```
2 import java.awt.event.KeyEvent;
 8 * To change this license header, choose License Headers in Project
  Properties.
12
13 /**
14 *
15 * @author Tanim
16 */
17 public class newPlayer extends javax.swing.JFrame {
18
     Player[] list = new Player[30];
19
20
        * Creates new form newPlayer
21
22
      public newPlayer() {
23
          initComponents();
24
25
      public newPlayer(Player[] pl){
26
          initComponents();
27
          list = pl;
28
      }
29
30
        * This method is called from within the constructor to initialize the
31
  form.
32
        * WARNING: Do NOT modify this code. The content of this method is
  always
33
        * regenerated by the Form Editor.
34
35
      @SuppressWarnings("unchecked")
36
      // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
  BEGIN: initComponents
37
      private void initComponents() {
38
39
          GRU = new javax.swing.JLabel();
          BBallTeam = new javax.swing.JLabel();
40
          FName = new javax.swing.JLabel();
41
42
          LName = new javax.swing.JLabel();
43
          GmsPlayed = new javax.swing.JLabel();
44
          POsition = new javax.swing.JLabel();
45
          fname = new javax.swing.JTextField();
```

```
46
          lname = new javax.swing.JTextField();
47
          gamesPlayed = new javax.swing.JTextField();
48
          Rebounds = new javax.swing.JLabel();
49
          Assists = new javax.swing.JLabel();
50
          Number = new javax.swing.JLabel();
51
          Points = new javax.swing.JLabel();
52
          rebounds = new javax.swing.JTextField();
53
          assists = new javax.swing.JTextField();
54
          number = new javax.swing.JTextField();
55
          points = new javax.swing.JTextField();
56
          createPlayer = new javax.swing.JButton();
57
          Cancel = new javax.swing.JButton();
58
          pos = new javax.swinq.JComboBox<>();
           jLabel1 = new javax.swing.JLabel();
59
60
61
  setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
          setMinimumSize(new java.awt.Dimension(700, 400));
62
63
          setResizable(false);
64
          setSize(new java.awt.Dimension(700, 400));
65
          getContentPane().setLayout(new
  org.netbeans.lib.awtextra.AbsoluteLayout());
66
          GRU.setFont(new java.awt.Font("Tahoma", 1, 36)); // NOI18N
67
68
          GRU.setForeground(new java.awt.Color(255, 255, 255));
69
          GRU.setText("Grand Ridge University ");
          getContentPane().add(GRU, new
70
  org.netbeans.lib.awtextra.AbsoluteConstraints(30, 20, -1, -1));
71
72
          BBallTeam.setFont(new java.awt.Font("Times New Roman", 1, 36)); //
  NOI18N
73
          BBallTeam.setForeground(new java.awt.Color(255, 255, 255));
74
          BBallTeam.setText("Basketball Team");
75
          getContentPane().add(BBallTeam, new
  org.netbeans.lib.awtextra.AbsoluteConstraints(320, 80, -1, -1));
76
77
          FName.setFont(new java.awt.Font("Times New Roman", 1, 24)); //
  NOI18N
78
          FName.setForeground(new java.awt.Color(255, 255, 255));
79
          FName.setText("First Name:");
80
          FName.setToolTipText("");
81
          getContentPane().add(FName, new
```

```
org.netbeans.lib.awtextra.AbsoluteConstraints(30, 140, -1, -1));
82
83
           LName.setFont(new java.awt.Font("Times New Roman", 1, 24)); //
   NOI18N
84
           LName.setForeground(new java.awt.Color(255, 255, 255));
           LName.setText("Last Name:");
85
86
           getContentPane().add(LName, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(30, 190, -1, -1));
87
88
           GmsPlayed.setFont(new java.awt.Font("Times New Roman", 1, 24)); //
   NOI18N
           GmsPlayed.setForeground(new java.awt.Color(255, 255, 255));
89
90
           GmsPlayed.setText("Games Played:");
           qetContentPane().add(GmsPlayed, new
91
   org.netbeans.lib.awtextra.AbsoluteConstraints(340, 140, -1, -1));
92
93
           POsition.setFont(new java.awt.Font("Times New Roman", 1, 24)); //
   NOI18N
94
           POsition.setForeground(new java.awt.Color(255, 255, 255));
95
           POsition.setText("Position:");
           POsition.setToolTipText("");
96
           getContentPane().add(POsition, new
97
   org.netbeans.lib.awtextra.AbsoluteConstraints(50, 240, -1, -1));
98
99
           fname.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
100
           fname.addActionListener(new java.awt.event.ActionListener() {
                public void actionPerformed(java.awt.event.ActionEvent evt) {
101
                   fnameActionPerformed(evt);
102
103
               }
