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/*
Raj has a phone directory in which he will store his friends and family's phone numbers.
He wants to transfer all the information into a file and retrieve the details in an easy manner. The directory contains the phone numbers and name of the person. He wants to add a new person's details with phone number. So, help him by writing a Java program which retrieves the details by searching/adding the person's name and vice versa. Use GUI */
package project;
import java.awt.event.*;
import javax.swing.*;
import java.awt.*;
import java.io.*;
import java.util.*;
import java.lang.*;

class phoneD{

    static JLabel title = new JLabel("PHONE DIRECTORY");

    static JFrame mainframe = new JFrame("PHONE");
    static JFrame searchframe = new JFrame("SEARCH");
    static JFrame newcontactframe = new JFrame("CONTACT");
    static JFrame displayframe = new JFrame("DISPLAY");

    static JButton newContact=new JButton("NEW CONTACT");
    static JButton search=new JButton("SEARCH");
    static JButton display=new JButton("DISPLAY");
    static JButton terminate=new JButton("TERMINATE");
    static JButton save = new JButton("SAVE");
    static JButton back = new JButton("BACK");
    static JButton back2 = new JButton("BACK");
    static JButton back3 = new JButton("BACK");
    static JButton startsearchName=new JButton("SEARCH");
    static JButton displayfam=new JButton("DISPLAY FAMILY");
    static JButton displayfriend=new JButton("DISPLAY FRIENDS");
    static JButton displaywork=new JButton("DISPLAY WORK");
    static JButton displayall=new JButton("DISPLAY ALL");

    static JTextArea textarea = new JTextArea();

    static JTextField nametextarea = new JTextField();
    static JTextField numbertextarea = new JTextField();
    static JTextField emailtextarea = new JTextField();

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static JTextField searchbytextarea = new JTextField();
static JTextField searchbynumtextarea = new JTextField();

static JLabel entername = new JLabel("ENTER NAME");
static JLabel eentername = new JLabel("ENTER NAME");
static JLabel enteremail = new JLabel("ENTER E-MAIL");
static JLabel enternumber = new JLabel("ENTER NUMBER");
static JLabel selectgroup = new JLabel("SELECT GROUP");

static String number = null;
static String name = null;

static void readFile(String path) {
    try {
        FileReader nameReader = new FileReader(path);
        BufferedReader namebufferedReader = new BufferedReader(nameReader)
;

        String nameline;
        while ((nameline = namebufferedReader.readLine()) != null){
            textarea.append(nameline);
            textarea.append("\n");
        }
        nameReader.close();

    }catch (IOException e){
        e.printStackTrace();
    }
}

static void feedFile(){
    String number = numbertextarea.getText();
    String name = nametextarea.getText();
    String email = emailtextarea.getText();
    try{
        FileWriter nWriter = new FileWriter("namesnumbers.txt", true);
        nWriter.append(name+" "+number+" "+email);
        nWriter.append("\n");
        nWriter.close();
    } catch (IOException e) {
        e.printStackTrace();
    }
}

static void feedFile2(String fileName){
    String number = numbertextarea.getText();
    String name = nametextarea.getText();
    String email = emailtextarea.getText();
    try {

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        FileWriter nWriter = new FileWriter(fileName, true);
        nWriter.append(name+" "+number+" "+email);
        nWriter.append("\n");
        nWriter.close();
    } catch (IOException e) {
        e.printStackTrace();
    }
}

static void nameFinderWithNumber(String path,String searchPath){
    String key = searchbytextarea.getText();
    try{
        File namefile = new File("namesnumbers.txt");
        Scanner nameSc = new Scanner(namefile);
        String name,number,email;
        textarea.setText("");
        while(nameSc.hasNextLine()) {;
            StringTokenizer st = new StringTokenizer(nameSc.nextLine()," ");

            while (st.hasMoreTokens()){
                name = st.nextToken();
                number = st.nextToken();
                email = st.nextToken();
                System.out.println(name+number);
                if(name.equals(key))
                    textarea.append("Name->"+name+"\n"+"Number->"+number+"\nEmail->"+email+"\n\n");
                System.out.println("pointing to->"+name+"/"+number+"/"+email);
            }
        }
        nameSc.close();
    }
    catch(Exception e){
        e.printStackTrace();
    }
}

public static void main(String args[]){

    String group[] = {"NONE","FAMILY","FRIENDS","WORK"};
    final JComboBox groupbox = new JComboBox(group);

    title.setFont(new Font("Arial", Font.BOLD, 16));
    title.setSize(300, 20);
    title.setLocation(115, 30);
    entername.setFont(new Font("Arial", Font.ITALIC, 16));
    entername.setSize(300, 20);
    entername.setLocation(100,50);

