```java
1 package pacOrg;
2
3 import java.awt.EventQueue;
26
27 public class CenaFrame extends JFrame {
28
29     /**
30      *
31      */
32     private static final long serialVersionUID = 1L;
33     private JPanel contentPane;
34     private JTextField textField_0;
35     private JTextField textField_1;
36     private JTextField textField_2;
37     private JTextField textField_3;
38     private JTextField textField_4;
39
40     public Mwain mwain = new Mwain();
41     public Firma firma = new Firma();
42     public FrameX frameX = new FrameX();
43
44
45     /**
46      * Launch the application.
47      */
48     public static void main(String[] args) {
49         EventQueue.invokeLater(new Runnable() {
50             public void run() {
51                 try {
52                     CenaFrame frame = new CenaFrame();
53                     frame.setVisible(true);
54                     frame.setResizable(false);
55                 } catch (Exception e) {
56                     e.printStackTrace();
57                 }
58             }
59         });
60     }
61
62     /**
63      * Create the frame.
64      */
65     public CenaFrame() {
66         setFont(new Font("MS Gothic", Font.ITALIC, 14));
67         setTitle("Window Cena");
68         setBounds(100, 100, 820, 345);
69         contentPane = new JPanel();
70         contentPane.setBackground(new Color(211, 211, 211));
71         contentPane.setBorder(new EmptyBorder(5, 5, 5, 5));
72         setContentPane(contentPane);
73         contentPane.setLayout(null);
74
75         Panel panel = new Panel();
76         panel.setBackground(new Color(211, 211, 211));
77         panel.setBounds(10, 10, 390, 155);
78         contentPane.add(panel);
79         GridBagLayout gbl_panel = new GridBagLayout();
80         gbl_panel.columnWidths = new int[]{0, 0, 0, 0, 0, 0};
81         gbl_panel.rowHeights = new int[]{0, 0, 0, 0, 0, 0, 0};
82         gbl_panel.columnWeights = new double[]{0.0, 0.0, 0.0, 0.0, 1.0, Double.MIN_VALUE};
83         gbl_panel.rowWeights = new double[]{0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
   Double.MIN_VALUE};
```

```java
 84          panel.setLayout(gbl_panel);
 85
 86          JLabel lblNewLabel = new JLabel("Broj kartona");
 87          lblNewLabel.setFont(new Font("MS Gothic", Font.ITALIC, 14));
 88          lblNewLabel.setToolTipText("Identifikacioni broj korisnika ID.");
 89          GridBagConstraints gbc_lblNewLabel = new GridBagConstraints();
 90          gbc_lblNewLabel.gridwidth = 4;
 91          gbc_lblNewLabel.insets = new Insets(0, 0, 5, 5);
 92          gbc_lblNewLabel.gridx = 0;
 93          gbc_lblNewLabel.gridy = 0;
 94          panel.add(lblNewLabel, gbc_lblNewLabel);
 95
 96          textField_0 = new JTextField();
 97          textField_0.setToolTipText("Uneti broj kartona (Samo Cifre bez razmaka, i bez
     decimala).");
 98          GridBagConstraints gbc_textField_0 = new GridBagConstraints();
 99          gbc_textField_0.insets = new Insets(0, 0, 5, 0);
100          gbc_textField_0.fill = GridBagConstraints.HORIZONTAL;
101          gbc_textField_0.gridx = 4;
102          gbc_textField_0.gridy = 0;
103          panel.add(textField_0, gbc_textField_0);
104          textField_0.setColumns(10);
105
106          JLabel lblNewLabel_1 = new JLabel("Ime pacijenta");
107          lblNewLabel_1.setFont(new Font("MS Gothic", Font.ITALIC, 14));
108          lblNewLabel_1.setToolTipText("Ime korisnika koje se treba uneti.");
109          GridBagConstraints gbc_lblNewLabel_1 = new GridBagConstraints();
110          gbc_lblNewLabel_1.gridwidth = 4;
111          gbc_lblNewLabel_1.insets = new Insets(0, 0, 5, 5);
112          gbc_lblNewLabel_1.gridx = 0;
113          gbc_lblNewLabel_1.gridy = 1;
114          panel.add(lblNewLabel_1, gbc_lblNewLabel_1);
115
116          textField_1 = new JTextField();
117          textField_1.setToolTipText("Ime String = Unos moze biti bilo sta.");
118          GridBagConstraints gbc_textField_1 = new GridBagConstraints();