104
           });
105
           fname.addKeyListener(new java.awt.event.KeyAdapter() {
               public void keyTyped(java.awt.event.KeyEvent evt) {
106
107
                    fnameKeyTyped(evt);
108
               }
109
           });
110
           getContentPane().add(fname, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(170, 140, 150, 30));
111
112
           lname.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
113
           lname.addKeyListener(new java.awt.event.KeyAdapter() {
```

```
114
               public void keyTyped(java.awt.event.KeyEvent evt) {
115
                   lnameKeyTyped(evt);
116
               }
117
           });
118
           getContentPane().add(lname, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(170, 190, 150, 30));
119
120
           gamesPlayed.setFont(new java.awt.Font("Times New Roman", 1,
   14)); // NOI18N
121
           gamesPlayed.addKeyListener(new java.awt.event.KeyAdapter() {
122
               public void keyTyped(java.awt.event.KeyEvent evt) {
123
                   gamesPlayedKeyTyped(evt);
124
               }
125
           });
126
           getContentPane().add(gamesPlayed, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(500, 140, 150, 30));
127
128
           Rebounds.setFont(new java.awt.Font("Times New Roman", 1, 24)); //
   NOI18N
129
           Rebounds.setForeground(new java.awt.Color(255, 255, 255));
           Rebounds.setText("Rebounds:");
130
           getContentPane().add(Rebounds, new
131
   org.netbeans.lib.awtextra.AbsoluteConstraints(360, 290, -1, -1));
132
133
           Assists.setFont(new java.awt.Font("Times New Roman", 1, 24)); //
   NOI18N
134
           Assists.setForeground(new java.awt.Color(255, 255, 255));
           Assists.setText("Assists:");
135
           getContentPane().add(Assists, new
136
   org.netbeans.lib.awtextra.AbsoluteConstraints(380, 240, -1, -1));
137
138
           Number.setFont(new java.awt.Font("Times New Roman", 1, 24)); //
   NOI18N
           Number.setForeground(new java.awt.Color(255, 255, 255));
139
           Number.setText("Number:");
140
141
           getContentPane().add(Number, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(50, 290, -1, -1));
142
143
           Points.setFont(new java.awt.Font("Times New Roman", 1, 24)); //
   NOI18N
144
           Points.setForeground(new java.awt.Color(255, 255, 255));
145
           Points.setText("Points:");
```

```
146
           getContentPane().add(Points, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(380, 190, 80, 30));
147
148
           rebounds.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
149
           rebounds.addKeyListener(new java.awt.event.KeyAdapter() {
               public void keyTyped(java.awt.event.KeyEvent evt) {
150
151
                    reboundsKeyTyped(evt);
152
               }
153
           });
154
           getContentPane().add(rebounds, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(500, 290, 150, 30));
155
156
           assists.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
157
           assists.addKeyListener(new java.awt.event.KeyAdapter() {
               public void keyTyped(java.awt.event.KeyEvent evt) {
158
159
                    assistsKeyTyped(evt);
160
               }
           });
161
162
           getContentPane().add(assists, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(500, 240, 150, 30));
163
164
           number.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
165
           number.addKeyListener(new java.awt.event.KeyAdapter() {
166
               public void keyTyped(java.awt.event.KeyEvent evt) {
167
                    numberKeyTyped(evt);
168
               }
169
           });
170
           getContentPane().add(number, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(170, 290, 150, 30));
171
172
           points.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
173
           points.addKeyListener(new java.awt.event.KeyAdapter() {
174
               public void keyTyped(java.awt.event.KeyEvent evt) {
175
                    pointsKeyTyped(evt);
176
                }
177
           });
178
           getContentPane().add(points, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(500, 190, 150, 30));
```

```
179
180
           createPlayer.setFont(new java.awt.Font("Times New Roman", 1,
   14)); // NOI18N
181
           createPlayer.setText("Create Player");
182
           createPlayer.addActionListener(new java.awt.event.ActionListener()
   {
183
               public void actionPerformed(java.awt.event.ActionEvent evt) {
