQLException connectException)
                  System.out.println(connectException.getMessage());
                  System.out.println(connectException.getSQLState());
                  System.out.println(connectException.getErrorCode());
                  System.exit(1);
 }
```

Thus, the connection from Java to Oracle database is performed and therefore, can be used for updating tables in the database directly.

Table Created in SQL for above mentioned purpose is as:

SQL> create table company(cid number(5) primary key,cname varchar(20),email varchar(256),pno number(10));

Table created.

SQL> create table product(pid number(5) primary key,p_name varchar(35), type varchar(30),cost number(5,5),quantity number(5));

Table created.

SQL> create table test(tid number(5) primary key,quality varchar(30),testmanager varchar(20),condition varchar(20),specified_in varchar2(30));

Table created.

SQL> create table feedback(fid number(5) primary key,pid number(5),p_name varchar2(35),message varchar(30),rating number(3,1));

Table created.

SQL> create table sends(cid number(5),pid number(5),day date,primary key(cid,pid),foreign key(cid) references company(cid),foreign key(pid) references product(pid));

Table created.

SQL> create table assess(pid number(5),tid number(5),day date,primary key(pid,tid),foreign key(pid) references product(pid),foreign key(tid) references test(tid));

Table created.

SQL> alter table feedback add(tid number(5),

2 foreign key(tid) references test(tid), foreign key(pid) references product(pid));

Table altered.

SQL> create table gives(cid number(5), fid number(5), primary key(cid, fid), foreign key(cid) references company(cid), foreign key(fid) references feedback(fid));

Table created.

SQL> alter table gives add (day date);

Table altered.

SQL> alter table company modify(email varchar2(30));

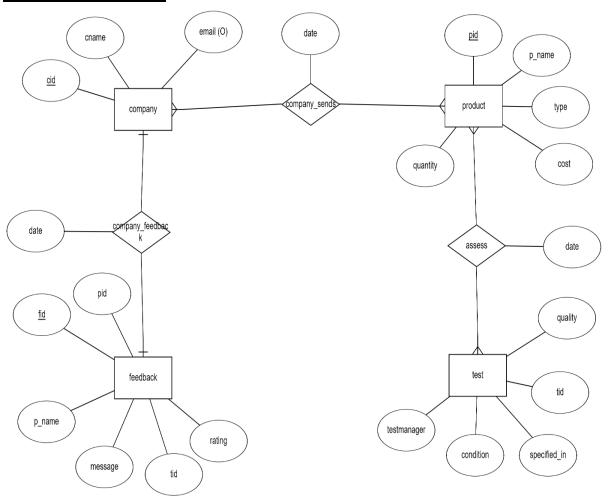
Table altered.

SQL> alter table test modify(quality varchar2(15),condition varchar2(18), specified_in varchar(15),testmanager varchar(15));

Table altered.

DESIGN:

ER DIAGRAM:



Database Design:

SQL> select * from tab;

TNAME TABTYPE CLUSTERID

----- -----

ASSESS TABLE
COMPANY TABLE
FEEDBACK TABLE
GIVES TABLE
PRODUCT TABLE
SENDS TABLE
TEST TABLE

7 rows selected. SQL> desc ASSESS;

Name Null? Type

PID NOT NULL NUMBER(5)

DBMS MINI PROJECT

TILTLE: AIR LINES QUALITY AND INFORMATION MANAGEMENT SYSTEM

TID NOT NULL NUMBER(5)

DAY DATE

SQL> desc Company;

Name Null? Type

CID NOT NULL NUMBER(5)
CNAME VARCHAR2(20)
EMAIL VARCHAR2(30)
PNO NUMBER(10)

SQL> desc feedback;

Name Null? Type

FID NOT NULL NUMBER(5)

PID NUMBER(5)

P_NAME VARCHAR2(20)
MESSAGE VARCHAR2(15)
RATING NUMBER(3,1)
TID NUMBER(5)

SQL> desc product;

Name Null? Type

PID NOT NULL NUMBER(5)

P_NAME VARCHAR2(20)

TYPE VARCHAR2(20)

COST NUMBER(10)

QUANTITY NUMBER(10)

SQL> desc test;

Name Null? Type

TID NOT NULL NUMBER(5)
QUALITY VARCHAR2(15)
TESTMANAGER VARCHAR2(15)
CONDITION VARCHAR2(18)
SPECIFIED IN VARCHAR2(15)

SQL> desc sends;

Name Null? Type

CID NOT NULL NUMBER(5)
PID NOT NULL NUMBER(5)

DAY DATE

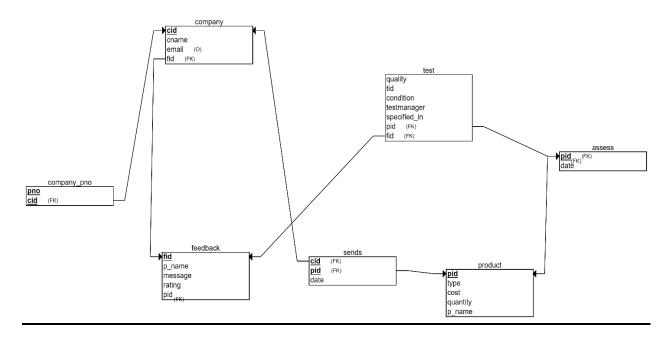
SQL> desc gives;

Name Null? Type

CID NOT NULL NUMBER(5)

FID NOT NULL NUMBER(5)

DAY DATE



Implementation:

Program:

User Interface:

```
import java.awt.BorderLayout;
import java.awt.Font;
import java.awt.Image;
import java.awt.Toolkit;
import java.awt.event.WindowAdapter;
import java.awt.event.WindowEvent;
import javax.swing.ImageIcon;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JMenu;
import javax.swing.JMenuBar;
import javax.swing.JMenuItem;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.JTextField;
