

Chuyên đề 2

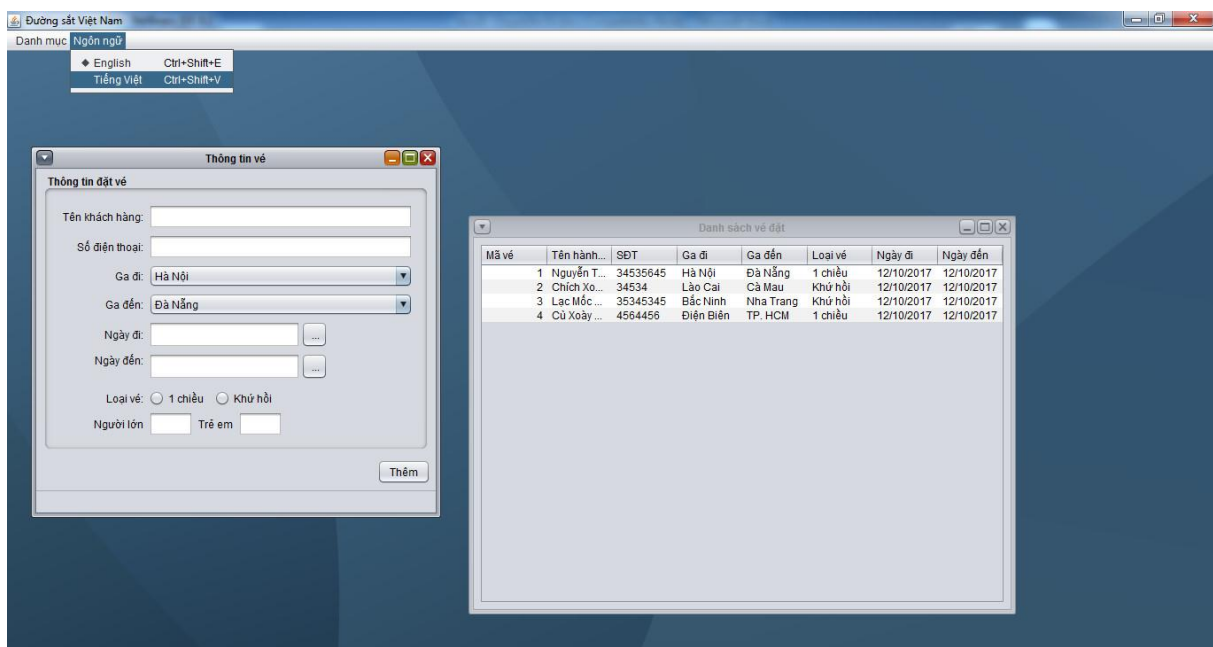
Bài tổng hợp

Mục tiêu

- ✓ Tạo được ứng dụng Java Desktop bằng Swing
- ✓ Ứng dụng được I18N và L10N
- ✓ Tích hợp được thư viện JDBC để kết nối với CSDL.

Bài thực hành:

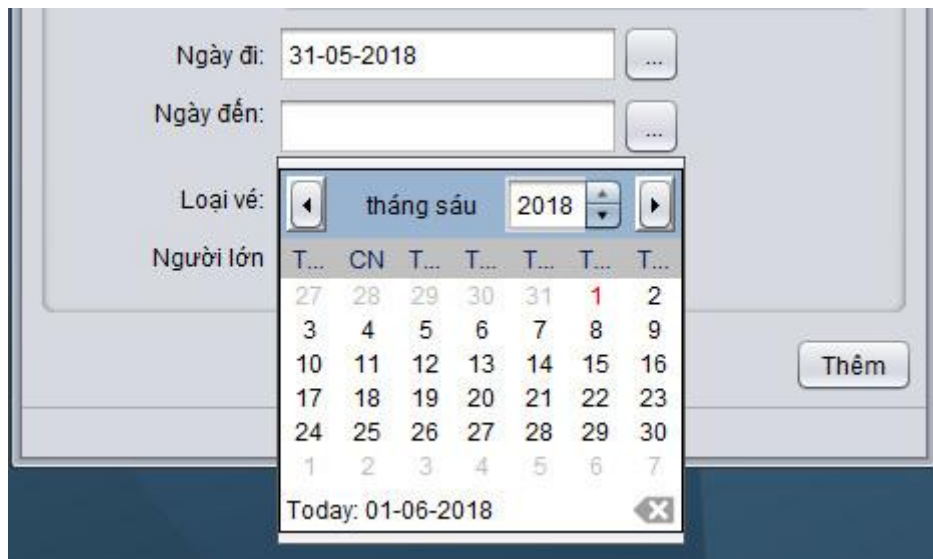
Yêu cầu: Tạo ứng dụng “**Đặt vé đường sắt**” như hình mô tả bên dưới



Ứng dụng gồm:

- Frame chính có chứa JdesktopPane, menu có thể điều hướng tới các frame con và chuyển ngôn ngữ.
- InternalFrame “**Thông tin vé**”: có form như hình trên, dùng để nhập dữ liệu và thêm vào database.
- InternalFrame “**Danh sách vé đặt**”: có form như hình trên, hiển thị danh sách vé đã đặt (tải từ database)

Tích hợp thư viện nguồn mở **JdatePicker** (<https://jdatepicker.org/>) để nhập dữ liệu ngày tháng dễ dàng hơn (xem hình bên dưới) – phiên bản mới nhất tính đến 01/2018 là 2.0.3:



Ứng dụng có các chức năng sau:

- Chuyển đổi ngôn ngữ I18N
- Nhập dữ liệu vé
- Hiển thị dữ liệu vé
- Chuột phải vào dòng dữ liệu trên bảng "*Danh sách vé*" thì hiển thị popup menu có tùy chọn "*Sửa*" và "*Xóa*".
 - Nếu bấm "*Xóa*" thì xóa dữ liệu khỏi database
 - Nếu bấm "*Sửa*" thì dữ liệu sẽ đổ lên form "*Thông tin vé*", đồng thời hiển thị thêm nút "*Sửa*" và disable nút "*Thêm*".