119          gbc_textField_1.insets = new Insets(0, 0, 5, 0);
120          gbc_textField_1.fill = GridBagConstraints.HORIZONTAL;
121          gbc_textField_1.gridx = 4;
122          gbc_textField_1.gridy = 1;
123          panel.add(textField_1, gbc_textField_1);
124          textField_1.setColumns(10);
125
126          JLabel lblNewLabel_2 = new JLabel("Prezime pacijenta");
127          lblNewLabel_2.setFont(new Font("MS Gothic", Font.ITALIC, 14));
128          lblNewLabel_2.setToolTipText("Prezime korisnika koje se treba uneti.");
129          GridBagConstraints gbc_lblNewLabel_2 = new GridBagConstraints();
130          gbc_lblNewLabel_2.gridwidth = 4;
131          gbc_lblNewLabel_2.insets = new Insets(0, 0, 5, 5);
132          gbc_lblNewLabel_2.gridx = 0;
133          gbc_lblNewLabel_2.gridy = 2;
134          panel.add(lblNewLabel_2, gbc_lblNewLabel_2);
135
136          textField_2 = new JTextField();
137          textField_2.setToolTipText("Prezime String = Unos moze biti bilo sta.");
138          GridBagConstraints gbc_textField_2 = new GridBagConstraints();
139          gbc_textField_2.insets = new Insets(0, 0, 5, 0);
140          gbc_textField_2.fill = GridBagConstraints.HORIZONTAL;
141          gbc_textField_2.gridx = 4;
142          gbc_textField_2.gridy = 2;
143          panel.add(textField_2, gbc_textField_2);
144          textField_2.setColumns(10);
```

```
145
146         JLabel lblNewLabel_3 = new JLabel("Dug");
147         lblNewLabel_3.setFont(new Font("MS Gothic", Font.ITALIC, 14));
148         lblNewLabel_3.setToolTipText("Uneti trosak posle operacije.");
149         GridBagConstraints gbc_lblNewLabel_3 = new GridBagConstraints();
150         gbc_lblNewLabel_3.gridwidth = 4;
151         gbc_lblNewLabel_3.insets = new Insets(0, 0, 5, 5);
152         gbc_lblNewLabel_3.gridx = 0;
153         gbc_lblNewLabel_3.gridy = 3;
154         panel.add(lblNewLabel_3, gbc_lblNewLabel_3);
155
156         textField_3 = new JTextField();
157         textField_3.setToolTipText("double unos moze biti samo broj ! sa ili bez
    decimala.");
158         GridBagConstraints gbc_textField_3 = new GridBagConstraints();
159         gbc_textField_3.insets = new Insets(0, 0, 5, 0);
160         gbc_textField_3.fill = GridBagConstraints.HORIZONTAL;
161         gbc_textField_3.gridx = 4;
162         gbc_textField_3.gridy = 3;
163         panel.add(textField_3, gbc_textField_3);
164         textField_3.setColumns(10);
165
166         JLabel lblNewLabel_4 = new JLabel("Placeno");
167         lblNewLabel_4.setFont(new Font("MS Gothic", Font.ITALIC, 14));
168         lblNewLabel_4.setToolTipText("Unesti kolicinu novca koja je placena.");
169         GridBagConstraints gbc_lblNewLabel_4 = new GridBagConstraints();
170         gbc_lblNewLabel_4.gridwidth = 4;
171         gbc_lblNewLabel_4.insets = new Insets(0, 0, 5, 5);
172         gbc_lblNewLabel_4.gridx = 0;
173         gbc_lblNewLabel_4.gridy = 4;
174         panel.add(lblNewLabel_4, gbc_lblNewLabel_4);
175
176         textField_4 = new JTextField();
177         textField_4.setToolTipText("double Unos more biti samo broj sa ili bez decimala.");
178         GridBagConstraints gbc_textField_4 = new GridBagConstraints();
179         gbc_textField_4.insets = new Insets(0, 0, 5, 0);
180         gbc_textField_4.fill = GridBagConstraints.HORIZONTAL;
181         gbc_textField_4.gridx = 4;
182         gbc_textField_4.gridy = 4;
183         panel.add(textField_4, gbc_textField_4);
184         textField_4.setColumns(10);
185
186         Panel panel_1 = new Panel();
187         panel_1.setBackground(new Color(211, 211, 211));
188         panel_1.setBounds(10, 171, 192, 135);
189         contentPane.add(panel_1);
190         GridBagLayout gbl_panel_1 = new GridBagLayout();
191         gbl_panel_1.columnWidths = new int[]{0, 0};
192         gbl_panel_1.rowHeights = new int[]{0, 0, 0, 0, 0, 0};
193         gbl_panel_1.columnWeights = new double[]{1.0, Double.MIN_VALUE};
194         gbl_panel_1.rowWeights = new double[]{0.0, 0.0, 0.0, 0.0, 0.0, Double.MIN_VALUE};