public class ProjectUI extends JFrame {
      /**
       */
      private static final long serialVersionUID = 1L;
      private JMenu
mnucmpy,mnusends,mnuproduct,mnuassess,mnutester,mnucpyfeed,mnufeed;
      private JMenuBar mnuBar;
      private JMenuItem miInsert1,miUpdate1,midelete1,miView1;
      private JMenuItem miInsert2,miUpdate2,midelete2,miView2;
      private JMenuItem miInsert3,miUpdate3,midelete3,miView3;
```

```
private JMenuItem miInsert4,miUpdate4,midelete4,miView4;
private JMenuItem miInsert5,miUpdate5,midelete5,miView5;
private JMenuItem miInsert6,miUpdate6,midelete6,miView6;
private JMenuItem miInsert7,miUpdate7,midelete7,miView7;
private JTextField txtField;
static JPanel p1;
int x=0, y=100;
void initialize()
      //po=new JPanel();
      p1=new JPanel();
      mnucmpy=new JMenu("Company");
      mnuproduct=new JMenu("Product");
      mnusends=new JMenu("Sends");
      mnutester=new JMenu("Tester");
      mnuassess=new JMenu("Assess");
      mnufeed=new JMenu("FeedBack");
      mnucpyfeed=new JMenu("Comp_FeedBack");
      mnuBar=new JMenuBar();
      miInsert1=new JMenuItem("Insert");
      miUpdate1=new JMenuItem("Update");
      midelete1=new JMenuItem("Delete");
      miView1=new JMenuItem("View");
      miInsert2=new JMenuItem("Insert");
      miUpdate2=new JMenuItem("Update");
      midelete2=new JMenuItem("Delete");
      miView2=new JMenuItem("View");
      miInsert3=new JMenuItem("Insert");
      miUpdate3=new JMenuItem("Update");
      midelete3=new JMenuItem("Delete");
      miView3=new JMenuItem("View");
      miInsert4=new JMenuItem("Insert");
      miUpdate4=new JMenuItem("Update");
      midelete4=new JMenuItem("Delete");
      miView4=new JMenuItem("View");
      miInsert5=new JMenuItem("Insert");
      miUpdate5=new JMenuItem("Update");
      midelete5=new JMenuItem("Delete");
      miView5=new JMenuItem("View");
      miInsert6=new JMenuItem("Insert");
      miUpdate6=new JMenuItem("Update");
      midelete6=new JMenuItem("Delete");
      miView6=new JMenuItem("View");
      miInsert7=new JMenuItem("Insert");
      miUpdate7=new JMenuItem("Update");
      midelete7=new JMenuItem("Delete");
      miView7=new JMenuItem("View");
```

TILTLE: AIR LINES QUALITY AND INFORMATION MANAGEMENT SYSTEM

```
txtField = new JTextField("
                                           Air lines quality and information
management system");
             txtField.setFont(new Font("Serif", Font.PLAIN, 25));
             txtField.setEditable(false);
             po.setBackground(Color.MAGENTA);
      //
      void addComponentsToFrame()
             mnucmpy.add(miInsert1);
             mnucmpy.add(miUpdate1);
             mnucmpy.add(midelete1);
             mnucmpy.add(miView1);
             mnusends.add(miInsert2);
             mnusends.add(miUpdate2);
             mnusends.add(midelete2);
             mnusends.add(miView2);
             mnuproduct.add(miInsert3);
             mnuproduct.add(miUpdate3);
             mnuproduct.add(midelete3);
             mnuproduct.add(miView3);
             mnuassess.add(miInsert4);
             mnuassess.add(miUpdate4);
             mnuassess.add(midelete4);
             mnuassess.add(miView4);
             mnutester.add(miInsert5);
             mnutester.add(miUpdate5);
             mnutester.add(midelete5);
             mnutester.add(miView5);
             mnucpyfeed.add(miInsert6);
             mnucpyfeed.add(miUpdate6);
             mnucpyfeed.add(midelete6);
             mnucpyfeed.add(miView6);
             mnufeed.add(miInsert7);
