```java
01 package GUILayer;
02
03 import GUILayer.*;
04
05
06 import java.awt.BorderLayout;
07 import java.awt.EventQueue;
08
09 import javax.swing.JFrame;
10 import javax.swing.JPanel;
11 import javax.swing.border.EmptyBorder;
12 import javax.swing.border.TitledBorder;
13 import javax.swing.text.JTextComponent;
14 import javax.swing.UIManager;
15 import java.awt.Color;
16 import javax.swing.JTextField;
17 import javax.swing.JButton;
18 import javax.swing.JLabel;
19 import java.awt.event.ActionListener;
20 import java.awt.event.ActionEvent;
21 import java.util.ArrayList;
22
23 import ModelLayer.*;
24 import ControlLayer.*;
25 import javax.swing.JList;
26 import javax.swing.JTable;
27
28 public class MasterGUI extends JFrame {
29
30     private JPanel contentPane;
31     private JTextField textField;
32     private JTextField textField_1;
33     private JTextField textField_2;
34     private JTextField textField_3;
35     private JTextField textField_4;
36     private JTextField txtColor;
37     private JTextField txtFur;
38     private JTextField txtDate;
39     private JTextField txtCageMink;
40     private JTextField txtDensity;
41     private JTextField txtQuality;
42     private JTextField textField_5;
43     private JTextField textField_6;
44     private JTextField textField_7;
45     private JTable table_1;
46     private JLabel lblNewLabel;
47     private CTRCage cagCTR;
48     private Cage cag;
49     private Hall hal;
50     private Column col;
51     private Mink mink;
52     private JTextField textField_8;
53     private JTextField textField_9;
54
55
56     /**
57      * Launch the application.
58      */
59     public static void main(String[] args) {
60         EventQueue.invokeLater(new Runnable() {
61             public void run() {
62                 try {
63                     MasterGUI frame = new MasterGUI();
64                     frame.setVisible(true);
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65                     } catch (Exception e) {
66                             e.printStackTrace();
67                     }
68                 }
69             });
70     }
71
72     /**
73      * Create the frame.
74      */
75     public MasterGUI() {
76             setTitle("Adminq");
77             setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
78             setBounds(100, 100, 1116, 650);
79             contentPane = new JPanel();
80             contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
81             setContentPane(contentPane);
82             contentPane.setLayout(null);
83
84             JPanel panel = new JPanel();
85             panel.setBounds(20, 11, 203, 166);
86             panel.setBorder(new TitledBorder(UIManager.getBorder(
87             "TitledBorder.border"), "Opret hal", TitledBorder.LEFT,
88             TitledBorder.TOP, null, new Color(0, 0, 0)));
89             panel.setToolTipText("Create hall");
90             contentPane.add(panel);
91             panel.setLayout(null);
92
93             textField = new JTextField();
94             textField.setBounds(10, 35, 183, 20);
95             panel.add(textField);
96             textField.setColumns(10);
97
98             JButton btnSg = new JButton("Update");
99             btnSg.setBounds(10, 119, 89, 23);
100            panel.add(btnSg);
101
102            JButton btnOpret = new JButton("Opret");
103            btnOpret.addActionListener(new ActionListener() {
104                 public void actionPerformed(ActionEvent e)
105                 {
106                         addHall();
107                 }
108            });
109            btnOpret.setBounds(104, 119, 89, 23);
110            panel.add(btnOpret);
111
112            JLabel lblHalNr = new JLabel("Hal nr:");
113            lblHalNr.setBounds(10, 22, 46, 14);
114            panel.add(lblHalNr);
115
116            textField_9 = new JTextField();
117            textField_9.setColumns(10);
118            textField_9.setBounds(10, 79, 183, 20);
119            panel.add(textField_9);
120
121            JLabel label_4 = new JLabel("Hal nr:");
122            label_4.setBounds(10, 66, 46, 14);
123            panel.add(label_4);
124
125            JPanel panel_1 = new JPanel();
126            panel_1.setLayout(null);
127            panel_1.setToolTipText("Create hall");
128            panel_1.setBorder(new TitledBorder(UIManager.getBorder(
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            "TitledBorder.border"), "Opret fag", TitledBorder.LEFT,