195         panel_1.setLayout(gbl_panel_1);
196
197         JButton btnNewButton = new JButton("Unos podataka cena");
198         btnNewButton.addActionListener(new ActionListener() {
199             public void actionPerformed(ActionEvent e) {
200
201                 firma.loadCena("cene.txt");
202
203                 String id = textField_0.getText().trim();
204                 String ime = textField_1.getText().trim();
205                 String prezime = textField_2.getText().trim();
```

```java
206                 String dug = textField_3.getText().trim();
207                 String placeno = textField_4.getText().trim();
208
209                 if (Mwain.isNumber(id)== true) {
210
211                     if (Mwain.isDecimalNumber(dug)== true) {
212
213                         if (Mwain.isDecimalNumber(placeno)== true) {
214
215                             int idX = Integer.parseInt(id);
216                             double dugX = Double.parseDouble(dug);
217                             double placenoX = Double.parseDouble(placeno);
218                             double trenutnoStanje = dugX- placenoX;
219
220                             Cena cena = new Cena(idX, ime, prezime, dugX, placenoX,
    trenutnoStanje);
221                             boolean provera = firma.unosCene(cena);
222                             if (provera) {
223                                 JOptionPane.showMessageDialog(null, "unos cene je uspesno
    uradjen.", "Unos uspesno uradjen", 1);
224                                 //System.out.println("unos cene je uspesno uradjen.");
225                             }else {
226                                 JOptionPane.showMessageDialog(null, "unos cene je neuspesno
    uradjen.", "Unos neuspesno uradjen", 1);
227                                 //System.out.println("unos cene je neuspesno izrsen.");
228                             }
229
230
231                         }else {
232
233                             JOptionPane.showMessageDialog(null, "Unos mora biti samo broj",
    "GRESKA PRI UNOSU !", 1);
234                         }
235
236
237                     }else {
238                         JOptionPane.showMessageDialog(null, "Unos mora biti samo broj",
    "GRESKA PRI UNOSU !", 1);
239                     }
240
241                 }else {
242                     JOptionPane.showMessageDialog(null, "Unos mora biti samo broj, bez
    razmaka, bez decimala !","GRESKA PRI UNOSU !", 1);
243                 }
244
245
246
247
248             }
249         });
250         btnNewButton.setFont(new Font("MS Gothic", Font.ITALIC, 12));
251         btnNewButton.setToolTipText("Unos u listu podataka gornje unetih informacija.");
252         GridBagConstraints gbc_btnNewButton = new GridBagConstraints();
253         gbc_btnNewButton.insets = new Insets(0, 0, 5, 0);
254         gbc_btnNewButton.fill = GridBagConstraints.HORIZONTAL;
255         gbc_btnNewButton.gridx = 0;
256         gbc_btnNewButton.gridy = 0;
257         panel_1.add(btnNewButton, gbc_btnNewButton);
258
259         JButton btnNewButton_1 = new JButton("Izmena lista ID");
260         btnNewButton_1.addActionListener(new ActionListener() {
261             public void actionPerformed(ActionEvent e) {
```

```java
262
263                firma.loadCena("cene.txt");
264
265                String id = textField_0.getText().trim();
266                String dug = textField_3.getText().trim();
267                String placeno = textField_4.getText().trim();
268
269                if (Mwain.isNumber(id)== true) {
270
271                    if (Mwain.isDecimalNumber(dug)== true) {
272
273                        if (Mwain.isDecimalNumber(placeno)== true) {
274
275                            int idX = Integer.parseInt(id);
276                            double dugX = Double.parseDouble(dug);
277                            double placenoX = Double.parseDouble(placeno);
278                            Cena cena = new Cena(idX, dugX, placenoX);
279                            Cena cena2 = firma.izmenaCenaID(cena);