184
                   createPlayerActionPerformed(evt);
185
               }
186
           });
187
           getContentPane().add(createPlayer, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(220, 340, 120, 30));
188
189
           Cancel.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
190
           Cancel.setText("Cancel");
191
           Cancel.addActionListener(new java.awt.event.ActionListener() {
                public void actionPerformed(java.awt.event.ActionEvent evt) {
192
193
                   CancelActionPerformed(evt);
194
                }
           });
195
196
           getContentPane().add(Cancel, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(370, 340, 120, 30));
197
198
           pos.setModel(new javax.swing.DefaultComboBoxModel<>(new String□
   { "N/A", "Forward", "Guard" }));
           getContentPane().add(pos, new
199
   org.netbeans.lib.awtextra.AbsoluteConstraints(170, 240, 150, 30));
200
201
           jLabel1.setIcon(new
   javax.swing.ImageIcon(getClass().getResource("/basketball/1.jpg"))); //
   NOI18N
202
           jLabel1.setText("jLabel1");
203
           jLabel1.setMaximumSize(new java.awt.Dimension(700, 400));
204
           jLabel1.setMinimumSize(new java.awt.Dimension(700, 400));
           jLabel1.setPreferredSize(new java.awt.Dimension(770, 440));
205
206
           getContentPane().add(jLabel1, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, -1, -1));
207
208
           setSize(new java.awt.Dimension(716, 439));
209
           setLocationRelativeTo(null);
210
       }// </editor-fold>//GEN-END:initComponents
```

```
211
212
       private void createPlayerActionPerformed(java.awt.event.ActionEvent
   evt) {//GEN-FIRST:event_createPlayerActionPerformed
213
           String name1 = fname.getText();
214
           String name2 = lname.getText();
215
           int ap = 0:
216
           int reb = 0:
217
           int as = 0;
218
           int n = 0;
219
           int p = 0:
220
           if(!gamesPlayed.getText().equals("")){
                if(!rebounds.getText().equals("")){
221
                    if(!assists.getText().equals("")){
222
223
                        if(!number.getText().equals("")){
224
                            if(!points.getText().equals("")){
225
                                qp = Integer.parseInt(gamesPlayed.getText());
226
                                reb = Integer.parseInt(rebounds.getText());
227
                                as = Integer.parseInt(assists.getText());
228
                                n = Integer.parseInt(number.getText());
229
                                p = Integer.parseInt(points.getText());
230
                            }
231
                        }
232
                    }
233
                }
234
235
           String position = (String) pos.getSelectedItem();
236
           boolean player = false;
237
           if(fname.getText().equals("")||lname.getText().equals("")||
   gamesPlayed.getText().equals("")||rebounds.getText().equals("")||
   assists.getText().equals("")|| number.getText().equals("")||
   points.getText().equals("")|| position.equals("N/A")){
238
                JOptionPane.showMessageDialog(null, "Please fill in all
   required fields.");
239
                player = false;
240
           }else{
241
                player = true;
242
243
           if(player == true){
244
                list.add(new Player(fname.getText(), lname.getText(), qp, n,
245
   reb, as, position, p ));
246
                JOptionPane.showMessageDialog(null, "The player " +
```

```
fname.getText() + " " + lname.getText()+ " was added to the database.");
247
                updateFile(list);*/
248
                boolean found = false; //control variable for the next empty
   slot
249
                int index = 0; //has to be 0 to 29
250
                    while(found == false){
251
                        if(index >= 0 && index <= 29 ){
252
                            if(list[index] == null){
253
                                list[index] = new Player(fname.getText(),
   lname.getText(), gp, n, reb, as, position, p );
254
                                JOptionPane.showMessageDialog(null, "A new
   Player was successfully added.");
255
                                found = true;
256
257
                            index++;
258
                        }
259
                    }
260
261
262
                updateFile(list);
263
264
265
                this.setVisible(false);
266
                StartFrame st = new StartFrame();