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enternumber.setFont(new Font("Arial", Font.ITALIC, 16));
enternumber.setSize(300, 20);
enternumber.setLocation(100, 127);
enteremail.setFont(new Font("Arial", Font.ITALIC, 16));
enteremail.setSize(300, 20);
enteremail.setLocation(100,214);
selectgroup.setFont(new Font("Arial", Font.ITALIC, 16));
selectgroup.setSize(300, 20);
selectgroup.setLocation(100,300);
eentername.setFont(new Font("Arial", Font.ITALIC, 16));
eentername.setSize(300, 20);
eentername.setLocation(100,50);

textarea.setBounds(100,60,200,200);
nametextarea.setBounds(100,75,200,50);
numbertextarea.setBounds(100,150,200,50);
emailtextarea.setBounds(100,240,200,50);
newContact.setBounds(100,300,200,30);
search.setBounds(100,350,200,30);
save.setBounds(100,400,200,30);
back.setBounds(100,600,200,30);
back2.setBounds(100,600,200,30);
back3.setBounds(100,600,200,30);
display.setBounds(100,400,200,30);
terminate.setBounds(100,600,200,30);
searchbytextarea.setBounds(100,100,200,50);
searchbynumtextarea.setBounds(100,100,200,50);
startsearchName.setBounds(100,350,200,30);
groupbox.setBounds(100,330,200,30);
displayall.setBounds(100,250,200,30);
displayfam.setBounds(100,300,200,30);
displayfriend.setBounds(100,350,200,30);
displaywork.setBounds(100,400,200,30);

mainframe.add(title);
mainframe.add(textarea);
mainframe.add(newContact);
mainframe.add(search);
mainframe.add(display);
mainframe.add(terminate);
mainframe.setSize(400,700);
mainframe.setLayout(null);
mainframe.setVisible(true);
mainframe.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

newcontactframe.setSize(400,700);
newcontactframe.add(nametextarea);
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newcontactframe.add(numbertextarea);
newcontactframe.add(emailtextarea);
newcontactframe.add(save);
newcontactframe.add(back2);
newcontactframe.add(entername);
newcontactframe.add(enternumber);
newcontactframe.add(enteremail);
newcontactframe.add(groupbox);
newcontactframe.add(selectgroup);
newcontactframe.setLayout(null);
newcontactframe.setVisible(false);
newcontactframe.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

searchframe.setSize(400,700);
searchframe.add(back3);
searchframe.add(eentername);
searchframe.add(searchbytextarea);
searchframe.add(startsearchName);
searchframe.setLayout(null);
searchframe.setVisible(false);
searchframe.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

displayframe.add(displayfam);
displayframe.add(displayfriend);
displayframe.add(displaywork);
displayframe.add(displayall);
displayframe.add(back);
displayframe.setSize(400,700);
displayframe.setLayout(null);
displayframe.setVisible(false);
displayframe.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

terminate.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        System.exit(1);
    }
});

newContact.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        mainframe.setVisible(false);
        searchframe.setVisible(false);
        newcontactframe.setVisible(true);
        displayframe.setVisible(false);
    }
});

back.addActionListener(new ActionListener(){

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        public void actionPerformed(ActionEvent e){
            mainframe.setVisible(true);
            searchframe.setVisible(false);
            newcontactframe.setVisible(false);
            displayframe.setVisible(false);
        }
    });

    back2.addActionListener(new ActionListener(){
        public void actionPerformed(ActionEvent e){
            mainframe.setVisible(true);
            searchframe.setVisible(false);
            newcontactframe.setVisible(false);
        }
    });

    back3.addActionListener(new ActionListener(){
        public void actionPerformed(ActionEvent e){
            mainframe.setVisible(true);
            searchframe.setVisible(false);
            newcontactframe.setVisible(false);
            displayframe.setVisible(false);
        }
    });

    save.addActionListener(new ActionListener(){
        public void actionPerformed(ActionEvent e){
            feedFile();
            mainframe.setVisible(true);
            searchframe.setVisible(false);
            newcontactframe.setVisible(false);
            displayframe.setVisible(false);
            if(groupbox.getItemAt(groupbox.getSelectedIndex()).equals(
"FAMILY"))
                feedFile2("family.txt");
            else if(groupbox.getItemAt(groupbox.getSelectedIndex()).eq
uals("FRIENDS"))
                feedFile2("friends.txt");
            else if(groupbox.getItemAt(groupbox.getSelectedIndex()).eq
uals("WORK"))
                feedFile2("work.txt");
            else
                System.out.println(groupbox.getItemAt(groupbox.getSelected
Index()));
        }
    });

    search.addActionListener(new ActionListener(){
        public void actionPerformed(ActionEvent e){

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        mainframe.setVisible(false);
        searchframe.setVisible(true);
        newcontactframe.setVisible(false);
        displayframe.setVisible(false);
    }
});

startsearchName.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        mainframe.setVisible(true);
        searchframe.setVisible(false);
        newcontactframe.setVisible(false);
        displayframe.setVisible(false);
        nameFinderWithNumber("names.txt","numbers.txt");
    }
});

display.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        mainframe.setVisible(false);
        searchframe.setVisible(false);
        newcontactframe.setVisible(false);
        displayframe.setVisible(true);
        textarea.setText("");
    }
});

displayall.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        mainframe.setVisible(true);
        searchframe.setVisible(false);
        newcontactframe.setVisible(false);
        displayframe.setVisible(false);
        textarea.setText("");
        readFile("namesnumbers.txt");
    }
});

displayfam.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        mainframe.setVisible(true);
        searchframe.setVisible(false);
        newcontactframe.setVisible(false);
        displayframe.setVisible(false);
        textarea.setText("");
        readFile("family.txt");
    }
});

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displayfriend.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        mainframe.setVisible(true);
        searchframe.setVisible(false);
        newcontactframe.setVisible(false);
        displayframe.setVisible(false);
        textarea.setText("");
        readFile("friends.txt");
    }
});
displaywork.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent e){
        mainframe.setVisible(true);
        searchframe.setVisible(false);
        newcontactframe.setVisible(false);
        displayframe.setVisible(false);
        textarea.setText("");
        readFile("work.txt");
    }
});
}
}
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