280                            if (cena2 != null) {
281                                JOptionPane.showMessageDialog(null, "Izmena cene je uspesno
   uradjen.", "izmena uspesno uradjen", 1);
282                                //System.out.println("Izmena je uspesno uradjena.");
283                            }else {
284                                JOptionPane.showMessageDialog(null, "Izmena cene je
   neuspesno uradjen.", "izmena neuspesno uradjen", 1);
285                                System.out.println("Izmena je neuspesno uradjena.");
286                            }
287
288                        }else {
289
290                            JOptionPane.showMessageDialog(null, "Unos mora biti samo broj",
   "GRESKA PRI UNOSU !", 1);
291                        }
292
293
294                    }else {
295                        JOptionPane.showMessageDialog(null, "Unos mora biti samo broj",
   "GRESKA PRI UNOSU !", 1);
296                    }
297
298                }else {
299                    JOptionPane.showMessageDialog(null, "Unos mora biti samo broj, bez
   razmaka, bez decimala !","GRESKA PRI UNOSU !", 1);
300                }
301
302            }
303        });
304        btnNewButton_1.setFont(new Font("MS Gothic", Font.ITALIC, 12));
305        btnNewButton_1.setToolTipText("Izmena jedne instance grupe podataka na osnovu
   identifikatora (broj kartona).");
306        GridBagConstraints gbc_btnNewButton_1 = new GridBagConstraints();
307        gbc_btnNewButton_1.fill = GridBagConstraints.HORIZONTAL;
308        gbc_btnNewButton_1.insets = new Insets(0, 0, 5, 0);
309        gbc_btnNewButton_1.gridx = 0;
310        gbc_btnNewButton_1.gridy = 1;
311        panel_1.add(btnNewButton_1, gbc_btnNewButton_1);
312
313        JButton btnNewButton_2 = new JButton("Izmena lista Ime + Prezime");
314        btnNewButton_2.addActionListener(new ActionListener() {
315            public void actionPerformed(ActionEvent e) {
316
317                firma.loadCena("cene.txt");
```

```java
318
319
320                 String dug = textField_3.getText().trim();
321                 String placeno = textField_4.getText().trim();
322                 String ime = textField_1.getText().trim();
323                 String prezime = textField_2.getText().trim();
324
325                 if (Mwain.isDecimalNumber(dug)== true) {
326
327                     if (Mwain.isDecimalNumber(placeno)== true) {
328
329
330                         double dugX = Double.parseDouble(dug);
331                         double placenoX = Double.parseDouble(placeno);
332
333
334                         Cena cena = new Cena(ime, prezime, dugX, placenoX);
335                         Cena cena2 = firma.izmenaCenaImePrezime(cena);
336                         if (cena2 != null) {
337                             JOptionPane.showMessageDialog(null, "Izmena cene je uspesno
   uradjen.", "izmena uspesno uradjen", 1);
338                             //System.out.println("Izmena je uspesno uradjena.");
339                         }else {
340                             JOptionPane.showMessageDialog(null, "Izmena cene je neuspesno
   uradjen.", "izmena neuspesno uradjen", 1);
341                             //System.out.println("Izmena je neuspesno uradjena.");
342                         }
343
344                     }else {
345
346                         JOptionPane.showMessageDialog(null, "Unos mora biti samo broj",
   "GRESKA PRI UNOSU !", 1);
347                     }
348
349
350                 }else {
351                     JOptionPane.showMessageDialog(null, "Unos mora biti samo broj", "GRESKA
   PRI UNOSU !", 1);
352                 }
353
354             }
355         });
356         btnNewButton_2.setFont(new Font("MS Gothic", Font.ITALIC, 12));
357         btnNewButton_2.setToolTipText("Izmena jedne instance liste podataka na osnovu
   proslednjenog imena i prezimena.");
358         GridBagConstraints gbc_btnNewButton_2 = new GridBagConstraints();
359         gbc_btnNewButton_2.fill = GridBagConstraints.HORIZONTAL;