267
                st.setVisible(true);
268
           }
269
270
       }//GEN-LAST:event_createPlayerActionPerformed
271
272
       private boolean isEmpty(Player[] ab){
273
           boolean isit = true;
274
            for(int i = 0; i < ab.length; i++){//if there is even a single
   non-null, the list isn't empty
                if(ab[i] != null){
275
276
                    isit = false;
277
                }
278
279
           return isit;
280
281
       private void updateFile(Player[] lt){
282
           try{
283
                    FileOutputStream fos= new FileOutputStream("Players");
```

```
284
                    ObjectOutputStream oos= new ObjectOutputStream(fos);
                    oos.writeObject(lt); //this is a way to store the
285
   arraylist in a file
286
                    oos.close();
287
                    fos.close();
288
                }catch(IOException ioe){
                    ioe.printStackTrace();
289
290
               }
291
       }
292
       private void CancelActionPerformed(java.awt.event.ActionEvent evt) {//
   GEN-FIRST:event_CancelActionPerformed
293
           // TODO add your handling code here:
294
           StartFrame sf = new StartFrame();
295
           this.setVisible(false):
296
           sf.setVisible(true);
297
       }//GEN-LAST:event_CancelActionPerformed
298
299
       private void fnameKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_fnameKeyTyped
300
           // TODO add your handling code here:
301
           char c=evt.getKeyChar();
           if(!(Character.isAlphabetic(c) || (c==KeyEvent.VK_BACK_SPACE)||
302
   c==KeyEvent.VK_DELETE ))
303
               evt.consume();
       }//GEN-LAST:event_fnameKeyTyped
304
305
306
       private void lnameKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_lnameKeyTyped
307
           // TODO add your handling code here:
308
           char c=evt.getKeyChar();
309
           if(!(Character.isAlphabetic(c) || (c==KeyEvent.VK_BACK_SPACE)||
   c==KeyEvent.VK_DELETE ))
310
               evt.consume();
311
       }//GEN-LAST:event_lnameKeyTyped
312
313
       private void gamesPlayedKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_gamesPlayedKeyTyped
314
           // TODO add your handling code here:
315
           char c = evt.getKeyChar();
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
316
   KeyEvent.VK_DELETE){
317
               evt.consume();
```

```
318
319
       }//GEN-LAST:event_gamesPlayedKeyTyped
320
321
       private void reboundsKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_reboundsKeyTyped
322
           // TODO add your handling code here:
323
           char c = evt.getKeyChar();
324
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
   KeyEvent.VK_DELETE){
325
               evt.consume();
326
327
       }//GEN-LAST:event_reboundsKeyTyped
328
329
       private void assistsKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_assistsKeyTyped
330
           // TODO add your handling code here:
331
           char c = evt.getKeyChar();
332
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
   KeyEvent.VK_DELETE){
333
               evt.consume();
334
           }
335
       }//GEN-LAST:event_assistsKeyTyped
336
337
       private void numberKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_numberKeyTyped
           // TODO add your handling code here:
338
339
           char c = evt.getKeyChar();
340
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
   KeyEvent.VK_DELETE){
341
               evt.consume();
342
343
       }//GEN-LAST:event_numberKeyTyped
344
345
       private void pointsKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_pointsKeyTyped
346
           // TODO add your handling code here:
347
           char c = evt.getKeyChar();
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
348
   KeyEvent.VK_DELETE){
349
               evt.consume();
350
351
       }//GEN-LAST:event_pointsKeyTyped
```

```
352
353
       private void fnameActionPerformed(java.awt.event.ActionEvent evt) {//
   GEN-FIRST:event_fnameActionPerformed
354
           // TODO add your handling code here:
355
       }//GEN-LAST:event_fnameActionPerformed
356
       /**
357
358
        * @param args the command line arguments
359
360
       public static void main(String args□) {
           /* Set the Nimbus look and feel */
361
362
           //<editor-fold defaultstate="collapsed" desc=" Look and feel
   setting code (optional) ">
363
           /* If Nimbus (introduced in Java SE 6) is not available, stay with
   the default look and feel.
