```
import javax.swing.*;
import java.awt.*;
import java.awt.event.*;
import java.util.ArrayList;
public class TaskScheduler {
  // Task class to represent individual tasks
  static class Task {
     String description;
     String dueTime;
     boolean isCompleted;
     Task(String description, String dueTime) {
       this.description = description;
       this.dueTime = dueTime;
       this.isCompleted = false;
     public String toString() {
       return (isCompleted ? "[Completed] " : "") + description + " (Due: " + dueTime + ")";
  }
  public static void main(String[] args) {
     // List to store tasks
     ArrayList<Task> taskList = new ArrayList<>();
```

```
// Frame setup
    JFrame frame = new JFrame("Task Scheduler");
    frame.setDefaultCloseOperation(JFrame.EXIT ON CLOSE);
    frame.setSize(500, 400);
    // Components
    DefaultListModel<Task> taskModel = new DefaultListModel<>();
    JList<Task> taskListView = new JList<>(taskModel);
    taskListView.setSelectionMode(ListSelectionModel.SINGLE_SELECTION);
    JTextField taskField = new JTextField(20);
    JTextField timeField = new JTextField(10);
    JButton addButton = new JButton("Add Task");
    JButton deleteButton = new JButton("Delete Task");
    JButton completeButton = new JButton("Mark as Completed");
    // Add task button action
    addButton.addActionListener(e -> {
       String description = taskField.getText().trim();
       String dueTime = timeField.getText().trim();
       if (!description.isEmpty() && !dueTime.isEmpty()) {
         Task task = new Task(description, dueTime);
         taskModel.addElement(task);
         taskField.setText("");
         timeField.setText("");
       } else {
         JOptionPane.showMessageDialog(frame, "Please fill out both fields!", "Error",
JOptionPane.ERROR MESSAGE);
      }
    });
```

```
// Delete task button action
    deleteButton.addActionListener(e -> {
       int selectedIndex = taskListView.getSelectedIndex();
      if (selectedIndex != -1) {
         taskModel.remove(selectedIndex);
       } else {
         JOptionPane.showMessageDialog(frame, "Please select a task to delete!", "Error",
JOptionPane.ERROR_MESSAGE);
      }
    });
    // Mark as completed button action
    completeButton.addActionListener(e -> {
       int selectedIndex = taskListView.getSelectedIndex();
       if (selectedIndex != -1) {
         Task selectedTask = taskModel.get(selectedIndex);
         selectedTask.isCompleted = true;
         taskModel.set(selectedIndex, selectedTask); // Refresh the view
       } else {
         JOptionPane.showMessageDialog(frame, "Please select a task to mark as completed!",
"Error", JOptionPane.ERROR MESSAGE);
      }
    });
    // Layout
    JPanel inputPanel = new JPanel();
    inputPanel.add(new JLabel("Task:"));
    inputPanel.add(taskField);
    inputPanel.add(new JLabel("Due Time:"));
    inputPanel.add(timeField);
```

```
inputPanel.add(addButton);

JPanel buttonPanel = new JPanel();
buttonPanel.add(deleteButton);

buttonPanel.add(completeButton);

frame.setLayout(new BorderLayout());
frame.add(inputPanel, BorderLayout.NORTH);
frame.add(new JScrollPane(taskListView), BorderLayout.CENTER);
frame.add(buttonPanel, BorderLayout.SOUTH);

// Show frame
frame.setVisible(true);
}
```