

**Curso:** T-ADS

**Turma:** 3º B - NOTURNO

**Matéria:** ESTRUTURA DE DADOS

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**ADO - 1:** Desenvolver uma aplicação utilizando a linguagem JAVA e os conceitos da Aula 02 e Aula 03, sobre Array e manipulação de dados.

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**▹Desenvolver uma aplicação utilizando a linguagem JAVA e os conceitos da Aula 02 e Aula 03, sobre Array e manipulação de dados.**

**▹Descrever a situação e/ou problema (tema livre);**

Nesta ADO, desenvolvi um sistema de gestão de tarefas. O sistema será responsável por realizar o agendamento de atividades de acordo com data, hora e descrição.

Cada atividade que for inserida, terá um controle de verificação de status automático, podendo ser:

* Atrasada
* Pendente
* Em\_Andamento
* Concluída (Poderá ser selecionado pelo usuário quando for concluída)

Além de realizar o agendamento, poderá também ser feita a consulta das tarefas agendadas, edição e exclusão se for necessário.

**▹Criar uma Classe Vetor com todos os métodos para manipular os dados;**

**▹Criar uma Classe para testar a aplicação, possibilitando a interação com o usuário, para manipular os dados;**

O sistema foi desenvolvido utilizando a biblioteca Swing do Java, onde foi criado o layout de interação do usuário.

A interface busca ser simples, objetiva e satisfatório para o usuário.

**Obs:** No projeto há um ícone do Senac em jpg e uma dependência externa “JCalendar” que foi implementada para o uso do DataChooser “Seletor de data”.

**O projeto foi desenvolvido em 5 classes:**

1. Main //Teste do sistema
2. Tarefa //Modelagem dos métodos e atributos de uma tarefa
3. ListaTarefas //Responsável pelo gerenciamento das tarefas
4. TelaPrincipal //Classe Swing responsável pela interface principal
5. PainelTarefa // Classe Swing responsável pelo formulário de tarefa

Classes:

**Main.java**

**package com.mycompany.tarefasagendadas;**

**import javax.swing.\*;**

**public class Main {**

**public static void main(String[] args) {**

**try {**

**// Define o Look and Feel para Nimbus**

**UIManager.setLookAndFeel("javax.swing.plaf.nimbus.NimbusLookAndFeel");**

**} catch (Exception e) {**

**e.printStackTrace();**

**}**

**TelaPrincipal sistema = new TelaPrincipal();**

**sistema.setVisible(true);**

**}**

**}**

**Tarefa.java**

**package com.mycompany.tarefasagendadas;**

**import java.text.SimpleDateFormat;**

**import java.util.Calendar;**

**import java.util.Date;**

**public class Tarefa {**

**private int id = 0;**

**private String titulo;**

**private String data;**

**private String horaInicio;**

**private String horaFim;**

**private String descricao;**

**private Status status;**

**public void atualizarStatus() {**

**Calendar agora = Calendar.getInstance();**

**Date dataHoraAtual = agora.getTime();**

**// Formata a data e hora atual para comparação**

**SimpleDateFormat formatoDataHora = new SimpleDateFormat("dd/MM/yyyy HH:mm");**

**String dataHoraAtualStr = formatoDataHora.format(dataHoraAtual);**

**// Verifica o status com base nas comparações**

**if(status == Status.CONCLUIDO){**

**return;**

**}**

**if (dataHoraAtualStr.compareTo(data + " " + horaFim) > 0) {**

**status = Status.ATRASADA;**

**} else if (dataHoraAtualStr.compareTo(data + " " + horaInicio) >= 0**

**&& dataHoraAtualStr.compareTo(data + " " + horaFim) <= 0) {**

**status = Status.EM\_ANDAMENTO;**

**} else {**

**status = Status.PENDENTE; // Talvez você queira adicionar um status "pendente" para tarefas futuras**

**}**

**}**

**public void concluirStatus(){**

**status = Status.CONCLUIDO;**

**}**

**public Status getStatus() {**

**return status;**

**}**

**public Tarefa() {**

**}**

**public Tarefa(int id, String titulo, String data, String horaInicio, String horaFim, String descricao) {**

**this.id = id;**

**this.titulo = titulo;**

**this.data = data;**

**this.horaInicio = horaInicio;**

**this.horaFim = horaFim;**

**this.descricao = descricao;**

**}**

**public int getId() {**

**return id;**

**}**

**public String getTitulo() {**

**return titulo;**

**}**

**public String getData() {**

**return data;**

**}**

**public String getHoraInicio() {**

**return horaInicio;**

**}**

**public String getHoraFim() {**

**return horaFim;**

**}**

**public String getDescricao() {**

**return descricao;**

**}**

**public void setId(int id) {**

**this.id = id;**

**}**

**public void setTitulo(String titulo) {**

**this.titulo = titulo;**

**}**

**public void setData(String data) {**

**this.data = data;**

**}**

**public void setHoraInicio(String horaInicio) {**

**this.horaInicio = horaInicio;**

**}**

**public void setHoraFim(String horaFim) {**

**this.horaFim = horaFim;**

**}**

**public void setDescricao(String descricao) {**

**this.descricao = descricao;**

**}**

**@Override**

**public String toString() {**

**return "Tarefa{" + "id=" + id + ", titulo=" + titulo + ", data=" + data + ", horaInicio=" + horaInicio + ", horaFim=" + horaFim + ", descricao=" + descricao + '}';**