364
            * For details see http://download.oracle.com/javase/tutorial/
   uiswing/lookandfeel/plaf.html
            */
365
366
           try {
367
               for (javax.swing.UIManager.LookAndFeelInfo info :
   javax.swing.UIManager.getInstalledLookAndFeels()) {
368
                   if ("Nimbus".equals(info.getName())) {
369
   javax.swing.UIManager.setLookAndFeel(info.getClassName());
370
                        break:
371
                   }
372
373
           } catch (ClassNotFoundException ex) {
374
   java.util.logging.Logger.getLogger(newPlayer.class.getName()).log(java.uti
   1.logging.Level.SEVERE, null, ex);
375
           } catch (InstantiationException ex) {
376
   java.util.logging.Logger.getLogger(newPlayer.class.getName()).log(java.uti
   1.logging.Level.SEVERE, null, ex);
377
           } catch (IllegalAccessException ex) {
378
   java.util.logging.Logger.getLogger(newPlayer.class.getName()).log(java.uti
   1.logging.Level.SEVERE, null, ex);
379
           } catch (javax.swing.UnsupportedLookAndFeelException ex) {
380
   java.util.logging.Logger.getLogger(newPlayer.class.getName()).log(java.uti
```

```
1.logging.Level.SEVERE, null, ex);
381
382
           //</editor-fold>
383
384
           /* Create and display the form */
385
           java.awt.EventQueue.invokeLater(new Runnable() {
386
               public void run() {
387
                    new newPlayer().setVisible(true);
388
               }
389
           });
       }
390
391
392
       // Variables declaration - do not modify//GEN-BEGIN:variables
393
       private javax.swing.JLabel Assists;
394
       private javax.swing.JLabel BBallTeam;
395
       private javax.swing.JButton Cancel;
396
       private javax.swing.JLabel FName;
397
       private javax.swing.JLabel GRU;
398
       private javax.swing.JLabel GmsPlayed;
399
       private javax.swing.JLabel LName;
400
       private javax.swing.JLabel Number;
401
       private javax.swing.JLabel POsition;
402
       private javax.swing.JLabel Points;
403
       private javax.swing.JLabel Rebounds;
404
       private javax.swing.JTextField assists;
405
       private javax.swing.JButton createPlayer;
406
       private javax.swing.JTextField fname;
407
       private javax.swing.JTextField gamesPlayed;
408
       private javax.swing.JLabel jLabel1;
409
       private javax.swing.JTextField lname;
410
       private javax.swing.JTextField number;
411
       private javax.swing.JTextField points;
412
       private javax.swing.JComboBox<String> pos;
413
       private javax.swing.JTextField rebounds;
414
       // End of variables declaration//GEN-END:variables
415 }
416
```

Player.java

```
2 * To change this license header, choose License Headers in Project
  Properties.
11 import java.io.*;
12 public class Player implements Serializable{
13
14
      String fName;
15
      String lName;
16
      //int height;
17
      int totalGames;
18
      int jerseyNumber;
19
      int rebounds;
20
      int assist;
21
      String position;
      int points;
22
23
      public Player(String f, String l, int totalg, int jN, int re, int as,
24
  String pos, int pt){
25
           fName = f;
26
           lName = 1;
           totalGames = totalg;
27
           jerseyNumber = jN;
28
29
           rebounds = re;
30
           assist = as;
31
           position = pos;
32
           points = pt;
33
      }
34
35 }
36
```

```
1 import java.io.*;
 3 public class StartFrame extends javax.swing.JFrame {
      Player[] pl = new Player[30]; //max allowed is 30 ppl
      /**
 5
 6
       * Creates new form StartFrame
 7
 8
      public StartFrame() {
          initComponents();
 9
10
          File(); //read from file
11
      }
12
13
14
       * This method is called from within the constructor to initialize the
  form.
15
       * WARNING: Do NOT modify this code. The content of this method is
  always
16
       * regenerated by the Form Editor.