Cửa sổ đặt vé:

Thông tin về

Thông tin đặt vé

Tên khách hàng:

Số điện thoại:

Ga đi:

Ga đến:

Ngày đi: ...

Ngày đến: ...

Loại vé: ☒ 1 chiều ☐ Khứ hồi

Người lớn Trẻ em

Thêm

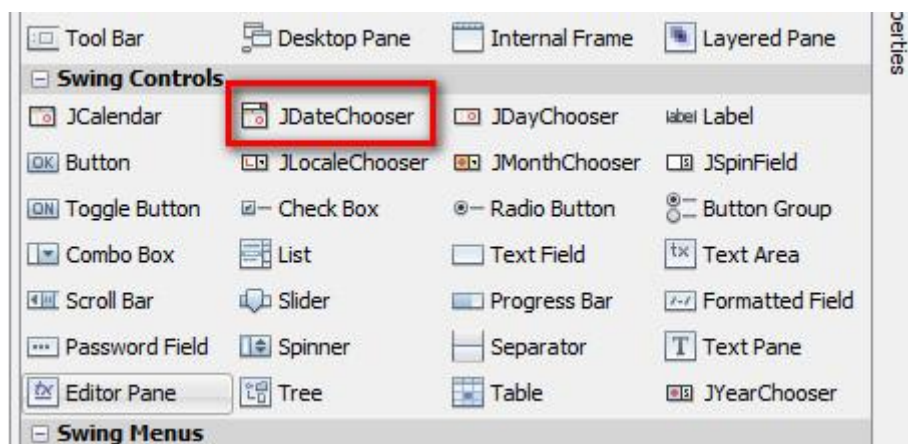
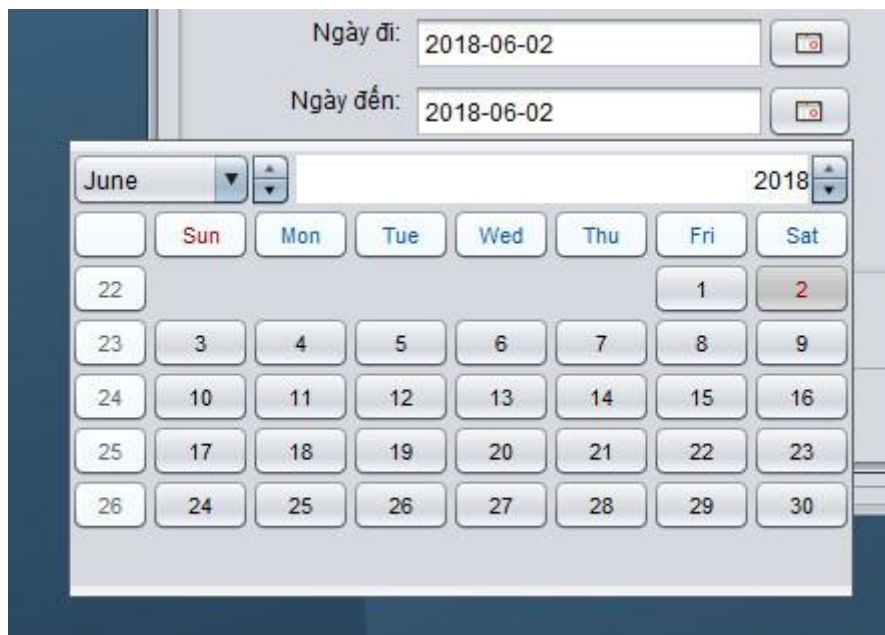
Cửa sổ danh sách vé:

Danh sách vé đặt

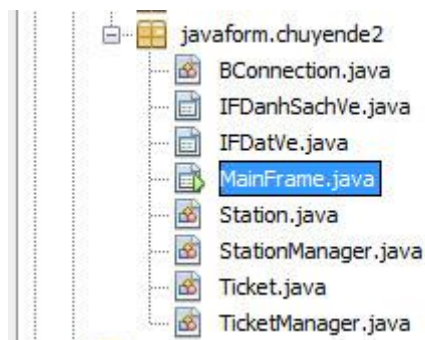
Mã vé	Tên hành...	SĐT	Ga đi	Ga đến	Loại vé	Ngày đi	Ngày đến
1	Nguyễn T...	34535645	Hà Nội	Đà Nẵng	1 chiều	12/10/2017	12/10/2017
2	Chích Xo...	34534	Lào Cai	Cà Mau	Khứ hồi	12/10/2017	12/10/2017
3	Lạc Mốc ...	35345345	Bắc Ninh	Nha Trang	Khứ hồi	12/10/2017	12/10/2017
4	Củ Xoày ...	4564456	Điện Biên	TP. HCM	Sửa	12/10/2017	12/10/2017