**}**

**public enum Status {**

**EM\_ANDAMENTO,**

**CONCLUIDO,**

**ATRASADA,**

**PENDENTE**

**}**

**}**

**ListaTarefas.java**

**package com.mycompany.tarefasagendadas;**

**import java.util.Scanner;**

**import java.util.Arrays;**

**public class ListaTarefas {**

**private Tarefa[] tarefas;**

**private int id = 1;**

**public int getId() {**

**return id;**

**}**

**public Tarefa[] getTarefas() {**

**return tarefas;**

**}**

**public void setTarefas(Tarefa[] tarefas) {**

**this.tarefas = tarefas;**

**}**

**private int tamanho = 0;**

**public ListaTarefas() {**

**this.tarefas = new Tarefa[5];**

**}**

**public void editarTarefa(Tarefa tarefaAtualizada){**

**for(Tarefa tarefa: getTarefas()){**

**if(tarefa.getId() == tarefaAtualizada.getId()){**

**tarefa = tarefaAtualizada;**

**return;**

**}**

**}**

**}**

**public void adicionar(Tarefa tarefa) throws Exception {**

**this.aumentaCapacidade();**

**if (this.tamanho < tarefas.length) {**

**tarefa.setId(this.getId());**

**this.tarefas[this.tamanho] = tarefa;**

**this.tamanho++;**

**this.id++;**

**} else {**

**throw new Exception("O vetor está cheio, não é possível adicionar novos tarefas");**

**}**

**}**

**public boolean adicionaNaPosicao(int posicao, Tarefa elemento) throws Exception {**

**this.aumentaCapacidade();**

**if (posicao >= 0 && posicao < this.tamanho) {**

**for (int i = this.tamanho; i > posicao; i--) {**

**this.tarefas[i + 1] = this.tarefas[i];**

**}**

**this.tarefas[posicao] = elemento;**

**this.tamanho++;**

**} else {**

**throw new Exception("Posição Inválida!");**

**}**

**return true;**

**}**

**public Tarefa buscarTarefa(int posicao) throws Exception {**

**if (posicao >= 0 && posicao < tamanho) {**

**return tarefas[posicao];**

**} else {**

**throw new Exception("Posição de busca não encontrada");**

**}**

**}**

**public int buscarPosicao(Tarefa elemento) {**

**for (int i = 0; i < this.tamanho; i++) {**

**if (tarefas[i].equals(elemento)) {**

**return i;**

**}**

**}**

**return -1;**

**}**

**public void remover(int posicao) throws Exception {**

**if (posicao >= 0 && posicao < this.tamanho) {**

**for (int i = posicao; i < this.tamanho - 1; i++) {**

**this.tarefas[i] = this.tarefas[i + 1];**

**}**

**this.tamanho--;**

**} else {**

**throw new Exception("Posição do array inválida");**

**}**

**}**

**public int getTamanho() {**

**return this.tamanho;**

**}**

**@Override**

**public String toString() {**

**StringBuilder s = new StringBuilder();**

**s.append("[");**

**for (int i = 0; i < this.tamanho - 1; i++) {**

**s.append(this.tarefas[i]);**

**s.append(", ");**

**}**

**if (this.tamanho > 0) {**

**s.append(this.tarefas[this.tamanho - 1]);**

**}**

**s.append("]");**

**return s.toString();**

**}**

**public void aumentaCapacidade() {**

**if (this.tamanho == this.tarefas.length) {**

**Tarefa[] tarefasNovos = new Tarefa[this.tarefas.length \* 2];**

**for (int i = 0; i < this.tarefas.length; i++) {**

**tarefasNovos[i] = this.tarefas[i];**

**}**

**this.tarefas = tarefasNovos;**

**}**

**}**

**}**

**TelaPrincipal.java**

**package com.mycompany.tarefasagendadas;**

**import java.awt.Point;**

**import java.util.logging.Level;**

**import java.util.logging.Logger;**

**import javax.swing.JOptionPane;**

**import javax.swing.JPanel;**

**import javax.swing.table.DefaultTableModel;**

**public class TelaPrincipal extends javax.swing.JFrame {**

**ListaTarefas tarefas = new ListaTarefas();**

**public TelaPrincipal() {**

**initComponents();**

**}**

**public void fecharTarefa(JPanel janela, Tarefa tarefa) throws Exception {**

**if (tarefa.getId() == 0) {**

**tarefa.setId(this.tarefas.getTamanho() + 1);**

**tarefas.adicionar(tarefa);**

**} else {**

**tarefas.editarTarefa(tarefa);**

**}**

**atualizarTabelaTarefas();**

**tabPainel.remove(janela);**

**}**

**public void fecharTarefa(JPanel janela) {**

**tabPainel.remove(janela);**

**}**

**public void atualizarTabelaTarefas() {**

**DefaultTableModel modelo = (DefaultTableModel) tblTarefas.getModel();**

**modelo.setRowCount(0);**

**for (int i = 0; i < tarefas.getTamanho(); i++) {**

**tarefas.getTarefas()[i].atualizarStatus();**

**modelo.addRow(new Object[]{**

**tarefas.getTarefas()[i].getId(),**

**tarefas.getTarefas()[i].getTitulo(),**

**tarefas.getTarefas()[i].getData(),**

**tarefas.getTarefas()[i].getHoraInicio(),**

**tarefas.getTarefas()[i].getHoraFim(),**

**tarefas.getTarefas()[i].getStatus(),**

**});**

**}**

**}**

**@SuppressWarnings("unchecked")**

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

