**Customer.java**

**---------------------------**

public class Customer {  
    
   int id ;  
   String email = "";  
   //String address;  
   String first\_name = "";  
   String last\_name = "";  
   public Customer(String fn, String ln,String email){  
       this.first\_name = fn;  
       this.last\_name = ln;  
       this.email = email;  
   }  
}

**CustomerDB.java**

**------------------------------**

import java.util.ArrayList;

public class CustomerDB {  
    ArrayList customers = new ArrayList();  
    
    public void addCustomer(Customer c){  
       customers.add(c);    
    }  
    
    public Customer getCustomer(int id){  
       for(int i = 0 ; i < customers.size();i++){  
           if(customers.get(i).id == id){  
               return customers.get(i);  
           }  
       }  
       return null;  
    }  
    
    public void updateCustomer(Customer c){  
       for(int i = 0 ; i < customers.size();i++){  
           if(customers.get(i).id == c.id){  
               customers.remove(i);  
               customers.add(i, c);  
           }  
       }    
    }  
    public void deleteCustomer(int index){  
        
               customers.remove(index);  
                
            
    }  
    
    public ArrayList getCustomers(){  
       return customers;  
    }  
}

**CustomerForm.java**

**-----------------------------------**

import java.awt.Container;  
import java.awt.GridLayout;  
import java.awt.event.ActionEvent;  
import java.awt.event.ActionListener;

import javax.swing.JButton;  
import javax.swing.JFrame;  
import javax.swing.JLabel;  
import javax.swing.JTextField;  
import javax.swing.SwingConstants;

public class CustomerForm extends JFrame implements ActionListener{  
   private JLabel fNameL, lNameL, emailL;  
   private JTextField fNameEdit, lNameEdit, emailEdit;  
   private JButton btnSave;  
   CustomerDB db;  
   Customer currentEditCustomer;  
   public CustomerForm(CustomerDB db , Customer c){  
        
       this.db = db;  
       this.currentEditCustomer = c;  
       fNameL = new JLabel("Enter First Name: ", SwingConstants.RIGHT);  
       lNameL = new JLabel("Enter Last Name: ", SwingConstants.RIGHT);  
       emailL = new JLabel("Enter E-Mail: ", SwingConstants.RIGHT);  
        
       fNameEdit = new JTextField(30);  
       lNameEdit = new JTextField(30);  
       emailEdit = new JTextField(30);  
        
       //SPecify handlers for each button and add (register) ActionListeners to each button.  
       btnSave = new JButton("Save");  
       btnSave.addActionListener(this);  
        
       setTitle("SCustomer Entry Form");  
       Container pane = getContentPane();  
       pane.setLayout(new GridLayout(3, 2));  
        
       //Add things to the pane in the order you want them to appear (left to right, top to bottom)  
               pane.add(fNameL);  
               pane.add(fNameEdit);  
                
               pane.add(lNameL);  
               pane.add(lNameEdit);  
                
               pane.add(emailL);  
               pane.add(emailEdit);  
                
               this.add(btnSave);  
               //setSize(WIDTH, HEIGHT);  
               setVisible(true);  
               setDefaultCloseOperation(EXIT\_ON\_CLOSE);  
   }  
   @Override  
   public void actionPerformed(ActionEvent e) {  
       // TODO Auto-generated method stub  
       //Add New Customer  
       if(currentEditCustomer == null){  
           Customer c = new Customer(CustomerForm.this.fNameEdit.getSelectedText(),  
                                     CustomerForm.this.lNameEdit.getText(),  
                                     CustomerForm.this.emailEdit.getText());  
           db.addCustomer(c);  
       }  
       //Edit Existing Customer  
       else{  
           db.updateCustomer(currentEditCustomer) ;  
       }  
       CustomerForm.this.setVisible(false);  
       
   }  
}

**CustomerManagerFrame.java :-**

**------------------------------------------**

import java.awt.Container;  
import java.awt.GridLayout;  
import java.awt.event.ActionEvent;  
import java.awt.event.ActionListener;  
import java.awt.event.ComponentEvent;  
import java.awt.event.ComponentListener;

import javax.swing.JButton;  
import javax.swing.JFrame;  
import javax.swing.JScrollPane;  
import javax.swing.JTable;  
import javax.swing.table.DefaultTableModel;

public class CustomerManagerFrame extends JFrame implements ActionListener, ComponentListener{  
   CustomerDB db;  
   //headers for the table  
    String[] columns = new String[] {  
        "E-Mail", "First Name", "Last Name"  
    };  
    JTable table;  
    JButton jbnAdd, jbnEdit, jbnDelete;  
    DefaultTableModel model;  
    public CustomerManagerFrame(CustomerDB db){  
       this.db = db;  
       model = new DefaultTableModel();  
       table = new JTable(model);  
       model.addColumn(columns[0]);  
       model.addColumn(columns[1]);  
       model.addColumn(columns[2]);  
       table = new JTable();  
       //add the table to the frame  
        this.add(new JScrollPane(table));  
        