             mnufeed.add(miUpdate7);
             mnufeed.add(midelete7);
             mnufeed.add(miView7);
             mnuBar.add(mnucmpy);
             mnuBar.add(mnusends);
             mnuBar.add(mnuproduct);
             mnuBar.add(mnuassess);
             mnuBar.add(mnutester);
             mnuBar.add(mnucpyfeed);
             mnuBar.add(mnufeed);
             setJMenuBar(mnuBar);
             p1.setLayout(new BorderLayout());
             p1.add(txtField, BorderLayout.CENTER);
```

```
JLabel imgLabel = new JLabel(new ImageIcon("src/img11.jpg"));
             p1.add(imgLabel, BorderLayout.SOUTH);
             this.setLayout(new BorderLayout());
             add(p1,BorderLayout.CENTER);
      void register()
             CompanyTable t1=new
CompanyTable(p1, ProjectUI.this, miInsert1, miUpdate1, midelete1, miView1);
             t1.regis company();
             SendsTable t2=new
SendsTable(p1,ProjectUI.this,miInsert2,miUpdate2,midelete2,miView2);
             t2.regis sends();
             ProductTable t3=new
ProductTable(p1, ProjectUI.this, miInsert3, miUpdate3, midelete3, miView3);
             t3.regis_product();
             AssessTable t4=new AssessTable(p1, ProjectUI.this, miInsert4,
miUpdate4, midelete4, miView4);
             t4.regis_assess();
             TestTable t5=new
TestTable(p1,ProjectUI.this,miInsert5,miUpdate5,midelete5,miView5);
             t5.regis test();
             Comp FeedTable t6=new Comp FeedTable(p1, ProjectUI.this,
miInsert6,miUpdate6, midelete6, miView6);
             t6.regis_companyFeedback();
             FeedbackTable t7=new
FeedbackTable(p1,ProjectUI.this,miInsert7,miUpdate7,midelete7,miView7);
             t7.regis Feedback();
              addWindowListener(new WindowAdapter(){
                          public void windowClosing(WindowEvent evt)
                                        ImageIcon icon = new
ImageIcon("src/t21.jpg");//C:\Users\DELL\Desktop\dbms\project\airlines Quality and
Inf mgmt system\src
a=JOptionPane.showConfirmDialog(ProjectUI.this, "Are you sure?", "This will close
the UI", JOptionPane.OK_CANCEL_OPTION, JOptionPane.QUESTION_MESSAGE, icon);
                                   if(a==0)
ProjectUI.this.setDefaultCloseOperation(JFrame.EXIT ON CLOSE);
                                   else if(a==2)
                                          ProjectUI.this.invalidate();
                                          ProjectUI.this.validate();
                                          ProjectUI.this.repaint();
                                   }
                          }
                     });
      }
      public ProjectUI()
             initialize();
```

```
addComponentsToFrame();
    register();
    pack();
    setTitle("Air lines quality and information management system");
    setSize(600,500);
    setVisible(true);
    Image icon = Toolkit.getDefaultToolkit().getImage("src/img23.png");
    setIconImage(icon);
    //setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
}
```

Company Table:

```
import java.awt.BorderLayout;
import java.awt.FlowLayout;
import java.awt.GridLayout;
import java.awt.List;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.awt.event.ItemEvent;
import java.awt.event.ItemListener;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JMenuItem;
import javax.swing.JOptionPane;
import javax.swing.JPanel;
import javax.swing.JScrollPane;
import javax.swing.JTable;
import javax.swing.JTextArea;
import javax.swing.JTextField;
import javax.swing.table.DefaultTableModel;
public class CompanyTable {
      private JPanel p1;
      private JFrame frame;