**private void initComponents() {**

**jPanel1 = new javax.swing.JPanel();**

**tabPainel = new javax.swing.JTabbedPane();**

**jScrollPane1 = new javax.swing.JScrollPane();**

**tblTarefas = new javax.swing.JTable();**

**jPanel2 = new javax.swing.JPanel();**

**btnVerTarefa = new javax.swing.JButton();**

**btnVerTarefa1 = new javax.swing.JButton();**

**btnAgendar = new javax.swing.JButton();**

**iconSenac = new javax.swing.JLabel();**

**jLabel1 = new javax.swing.JLabel();**

**jLabel2 = new javax.swing.JLabel();**

**setDefaultCloseOperation(javax.swing.WindowConstants.EXIT\_ON\_CLOSE);**

**setTitle("Agenda de Tarefas");**

**setResizable(false);**

**jPanel1.setBackground(new java.awt.Color(51, 51, 51));**

**jPanel1.setForeground(new java.awt.Color(16, 16, 16));**

**tabPainel.setBorder(javax.swing.BorderFactory.createEtchedBorder());**

**tblTarefas.setFont(new java.awt.Font("Arial", 0, 14)); // NOI18N**

**tblTarefas.setModel(new javax.swing.table.DefaultTableModel(**

**new Object [][] {**

**},**

**new String [] {**

**"ID", "Título", "Dia", "Hora Ínicio", "Hora Fim", "Status"**

**}**

**) {**

**boolean[] canEdit = new boolean [] {**

**false, false, false, false, false, false**

**};**

**public boolean isCellEditable(int rowIndex, int columnIndex) {**

**return canEdit [columnIndex];**

**}**

**});**

**tblTarefas.setRowHeight(30);**

**tblTarefas.getColumnModel().getColumn(0).setPreferredWidth(10);**

**tblTarefas.getColumnModel().getColumn(1).setPreferredWidth(120);**

**tblTarefas.getColumnModel().getColumn(2).setPreferredWidth(50);**

**tblTarefas.getColumnModel().getColumn(3).setPreferredWidth(40);**

**tblTarefas.getColumnModel().getColumn(4).setPreferredWidth(40);**

**jScrollPane1.setViewportView(tblTarefas);**

**tabPainel.addTab("Agenda", jScrollPane1);**

**jPanel2.setBorder(javax.swing.BorderFactory.createEtchedBorder());**

**btnVerTarefa.setBackground(new java.awt.Color(51, 102, 255));**

**btnVerTarefa.setFont(new java.awt.Font("Arial", 0, 14)); // NOI18N**

**btnVerTarefa.setText("Consultar");**

**btnVerTarefa.addActionListener(new java.awt.event.ActionListener() {**

**public void actionPerformed(java.awt.event.ActionEvent evt) {**

**btnVerTarefaActionPerformed(evt);**

**}**

**});**

**btnVerTarefa1.setBackground(new java.awt.Color(51, 102, 255));**

**btnVerTarefa1.setFont(new java.awt.Font("Arial", 0, 14)); // NOI18N**

**btnVerTarefa1.setText("Deletar");**

**btnVerTarefa1.addActionListener(new java.awt.event.ActionListener() {**

**public void actionPerformed(java.awt.event.ActionEvent evt) {**

**btnVerTarefa1ActionPerformed(evt);**

**}**

**});**

**btnAgendar.setBackground(new java.awt.Color(51, 102, 255));**

**btnAgendar.setFont(new java.awt.Font("Arial", 0, 14)); // NOI18N**

**btnAgendar.setText("Adicionar");**

**btnAgendar.addActionListener(new java.awt.event.ActionListener() {**

**public void actionPerformed(java.awt.event.ActionEvent evt) {**

**btnAgendarActionPerformed(evt);**

**}**

**});**

**iconSenac.setIcon(new javax.swing.ImageIcon(getClass().getResource("/senac2.png"))); // NOI18N**

**jLabel1.setText("Desenvolvido por:");**

**jLabel2.setFont(new java.awt.Font("Arial", 2, 12)); // NOI18N**

**jLabel2.setText("Arthur Silva Berdusco");**

**javax.swing.GroupLayout jPanel2Layout = new javax.swing.GroupLayout(jPanel2);**

**jPanel2.setLayout(jPanel2Layout);**

**jPanel2Layout.setHorizontalGroup(**

**jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addGroup(jPanel2Layout.createSequentialGroup()**

**.addGap(12, 12, 12)**

**.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, jPanel2Layout.createSequentialGroup()**

**.addComponent(jLabel2, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)**

**.addContainerGap())**

**.addGroup(jPanel2Layout.createSequentialGroup()**

**.addGroup(jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.CENTER)**

**.addComponent(iconSenac)**

**.addComponent(btnAgendar, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)**

**.addComponent(btnVerTarefa, javax.swing.GroupLayout.DEFAULT\_SIZE, 129, Short.MAX\_VALUE)**

**.addComponent(btnVerTarefa1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)**

**.addGroup(jPanel2Layout.createSequentialGroup()**

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

**.addComponent(jLabel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)))**

**.addContainerGap(12, Short.MAX\_VALUE))))**

**);**

**jPanel2Layout.setVerticalGroup(**

**jPanel2Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addGroup(jPanel2Layout.createSequentialGroup()**

**.addGap(16, 16, 16)**

**.addComponent(iconSenac)**

**.addGap(40, 40, 40)**

**.addComponent(btnAgendar, javax.swing.GroupLayout.PREFERRED\_SIZE, 35, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addGap(30, 30, 30)**

**.addComponent(btnVerTarefa, javax.swing.GroupLayout.PREFERRED\_SIZE, 35, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addGap(30, 30, 30)**

**.addComponent(btnVerTarefa1, javax.swing.GroupLayout.PREFERRED\_SIZE, 35, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)**

**.addComponent(jLabel1)**

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

**.addComponent(jLabel2)**

**.addGap(15, 15, 15))**

**);**

**javax.swing.GroupLayout jPanel1Layout = new javax.swing.GroupLayout(jPanel1);**

**jPanel1.setLayout(jPanel1Layout);**

**jPanel1Layout.setHorizontalGroup(**

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

**.addGroup(jPanel1Layout.createSequentialGroup()**

**.addContainerGap()**

**.addComponent(jPanel2, javax.swing.GroupLayout.PREFERRED\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.PREFERRED\_SIZE)**

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

**.addComponent(tabPainel, javax.swing.GroupLayout.PREFERRED\_SIZE, 624, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))**