360         gbc_btnNewButton_2.insets = new Insets(0, 0, 5, 0);
361         gbc_btnNewButton_2.gridx = 0;
362         gbc_btnNewButton_2.gridy = 2;
363         panel_1.add(btnNewButton_2, gbc_btnNewButton_2);
364
365         JButton btnNewButton_3 = new JButton("Nulliranje");
366         btnNewButton_3.addActionListener(new ActionListener() {
367             public void actionPerformed(ActionEvent e) {
368
369                 firma.loadCena("cene.txt");
370
371                 String id = textField_0.getText().trim();
372
373                 if (Mwain.isNumber(id)== true) {
374
```

```java
375                     int IdX = Integer.parseInt(id);
376                     double dug = 0.0;
377                     double placeno = 0.0;
378                     double trenutnoStanje = 0.0;
379
380                     Cena cena = new Cena(IdX, dug, placeno, trenutnoStanje);
381                     Cena cena2 = firma.nuliranjeCeneID(cena);
382                     if (cena2 != null) {
383                         JOptionPane.showMessageDialog(null, "Nuliranje je uspesno uradjeno
   !", "Operacija ok.", 1);
384                         System.out.println("Izmena je uspesno uradjena.");
385                     }else {
386                         JOptionPane.showMessageDialog(null, "Nuliranje je neuspesno
   uradjeno proverite ID !", "Greska pri unosu.", 1);
387                         System.out.println("Izmena je nespesno uradjena.");
388                     }
389
390                 } else {
391
392                     JOptionPane.showMessageDialog(null, "ID moze biti samo broj ! bez
   decimala !", "Greska pri unosu.", 1);
393
394                 }
395
396
397             }
398         });
399         btnNewButton_3.setFont(new Font("MS Gothic", Font.ITALIC, 12));
400         btnNewButton_3.setToolTipText("Stavljanje vrednosti na 0 na osnovu identifikacionog
   broja ID ( broj kartona).");
401         GridBagConstraints gbc_btnNewButton_3 = new GridBagConstraints();
402         gbc_btnNewButton_3.fill = GridBagConstraints.HORIZONTAL;
403         gbc_btnNewButton_3.insets = new Insets(0, 0, 5, 0);
404         gbc_btnNewButton_3.gridx = 0;
405         gbc_btnNewButton_3.gridy = 3;
406         panel_1.add(btnNewButton_3, gbc_btnNewButton_3);
407
408         Panel panel_2 = new Panel();
409         panel_2.setBackground(new Color(211, 211, 211));
410         panel_2.setBounds(208, 171, 192, 135);
411         contentPane.add(panel_2);
412         GridBagLayout gbl_panel_2 = new GridBagLayout();
413         gbl_panel_2.columnWidths = new int[]{0, 0};
414         gbl_panel_2.rowHeights = new int[]{0, 0, 0, 0, 0, 0};
415         gbl_panel_2.columnWeights = new double[]{1.0, Double.MIN_VALUE};
416         gbl_panel_2.rowWeights = new double[]{0.0, 0.0, 0.0, 0.0, 0.0, Double.MIN_VALUE};
417         panel_2.setLayout(gbl_panel_2);
418
419         JButton btnListaSvihCena = new JButton("Lista svih cena");
420         btnListaSvihCena.addActionListener(new ActionListener() {
421             public void actionPerformed(ActionEvent arg0) {
422
423                 Console console = new Console();
424                 console.init();
425                 firma.lstCena();
426
427             }
428         });
429         btnListaSvihCena.setToolTipText("Lista svih podataka iz klase cene.");
430         btnListaSvihCena.setFont(new Font("MS Gothic", Font.ITALIC, 12));
431         GridBagConstraints gbc_btnListaSvihCena = new GridBagConstraints();
432         gbc_btnListaSvihCena.fill = GridBagConstraints.HORIZONTAL;
```

```java
433            gbc_btnListaSvihCena.insets = new Insets(0, 0, 5, 0);
434            gbc_btnListaSvihCena.gridx = 0;
435            gbc_btnListaSvihCena.gridy = 0;
436            panel_2.add(btnListaSvihCena, gbc_btnListaSvihCena);
437
438            JButton btnListaCenaId = new JButton("Lista cena ID");
439            btnListaCenaId.addActionListener(new ActionListener() {
440                public void actionPerformed(ActionEvent arg0) {
441
442                    String id = textField_0.getText().trim();