Xóa

Sử dụng thư viện jcalendar-1.4.jar (<http://toedter.com>)



Tham khảo cấu trúc ứng dụng:



Code tham khảo:

Station.java

`package javaform.chuyende2;`

```
/**
 *
 * @author minhvufc
 */
public class Station {

    private int id;
    private String name;

    public Station() {
    }

    public Station(int id, String name) {
        this.id = id;
        this.name = name;
    }

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    @Override
    public String toString() {
        return this.name;
    }

}
```

Ticket.java

```
package javaform.chuyende2;
```

```
/**
```

```
*
```

```
* @author minhvuvc
```

```
*/
```

```
public class Ticket {
```

```
    private int id;
```

```
    private String passenger;
```

```
    private String phone;
```

```
    private int fromS;
```

```
    private int toS;
```

```
    private int type;
```

```
    private String startDate;
```

```
    private String endDate;
```

```
    private int adult;
```

```
    private int child;
```

```
    private String fromSName;
```

```
    private String toSName;
```

```
    public Ticket() {
```

```
    }
```

```
    public Ticket(int id, String passenger, String phone, int fromS, int toS, int type,
String startDate, String endDate, int adult, int child, String fromSName, String
toSName) {
```

```
        this.id = id;
```

```
        this.passenger = passenger;
```

```
        this.phone = phone;
```

```
        this.fromS = fromS;
```

```
        this.toS = toS;
```

```
        this.type = type;
```

```
        this.startDate = startDate;
```

```
        this.endDate = endDate;
```

```
        this.adult = adult;
```

```
        this.child = child;
```

```
        this.fromSName = fromSName;
```

```
        this.toSName = toSName;
```

```
    }
```

```
    public Ticket(String passenger, String phone, int fromS, int toS, int type, String
startDate, String endDate, int adult, int child) {
```

```
        this.passenger = passenger;
```

```
        this.phone = phone;
```

```
        this.fromS = fromS;
```

```
this.toS = toS;
this.type = type;
this.startDate = startDate;
this.endDate = endDate;
this.adult = adult;
this.child = child;
}

public int getId() {
    return id;
}

public void setId(int id) {
    this.id = id;
}

public String getPassenger() {
    return passenger;
}

public void setPassenger(String passenger) {
    this.passenger = passenger;
}

public String getPhone() {
    return phone;
}

public void setPhone(String phone) {
    this.phone = phone;
}

public int getFromS() {
    return fromS;
}

public void setFromS(int fromS) {
    this.fromS = fromS;
}

public int getToS() {
    return toS;
}
```

```

public void setToS(int toS) {
    this.toS = toS;
}

public int getType() {
    return type;
}

public void setType(int type) {
    this.type = type;
}

public String getStartDate() {
    return startDate;
}

public void setStartDate(String startDate) {
    this.startDate = startDate;
}

public String getEndDate() {
    return endDate;
}

public void setEndDate(String endDate) {
    this.endDate = endDate;
}

public int getAdult() {
    return adult;
}

public void setAdult(int adult) {
    this.adult = adult;
}

public int getChild() {
    return child;
}

public void setChild(int child) {
    this.child = child;
}

```



```
public String getFromSName() {  
    return fromSName;  
}  
  
public void setFromSName(String fromSName) {  
    this.fromSName = fromSName;  
}  
  
public String getToSName() {  
    return toSName;  
}  
  
public void setToSName(String toSName) {  
    this.toSName = toSName;  
}  
}
```

BConnection.java

```
package javaform.chuyende2;  
  
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.SQLException;  
import java.util.logging.Level;  
import java.util.logging.Logger;  
  
/**  
 *  
 * @author minhvuvc  
 */  
public class BConnection {  
  
    private static final String HOST = "jdbc:sqlserver://localhost\\MINHVUFC-  
PC\\SQLEXPRESS2014:1433;databaseName=BKDuongSat";  
    private static final String USERNAME = "sa";  
    private static final String PASSWORD = "1234$";  
  
    public static Connection getConnection() {  
        try {  
            Class.forName("com.microsoft.sqlserver.jdbc.SQLServerDriver");  
            return DriverManager.getConnection(HOST, USERNAME, PASSWORD);  
        } catch (ClassNotFoundException ex) {
```

```
        Logger.getLogger(BConnection.class.getName()).log(Level.SEVERE, null,
ex);
    } catch (SQLException ex) {
        Logger.getLogger(BConnection.class.getName()).log(Level.SEVERE, null,
ex);
    }
    return null;
}
}
```