**);**

**jPanel1Layout.setVerticalGroup(**

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

**.addGroup(jPanel1Layout.createSequentialGroup()**

**.addContainerGap()**

**.addGroup(jPanel1Layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING, false)**

**.addComponent(tabPainel, javax.swing.GroupLayout.DEFAULT\_SIZE, 488, Short.MAX\_VALUE)**

**.addComponent(jPanel2, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))**

**.addContainerGap(javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE))**

**);**

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

**getContentPane().setLayout(layout);**

**layout.setHorizontalGroup(**

**layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)**

**);**

**layout.setVerticalGroup(**

**layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addComponent(jPanel1, javax.swing.GroupLayout.DEFAULT\_SIZE, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)**

**);**

**pack();**

**setLocationRelativeTo(null);**

**}// </editor-fold>**

**private void btnAgendarActionPerformed(java.awt.event.ActionEvent evt) {**

**if (tabPainel.getTabCount() > 5) {**

**JOptionPane.showMessageDialog(this, "Você está com muitas abas em andamento, finalize uma para abrir outra.");**

**return;**

**}**

**PainelTarefa painelTarefa = new PainelTarefa(this);**

**tabPainel.addTab("Nova Tarefa", painelTarefa);**

**tabPainel.setSelectedComponent(painelTarefa);**

**}**

**private void btnVerTarefaActionPerformed(java.awt.event.ActionEvent evt) {**

**if (tblTarefas.getSelectedRow() != -1) {**

**if (tabPainel.getTabCount() > 5) {**

**JOptionPane.showMessageDialog(this, "Você está com muitas abas em andamento, finalize uma para abrir outra.");**

**return;**

**}**

**String idTarefa = String.valueOf(tblTarefas.getValueAt(tblTarefas.getSelectedRow(), 0));**

**int idSelecionado = Integer.parseInt(idTarefa);**

**for (int i = 0; i < tarefas.getTamanho(); i++) {**

**if (tarefas.getTarefas()[i].getId() == idSelecionado) {**

**PainelTarefa painelTarefa = new PainelTarefa(this, tarefas.getTarefas()[i]);**

**tabPainel.addTab("Tarefa: " + tarefas.getTarefas()[i].getId(), painelTarefa);**

**tabPainel.setSelectedComponent(painelTarefa);**

**tblTarefas.clearSelection();**

**}**

**}**

**} else {**

**JOptionPane.showMessageDialog(this, "Selecione uma tarefa.");**

**}**

**}**

**private void btnVerTarefa1ActionPerformed(java.awt.event.ActionEvent evt) {**

**int id = Integer.parseInt(tblTarefas.getValueAt(tblTarefas.getSelectedRow(), 0).toString());**

**for(int i = 0; i< tarefas.getTamanho(); i++){**

**if(tarefas.getTarefas()[i].getId() == id){**

**try {**

**tarefas.remover(i);**

**} catch (Exception ex) {**

**JOptionPane.showMessageDialog(this, "Não foi possível remover tarefa");**

**}**

**}**

**}**

**atualizarTabelaTarefas();**

**}**

**/\*\***

**\* @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(TelaPrincipal.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);**