      private JMenuItem miInsert1,miUpdate1,midelete1,miView1;
      private JLabel lblcid,lblcname,lblemail,lblphone;
      private JTextField txtcid,txtcname,txtemail,txtphone;
      private JButton btn;
      private JTextArea txtmsg;
      private Connection connection;
      private Statement statement;
      public CompanyTable(JPanel p1,JFrame frame,JMenuItem miInsert1,JMenuItem
miUpdate1, JMenuItem midelete1, JMenuItem miView1) {
             try
             {
                    Class.forName("oracle.jdbc.driver.OracleDriver");
             }
```

```
catch (Exception e)
             {
                    System.err.println("Unable to find and load driver");
                    System.exit(1);
             connectToDB();
             this.frame=frame;
             this.p1=p1;
             this.miInsert1=miInsert1;
             this.midelete1=midelete1;
             this.miUpdate1=miUpdate1;
             this.miView1=miView1;
             txtcid=new JTextField(20);
             txtcname=new JTextField(20);
             txtemail=new JTextField(20);
             txtphone=new JTextField(20);
             txtmsg=new JTextArea(8,50);
             lblcid=new JLabel("Company Id:");
             lblcname=new JLabel("Company Name:");
             lblemail=new JLabel("Email:");
             lblphone=new JLabel("Phone No:");
             //queryHandler();
      public void connectToDB()
    {
             try
               connection =
DriverManager.getConnection("jdbc:oracle:thin:@localhost:1522:ORCL","mydbms","mydb
ms");
               statement = connection.createStatement();
             }
             catch (SQLException connectException)
               System.out.println(connectException.getMessage());
               System.out.println(connectException.getSQLState());
               System.out.println(connectException.getErrorCode());
               System.exit(1);
             }
    }
      public void regis company() {
             miInsert1.addActionListener(new ActionListener() {
                     public void actionPerformed(ActionEvent ae) {
                           p1.removeAll();
                          frame.invalidate();
                           frame.validate();
                          frame.repaint();
                           p1.setBackground(Color.CYAN);
                    //
                           JPanel p=new JPanel();
                          txtcid=new JTextField(20);
                          txtcname=new JTextField(20);
                           txtemail=new JTextField(20);
                           txtphone=new JTextField(20);
                           txtmsg=new JTextArea(8,50);
                           btn=new JButton();
                           //a grid of lbl and txtfield
                           p.add(lblcid);
                           p.add(txtcid);
```

```
p.add(lblcname);
                           p.add(txtcname);
                           p.add(lblemail);
                           p.add(txtemail);
                           p.add(lblphone);
                           p.add(txtphone);
                           p.setLayout(new GridLayout(4,2));
                           p1.add(p);
                           p1.add(btn);
                           p1.add(txtmsg);//msg text area added to panel
                           btn.setText("INSERT");
                           p1.setLayout(new FlowLayout());
                           frame.add(p1,BorderLayout.CENTER);
                           frame.validate();
                           //register listener
                           btn.addActionListener(new ActionListener() {