StationManager.java

```
package javaform.chuyende2;
```

```
import java.sql.Connection;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.ArrayList;
import java.util.logging.Level;
import java.util.logging.Logger;
import javaform.chuyende1.BookManager;
import javax.swing.DefaultComboBoxModel;
```

```
/**
```

```
*
```

```
* @author minhvuvc
```

```
*/
```

```
public class StationManager {
```

```
    private Connection conn;
```

```
    ArrayList<Station> lstStation = new ArrayList<>();
```

```
    public StationManager() {
```

```
        conn = BConnection.getConnection();
```

```
        if (conn != null) {
```

```
            System.out.println("Kết nối thành công");
```

```
        } else {
```

```
            System.err.println(">>> Kiểm tra kết nối !!!");
```

```
        }
```

```
    }
```

```
    public DefaultComboBoxModel<Station> getStation() {
```

```
        // Reset mảng dữ liệu
```

```
        lstStation.removeAll(lstStation);
```

```
DefaultComboBoxModel<Station> dcbm = new
DefaultComboBoxModel<Station>();
```

```
try {
    String sql = "SELECT * FROM Station";

    Statement stt = conn.createStatement();
    ResultSet rs = stt.executeQuery(sql);
    while (rs.next()) {
        Station s = new Station(rs.getInt("id"), rs.getString("name"));
        lstStation.add(s);
        dcbm.addElement(s);
    }
} catch (SQLException ex) {
    Logger.getLogger(BookManager.class.getName()).log(Level.SEVERE,
null, ex);
} finally {
    return dcbm;
}
}
```

TicketManager.java

```
package javaform.chuyende2;

import java.sql.CallableStatement;
import java.sql.Connection;
import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.ArrayList;
import java.util.logging.Level;
import java.util.logging.Logger;
import javax.swing.table.DefaultTableModel;

/**
 *
 * @author minhvuvc
 */
public class TicketManager {

    private Connection conn;
    ArrayList<Ticket> lstTicket = new ArrayList<>();
```

```

public TicketManager() {
    conn = BConnection.getConnection();
    if (conn != null) {
        System.out.println("Kết nối thành công");
    } else {
        System.err.println(">>> Kiểm tra kết nối !!!");
    }
}

public DefaultTableModel getAllTicket() {
    // Reset mảng dữ liệu
    lstTicket.removeAll(lstTicket);
    String columnNames[] = { "Mã", "Hành Khách", "SĐT", "Ga đi", "Ga đến",
        "Loại", "Ngày đi", "Ngày đến", "Người lớn", "Trẻ em" };
    DefaultTableModel dtf = new DefaultTableModel(columnNames, 0);
    try {
        String sql = "{CALL sp_getTicket}";
        CallableStatement cs = conn.prepareCall(sql);
        ResultSet rs = cs.executeQuery();
        while (rs.next()) {
            Ticket t = new Ticket(rs.getInt("id"),
                rs.getString("passenger"), rs.getString("phone"),
                rs.getInt("fromS"), rs.getInt("toS"), rs.getInt("type"),
                rs.getString("startDate"), rs.getString("endDate"),
                rs.getInt("adult"), rs.getInt("child"),
                rs.getString("gadi"), rs.getString("gaden"));
            lstTicket.add(t);
            dtf.addRow(new Object[] { rs.getInt("id"),
                rs.getString("passenger"), rs.getString("phone"),
                rs.getString("gadi"), rs.getString("gaden"),
                rs.getInt("type") == 0 ? "Một chiều" : "Khứ hồi",
                rs.getString("startDate"), rs.getString("endDate"),
                rs.getInt("adult"), rs.getInt("child") });
        }
        if (lstTicket.size() == 0) {
            System.out.println("KHÔNG TÌM THẤY DỮ LIỆU");
        }
    } catch (SQLException ex) {
        Logger.getLogger(TicketManager.class.getName()).log(Level.SEVERE,
null, ex);
    } finally {
        return dtf;
    }
}

```

```

public int create(Ticket t) {
    try {
        String sql = "{CALL sp_newTicket(?,?,?,?,?,?,?,?)}";
        CallableStatement cs = conn.prepareCall(sql);
        cs.setString(1, t.getPassenger());
        cs.setString(2, t.getPhone());
        cs.setInt(3, t.getFromS());
        cs.setInt(4, t.getToS());
        cs.setInt(5, t.getType());
        cs.setString(6, t.getStartDate());
        cs.setString(7, t.getEndDate());
        cs.setInt(8, t.getAdult());
        cs.setInt(9, t.getChild());

        int row = cs.executeUpdate();
        System.out.println("Thêm dữ liệu: " + row);
        return row;
    } catch (SQLException ex) {
        Logger.getLogger(TicketManager.class.getName()).log(Level.SEVERE,
null, ex);
        return 0;
    }
}

public int deleteTicket(int id) {

    try {
        String sql = "DELETE Ticket WHERE id = " + id;
        Statement stt = conn.createStatement();
        int row = stt.executeUpdate(sql);

        if (row > 0) {
            System.out.println("Xóa thành công");
        }
        return row;
    } catch (SQLException ex) {
        Logger.getLogger(TicketManager.class.getName()).log(Level.SEVERE,
null, ex);
    }
    return 0;
}
}