**} catch (InstantiationException ex) {**

**java.util.logging.Logger.getLogger(TelaPrincipal.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);**

**} catch (IllegalAccessException ex) {**

**java.util.logging.Logger.getLogger(TelaPrincipal.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);**

**} catch (javax.swing.UnsupportedLookAndFeelException ex) {**

**java.util.logging.Logger.getLogger(TelaPrincipal.class.getName()).log(java.util.logging.Level.SEVERE, null, ex);**

**}**

**//</editor-fold>**

**/\* Create and display the form \*/**

**java.awt.EventQueue.invokeLater(new Runnable() {**

**public void run() {**

**new TelaPrincipal().setVisible(true);**

**}**

**});**

**}**

**// Variables declaration - do not modify**

**private javax.swing.JButton btnAgendar;**

**private javax.swing.JButton btnVerTarefa;**

**private javax.swing.JButton btnVerTarefa1;**

**private javax.swing.JLabel iconSenac;**

**private javax.swing.JLabel jLabel1;**

**private javax.swing.JLabel jLabel2;**

**private javax.swing.JPanel jPanel1;**

**private javax.swing.JPanel jPanel2;**

**private javax.swing.JScrollPane jScrollPane1;**

**private javax.swing.JTabbedPane tabPainel;**

**private javax.swing.JTable tblTarefas;**

**// End of variables declaration**

**}**

**PainelTarefa.java**

**package com.mycompany.tarefasagendadas;**

**import java.util.Date;**

**import javax.swing.JSpinner;**

**import javax.swing.SpinnerDateModel;**

**import java.text.ParseException;**

**import java.text.SimpleDateFormat;**

**import java.util.Calendar;**

**import java.util.logging.Level;**

**import java.util.logging.Logger;**

**import com.mycompany.tarefasagendadas.Tarefa;**

**import java.util.Locale;**

**import javax.swing.JOptionPane;**

**public class PainelTarefa extends javax.swing.JPanel {**

**TelaPrincipal jf;**

**Tarefa tarefa;**

**public PainelTarefa() {**

**initComponents();**

**}**

**public PainelTarefa(TelaPrincipal jf) {**

**initComponents();**

**this.jf = jf;**

**}**

**public boolean camposValidos() throws Exception {**

**if (txtTitulo.getText().trim().isEmpty()) {**

**new Exception("Campo título não pode ser nulo");**

**return false;**

**}**

**if (dtcData.getDate() == null) {**

**new Exception("Campo data não pode ser nulo");**

**return false;**

**}**

**if (spnInicio.getValue() == null) {**

**new Exception("Campo hora início não pode ser nulo");**

**return false;**

**}**

**if (spnInicio.getValue() == null) {**

**new Exception("Campo hora fim não pode ser nulo");**

**return false;**

**}**

**return true;**

**}**

**public PainelTarefa(TelaPrincipal jf, Tarefa tarefa) {**

**this.jf = jf;**

**this.tarefa = tarefa;**

**initComponents();**

**SimpleDateFormat df = new SimpleDateFormat("dd/MM/yyyy");**

**try {**

**Date data = df.parse(tarefa.getData());**

**txtTitulo.setText(tarefa.getTitulo());**

**dtcData.setDate(data);**

**SimpleDateFormat timeFormat = new SimpleDateFormat("HH:mm");**

**Date horaInicio = timeFormat.parse(tarefa.getHoraInicio());**

**spnInicio.setValue(horaInicio);**

**Date horaFim = timeFormat.parse(tarefa.getHoraFim());**

**spnFim.setValue(horaFim);**

**txtDescricao.setText(tarefa.getDescricao());**

**cboStatus.setSelectedItem(tarefa.getStatus());**

**} catch (Exception ex) {**

**ex.printStackTrace();**

**}**

**}**

**@SuppressWarnings("unchecked")**

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

**private void initComponents() {**

**jLabel4 = new javax.swing.JLabel();**

**txtTitulo = new javax.swing.JTextField();**

**jLabel5 = new javax.swing.JLabel();**

**Date date = new Date();**

**SpinnerDateModel sm = new SpinnerDateModel(date, null, null, Calendar.HOUR\_OF\_DAY);**

**spnInicio = new javax.swing.JSpinner(sm);**

**dtcData = new com.toedter.calendar.JDateChooser();**

**jLabel1 = new javax.swing.JLabel();**

**SpinnerDateModel sm2 = new SpinnerDateModel(date, null, null, Calendar.HOUR\_OF\_DAY);**

**spnFim = new javax.swing.JSpinner(sm2);**

**jLabel2 = new javax.swing.JLabel();**

**jLabel3 = new javax.swing.JLabel();**

**btnSalvar = new javax.swing.JButton();**

**jScrollPane2 = new javax.swing.JScrollPane();**

**txtDescricao = new javax.swing.JTextArea();**

**btnSalvar1 = new javax.swing.JButton();**

**cboStatus = new javax.swing.JComboBox<>();**

**jLabel4.setFont(new java.awt.Font("Serif", 0, 14)); // NOI18N**

**jLabel4.setText("Título:");**

**txtTitulo.