17
18
      @SuppressWarnings("unchecked")
19
      // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
  BEGIN: initComponents
20
      private void initComponents() {
21
22
          GRU = new javax.swing.JLabel();
23
          ViewPlayers = new javax.swing.JButton();
24
          AddPlayer = new javax.swing.JButton();
25
          Exit = new javax.swing.JButton();
26
          BBallTeam = new javax.swing.JLabel();
27
          Logo = new javax.swing.JLabel();
28
          HomeOfTheBears = new javax.swing.JLabel();
29
          jLabel2 = new javax.swing.JLabel();
30
31
  setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
32
          setMinimumSize(new java.awt.Dimension(700, 400));
33
          getContentPane().setLayout(new
  org.netbeans.lib.awtextra.AbsoluteLayout());
34
35
          GRU.setFont(new java.awt.Font("Tahoma", 1, 36)); // NOI18N
          GRU.setForeground(new java.awt.Color(255, 255, 255));
36
37
          GRU.setText("Grand Ridge University ");
          getContentPane().add(GRU, new
38
```

```
org.netbeans.lib.awtextra.AbsoluteConstraints(30, 20, -1, -1));
39
40
          ViewPlayers.setFont(new java.awt.Font("Times New Roman", 1,
  18)); // NOI18N
41
          ViewPlayers.setText("View Players");
42
          ViewPlayers.addActionListener(new java.awt.event.ActionListener()
  {
43
               public void actionPerformed(java.awt.event.ActionEvent evt) {
44
                   ViewPlayersActionPerformed(evt);
45
               }
46
          });
47
          getContentPane().add(ViewPlayers, new
  org.netbeans.lib.awtextra.AbsoluteConstraints(410, 220, 200, 40));
48
49
          AddPlayer.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
  NOI18N
50
          AddPlayer.setText("Add Players");
          AddPlayer.addActionListener(new java.awt.event.ActionListener() {
51
52
               public void actionPerformed(java.awt.event.ActionEvent evt) {
53
                   AddPlayerActionPerformed(evt);
54
               }
55
          });
56
          getContentPane().add(AddPlayer, new
  org.netbeans.lib.awtextra.AbsoluteConstraints(410, 160, 200, 40));
57
58
          Exit.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
  NOI18N
59
          Exit.setText("Exit");
60
          Exit.setCursor(new
  java.awt.Cursor(java.awt.Cursor.DEFAULT_CURSOR));
61
          Exit.addActionListener(new java.awt.event.ActionListener() {
62
               public void actionPerformed(java.awt.event.ActionEvent evt) {
                   ExitActionPerformed(evt);
63
64
               }
65
          });
66
          getContentPane().add(Exit, new
  org.netbeans.lib.awtextra.AbsoluteConstraints(410, 280, 200, 40));
67
68
          BBallTeam.setFont(new java.awt.Font("Times New Roman", 1, 36)); //
  NOI18N
69
          BBallTeam.setForeground(new java.awt.Color(255, 255, 255));
70
          BBallTeam.setText("Basketball Team");
```

```
71
           getContentPane().add(BBallTeam, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(320, 80, -1, -1));
72
73
           Logo.setIcon(new javax.swing.ImageIcon(getClass().getResource("/
   basketball/Bear Basketball IA.png"))); // NOI18N
74
           getContentPane().add(Logo, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(60, 160, -1, 210));
75
76
           HomeOfTheBears.setFont(new java.awt.Font("Times New Roman", 1,
   24)); // NOI18N
77
           HomeOfTheBears.setForeground(new java.awt.Color(204, 153, 0));
78
           HomeOfTheBears.setText("Home of the Bears");
79
           getContentPane().add(HomeOfTheBears, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(120, 130, -1, -1));
80
81
           jLabel2.setIcon(new
   javax.swing.ImageIcon(getClass().getResource("/basketball/1.jpg"))); //
   NOI18N
82
           jLabel2.setMaximumSize(new java.awt.Dimension(700, 400));
           jLabel2.setMinimumSize(new java.awt.Dimension(700, 400));
83
           jLabel2.setPreferredSize(new java.awt.Dimension(700, 400));
84
85
           getContentPane().add(jLabel2, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 700, -1));
86
87
           setSize(new java.awt.Dimension(716, 439));
           setLocationRelativeTo(null);
88
89
       }// </editor-fold>//GEN-END:initComponents
90
91
       public void File(){
92
           File temp = new File("Players");
           if(temp.exists()== true){ //if the file is there
93
94
                //if the file exists, read it it into the arraylist of users
95
               try
96
                {
97
                    FileInputStream fis = new FileInputStream("Players");
                    ObjectInputStream ois = new ObjectInputStream(fis);
98
99
                    pl = (Player[]) ois.readObject();
100
                    ois.close();
101
                    fis.close():