```

IFDatVe.java

```
package javaform.chuyende2;

import java.text.SimpleDateFormat;
import java.util.Calendar;
import javax.swing.JOptionPane;

/**
 *
 * @author Admin
 */
public class IFDatVe extends javax.swing.JInternalFrame {

    SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd");

    CallbackDatVe callbackDatVe;

    interface CallbackDatVe {

        public void actionAdd();
    }

    /**
     * Creates new form IFDatVe
     */
    public IFDatVe(CallbackDatVe cb) {
        initComponents();
        this.callbackDatVe = cb;
        loadStation();
    }

    private void loadStation() {
        StationManager st = new StationManager();
        cbxFromStation.setModel(st.getStation());
        cbxToStation.setModel(st.getStation());
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
```

```
private void initComponents() {
```

```
    groupWay = new javax.swing.ButtonGroup();
    jPanel1 = new javax.swing.JPanel();
    jLabel2 = new javax.swing.JLabel();
    txtPassenger = new javax.swing.JTextField();
    jLabel3 = new javax.swing.JLabel();
    txtPhone = new javax.swing.JTextField();
    jLabel4 = new javax.swing.JLabel();
    jpDate = new javax.swing.JPanel();
    jLabel5 = new javax.swing.JLabel();
    jLabel6 = new javax.swing.JLabel();
    cbxToStation = new javax.swing.JComboBox();
    cbxFromStation = new javax.swing.JComboBox();
    jLabel7 = new javax.swing.JLabel();
    jLabel8 = new javax.swing.JLabel();
    radType1Way = new javax.swing.JRadioButton();
    jRadioButton2 = new javax.swing.JRadioButton();
    jLabel9 = new javax.swing.JLabel();
    jLabel10 = new javax.swing.JLabel();
    txtAdult = new javax.swing.JFormattedTextField();
    txtChild = new javax.swing.JFormattedTextField();
    jdcFrom = new com.toedter.calendar.JDateChooser();
    jdcTo = new com.toedter.calendar.JDateChooser();
    lblStatus = new javax.swing.JLabel();
    jSeparator1 = new javax.swing.JSeparator();
    btnAddNew = new javax.swing.JButton();
```

```
    setClosable(true);
    setIconifiable(true);
    setMaximizable(true);
    setResizable(true);
    setTitle("Thông tin vé");
```

```
    jPanel1.setBorder(javax.swing.BorderFactory.createTitledBorder("Thông tin  
đặt vé"));
```

```
    jLabel2.setText("Tên khách hàng:");
```

```
    jLabel3.setText("Số điện thoại:");
```

```
    jLabel4.setText("Ngày đi:");
```

```

jLabel5.setText("Ga đi:");

jLabel6.setText("Ga đến:");

cbxToStation.setModel(new javax.swing.DefaultComboBoxModel(new
String[] { "Hà Nội", "Hải Phòng", "Đà Nẵng", "Nha Trang", "TP Hồ Chí Minh"
}));
cbxToStation.setSelectedIndex(2);

cbxFromStation.setModel(new javax.swing.DefaultComboBoxModel(new
String[] { "Hà Nội", "Hải Phòng", "Đà Nẵng", "Nha Trang", "TP Hồ Chí Minh"
}));

jLabel7.setText("Ngày đến:");

jLabel8.setText("Loại vé:");

groupWay.add(radType1Way);
radType1Way.setSelected(true);
radType1Way.setText("1 chiều");

groupWay.add(jRadioButton2);
jRadioButton2.setText("Khứ hồi");

jLabel9.setText("Người lớn");

jLabel10.setText("Trẻ em");

txtAdult.setFormatterFactory(new
javax.swing.text.DefaultFormatterFactory(new
javax.swing.text.NumberFormatter(java.text.NumberFormat.getIntegerInstance()))
);

txtChild.setFormatterFactory(new
javax.swing.text.DefaultFormatterFactory(new
javax.swing.text.NumberFormatter(java.text.NumberFormat.getIntegerInstance()))
);

jdcFrom.setDate(Calendar.getInstance().getTime());
jdcFrom.setDateFormatString("yyyy-MM-dd");

jdcTo.setDate(Calendar.getInstance().getTime());
jdcTo.setDateFormatString("yyyy-MM-dd");

```


Trang 17 / 32

```

        .addComponent(txtChild,
javax.swing.GroupLayout.PREFERRED_SIZE, 50,
javax.swing.GroupLayout.PREFERRED_SIZE)))

    .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, 10,
Short.MAX_VALUE)
        .addComponent(jpDate,
javax.swing.GroupLayout.DEFAULT_SIZE, 229, Short.MAX_VALUE)
        .addGap(61, 61, 61))
    .addGroup(jPanel1Layout.createSequentialGroup())

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment
t.TRAILING)
        .addComponent(txtPhone,
javax.swing.GroupLayout.Alignment.LEADING)
        .addComponent(txtPassenger))
    .addContainerGap()
    .addGroup(javax.swing.GroupLayout.Alignment.TRAILING,
jPanel1Layout.createSequentialGroup())

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment
t.TRAILING)
        .addComponent(cbxToStation,
javax.swing.GroupLayout.Alignment.LEADING, 0,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(cbxFromStation, 0,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE))
    .addContainerGap()
    .addGroup(jPanel1Layout.createSequentialGroup())

    .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment
t.LEADING, false)
        .addComponent(jdcFrom,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addComponent(jdcTo,
javax.swing.GroupLayout.DEFAULT_SIZE, 220, Short.MAX_VALUE))
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))))
    );
    jPanel1Layout.setVerticalGroup(

jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING
G)