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N**

**jLabel5.setFont(new java.awt.Font("Serif", 0, 14)); // NOI18N**

**jLabel5.setText("Descrição:");**

**JSpinner.DateEditor de = new JSpinner.DateEditor(spnInicio, "HH:mm");**

**spnInicio.setEditor(de);**

**spnInicio.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N**

**dtcData.setLocale(new Locale("pt", "BR"));**

**dtcData.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N**

**dtcData.setDate(Calendar.getInstance().getTime());**

**jLabel1.setFont(new java.awt.Font("Serif", 0, 14)); // NOI18N**

**jLabel1.setText("Data da tarefa:");**

**JSpinner.DateEditor de2 = new JSpinner.DateEditor(spnFim, "HH:mm");**

**spnFim.setEditor(de2);**

**spnFim.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N**

**jLabel2.setFont(new java.awt.Font("Serif", 0, 14)); // NOI18N**

**jLabel2.setText("Horário de início:");**

**jLabel3.setFont(new java.awt.Font("Serif", 0, 14)); // NOI18N**

**jLabel3.setText("Horário de fim:");**

**btnSalvar.setBackground(new java.awt.Color(51, 102, 255));**

**btnSalvar.setFont(new java.awt.Font("Arial", 0, 12)); // NOI18N**

**btnSalvar.setText("Salvar e fechar");**

**btnSalvar.addActionListener(new java.awt.event.ActionListener() {**

**public void actionPerformed(java.awt.event.ActionEvent evt) {**

**btnSalvarActionPerformed(evt);**

**}**

**});**

**txtDescricao.setColumns(20);**

**txtDescricao.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N**

**txtDescricao.setRows(5);**

**jScrollPane2.setViewportView(txtDescricao);**

**btnSalvar1.setBackground(new java.awt.Color(102, 102, 102));**

**btnSalvar1.setFont(new java.awt.Font("Arial", 0, 12)); // NOI18N**

**btnSalvar1.setText("Fechar");**

**btnSalvar1.addActionListener(new java.awt.event.ActionListener() {**

**public void actionPerformed(java.awt.event.ActionEvent evt) {**

**btnSalvar1ActionPerformed(evt);**

**}**

**});**

**cboStatus.setFont(new java.awt.Font("Arial", 0, 18)); // NOI18N**

**cboStatus.setModel(new javax.swing.DefaultComboBoxModel<>(new String[] { "PENDENTE", "EM\_ANDAMENTO", "CONCLUIDO", "ATRASADO" }));**

**javax.swing.GroupLayout layout = new javax.swing.GroupLayout(this);**

**this.setLayout(layout);**

**layout.setHorizontalGroup(**

**layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addGroup(layout.createSequentialGroup()**

**.addContainerGap()**

**.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addComponent(jScrollPane2)**

**.addGroup(javax.swing.GroupLayout.Alignment.TRAILING, layout.createSequentialGroup()**

**.addComponent(cboStatus, javax.swing.GroupLayout.PREFERRED\_SIZE, 189, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.RELATED, javax.swing.GroupLayout.DEFAULT\_SIZE, Short.MAX\_VALUE)**

**.addComponent(btnSalvar1, javax.swing.GroupLayout.PREFERRED\_SIZE, 115, javax.swing.GroupLayout.PREFERRED\_SIZE)**

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

**.addComponent(btnSalvar, javax.swing.GroupLayout.PREFERRED\_SIZE, 115, javax.swing.GroupLayout.PREFERRED\_SIZE))**

**.addComponent(txtTitulo)**

**.addGroup(layout.createSequentialGroup()**

**.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addGroup(layout.createSequentialGroup()**

**.addComponent(jLabel1)**

**.addGap(0, 0, Short.MAX\_VALUE))**

**.addComponent(dtcData, javax.swing.GroupLayout.DEFAULT\_SIZE, 202, Short.MAX\_VALUE))**

**.addGap(18, 18, 18)**

**.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addComponent(jLabel2)**

**.addComponent(spnInicio, javax.swing.GroupLayout.PREFERRED\_SIZE, 150, javax.swing.GroupLayout.PREFERRED\_SIZE))**

**.addGap(18, 18, 18)**

**.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addComponent(jLabel3)**

**.addComponent(spnFim, javax.swing.GroupLayout.PREFERRED\_SIZE, 150, javax.swing.GroupLayout.PREFERRED\_SIZE)))**

**.addGroup(layout.createSequentialGroup()**

**.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addComponent(jLabel4, javax.swing.GroupLayout.PREFERRED\_SIZE, 88, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addComponent(jLabel5, javax.swing.GroupLayout.PREFERRED\_SIZE, 65, javax.swing.GroupLayout.PREFERRED\_SIZE))**

**.addGap(0, 0, Short.MAX\_VALUE)))**

**.addContainerGap())**

**);**

**layout.setVerticalGroup(**

**layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addGroup(layout.createSequentialGroup()**

**.addContainerGap()**

**.addComponent(jLabel4)**

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

**.addComponent(txtTitulo, javax.swing.GroupLayout.PREFERRED\_SIZE, 30, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addGap(34, 34, 34)**