443                    if (Mwain.isNumber(id)== true) {
444
445                        int idX = Integer.parseInt(id);
446                        Console console = new Console();
447                        console.init();
448                        firma.lstCenaI(idX);
449
450                    } else {
451
452                        JOptionPane.showMessageDialog(null, "ID moze biti samo broj", "GRESKA
       PRI PARSIRANJU !", 1);
453
454                    }
455
456                }
457            });
458            btnListaCenaId.setToolTipText("Lista cena po Identifikatoru - preporuceno");
459            btnListaCenaId.setFont(new Font("MS Gothic", Font.ITALIC, 12));
460            GridBagConstraints gbc_btnListaCenaId = new GridBagConstraints();
461            gbc_btnListaCenaId.fill = GridBagConstraints.HORIZONTAL;
462            gbc_btnListaCenaId.insets = new Insets(0, 0, 5, 0);
463            gbc_btnListaCenaId.gridx = 0;
464            gbc_btnListaCenaId.gridy = 1;
465            panel_2.add(btnListaCenaId, gbc_btnListaCenaId);
466
467            JButton btnListaIme = new JButton("Lista Ime & Prezime");
468            btnListaIme.addActionListener(new ActionListener() {
469                public void actionPerformed(ActionEvent arg0) {
470
471                    String ime = textField_1.getText().trim();
472                    String prezime = textField_2.getText().trim();
473
474                    Console console = new Console();
475                    console.init();
476                    firma.lstCenaImePrezime(ime, prezime);
477
478                }
479            });
480            btnListaIme.setToolTipText("Lista cena po imenu i prezimenu");
481            btnListaIme.setFont(new Font("MS Gothic", Font.ITALIC, 12));
482            GridBagConstraints gbc_btnListaIme = new GridBagConstraints();
483            gbc_btnListaIme.fill = GridBagConstraints.HORIZONTAL;
484            gbc_btnListaIme.insets = new Insets(0, 0, 5, 0);
485            gbc_btnListaIme.gridx = 0;
486            gbc_btnListaIme.gridy = 2;
487            panel_2.add(btnListaIme, gbc_btnListaIme);
488
489            JButton btnBrisanjeI = new JButton("Brisanje ID");
490            btnBrisanjeI.addActionListener(new ActionListener() {
491                public void actionPerformed(ActionEvent e) {
492
493                    String id = textField_0.getText().trim();
```

```java
494
495                if (Mwain.isNumber(id)== true) {
496
497                    int idC = Integer.parseInt(id);
498
499                    //Console console = new Console();
500                    //console.init();
501                    Cena provera = firma.cenaBrisanjeID(idC);
502                    if (provera == null) {
503                        JOptionPane.showMessageDialog(null, "ID ne postoji u listi
    podataka", "GRESKA PRI UNOSU !", 1);
504                        System.out.println("Zadati broj ne postoji u listi.");
505                    }
506
507                } else {
508                    JOptionPane.showMessageDialog(null, "ID moze biti samo broj", "GRESKA
    PRI UNOSU !", 1);
509                }
510            }
511        });
512        btnBrisanjeI.setToolTipText("Brisanje jedne instance podataka po identifikatoru");
513        btnBrisanjeI.setFont(new Font("MS Gothic", Font.ITALIC, 12));
514        GridBagConstraints gbc_btnBrisanjeI = new GridBagConstraints();
515        gbc_btnBrisanjeI.fill = GridBagConstraints.HORIZONTAL;
516        gbc_btnBrisanjeI.insets = new Insets(0, 0, 5, 0);
517        gbc_btnBrisanjeI.gridx = 0;
518        gbc_btnBrisanjeI.gridy = 3;
519        panel_2.add(btnBrisanjeI, gbc_btnBrisanjeI);
520
521        JLabel labelMoney = new JLabel("");
522        Image img1 = new ImageIcon(this.getClass().getResource("/money3.png")).getImage();
    // this code is usefull copy it latter
523        labelMoney.setIcon(new ImageIcon(img1));
524        labelMoney.setBounds(406, 10, 386, 296);
525        contentPane.add(labelMoney);
526    }
527 }
528
```