```

```
.addGroup(jPanel1Layout.createSequentialGroup()  
    .addContainerGap()
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.  
t.CENTER)
```

```
    .addComponent(txtPassenger,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
    .addComponent(jLabel2))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.  
t.CENTER)
```

```
    .addComponent(txtPhone,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
    .addComponent(jLabel3))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.  
t.CENTER)
```

```
    .addComponent(cbxFrmStation,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE)  
    .addComponent(jLabel5))  
    .addGap(6, 6, 6)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.  
t.BASELINE)
```

```
    .addComponent(jLabel6)  
    .addComponent(cbxFrmStation,  
javax.swing.GroupLayout.PREFERRED_SIZE,  
javax.swing.GroupLayout.DEFAULT_SIZE,  
javax.swing.GroupLayout.PREFERRED_SIZE))
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
```

```
.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.  
t.LEADING)
```

```

        .addComponent(jLabel4)
        .addComponent(jdcFrom,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))

        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jLabel7)
            .addComponent(jdcTo, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE))
        .addGroup(3, 3, 3)

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.CENTER)
            .addComponent(radType1Way)
            .addComponent(jLabel8)
            .addComponent(jRadioButton2))
        .addGroup(4, 4, 4)

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jpDate,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(jLabel9))

        .addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)
            .addComponent(jLabel10)
            .addComponent(txtAdult,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
            .addComponent(txtChild,
javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)))
        .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
    
```

```

);

lblStatus.setText("...");

btnAddNew.setText("Thêm");
btnAddNew.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        btnAddNewActionPerformed(evt);
    }
});

javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);
layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addComponent(jSeparator1)
    .addGroup(layout.createSequentialGroup()
        .addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
        .addGroup(layout.createParallelGroup.Alignment.TRAILING,
layout.createSequentialGroup()
            .addGap(0, 0, Short.MAX_VALUE)
            .addComponent(btnAddNew)))
        .addComponent(lblStatus, javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE, Short.MAX_VALUE)
    );
layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
    .addGroup(layout.createSequentialGroup()
        .addComponent(jPanel1, javax.swing.GroupLayout.PREFERRED_SIZE,
javax.swing.GroupLayout.DEFAULT_SIZE,
javax.swing.GroupLayout.PREFERRED_SIZE)
        .addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
        .addComponent(btnAddNew)
    );

```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(jSeparator1,
javax.swing.GroupLayout.PREFERRED_SIZE, 10,
javax.swing.GroupLayout.PREFERRED_SIZE)
```

```
.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED)
    .addComponent(lblStatus,
javax.swing.GroupLayout.PREFERRED_SIZE, 32,
javax.swing.GroupLayout.PREFERRED_SIZE)
    .addContainerGap(javax.swing.GroupLayout.DEFAULT_SIZE,
Short.MAX_VALUE))
);
```

```
pack();
} // </editor-fold>
```

```
private void btnAddNewActionPerformed(java.awt.event.ActionEvent evt) {
    String passenger = txtPassenger.getText();
    String phone = txtPhone.getText();
    int fromS = ((Station) cbxFromStation.getSelectedItem()).getId();
    int toS = ((Station) cbxToStation.getSelectedItem()).getId();
    int type = radType1Way.isSelected() ? 0 : 1;
    String startDate = sdf.format(jdcFrom.getDate());
    String endDate = sdf.format(jdcTo.getDate());
    int adult = Integer.parseInt(txtAdult.getText());
    int child = Integer.parseInt(txtChild.getText());
    Ticket t = new Ticket(passenger, phone, fromS, toS, type, startDate, endDate,
adult, child);
    TicketManager tm = new TicketManager();
    int row = tm.create(t);
    if (row > 0) {
        lblStatus.setText("Thêm dữ liệu thành công");
        callbackDatVe.addAction();
    } else {
        JOptionPane.showMessageDialog(rootPane, "Thêm dữ liệu THẤT BẠI",
"Thông báo", JOptionPane.ERROR_MESSAGE);
    }
}
```

```
// Variables declaration - do not modify
private javax.swing.JButton btnAddNew;
private javax.swing.JComboBox cbxFromStation;
```



```
private javax.swing.JComboBox cbxToStation;
private javax.swing.ButtonGroup groupWay;
private javax.swing.JLabel jLabel10;
private javax.swing.JLabel jLabel2;
private javax.swing.JLabel jLabel3;
private javax.swing.JLabel jLabel4;
private javax.swing.JLabel jLabel5;
private javax.swing.JLabel jLabel6;
private javax.swing.JLabel jLabel7;
private javax.swing.JLabel jLabel8;
private javax.swing.JLabel jLabel9;
private javax.swing.JPanel jPanel1;
private javax.swing.JRadioButton jButton2;
private javax.swing.JSeparator jSeparator1;
private com.toedter.calendar.JDateChooser jdcFrom;
private com.toedter.calendar.JDateChooser jdcTo;
private javax.swing.JPanel jpDate;
private javax.swing.JLabel lblStatus;
private javax.swing.JRadioButton radType1Way;
private javax.swing.JFormattedTextField txtAdult;
private javax.swing.JFormattedTextField txtChild;
private javax.swing.JTextField txtPassenger;
private javax.swing.JTextField txtPhone;
// End of variables declaration
}
```

IFDanhSachVe.java

```
package javaform.chuyende2;

import java.util.ArrayList;
import javax.swing.JOptionPane;
import javax.swing.table.DefaultTableModel;

/**
 *
 * @author Admin
 */
public class IFDanhSachVe extends javax.swing.JInternalFrame {

    ArrayList<Ticket> lstShoes = new ArrayList<>();