                                 @Override
                                 public void actionPerformed(ActionEvent e) {
                                        // TODO Auto-generated method stub
                                        try {
                                               Statement statement =
connection.createStatement();
                                               String query= "INSERT INTO company
VALUES(" + txtcid.getText() + ", " + "'" + txtcname.getText() + "'," + "'" +
txtemail.getText() + "'," + txtphone.getText() + ")";
                                               int i =
statement.executeUpdate(query);
                                                     txtmsg.append("\nInserted " +
i + " rows successfully");
                                        } catch (SQLException e1) {
                                               // TODO Auto-generated catch block
                                        //
                                               e1.printStackTrace();
      JOptionPane.showMessageDialog(frame, "Enter Details in Correct Format");
                                               txtmsg.append(e1.getMessage());
                                        }
                                 }
                          });
                    }
             });
             miUpdate1.addActionListener(new ActionListener() {
                    public void actionPerformed(ActionEvent ae) {
                           p1.setBackground(Color.LIGHT_GRAY);
                           p1.removeAll();
                           frame.invalidate();
                          frame.validate();
                           frame.repaint();
                           JPanel p=new JPanel();
                           txtcid=new JTextField(20);
                           txtcname=new JTextField(20);
                           txtemail=new JTextField(20);
                           txtphone=new JTextField(20);
                           txtmsg=new JTextArea(8,50);
                           txtmsg.setEditable(false);
```

```
btn=new JButton();
                           List idlist =new List(10);
                           try
                            ResultSet rs = statement.executeQuery("SELECT cid FROM
company");
                             while (rs.next())
                             {
                                   idlist.add(rs.getString("cid"));
                             }
                           catch (SQLException e)
                                 JOptionPane.showMessageDialog(frame, "Enter
Details in Correct Format");
                             txtmsg.append(e.getMessage());
                           }
                           p.add(lblcid);
                           p.add(txtcid);
                           p.add(lblcname);
                           p.add(txtcname);
                           p.add(lblemail);
                           p.add(txtemail);
                           p.add(lblphone);
                           p.add(txtphone);
                           p.setLayout(new GridLayout(4,2));
                           p1.add(p);
                           p1.add(idlist);
                           p1.add(btn);
                           p1.add(txtmsg);
                           btn.setText("Update");
                           p1.setLayout(new FlowLayout());
                           frame.add(p1,BorderLayout.CENTER);
                           frame.validate();
                           idlist.addItemListener(new ItemListener()
                           {