        
        for(int i = 0 ; i < db.getCustomers().size() ; i++){  
           model.addRow(new Object[]{db.getCustomers().get(i).first\_name,  
                                      db.getCustomers().get(i).last\_name,  
                                      db.getCustomers().get(i).email});  
        }  
        this.setTitle("Table Example");  
        this.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);       
        this.pack();  
        Container pane = getContentPane();  
       pane.setLayout(new GridLayout(1, 3));  
        jbnAdd = new JButton("Add");  
        jbnAdd.addActionListener(this);  
        pane.add(jbnAdd);  
        
        jbnEdit = new JButton("Edit");  
        jbnEdit.addActionListener(this);  
        pane.add(jbnEdit);  
        
        jbnDelete = new JButton("Delete");  
        jbnDelete.addActionListener(this);  
        pane.add(jbnDelete);  
        this.addComponentListener(this);  
        this.setVisible(true);  
    }

   @Override  
   public void actionPerformed(ActionEvent e) {  
       // TODO Auto-generated method stub  
       if ("Add".equals(e.getActionCommand())) {  
            new CustomerForm(db, null);  
       }  
       else if ("Edit".equals(e.getActionCommand())){  
           int selIndex = CustomerManagerFrame.this.table.getSelectedRow();  
           Customer selCustomer = db.getCustomers().get(selIndex);    
           new CustomerForm(db, selCustomer);  
       }  
       else{  
           int selIndex = CustomerManagerFrame.this.table.getSelectedRow();  
           db.deleteCustomer(selIndex);  
            
       }  
   }

   @Override  
   public void componentResized(ComponentEvent e) {  
       // TODO Auto-generated method stub  
        
   }

   @Override  
   public void componentMoved(ComponentEvent e) {  
       // TODO Auto-generated method stub  
        
   }

   @Override  
   public void componentShown(ComponentEvent e) {  
       if(table == null){  
           return;  
       }  
       // TODO Auto-generated method stub  
       //DefaultTableModel model = (DefaultTableModel) table.getModel();  
        
        for(int i = 0 ; i < db.getCustomers().size() ; i++){  
           model.removeRow(i);  
           model.addRow(new Object[]{db.getCustomers().get(i).first\_name,  
                                      db.getCustomers().get(i).last\_name,  
                                      db.getCustomers().get(i).email});  
        }    
   }

   @Override  
   public void componentHidden(ComponentEvent e) {  
       // TODO Auto-generated method stub  
        
   }  
    
}

**CustomerDemo.java**

**-----------------------------------**

public class CustomerDemo {

   /\*\*  
   \* @param args  
   \*/  
   public static void main(String[] args) {  
       // TODO Auto-generated method stub  
        CustomerManagerFrame form = new CustomerManagerFrame(new CustomerDB());  
   }

}

Show transcribed image textCreate Customer (GUI) Customer Manager Email First Name Last Name frankiones Cyahoo.com John Smith johnsmith chotmail.com seagreen clevi.com ynthia Green Kowolski wendykCwarners.com endy Add Edit Delete

Comments

Kasturi

930 answers

"Expert in Java Programming, C++ and C."

**PROGRAM CODE\*\*\*:**

**CustomerManagerFrame.java**

package db;

public class CustomerManagerFrame extends JFrame implements ActionListener, ComponentListener{  
CustomerDB db;  
//headers for the table  
String[] columns = new String[] {  
"E-Mail", "First Name", "Last Name"  
};  
JTable table;  
JButton jbnAdd, jbnEdit, jbnDelete;  
DefaultTableModel model;  
public CustomerManagerFrame(CustomerDB db){  
this.db = db;  
model = new DefaultTableModel();  
table = new JTable(model);  
model.addColumn(columns[0]);  
model.addColumn(columns[1]);  
model.addColumn(columns[2]);  
// table = new JTable();  
//add the table to the frame  
//this.add(new JScrollPane(table));  
    
this.setTitle("Table Example");  
this.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);     
this.pack();  
    
JPanel pane = new JPanel();  
pane.setLayout(new FlowLayout());  
jbnAdd = new JButton("Add");  
jbnAdd.addActionListener(this);  
pane.add(jbnAdd);  
    
jbnEdit = new JButton("Edit");  
jbnEdit.addActionListener(this);  
pane.add(jbnEdit);  
    
jbnDelete = new JButton("Delete");  
jbnDelete.addActionListener(this);  
pane.add(jbnDelete);  
this.getContentPane().setLayout(new BorderLayout());  
this.getContentPane().add(new JScrollPane(table), BorderLayout.CENTER);  
this.getContentPane().add(pane, BorderLayout.SOUTH);  
this.addComponentListener(this);  
this.setVisible(true);  
this.setSize(600, 300);  
}  
    
public void rePopulate(CustomerDB db1)  
{  
   model.setRowCount(0);  
    
   for(int i=0; i<db1.getCustomers().size(); i++)  
    {  
        model.addRow(new Object[]{db1.getCustomers().get(i).email,  
db1.getCustomers().get(i).first\_name,  
db1.getCustomers().get(i).last\_name});  
    }  
}  
@Override  
public void actionPerformed(ActionEvent e) {  
// TODO Auto-generated method stub  
if ("Add".equals(e.getActionCommand())) {  
   CustomerForm form = new CustomerForm(db, null, this);  
   db = form.getDB();  
}  
else if ("Edit".equals(e.getActionCommand())){  
int selIndex = CustomerManagerFrame.this.table.getSelectedRow();  
if(selIndex != -1)  
{  
   Customer selCustomer = db.getCustomers().get(selIndex);  
   CustomerForm form = new CustomerForm(db, selCustomer, this);  
   db = form.getDB();  
    