            TitledBorder.TOP, null, new Color(0, 0, 0)));
            panel_1.setBounds(233, 11, 203, 166);
            contentPane.add(panel_1);

            textField_1 = new JTextField();
            textField_1.setColumns(10);
            textField_1.setBounds(10, 37, 183, 20);
            panel_1.add(textField_1);

            JButton btnUpdate_1 = new JButton("Update");
            btnUpdate_1.setBounds(10, 119, 89, 23);
            panel_1.add(btnUpdate_1);

            JButton button_1 = new JButton("Opret");
            button_1.addActionListener(new ActionListener() {
                    public void actionPerformed(ActionEvent e)
                    {
                            createColumn();
                    }
            });
            button_1.setBounds(104, 119, 89, 23);
            panel_1.add(button_1);

            JLabel lblColumnNr_1 = new JLabel("Column nr:");
            lblColumnNr_1.setBounds(10, 22, 116, 14);
            panel_1.add(lblColumnNr_1);

            JLabel lblColumnNr = new JLabel("Hal nr:");
            lblColumnNr.setBounds(10, 68, 71, 14);
            panel_1.add(lblColumnNr);

            textField_2 = new JTextField();
            textField_2.setColumns(10);
            textField_2.setBounds(10, 85, 183, 20);
            panel_1.add(textField_2);

            JPanel panel_2 = new JPanel();
            panel_2.setLayout(null);
            panel_2.setToolTipText("Create hall");
            panel_2.setBorder(new TitledBorder(UIManager.getBorder(
            "TitledBorder.border"), "Bur information", TitledBorder.
            LEFT, TitledBorder.TOP, null, new Color(0, 0, 0)));
            panel_2.setBounds(446, 11, 203, 205);
            contentPane.add(panel_2);

            textField_3 = new JTextField();
            textField_3.setColumns(10);
            textField_3.setBounds(10, 37, 183, 20);
            panel_2.add(textField_3);

            JButton btnUpdate = new JButton("Update");
            btnUpdate.setBounds(10, 164, 89, 23);
            panel_2.add(btnUpdate);

            JButton button_3 = new JButton("Opret");
            button_3.addActionListener(new ActionListener() {
                    public void actionPerformed(ActionEvent arg0)
                    {
                            createCage();
                    }
            });
            button_3.setBounds(104, 164, 89, 23);
            panel_2.add(button_3);
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193
194          JLabel lblBurNr = new JLabel("Bur nr:");
195          lblBurNr.setBounds(10, 22, 46, 14);
196          panel_2.add(lblBurNr);
197
198          JLabel label_2 = new JLabel("Column nr:");
199          label_2.setBounds(10, 68, 71, 14);
200          panel_2.add(label_2);
201
202          textField_4 = new JTextField();
203          textField_4.setColumns(10);
204          textField_4.setBounds(10, 85, 183, 20);
205          panel_2.add(textField_4);
206
207          textField_8 = new JTextField();
208          textField_8.setColumns(10);
209          textField_8.setBounds(10, 133, 183, 20);
210          panel_2.add(textField_8);
211
212          JLabel lblBurType = new JLabel("Bur type:");
213          lblBurType.setBounds(10, 116, 71, 14);
214          panel_2.add(lblBurType);
215
216          JPanel panel_3 = new JPanel();
217          panel_3.setLayout(null);
218          panel_3.setToolTipText("Create hall");
219          panel_3.setBorder(new TitledBorder(UIManager.getBorder(
220          "TitledBorder.border"), "Opret Mink", TitledBorder.LEFT,
221          TitledBorder.TOP, null, new Color(0, 0, 0)));
222          panel_3.setBounds(654, 11, 423, 166);
223          contentPane.add(panel_3);
224
225          txtColor = new JTextField();
226          txtColor.setColumns(10);
227          txtColor.setBounds(10, 37, 116, 20);
228          panel_3.add(txtColor);
229
230          JLabel lblColor = new JLabel("Color:");
231          lblColor.setBounds(10, 22, 46, 14);
232          panel_3.add(lblColor);
233
234          JLabel lblPelsLngde = new JLabel("Pels l\u00E6ngde:");
235          lblPelsLngde.setBounds(10, 68, 116, 14);
236          panel_3.add(lblPelsLngde);
237
238          txtFur = new JTextField();
239          txtFur.setColumns(10);
240          txtFur.setBounds(10, 85, 116, 20);
241          panel_3.add(txtFur);
242
243          JLabel lblPelsTthed = new JLabel("F\u00F8de\u00E5r:");
244          lblPelsTthed.setBounds(288, 22, 71, 14);
245          panel_3.add(lblPelsTthed);
246
247          txtDate = new JTextField();
