```
1 package gui;
 2 import inout.Input;
 3 import inout.Output;
 5 import java.awt.EventQueue;
 7 import javax.swing.JFileChooser;
 8 import javax.swing.JFrame;
 9 import javax.swing.JMenuBar;
10 import javax.swing.JMenu;
11 import javax.swing.JMenuItem;
12 import javax.swing.JButton;
13 import javax.swing.JOptionPane;
14
15 import model.SESystem;
17 import java.awt.BorderLayout;
18 import java.awt.event.ActionListener;
19 import java.awt.event.ActionEvent;
20 import java.io.File;
21 import java.util.ArrayList;
22
23 import javax.swing.JPanel;
24
25 import com.jgoodies.forms.layout.FormLayout;
26 import com.jgoodies.forms.layout.ColumnSpec;
27 import com.jgoodies.forms.layout.RowSpec;
28
29
30 public class Program {
31
32
      private JFrame frame;
33
      private ArrayList<SESystem> allsesystems;
34
      private SESystem selectedSystem;
      /**
35
36
       * Launch the application.
       */
37
38
      public static void main(String[] args) {
39
           EventQueue.invokeLater(new Runnable() {
40
               public void run() {
41
                   try {
42
                       Program window = new Program();
43
                       window.frame.setVisible(true);
44
                   } catch (Exception e) {
45
                       e.printStackTrace();
46
                   }
47
               }
          });
48
49
      }
50
51
       * Create the application.
52
53
      public Program() {
54
55
           allsesystems = new ArrayList<SESystem>();
56
           initialize();
57
      }
58
59
      /**
60
       * Initialize the contents of the frame.
61
```

Program.java

```
62
 63
       private void displaypanel(int ruleid)
 64
 65
           WindowRule panel = new WindowRule();
            panel.setBounds(0, 0, 550, 450);
 66
 67
            panel.setVisible(true);
 68
            panel.setRuleId(ruleid);
 69
            panel.setSelectedSystem(selectedSystem);
 70
            panel.show();
 71
            frame.getContentPane().add(panel);
 72
       }
 73
 74
       private void initialize() {
 75
            frame = new JFrame();
 76
            frame.setBounds(100, 100, 601, 450);
 77
            frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
 78
 79
            JMenuBar menuBar = new JMenuBar();
            frame.setJMenuBar(menuBar);
 80
 81
 82
            JMenu mnFile = new JMenu("File");
 83
           menuBar.add(mnFile);
 84
            JMenuItem mntmOpenFile = new JMenuItem("Open File");
 85
 86
           mntmOpenFile.addActionListener(new ActionListener() {
 87
                public void actionPerformed(ActionEvent e) {
 88
                    JFileChooser chooser = new JFileChooser(); //gia to parathyro pou tha
   diale3w arxeio
 89
                    int result;
 90
 91
                    result=chooser.showOpenDialog(frame); //emfanizei to parathyro
                    //an pathse ok o xristis tote epistrefei to approve option
 92
 93
                    if(result==JFileChooser.APPROVE_OPTION){
 94
                        File f = chooser.getSelectedFile(); <mark>//vriskw to arxeio pou diale3e</mark>
95
                        Input parserinput = new Input(f); //dhmiourgw to antikeimeno input gia
   na diavasei to arxeio
                        SESystem newsystem = parserinput.readFile(); //diavazw to arxeio kai
 96
   mou epistrefei to sistima logismikou pou diale3e
97
                        allsesystems.add(newsystem);
98
                        selectedSystem = newsystem;
99
100
                    }
101
                }
102
            });
103
           mnFile.add(mntmOpenFile);
104
105
            JMenuItem mntmClose = new JMenuItem("Close Project");
106
           mnFile.add(mntmClose);
107
108
            JMenuItem mntmExit = new JMenuItem("Exit");
109
           mnFile.add(mntmExit);
110
111
            JMenu mnRule = new JMenu("Rule");
112
           menuBar.add(mnRule);
113
            JMenuItem mntmRule = new JMenuItem("Rule 1");
114
115
           mntmRule.addActionListener(new ActionListener() {
116
                public void actionPerformed(ActionEvent e) {
117
                    displaypanel(1);
118
                }
           });
119
```

Program.java

```
120
           mnRule.add(mntmRule);
121
122
            JMenuItem mntmRule_1 = new JMenuItem("Rule 2");
123
           mntmRule_1.addActionListener(new ActionListener() {
                public void actionPerformed(ActionEvent e) {
124
125
                    displaypanel(2);
126
127
            });
128
           mnRule.add(mntmRule_1);
129
130
            JMenuItem mntmRule_2 = new JMenuItem("Rule 3");
131
           mntmRule_2.addActionListener(new ActionListener() {
132
                public void actionPerformed(ActionEvent e) {
133
                    displaypanel(3);
134
135
           });
           mnRule.add(mntmRule_2);
136
137
            JMenuItem mntmRule_3 = new JMenuItem("Rule 4");
138
139
           mntmRule 3.addActionListener(new ActionListener() {
140
                public void actionPerformed(ActionEvent e) {
141
                    displaypanel(4);
142
143
            });
144
           mnRule.add(mntmRule_3);
145
146
            JMenuItem mntmRule 4 = new JMenuItem("Rule 5");
147
           mntmRule_4.addActionListener(new ActionListener() {
                public void actionPerformed(ActionEvent e) {
148
149
                    displaypanel(5);
150
                }
151
            });
           mnRule.add(mntmRule 4);
152
153
154
            JMenuItem mntmRule_5 = new JMenuItem("Rule 6");
155
           mntmRule 5.addActionListener(new ActionListener() {
156
                public void actionPerformed(ActionEvent e) {
157
                    displaypanel(6);
                }
158
159
            });
160
           mnRule.add(mntmRule_5);
161
162
            JMenuItem mntmRule_6 = new JMenuItem("Rule 7");
163
           mntmRule_6.addActionListener(new ActionListener() {
                public void actionPerformed(ActionEvent e) {
164
165
                    displaypanel(7);
166
167
            });
168
           mnRule.add(mntmRule_6);
169
            JMenuItem mntmRule_7 = new JMenuItem("Rule 8");
170
           mntmRule_7.addActionListener(new ActionListener() {
171
172
                public void actionPerformed(ActionEvent e) {
173
                    displaypanel(8);
174
175
           });
176
           mnRule.add(mntmRule_7);
177
            JMenuItem mntmReport = new JMenuItem("Report");
178
179
           mntmReport.addActionListener(new ActionListener() {
180
                public void actionPerformed(ActionEvent e) {
```

Program.java

```
181
                    int num = selectedSystem.isAllEvaluated();
182
                    if(num==-1){
183
                        JFileChooser chooser = new JFileChooser(); //gia to parathyro pou tha
   diale3w arxeio
184
                        int result;
185
186
                       result=chooser.showSaveDialog(frame); //emfanizei to parathyro
                       //an pathse ok o xristis tote epistrefei to approve option
187
188
                        if(result==JFileChooser.APPROVE_OPTION){
                            File f = chooser.getSelectedFile();
189
190
                            Output parserinput = new Output(f,selectedSystem);
191
192
                        }
193
                   }
194
                   else{
195
                        JOptionPane.showMessageDiaLog(frame, "Evaluate Law: "+num+1);
196
                   }
197
               }
           });
198
199
           mnRule.add(mntmReport);
200
201
           JMenu mnWorkspace = new JMenu("Workspace");
202
           menuBar.add(mnWorkspace);
           frame.getContentPane().setLayout(null);
203
204
           //displaypanel();
       }
205
206 }
207
```