                }catch(IOException ioe){
102
103
                    ioe.printStackTrace();
104
                    return;
```

```
105
               }catch(ClassNotFoundException c){
106
                    System.out.println("Class not found");
107
                    c.printStackTrace();
108
                    return;
109
               }
110
               //for(int i = 0; i< pl.length; i++)
111
                    //System.out.println(pl[i]);//works
112
           }else{
113
               pl[0] = new Player("Anthony", "Davis", 45, 23, 12, 17,
   "Forward", 36); //if the file isn't there
114
115
             /*boolean found = false;
116
                int index = 0; //has to be 0 to 29
117
               if(isEmpty(pl) == false){
118
                    while(found == false){
119
                        if(index >= 0 \&\& index <= 29)
                            if(pl[index] == null){
120
                                pl[index] = new Player("Anthony", "Davis", 45,
121
   23, 12, 17, "Forward", 36); //if the file isn't there
122
                                found = true;
123
                            }
124
                        }
              }*/
125
126
           }
127
128
       }
129
130
       private void AddPlayerActionPerformed(java.awt.event.ActionEvent evt)
   {//GEN-FIRST:event_AddPlayerActionPerformed
131
           // TODO add your handling code here:
132
           this.setVisible(false);
133
           newPlayer ne = new newPlayer(pl);
134
           ne.setVisible(true);
135
       }//GEN-LAST:event_AddPlayerActionPerformed
136
137
       private void ViewPlayersActionPerformed(java.awt.event.ActionEvent
   evt) {//GEN-FIRST:event_ViewPlayersActionPerformed
138
           // TODO add your handling code here:
139
           this.setVisible(false);
140
           ViewPlayers vp = new ViewPlayers(pl);
141
           vp.setVisible(true);
142
       }//GEN-LAST:event_ViewPlayersActionPerformed
```

```
143
144
       private void ExitActionPerformed(java.awt.event.ActionEvent evt) {//
   GEN-FIRST:event_ExitActionPerformed
145
           // TODO add your handling code here:
146
147
           //write to file and then close
148
           System.exit(0);
149
       }//GEN-LAST:event_ExitActionPerformed
150
151
       /**
152
        * @param args the command line arguments
153
154
       public static void main(String args□) {
155
           /* Set the Nimbus look and feel */
           //<editor-fold defaultstate="collapsed" desc=" Look and feel
156
   setting code (optional) ">
           /* If Nimbus (introduced in Java SE 6) is not available, stay with
157
   the default look and feel.
158
            * For details see http://download.oracle.com/javase/tutorial/
   uiswing/lookandfeel/plaf.html
159
            */
160
           trv {
161
               for (javax.swing.UIManager.LookAndFeelInfo info :
   javax.swing.UIManager.getInstalledLookAndFeels()) {
                   if ("Nimbus".equals(info.getName())) {
162
163
   javax.swing.UIManager.setLookAndFeel(info.getClassName());
164
                        break:
165
                   }
166
167
           } catch (ClassNotFoundException ex) {
168
   java.util.logging.Logger.getLogger(StartFrame.class.getName()).log(java.ut
   il.logging.Level.SEVERE, null, ex);
169
           } catch (InstantiationException ex) {
170
   java.util.logging.Logger.getLogger(StartFrame.class.getName()).log(java.ut
   il.logging.Level.SEVERE, null, ex);
171
           } catch (IllegalAccessException ex) {
172
   java.util.logging.Logger.getLogger(StartFrame.class.getName()).log(java.ut
   il.logging.Level.SEVERE, null, ex);
```

```
173
           } catch (javax.swing.UnsupportedLookAndFeelException ex) {
174
   java.util.logqinq.Logqer.getLogger(StartFrame.class.getName()).log(java.ut
   il.logging.Level.SEVERE, null, ex);
175
           //</editor-fold>
176
177
178
           /* Create and display the form */
           java.awt.EventQueue.invokeLater(new Runnable() {
179
180
               public void run() {
181
                    new StartFrame().setVisible(true);
182
               }
183
           });
       }
184
185
186
       // Variables declaration - do not modify//GEN-BEGIN:variables
187
       private javax.swing.JButton AddPlayer;
188
       private javax.swing.JLabel BBallTeam;
189
       private javax.swing.JButton Exit;
190
       private javax.swing.JLabel GRU;
191
       private javax.swing.JLabel HomeOfTheBears;
192
       private javax.swing.JLabel Logo;
193
       private javax.swing.JButton ViewPlayers;
194
       private javax.swing.JLabel jLabel2;
195
       // End of variables declaration//GEN-END:variables
196 }
197
```

```
2 import java.awt.event.KeyEvent;
 7 * To change this license header, choose License Headers in Project
  Properties.