248          txtDate.setColumns(10);
249          txtDate.setBounds(288, 37, 116, 20);
250          panel_3.add(txtDate);
251
252          txtCageMink = new JTextField();
253          txtCageMink.setColumns(10);
254          txtCageMink.setBounds(288, 85, 116, 20);
255          panel_3.add(txtCageMink);
256
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257          JLabel lblBurNr_1 = new JLabel("Bur nr:");
258          lblBurNr_1.setBounds(288, 68, 71, 14);
259          panel_3.add(lblBurNr_1);
260
261          JLabel lblKvalitet = new JLabel("Kvalitet:");
262          lblKvalitet.setBounds(148, 68, 71, 14);
263          panel_3.add(lblKvalitet);
264
265          txtDensity = new JTextField();
266          txtDensity.setColumns(10);
267          txtDensity.setBounds(148, 37, 116, 20);
268          panel_3.add(txtDensity);
269
270          JLabel lblFdselsr = new JLabel("Pels t\u00E6thed");
271          lblFdselsr.setBounds(148, 22, 84, 14);
272          panel_3.add(lblFdselsr);
273
274          JButton btnNewButton = new JButton("Opret");
275          btnNewButton.addActionListener(new ActionListener() {
276                  public void actionPerformed(ActionEvent e)
277                  {
278                          createMink();
279                  }
280          });
281          btnNewButton.setBounds(316, 116, 89, 23);
282          panel_3.add(btnNewButton);
283
284          JButton btnSg_1 = new JButton("Update");
285          btnSg_1.setBounds(217, 116, 89, 23);
286          panel_3.add(btnSg_1);
287
288          txtQuality = new JTextField();
289          txtQuality.setBounds(148, 85, 116, 20);
290          panel_3.add(txtQuality);
291          txtQuality.setColumns(10);
292
293          JPanel panel_4 = new JPanel();
294          panel_4.setLayout(null);
295          panel_4.setToolTipText("Create hall");
296          panel_4.setBorder(new TitledBorder(UIManager.getBorder(
297          "TitledBorder.border"), "S\u00F8g hal", TitledBorder.LEFT,
298          TitledBorder.TOP, null, new Color(0, 0, 0)));
299          panel_4.setBounds(20, 188, 203, 101);
300          contentPane.add(panel_4);
301
302          textField_5 = new JTextField();
303          textField_5.setColumns(10);
304          textField_5.setBounds(10, 35, 183, 20);
305          panel_4.add(textField_5);
306
307          JButton btnSg_2 = new JButton("S\u00F8g");
308          btnSg_2.setBounds(104, 66, 89, 23);
309          panel_4.add(btnSg_2);
310
311          JLabel label = new JLabel("Hal nr:");
312          label.setBounds(10, 22, 46, 14);
313          panel_4.add(label);
314
315          JPanel panel_5 = new JPanel();
316          panel_5.setLayout(null);
317          panel_5.setToolTipText("Create hall");
318          panel_5.setBorder(new TitledBorder(UIManager.getBorder(
319          "TitledBorder.border"), "S\u00F8g fag", TitledBorder.LEFT,
320          TitledBorder.TOP, null, new Color(0, 0, 0)));
```

```
321        panel_5.setBounds(233, 188, 203, 101);
322        contentPane.add(panel_5);
323
324        textField_6 = new JTextField();
325        textField_6.setColumns(10);
326        textField_6.setBounds(10, 35, 183, 20);
327        panel_5.add(textField_6);
328
329        JButton btnSg_3 = new JButton("S\u00F8g");
330        btnSg_3.setBounds(104, 66, 89, 23);
331        panel_5.add(btnSg_3);
332
333        JLabel label_1 = new JLabel("Hal nr:");
334        label_1.setBounds(10, 22, 46, 14);
335        panel_5.add(label_1);
336
337        JPanel panel_6 = new JPanel();
338        panel_6.setLayout(null);
339        panel_6.setToolTipText("Create hall");
340        panel_6.setBorder(new TitledBorder(UIManager.getBorder(
341        "TitledBorder.border"), "S\u00F8g bur", TitledBorder.LEFT,
342        TitledBorder.TOP, null, new Color(0, 0, 0)));
343        panel_6.setBounds(446, 227, 203, 101);
344        contentPane.add(panel_6);
345
346        textField_7 = new JTextField();
347        textField_7.setColumns(10);
348        textField_7.setBounds(10, 35, 183, 20);
349        panel_6.add(textField_7);
350
351        JButton btnSg_4 = new JButton("S\u00F8g");
352        btnSg_4.addActionListener(new ActionListener() {
353            public void actionPerformed(ActionEvent e)
354            {
355                findCage();
356            }
357        });
358        btnSg_4.setBounds(104, 66, 89, 23);
359        panel_6.add(btnSg_4);
360
361        JLabel label_3 = new JLabel("Hal nr:");
362        label_3.setBounds(10, 22, 46, 14);
363        panel_6.add(label_3);
364
