UML diagram

Diagram

Description automatically generated

Graphical user interface, text, application, Word

Description automatically generated

Graphical user interface, text, application, Word

Description automatically generated

Graphical user interface, text, application

Description automatically generated

Graphical user interface, application

Description automatically generated pressing no does not add the name to the system

Graphical user interface, application

Description automatically generated

Graphical user interface, text, application

Description automatically generated

**Pear**:

/\*JavaParadiseGUI.java will have list of PC, customers, and bookings

\*It will be organized as tabbed pane

\*/

package diploma\_stage2;

import java.awt.\*;

import java.awt.event.\*;

import javax.swing.\*;

import javax.swing.border.\*;

import java.util.\*;

import java.time.\*;

import java.io.\*;

public class Pear extends JFrame implements ActionListener{

//declarations

ArrayList<PC> PC ;

ArrayList<Customer> customers ;

//ArrayList<Booking> bookings ;

//for PCTab

JButton btnRList, btnRClear;

JTextArea jtaR;

// for customersTab

JButton btnCAdd, btnCList, btnCClear;

JTextArea jtaC;

JLabel lblName;

JTextField txtName;

Customer cfound, cfoundb = null;

PC rfound = null;

Booking bfound = null;

//constructor

public Pear(){

PC = new ArrayList<PC>();

customers = new ArrayList<Customer>();

//components for tabbed panel

JTabbedPane tabs = new JTabbedPane();

JPanel PCTab = new JPanel();

JPanel customersTab = new JPanel();

//components for PCTab

//\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

JPanel displayRPanel = new JPanel();

JPanel buttonRPanel = new JPanel();

//for PCTab display

jtaR = new JTextArea(30, 50);

JScrollPane scrollR = new JScrollPane(jtaR, ScrollPaneConstants.VERTICAL\_SCROLLBAR\_ALWAYS,

ScrollPaneConstants.HORIZONTAL\_SCROLLBAR\_ALWAYS);

//for PCTab button panel

btnRList = new JButton("List PC");

btnRClear = new JButton("Clear display");

//\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

//components for customerTab

JPanel inputCPanel = new JPanel();

JPanel displayCPanel = new JPanel();

JPanel buttonCPanel = new JPanel();

inputCPanel.setLayout(new GridLayout(2,1));

inputCPanel.setBorder(new EmptyBorder(30,30,30,30));

lblName = new JLabel(" Enter name");

txtName = new JTextField(10);

btnCAdd = new JButton("Add customer");

btnCList = new JButton("List customers");

btnCClear = new JButton("Clear");

jtaC = new JTextArea(30, 50);

jtaC.setBorder(new TitledBorder("List of customers"));

//\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

//build tabs

//add tabbed pane to center

add(tabs, BorderLayout.CENTER);

//add tab panels to it

tabs.addTab("PC", PCTab);

tabs.addTab("Customers", customersTab);

//tabs.addTab("Bookings", bookingsTab);

//tabs.addTab("Checkout", checkoutTab);

//\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

//build PCTab

PCTab.setLayout(new BorderLayout());

PCTab.add(displayRPanel, BorderLayout.CENTER);

PCTab.add(buttonRPanel, BorderLayout.SOUTH);

jtaR.setBorder(new TitledBorder("List of PC"));

btnRList.addActionListener(this);

btnRClear.addActionListener(this);

buttonRPanel.add(btnRList);

buttonRPanel.add(btnRClear);

displayRPanel.add(scrollR);

//\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

//build customersTab

customersTab.setLayout(new BorderLayout());

customersTab.add(inputCPanel, BorderLayout.NORTH);

customersTab.add(displayCPanel, BorderLayout.CENTER);

customersTab.add(buttonCPanel, BorderLayout.SOUTH);

inputCPanel.setLayout(new GridLayout(1, 2));

inputCPanel.setBorder(new EmptyBorder(30,30,30,30));

inputCPanel.add(lblName);

inputCPanel.add(txtName);

//build button panel

btnCAdd.addActionListener(this);

btnCList.addActionListener(this);

btnCClear.addActionListener(this);

buttonCPanel.add(btnCAdd);

buttonCPanel.add(btnCList);

buttonCPanel.add(btnCClear);

displayCPanel.add(jtaC);

//\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

//build bookingsTab

JPanel displayBPanel = new JPanel();

JPanel buttonBPanel = new JPanel();

//buttonBPanel.setLayout(new GridLayout(1,2, 20, 20));

//pnlPaymentOpt

}

public void populateLists(){

PC[] arrOfPC = {new PC("Gaming"), new PC("Office"),new PC("Media Consumption")};

Customer[] arrOfCustomers = {new Customer("James"),

new Customer("Elijah"), new Customer("John")};

for(int i = 0; i < arrOfPC.length; i++){

arrOfPC[i].setTotalPrice(arrOfPC[i].getType());

PC.add(arrOfPC[i]);

}

for(int i = 0; i < arrOfCustomers.length; i++)

customers.add(arrOfCustomers[i]);

//System.out.println(PC.toString());

rfound = searchPCByPCNo(2);

}

public static void main(String[] args){

Pear jp = new Pear();

jp.populateLists();

//set up frame

jp.setSize(600, 550);

jp.setLocationRelativeTo(null);

jp.setVisible(true);

}

public void displayAllPCs() {

for (PC r:PC) {

System.out.println(r);

}

}

public void addCustomer() {

String name = txtName.getText();

Customer c = new Customer(name);

customers.add(c);

}

public void listCustomers() {

for (Customer c:customers) {

System.out.println(c);

}

}

public Customer searchCustomerById(int id) {

for (Customer c:customers) {

if (c.getCustId() == id)

return c;

}

return null;

}

public PC searchPCByPCNo(int PCNo){

for(PC r: PC){

if(r.getPCNo() == PCNo)

return r;

}

return null;

}

public void actionPerformed(ActionEvent e){

if(e.getSource()==btnRList){

jtaR.setText("");

for(PC r: PC){

System.out.println(r);

jtaR.append("\n" + r.toString() + "\n");

}

}

if(e.getSource() == btnCList){

jtaC.setText("");

for(Customer c: customers){

jtaC.append("\n"+ c.toString() + "\n");

}

}

if(e.getSource()==btnRClear){

jtaR.setText("");

}

if(e.getSource() == btnCClear){

jtaC.setText("");

}

if(e.getSource()==btnCAdd){

int options = JOptionPane.showOptionDialog(

null,

"Are you sure you want to add that name into the system?",

"Adding a customer",

JOptionPane.YES\_NO\_OPTION,

JOptionPane.INFORMATION\_MESSAGE,

null,

null,

0);

if (options ==0){

addCustomer();

JOptionPane.showMessageDialog(null, "That name has been added to the system");

}else{

;

}

}

}

}