    /**
     * Creates new form IFDanhSachVe
     */
}
```

```

public IFDanhSachVe() {
    initComponents();

    taiDSVe();
}

/**
 * Tải danh sách vé
 */
public void taiDSVe() {
    TicketManager tk = new TicketManager();
    DefaultTableModel dtf = tk.getAllTicket();
    tblDanhSachVe.setModel(dtf);
}

/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    jpmDanhSachVe = new javax.swing.JPopupMenu();
    jmiSua = new javax.swing.JMenuItem();
    jmiXoa = new javax.swing.JMenuItem();
    jScrollPane1 = new javax.swing.JScrollPane();
    tblDanhSachVe = new javax.swing.JTable();

    jmiSua.setText("Sửa");
    jmiSua.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jmiSuaActionPerformed(evt);
        }
    });
    jpmDanhSachVe.add(jmiSua);

    jmiXoa.setText("Xóa");
    jmiXoa.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jmiXoaActionPerformed(evt);
        }
    });
}

```



```

jpmDanhSachVe.add(jmiXoa);

setClosable(true);
setIconifiable(true);
setMaximizable(true);
setResizable(true);
setTitle("Danh sách vé đặt");

tblDanhSachVe.setModel(new javax.swing.table.DefaultTableModel(
    new Object [][] {
        { new Integer(1), "Nguyễn Thành Nam", "34535645", "Hà Nội", "Đà Nẵng", "1 chiều", "12/10/2017", "12/10/2017" },
        { new Integer(2), "Chích Xong Sốc", "34534", "Lào Cai", "Cà Mau", "Khứ hồi", "12/10/2017", "12/10/2017" },
        { new Integer(3), "Lạc Mốc Hột Lép", "35345345", "Bắc Ninh", "Nha Trang", "Khứ hồi", "12/10/2017", "12/10/2017" },
        { new Integer(4), "Cù Xoà Phấn", "4564456", "Điện Biên", "TP. HCM", "1 chiều", "12/10/2017", "12/10/2017" }
    },
    new String [] {
        "Mã vé", "Tên hành khách", "SDT", "Ga đi", "Ga đến", "Loại vé", "Ngày đi", "Ngày đến"
    }
) {
    Class[] types = new Class [] {
        java.lang.Integer.class, java.lang.String.class, java.lang.String.class,
        java.lang.Object.class, java.lang.Object.class, java.lang.Object.class,
        java.lang.Object.class, java.lang.Object.class
    };

    public Class getColumnClass(int columnIndex) {
        return types [columnIndex];
    }
});
tblDanhSachVe.addMouseListener(new java.awt.event.MouseAdapter() {
    public void mouseReleased(java.awt.event.MouseEvent evt) {
        tblDanhSachVeMouseReleased(evt);
    }
});
jScrollPane1.setViewportViewView(tblDanhSachVe);

javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
getContentPane().setLayout(layout);

```



```

    }
}

private void jmiSuaActionPerformed(java.awt.event.ActionEvent evt) {
    // Sửa:

}

```

```

// Variables declaration - do not modify
private javax.swing.JScrollPane jScrollPane1;
private javax.swing.JMenuItem jmiSua;
private javax.swing.JMenuItem jmiXoa;
private javax.swing.JPopupMenu jpmDanhSachVe;
private javax.swing.JTable tblDanhSachVe;
// End of variables declaration
}

```

MainFrame.java

```
package javaform.chuyende2;
```

```

/**
 *
 * @author Admin
 */
public class MainFrame extends javax.swing.JFrame implements
IFDatVe.CallbackDatVe {

```

```

    IFDatVe frameDatVe;
    IFDanhSachVe frameDanhSachVe;

```

```

/**
 * Creates new form MainFrame
 */

```

```

public MainFrame() {
    initComponents();
}

```

```

/**
 * This method is called from within the constructor to initialize the form.
 * WARNING: Do NOT modify this code. The content of this method is always
 * regenerated by the Form Editor.
 */
@SuppressWarnings("unchecked")

```

```
// <editor-fold defaultstate="collapsed" desc="Generated Code">
private void initComponents() {

    groupLang = new javax.swing.ButtonGroup();
    jdpMain = new javax.swing.JDesktopPane();
    jMenuBar1 = new javax.swing.JMenuBar();
    jMenu1 = new javax.swing.JMenu();
    jMenuItem1 = new javax.swing.JMenuItem();
    jMenuItem2 = new javax.swing.JMenuItem();
    jMenu2 = new javax.swing.JMenu();
    radEnglish = new javax.swing.JRadioButtonMenuItem();
    radTiangViet = new javax.swing.JRadioButtonMenuItem();

    setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
    setTitle("Đường sắt Việt Nam");

    javax.swing.GroupLayout jdpMainLayout = new
    javax.swing.GroupLayout(jdpMain);
    jdpMain.setLayout(jdpMainLayout);
    jdpMainLayout.setHorizontalGroup(

    jdpMainLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGap(0, 400, Short.MAX_VALUE)
    );
    jdpMainLayout.setVerticalGroup(

    jdpMainLayout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
        .addGap(0, 279, Short.MAX_VALUE)
    );

    jMenu1.setText("Danh mục");

    jMenuItem1.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_V, java.awt.event.InputEvent.CTRL_MASK));
    jMenuItem1.setText("Đặt vé");
    jMenuItem1.addActionListener(new java.awt.event.ActionListener() {
        public void actionPerformed(java.awt.event.ActionEvent evt) {
            jMenuItem1ActionPerformed(evt);
        }
    });
    jMenu1.add(jMenuItem1);
}
```