365        table_1 = new JTable();
366        table_1.setBounds(20, 305, 203, 233);
367        contentPane.add(table_1);
368
369        JLabel lblNewLabel = new JLabel("New label");
370        lblNewLabel.setBounds(233, 305, 393, 14);
371        contentPane.add(lblNewLabel);
372    }
373
374    public void createCage()
375    {
376        CTRCage ctr = new CTRCage();
377        int nr = Integer.parseInt(textField_3.getText());
378        int column = Integer.parseInt(textField_4.getText());
379        String cageType = textField_8.getText();
380        try
381        {
382            ctr.createCage(nr, column, cageType);
383            textField_3.setText("");
384            textField_4.setText("");
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385                      textField_8.setText("");
386              }
387          catch(Exception e)
388          {
389                  System.out.println("ERROR!!!");
390          }
391
392
393      }
394
395      public void createMink()
396      {
397              CTRMink ctr = new CTRMink();
398
399              String color = txtColor.getText();
400              int fur = Integer.parseInt(txtFur.getText());
401              int density =  Integer.parseInt(txtDensity.getText());
402              String date = txtDate.getText();
403              String quality = txtQuality.getText();
404              int cage = Integer.parseInt(txtCageMink.getText());
405
406              try
407              {
408                      ctr.createMink(color, fur, density, date, quality, cage);
409              }
410          catch(Exception e)
411          {
412                  System.out.println("FEJL!!!!");
413          }
414
415
416      }
417
418      public void createColumn()
419      {
420              CTRColumn ctr = new CTRColumn();
421              int col = Integer.parseInt(textField_1.getText());
422              int hal = Integer.parseInt(textField_2.getText());
423              try
424              {
425                      ctr.createColumn(col, hal);
426              }
427          catch(Exception e)
428          {
429                  System.out.println("ERROR!!");
430          }
431
432      }
433 //      private void findCageTest()
434 //      {
435 //              try
436 //              {
437 //                      Cage cagObj = cagCTR.findCage(Integer.parseInt(
438 textField_7.getText())));
439 //                      textField_3.setText(Integer.parseInt(cag.getCageNo())));
440 //
441 //
442 //              }
443 //          catch(Exception e)
444 //          {
445 //                  System.out.println("FEJL!!!!");
446 //          }
447 //      }
448
```

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449
450
451    private void findCage()
452    {
453            int nr = Integer.parseInt(textField_5.getText());
454            CTRCage ctr = new CTRCage();
455            Cage cagobj = ctr.findCage(nr);
456            if(cagobj != null)
457            {
458                    putValueOnScreen(cagobj);
459            }
460            else
461            {
462                    System.out.println("FEJL");
463            }
464    }
465
466    public void addHall()
467    {
468            CTRHall ctr = new CTRHall();
469            int hallnr = Integer.parseInt(textField.getText());
470            int cvr = Integer.parseInt(textField_9.getText());
471            try
472            {
473                    ctr.insertHall(hallnr, cvr);
474            }
475            catch(Exception e)
476            {
477                    System.out.println("ERROR!!");
478            }
479    }
480    public void putValueOnScreen(Cage cagobj)
481    {
482            ArrayList<Mink> minkList = cagobj.getMyMink();
483            System.out.println(minkList.size());
484            BurData burobj = new BurData();
485            burobj.setData(minkList);
486            table_1.setModel(burobj);
487            lblNewLabel.setText(String.valueOf(cagobj.getCageNo()));
488            this.setVisible(true);
489    }
490    public void findCage(java.awt.event.ActionEvent evt)
491    {
492            try
493            {
494                    CTRCage ctr = new CTRCage();
495                    int findCage = Integer.parseInt(textField_7.getText());
496                    ArrayList<Cage> cagobj = ctr.find(findCage);
497                    System.out.println("VIRKER");
498            }
499            catch(Exception e)
500            {
501                    System.out.println("ERROR!!");
502            }
503    }
504 }
```