                                 @Override
                                 public void itemStateChanged(ItemEvent arg0) {
                                        // TODO Auto-generated method stub
                                        try
                                           ResultSet rs =
statement.executeQuery("SELECT * FROM company where CID
="+idlist.getSelectedItem());
                                               rs.next();
                                               txtcid.setText(rs.getString("CID"));
      txtcname.setText(rs.getString("CNAME"));
      txtemail.setText(rs.getString("Email"));
      txtphone.setText(rs.getString("PNO"));
                                        catch (SQLException selectException)
```

```
{
      txtmsg.append(selectException.getMessage());
                                 }
                          });
                           btn.addActionListener(new ActionListener() {
                                 @Override
                                 public void actionPerformed(ActionEvent e) {
                                        // TODO Auto-generated method stub
                                        try
                                        {
                                               Statement statement =
connection.createStatement();
                                               int i =
statement.executeUpdate("UPDATE company "
                                               + "SET cname='" + txtcname.getText()
                                               + "email='" + txtemail.getText() +
"', "
                                               + "pno ="+ txtphone.getText() + "
WHERE cid = "
                                               + idlist.getSelectedItem());
                                               txtmsg.append("\nUpdated " + i + "
rows successfully");
                                               //idlist.removeAll();
                                               //loadSailors();
                                        catch (SQLException insertException)
      JOptionPane.showMessageDialog(frame, "Enter Details in Correct Format");
      txtmsg.append(insertException.getMessage());
                                        }
                                 }
                          });
                    }
             });
             midelete1.addActionListener(new ActionListener() {
                    public void actionPerformed(ActionEvent ae) {
                           p1.setBackground(Color.BLUE);
                           p1.removeAll();
                           frame.invalidate();
                          frame.validate();
                           frame.repaint();
                           JPanel p=new JPanel();
                          txtcid=new JTextField(20);
                          txtcname=new JTextField(20);
                          txtemail=new JTextField(20);
                          txtphone=new JTextField(20);
                          txtmsg=new JTextArea(8,50);
```

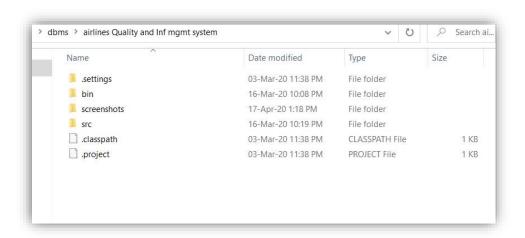
```
btn=new JButton();
                           List idlist =new List(10);
                           try
                            ResultSet rs = statement.executeQuery("SELECT cid FROM
company");
                             while (rs.next())
                             {
                                   idlist.add(rs.getString("cid"));
                             }
                           catch (SQLException e)
                           {
                             txtmsg.append(e.getMessage());