```
jMenuItem2.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_D, java.awt.event.InputEvent.CTRL_MASK));
jMenuItem2.setText("Danh sách vé");
jMenuItem2.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        jMenuItem2ActionPerformed(evt);
    }
});
jMenu1.add(jMenuItem2);

jMenuBar1.add(jMenu1);

jMenu2.setText("Ngôn ngữ");
```

```
radEnglish.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_E, java.awt.event.InputEvent.SHIFT_MASK | java.awt.event.InputEvent.CTRL_MASK));
groupLang.add(radEnglish);
radEnglish.setSelected(true);
radEnglish.setText("English");
jMenu2.add(radEnglish);
```

```
radTiangViet.setAccelerator(javax.swing.KeyStroke.getKeyStroke(java.awt.event.KeyEvent.VK_V, java.awt.event.InputEvent.SHIFT_MASK | java.awt.event.InputEvent.CTRL_MASK));
groupLang.add(radTiangViet);
radTiangViet.setText("Tiếng Việt");
radTiangViet.addActionListener(new java.awt.event.ActionListener() {
    public void actionPerformed(java.awt.event.ActionEvent evt) {
        radTiangVietActionPerformed(evt);
    }
});
jMenu2.add(radTiangViet);

jMenuBar1.add(jMenu2);

setJMenuBar(jMenuBar1);

javax.swing.GroupLayout layout = new
javax.swing.GroupLayout(getContentPane());
```

```

        getContentPane().setLayout(layout);
        layout.setHorizontalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jdpMain)
        );
        layout.setVerticalGroup(

layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)
            .addComponent(jdpMain)
        );

        pack();
    } // </editor-fold>

    private void jMenuItem1ActionPerformed(java.awt.event.ActionEvent evt) {
        if (frameDatVe == null) {
            // Mở frame đặt vé
            frameDatVe = new IFDatVe(this);
        }
        jdpMain.add(frameDatVe);
        frameDatVe.setVisible(true);
    }

    private void jMenuItem2ActionPerformed(java.awt.event.ActionEvent evt) {
        if (frameDanhSachVe == null) {
            // Mở frame danh sách vé:
            frameDanhSachVe = new IFDanhSachVe();
        }
        jdpMain.add(frameDanhSachVe);
        frameDanhSachVe.setVisible(true);
    }

    private void radTiengVietActionPerformed(java.awt.event.ActionEvent evt) {
        // TODO add your handling code here:
    }

    /**
     * @param args the command line arguments
     */
    public static void main(String args[]) {
        /* Set the Nimbus look and feel */
        //<editor-fold defaultstate="collapsed" desc=" Look and feel setting code
        (optional) ">

```

```

    /* If Nimbus (introduced in Java SE 6) is not available, stay with the default
    look and feel.
    * For details see
    http://download.oracle.com/javase/tutorial/uiswing/lookandfeel/plaf.html
    */
    try {
        for (javax.swing.UIManager.LookAndFeelInfo info :
        javax.swing.UIManager.getInstalledLookAndFeels()) {
            if ("Nimbus".equals(info.getName())) {
                javax.swing.UIManager.setLookAndFeel(info.getClassName());
                break;
            }
        }
    } catch (ClassNotFoundException ex) {

        java.util.logging.Logger.getLogger(MainFrame.class.getName()).log(java.util.loggi
        ng.Level.SEVERE, null, ex);
    } catch (InstantiationException ex) {

        java.util.logging.Logger.getLogger(MainFrame.class.getName()).log(java.util.loggi
        ng.Level.SEVERE, null, ex);
    } catch (IllegalAccessException ex) {

        java.util.logging.Logger.getLogger(MainFrame.class.getName()).log(java.util.loggi
        ng.Level.SEVERE, null, ex);
    } catch (javax.swing.UnsupportedLookAndFeelException ex) {

        java.util.logging.Logger.getLogger(MainFrame.class.getName()).log(java.util.loggi
        ng.Level.SEVERE, null, ex);
    }
    //</editor-fold>
    //</editor-fold>

    /* Create and display the form */
    java.awt.EventQueue.invokeLater(new Runnable() {
        public void run() {
            new MainFrame().setVisible(true);
        }
    });
}

// Variables declaration - do not modify
private javax.swing.ButtonGroup groupLang;
private javax.swing.JMenu jMenu1;

```

```
private javax.swing.JMenu jMenu2;
private javax.swing.JMenuBar jMenuBar1;
private javax.swing.JMenuItem jMenuItem1;
private javax.swing.JMenuItem jMenuItem2;
private javax.swing.JDesktopPane jdpMain;
private javax.swing.JRadioButtonMenuItem radEnglish;
private javax.swing.JRadioButtonMenuItem radTiangViet;
// End of variables declaration
```

@Override

```
public void actionAdd() {
    if (frameDanhSachVe != null) {
        frameDanhSachVe.taiDSVe();
    } else {
        // Mở frame danh sách vé:
        frameDanhSachVe = new IFDanhSachVe();
        jdpMain.add(frameDanhSachVe);
        frameDanhSachVe.setVisible(true);
    }
}
}
```