

```
import java.io.FileOutputStream;
import java.io.IOException;
import java.io.ObjectOutputStream;
import java.util.ArrayList;

public class Main {

    public static void main(String[] args) {

        Hotel h1 = new Hotel("Bellevue");
        Hotel h2 = new Hotel("Hermes");
        Hotel h3 = new Hotel("CityHotel");
        Hotel h4 = new Hotel("Panorama");

        ArrayList<Hotel> hotels = new ArrayList<Hotel>();
        hotels.add(h1);
        hotels.add(h2);
        hotels.add(h3);
        hotels.add(h4);

        try {
            FileOutputStream fileOut = new FileOutputStream("hotels.ser");
            ObjectOutputStream out = new ObjectOutputStream(fileOut);
            out.writeObject(hotels);
            out.close();
            fileOut.close();
        }
        catch(IOException i) {
            i.printStackTrace();
        }

        InputFrame inputFrame = new InputFrame();

    }

}
```

```
// Κλάση
public class Reservation {

    protected int days;

    public Reservation(int days) {
        this.days = days;
    }

    public double calculateCost() {

        return days*120;
    }

}

public class AllInclusiveReservation extends Reservation {

    int meals;

    public AllInclusiveReservation(int days, int meals) {
        super(days);
        this.meals = meals;
    }

    public double calculateCost() {

        return days * (120+ meals*30);
    }

}
```

```
import java.io.Serializable;
import java.util.ArrayList;

public class Hotel implements Serializable {

    private String name;
    private ArrayList<Reservation> reservations = new ArrayList<>();// Έβαλα κρατήσεις

    public Hotel(String name) {
        this.name = name;
    }

    public String getName() {
        return name;
    }

    public void addReservation(Reservation r){
        reservations.add(r);
    }

    // Υπολογισμός χρεώσεων κρατήσεων
    public double calculateTotalCharge(){
        int total=0;
        for(Reservation res: reservations)
            sum += res.calculateCost();
        return total;
    }
}
```

```
import java.awt.Color;
import java.awt.Component;
import java.awt.GridLayout;
import java.awt.event.ActionEvent;
import java.awt.event.ActionListener;
import java.io.File;
import java.io.FileInputStream;
import java.io.FileNotFoundException;
import java.io.IOException;
import java.io.ObjectInputStream;
import java.util.ArrayList;
```

```
import javax.swing.BorderFactory;
import javax.swing.BoxLayout;
import javax.swing.DefaultListModel;
import javax.swing.JButton;
import javax.swing.JFrame;
import javax.swing.JLabel;
import javax.swing.JList;
import javax.swing.JPanel;
import javax.swing.JTextField;
```

```
public class InputFrame extends JFrame {
```

```
    private JPanel panel;
    private JPanel diamoniPanel;
    private JPanel allInclusivePanel;
    private JPanel buttonPanel;
```

```
    private JLabel diamoniLabel;
    private JLabel hotelLabel;
    private JLabel allInclusiveLabel;
```

```
    private JList<String> listView;
    private DefaultListModel model;
```

```
    private JTextField daysField;
    private JTextField mealsField;
```

```
    private JButton storeButton;
    private JButton calculateCostButton;
```

```
    private JTextField costField;
    private ArrayList<Hotel> hotels;
```

```
    public InputFrame() {
```

```
        panel = new JPanel();
        diamoniPanel = new JPanel();
        allInclusivePanel = new JPanel();
        buttonPanel = new JPanel();
```

```
        listView = new JList<String>();
        model = new DefaultListModel<String>();
```

```
        //Ανάγνωση ξενοδοχείων από αρχείο
```

```
        File file = new File("hotels.ser");
        FileInputStream fileIn;
```

```
        try {
            fileIn = new FileInputStream(file);
            ObjectInputStream in = new ObjectInputStream(fileIn);
            hotels = (ArrayList<Hotel>)in.readObject();
            in.close();
```

```

        fileIn.close();
    } catch (FileNotFoundException e) {
        e.printStackTrace();
    } catch (IOException e) {
        e.printStackTrace();
    } catch (ClassNotFoundException e) {
        // TODO Auto-generated catch block
        e.printStackTrace();
    }

    //Προσθήκη Ξενοδοχείων
    Collections.sort(hotels);
    for (Hotel hotel: hotels)
        model.addElement(hotel.getName());

    listView.setModel(model);

    diamoniLabel = new JLabel("Stoixeia Diamonis");
    hotelLabel = new JLabel("Hotel");
    allInclusiveLabel = new JLabel("AllInclusive");

    daysField = new JTextField("Hmeres Diamonis");
    mealsField = new JTextField("Plithos Geumatwn (1,2,3)");
    costField = new JTextField("Synoliko Kostos");

    storeButton = new JButton("Apothikeusi Kratisis");
    calculateCostButton = new JButton("Ypologismos Kostous");

    diamoniPanel.setLayout(new BorderLayout(diamoniPanel, BorderLayout.Y_AXIS));
    diamoniLabel.setAlignmentX(Component.CENTER_ALIGNMENT);
    diamoniPanel.add(diamoniLabel);
    hotelLabel.setAlignmentX(Component.CENTER_ALIGNMENT);
    diamoniPanel.add(hotelLabel);
    diamoniPanel.add(listView);
    diamoniPanel.add(daysField);
    diamoniPanel.setBorder(BorderFactory.createLineBorder(Color.black));

    allInclusivePanel.setLayout(new GridLayout(2,0));
    allInclusivePanel.add(allInclusiveLabel);
    allInclusivePanel.add(mealsField);
    allInclusivePanel.setBorder(BorderFactory.createLineBorder(Color.black));

    buttonPanel.setLayout(new GridLayout(2,0));
    buttonPanel.add(storeButton);
    buttonPanel.add(calculateCostButton);
    buttonPanel.setBorder(BorderFactory.createLineBorder(Color.black));

    panel.add(diamoniPanel);
    panel.add(allInclusivePanel);
    panel.add(buttonPanel);
    panel.add(costField);

    this.setContentPane(panel);

    ButtonListener listener = new ButtonListener();
    storeButton.addActionListener(listener);
    calculateCostButton.addActionListener(listener);

    this.setVisible(true);
    this.setSize(200, 320);
    this.setLocation(200, 0);
    this.setTitle("Input");
    this.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

```

```

    }

    class ButtonListener implements ActionListener {
        public void actionPerformed(ActionEvent e) {

            String selectedHotelName = listView.getSelectedValue();
            Hotel selectedHotel = null;

            for(Hotel h : hotels){
                if(h.getName().equals(selectedHotelName)){
                    selectedHotel = h;
                    break;
                }
            }
            //Βρίσκω επιλεγμένο ξενοδοχείο και κάνω add την κράτηση
            if(selectedHotel!=null){

                String daysText = daysField.getText();
                int days = Integer.parseInt(daysText);// Πηγή μετατροπή σε
int

                Reservation r;
                if(mealsField.getText().equals("")){
                    r = new Reservation(days);
                }
                else{

                    int meals =
Integer.parseInt(mealsField.getText()); // Πηγή μετατροπή
                    r = new AllInclusiveReservation(days,meals);
                }
                selectedHotel.addReservation(r);
            }
            else{
                int total = selectedHotel.calculateTotalost();
                costField.setText(Integer.toString(total));
            }
            else{
                JOptionPane.showMessageDialog(null, "No hotel selected!");
                System.out.println("No hotel selected");
            }
        }
    }
}

```