                           p.add(lblcid);
                           p.add(txtcid);
                           p.add(lblcname);
                           p.add(txtcname);
                           p.add(lblemail);
                           p.add(txtemail);
                           p.add(lblphone);
                           p.add(txtphone);
                           p.setLayout(new GridLayout(4,2));
                           p1.add(p);
                           p1.add(idlist);
                           p1.add(btn);
                           p1.add(txtmsg);
                           btn.setText("Delete");
                           p1.setLayout(new FlowLayout());
                           frame.add(p1,BorderLayout.CENTER);
                           frame.validate();
                           idlist.addItemListener(new ItemListener()
                           {
                                 @Override
                                 public void itemStateChanged(ItemEvent arg0) {
                                        // TODO Auto-generated method stub
                                        try
                                           ResultSet rs =
statement.executeQuery("SELECT * FROM company where CID
="+idlist.getSelectedItem());
                                               rs.next();
                                               txtcid.setText(rs.getString("CID"));
      txtcname.setText(rs.getString("CNAME"));
      txtemail.setText(rs.getString("Email"));
      txtphone.setText(rs.getString("PNO"));
                                        catch (SQLException selectException)
```

```
txtmsg.append(selectException.getMessage());
                                 }
                           });
                           btn.addActionListener(new ActionListener() {
                                 @Override
                                 public void actionPerformed(ActionEvent e) {
                                        // TODO Auto-generated method stub
                                        try
                                        {
                                               Statement statement =
connection.createStatement();
                                               int i =
statement.executeUpdate("delete from company where cid=" +
idlist.getSelectedItem());
                                               txtmsg.append("\nDeleted " + i + "
rows successfully");
                                               //idlist.removeAll();
                                               //loadSailors();
                                               txtcid.setText(null);
                                               txtcname.setText(null);
                                               txtemail.setText(null);
                                               txtphone.setText(null);
                                               idlist.removeAll();
                                        }
                                        catch (SQLException insertException)
      JOptionPane.showMessageDialog(frame, "Enter Details in Correct Format");
      txtmsg.append(insertException.getMessage());
                                 }
                          });
                    }
             });
             miView1.addActionListener(new ActionListener() {
                    @Override
                    public void actionPerformed(ActionEvent e) {
                           // TODO Auto-generated method stub
                      p1.removeAll();
                      frame.invalidate();
                   frame.validate();