}  
}  
  
else{  
int selIndex = CustomerManagerFrame.this.table.getSelectedRow();  
if(selIndex != -1)  
   db.deleteCustomer(selIndex import java.awt.BorderLayout;  
import java.awt.Container;  
import java.awt.FlowLayout;  
import java.awt.GridLayout;  
import java.awt.event.ActionEvent;  
import java.awt.event.ActionListener;  
import java.awt.event.ComponentEvent;  
import java.awt.event.ComponentListener;  
import javax.swing.JButton;  
import javax.swing.JFrame;  
import javax.swing.JPanel;  
import javax.swing.JScrollPane;  
import javax.swing.JTable;  
import javax.swing.border.Border;  
import javax.swing.table.DefaultTableModel;

);  
rePopulate(db);  
}  
}  
@Override  
public void componentResized(ComponentEvent e) {  
// TODO Auto-generated method stub  
    
}  
@Override  
public void componentMoved(ComponentEvent e) {  
// TODO Auto-generated method stub  
    
}  
@Override  
public void componentShown(ComponentEvent e) {  
if(table == null){  
return;  
}  
// TODO Auto-generated method stub  
//DefaultTableModel model = (DefaultTableModel) table.getModel();  
    
/\* for(int i = 0 ; i < db.getCustomers().size() ; i++){  
model.removeRow(i);  
model.addRow(new Object[]{db.getCustomers().get(i).first\_name,  
db.getCustomers().get(i).last\_name,  
db.getCustomers().get(i).email});  
} \*/  
}  
@Override  
public void componentHidden(ComponentEvent e) {  
// TODO Auto-generated method stub  
    
}  
    
}

**CustomerForm.java**

package db;

import java.awt.GridLayout;

import java.awt.event.ActionEvent;

import java.awt.event.ActionListener;

import javax.swing.JButton;

import javax.swing.JFrame;

import javax.swing.JLabel;

import javax.swing.JTextField;

public class CustomerForm extends JFrame implements ActionListener{

   private JLabel fNameL, lNameL, emailL;

   private JTextField fNameEdit, lNameEdit, emailEdit;

   private JButton btnSave;

   CustomerDB db;

   Customer currentEditCustomer;

   private CustomerManagerFrame frame;

   public CustomerForm(CustomerDB db , Customer c, CustomerManagerFrame frame){

   this.db = db;

   this.currentEditCustomer = c;

   this.frame = frame;

   fNameL = new JLabel("Enter First Name: ");

   lNameL = new JLabel("Enter Last Name: ");

   emailL = new JLabel("Enter E-Mail: ");

   fNameEdit = new JTextField(30);

   lNameEdit = new JTextField(30);

   emailEdit = new JTextField(30);

   //SPecify handlers for each button and add (register) ActionListeners to each button.

   btnSave = new JButton("Save");

   btnSave.addActionListener(this);

   if(c != null)

   {

       fNameEdit.setText(c.first\_name);

       lNameEdit.setText(c.last\_name);

       emailEdit.setText(c.email);

       btnSave.setText("Update");

   }

   setTitle("SCustomer Entry Form");

   this.getContentPane().setLayout(new GridLayout(4, 2, 5, 5));

   //Add things to the pane in the order you want them to appear (left to right, top to bottom)

   this.getContentPane().add(fNameL);

   this.getContentPane().add(fNameEdit);

   this.getContentPane().add(lNameL);

   this.getContentPane().add(lNameEdit);

   this.getContentPane().add(emailL);

   this.getContentPane().add(emailEdit);

   this.add(btnSave);

   this.setSize(300, 300);

   this.setVisible(true);

   this.pack();

   this.setDefaultCloseOperation(EXIT\_ON\_CLOSE);

   }

   @Override

   public void actionPerformed(ActionEvent e) {

   // TODO Auto-generated method stub

   //Add New Customer

   Customer c = new Customer(CustomerForm.this.fNameEdit.getText(),

   CustomerForm.this.lNameEdit.getText(),

   CustomerForm.this.emailEdit.getText());

if(btnSave.getText().equals("Save"))

      db.addCustomer(c);

else

{

      c.id = currentEditCustomer.id;

      db.updateCustomer(c);

}

   CustomerForm.this.setVisible(false);

   frame.rePopulate(db);

   }

   public CustomerDB getDB()

   {

   return db;

   }

}

**Customer.java**

package db;

public class Customer {

   int id ;

   String email = "";

   //String address;

   String first\_name = "";

   String last\_name = "";

   private static int counter = 0;

   public Customer(String fn, String ln,String email){

       id = ++counter;

   this.first\_name = fn;

   this.last\_name = ln;

   this.email = email;

   }

   }