**.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.TRAILING)**

**.addGroup(layout.createSequentialGroup()**

**.addComponent(jLabel1)**

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

**.addComponent(dtcData, javax.swing.GroupLayout.PREFERRED\_SIZE, 30, javax.swing.GroupLayout.PREFERRED\_SIZE))**

**.addGroup(layout.createSequentialGroup()**

**.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addComponent(jLabel2)**

**.addComponent(jLabel3))**

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

**.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.LEADING)**

**.addComponent(spnInicio, javax.swing.GroupLayout.PREFERRED\_SIZE, 30, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addComponent(spnFim, javax.swing.GroupLayout.PREFERRED\_SIZE, 30, javax.swing.GroupLayout.PREFERRED\_SIZE))))**

**.addGap(42, 42, 42)**

**.addComponent(jLabel5)**

**.addPreferredGap(javax.swing.LayoutStyle.ComponentPlacement.UNRELATED)**

**.addComponent(jScrollPane2, javax.swing.GroupLayout.DEFAULT\_SIZE, 119, Short.MAX\_VALUE)**

**.addGap(18, 18, 18)**

**.addGroup(layout.createParallelGroup(javax.swing.GroupLayout.Alignment.BASELINE)**

**.addComponent(btnSalvar, javax.swing.GroupLayout.PREFERRED\_SIZE, 41, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addComponent(btnSalvar1, javax.swing.GroupLayout.PREFERRED\_SIZE, 41, javax.swing.GroupLayout.PREFERRED\_SIZE)**

**.addComponent(cboStatus, javax.swing.GroupLayout.PREFERRED\_SIZE, 41, javax.swing.GroupLayout.PREFERRED\_SIZE))**

**.addGap(20, 20, 20))**

**);**

**}// </editor-fold>**

**private void btnSalvarActionPerformed(java.awt.event.ActionEvent evt) {**

**try {**

**if (camposValidos()) {**

**if (this.tarefa == null) {**

**this.tarefa = new Tarefa();**

**}**

**this.tarefa.setTitulo(txtTitulo.getText()); //OK**

**this.tarefa.setDescricao(txtDescricao.getText()); // OK**

**//DATA TAREFA: OK**

**SimpleDateFormat df = new SimpleDateFormat("dd/MM/yyyy");**

**String data = df.format(dtcData.getDate());**

**this.tarefa.setData(data);**

**SimpleDateFormat inputFormat = new SimpleDateFormat("EEE MMM dd HH:mm:ss zzz yyyy");**

**SimpleDateFormat outputFormat = new SimpleDateFormat("HH:mm");**

**Date dateInicio = inputFormat.parse(spnInicio.getValue().toString());**

**String horaInicioFormatada = outputFormat.format(dateInicio);**

**this.tarefa.setHoraInicio(horaInicioFormatada);**

**Date dateFim = inputFormat.parse(spnFim.getValue().toString());**

**String horaFimFormatada = outputFormat.format(dateFim);**

**this.tarefa.setHoraFim(horaFimFormatada);**

**if(cboStatus.getSelectedIndex() == 2){**

**tarefa.concluirStatus();**

**}**

**this.jf.fecharTarefa(this, tarefa);**

**} else {**

**JOptionPane.showMessageDialog(this, "Preencha todos os campos.");**

**}**

**} catch (Exception ex) {**

**JOptionPane.showMessageDialog(this, "Revise os campos e tente novamente");**

**}**

**}**

**private void btnSalvar1ActionPerformed(java.awt.event.ActionEvent evt) {**

**this.jf.fecharTarefa(this);**

**}**

**// Variables declaration - do not modify**

**private javax.swing.JButton btnSalvar;**

**private javax.swing.JButton btnSalvar1;**

**private javax.swing.JComboBox<String> cboStatus;**

**private com.toedter.calendar.JDateChooser dtcData;**

**private javax.swing.JLabel jLabel1;**

**private javax.swing.JLabel jLabel2;**

**private javax.swing.JLabel jLabel3;**

**private javax.swing.JLabel jLabel4;**

**private javax.swing.JLabel jLabel5;**

**private javax.swing.JScrollPane jScrollPane2;**

**private javax.swing.JSpinner spnFim;**

**private javax.swing.JSpinner spnInicio;**

**private javax.swing.JTextArea txtDescricao;**

**private javax.swing.JTextField txtTitulo;**

**// End of variables declaration**

**}**