                      frame.repaint();
                 JTable j;
                   DefaultTableModel model = new DefaultTableModel();
                   j = new JTable(model);
                   model.addColumn("CID");
                   model.addColumn("Company Name");
                   model.addColumn("Email");
                   model.addColumn("Pno");
                          try {
```

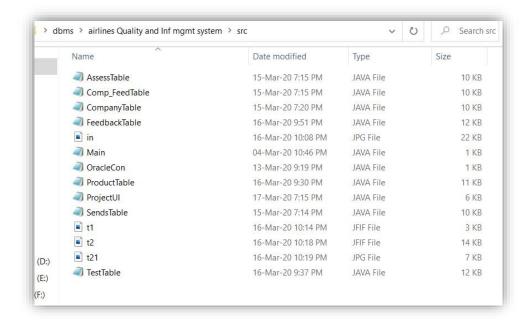
```
ResultSet rs=statement.executeQuery("select *
from company");
                                 while(rs.next()) {
                                 model.addRow(new Object[]{rs.getString("cid"),
rs.getString("cname"),rs.getString("email"),rs.getString("pno")});
                           catch(SQLException e1) {
                                 JOptionPane.showMessageDialog(frame, "Something
Went Wrong");
                           //j.setBounds(0, 0, 500, 500);
                   JScrollPane sp = new JScrollPane(j);
                   p1.add(sp,BorderLayout.NORTH);
                    frame.invalidate();
                           frame.validate();
                    frame.repaint();
                    }
             });
      }
}
Main:
public class Main {
      public static void main(String[] args) {
             // TODO Auto-generated method stub
             new ProjectUI();
      }
}
```

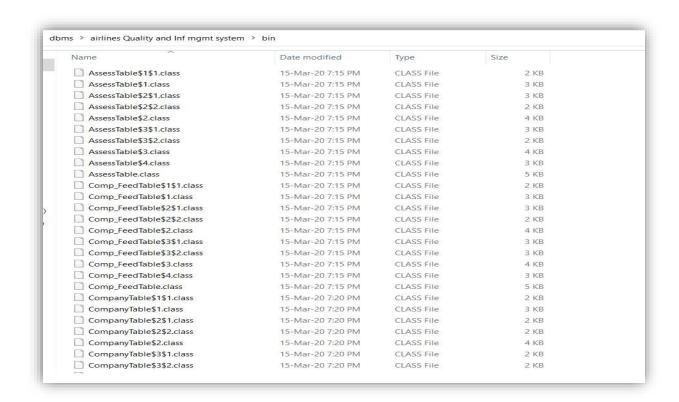
GitHub links and folder structure

https://github.com/ManeethMadishetti/DBMSPROJECT



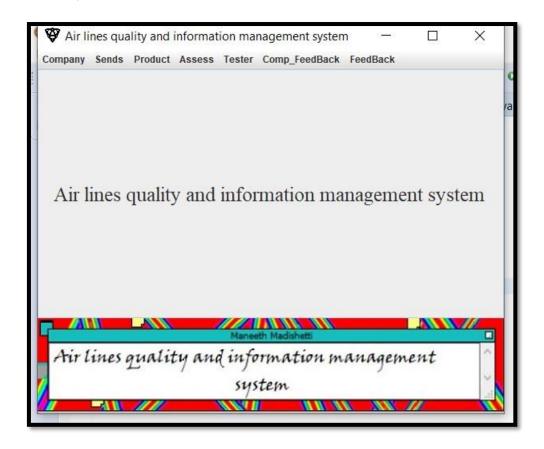
TILTLE: AIR LINES QUALITY AND INFORMATION MANAGEMENT SYSTEM

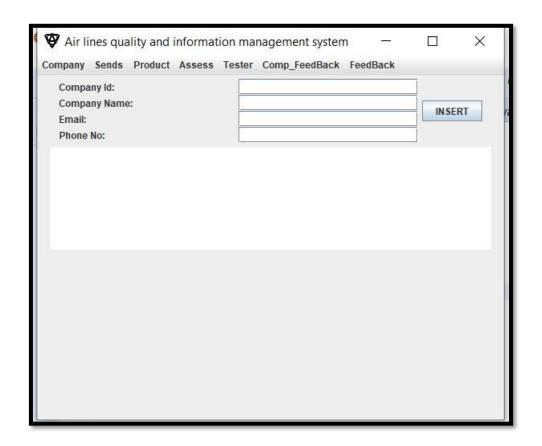


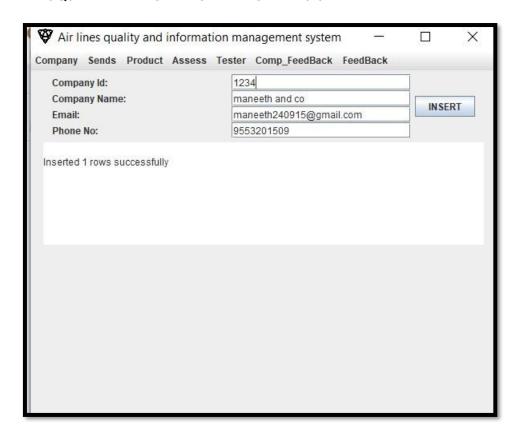


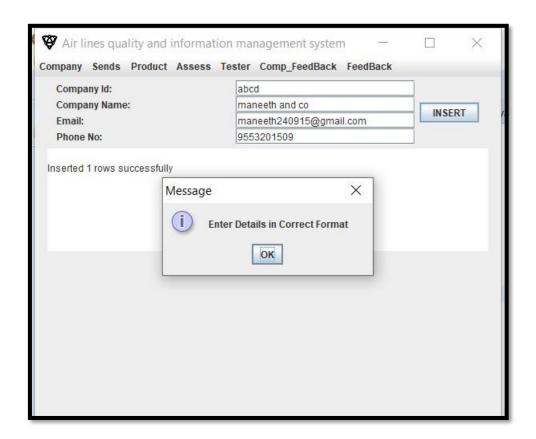
Testing:

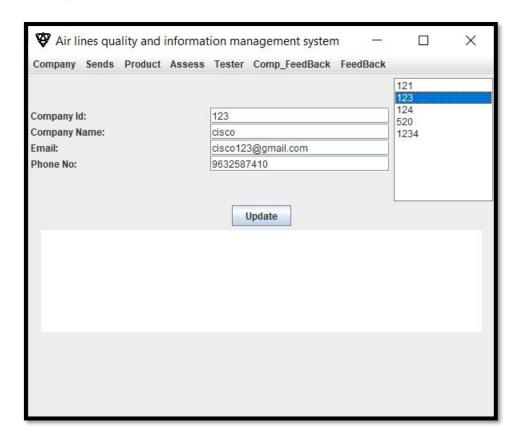
Java GUI Testing:

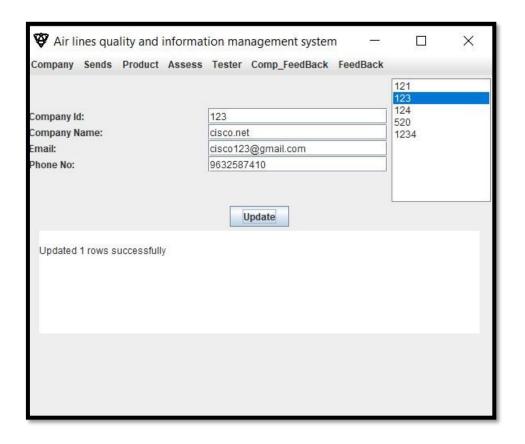


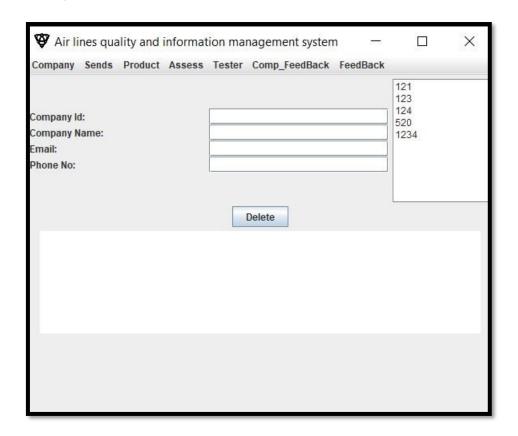


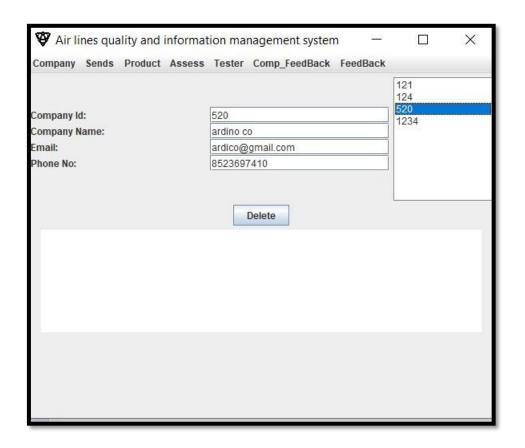


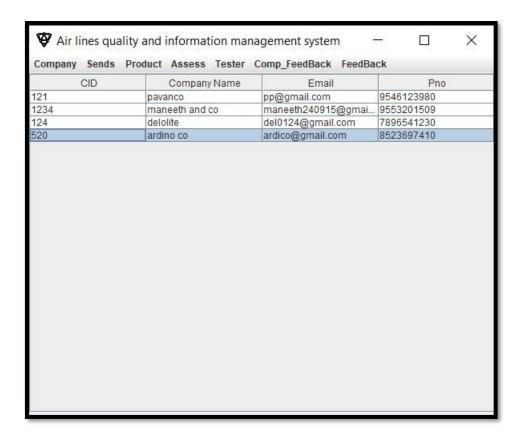


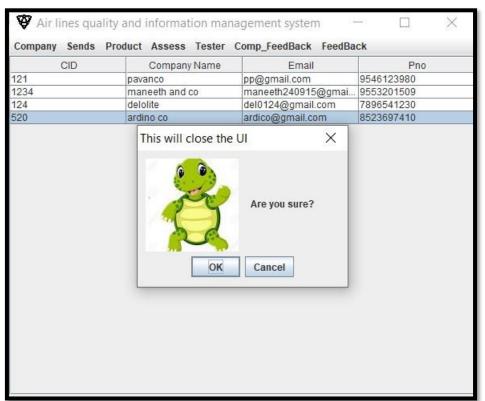












The data entered in the above form is updated in the "company" table of the Oracle database 11g as:

```
SQL> select * from company;
      CID CNAME
                                  EMAIL
                                                                           PN<sub>0</sub>
       121 pavanco
                                  pp@gmail.com
                                                                   9546123980
      1234 maneeth and co
                                  maneeth240915@gmail.com
                                                                   9553201509
                                                                   7896541230
       124 delolite
                                  de10124@gmail.com
                                                                   8523697410
      520 ardino co
                                  ardico@gmail.com
SQL>
```

Results:

I successfully completed this MINI PROJECT "Air Lines Quality and control Management system".

Discussion and Future work

While doing this project I got new ideas I understood how to work on projects. Now to further extend this project I want to create a android app by which I can control my project on my hand and connect to it. this project efficiently stores the data in tables and we can manipulate it easily by friendly userinterface

References:

- https://www.academia.edu/36893248/Ramakrishnan Database Management Systems 3rd Edition
- https://docs.oracle.com/javase/7/docs/index.html
- https://www.javatpoint.com/dbms-tutorial
- http://www.sqlines.com/articles/java/sql server jdbc connection