11
12 /**
13 *
14 * @author Tanim
15 */
16 public class updateInfo extends javax.swing.JFrame {
17
      /**
18
19
        * Creates new form updateInfo
       */
20
21
      Player∏ ppl;
22
      Player temp = null;
23
      public updateInfo(){
24
          initComponents();
25
26
      public updateInfo(Player [] p, Player t) {
27
          ppl = p;
28
          temp = t;
29
          initComponents();
30
          updateScreen();
31
      }
32
33
       * This method is called from within the constructor to initialize the
34
  form.
35
       * WARNING: Do NOT modify this code. The content of this method is
  always
       * regenerated by the Form Editor.
36
37
38
      @SuppressWarnings("unchecked")
      // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
39
  BEGIN: initComponents
40
      private void initComponents() {
41
42
          GRU = new javax.swing.JLabel();
43
          BBallTeam = new javax.swing.JLabel();
44
          name1 = new javax.swing.JTextField();
```

```
45
          name2 = new javax.swing.JTextField();
46
          numb = new javax.swing.JTextField();
47
          pt = new javax.swing.JTextField();
48
          ast = new javax.swing.JTextField();
49
          rb = new javax.swing.JTextField();
50
          qms = new javax.swing.JTextField();
          newGms = new javax.swing.JTextField();
51
52
          FName = new javax.swing.JLabel();
          LName = new javax.swing.JLabel();
53
54
          Position = new javax.swing.JLabel();
55
          Number = new javax.swing.JLabel();
56
          GmsPlayed = new javax.swing.JLabel();
57
          Points = new javax.swing.JLabel();
58
          Assists = new javax.swing.JLabel();
59
          Rebounds = new javax.swing.JLabel();
60
          newReb = new javax.swing.JTextField();
          newAst = new javax.swing.JTextField();
61
62
          pts = new javax.swing.JTextField();
63
          nu = new javax.swing.JTextField();
64
          posit = new javax.swing.JTextField();
65
          newName2 = new javax.swing.JTextField();
66
          newName1 = new javax.swing.JTextField();
67
          jLabel12 = new javax.swing.JLabel();
68
          jLabel13 = new javax.swing.JLabel();
69
          posCombo = new javax.swing.JComboBox<>();
70
          UpdateInfo = new javax.swing.JButton();
          Cancel = new javax.swing.JButton();
71
72
           jLabel1 = new javax.swing.JLabel();
73
74
  setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
75
          getContentPane().setLayout(new
  org.netbeans.lib.awtextra.AbsoluteLayout());
76
77
          GRU.setFont(new java.awt.Font("Times New Roman", 1, 30)); //
  NOI18N
78
          GRU.setForeground(new java.awt.Color(255, 255, 255));
79
          GRU.setText("Grand Ridge University ");
80
          getContentPane().add(GRU, new
  org.netbeans.lib.awtextra.AbsoluteConstraints(70, 30, -1, -1));
81
82
          BBallTeam.setFont(new java.awt.Font("Times New Roman", 1, 30)); //
```

```
NOI18N
83
           BBallTeam.setForeground(new java.awt.Color(255, 255, 255));
84
           BBallTeam.setText("Basketball Team");
           getContentPane().add(BBallTeam, new
85
   org.netbeans.lib.awtextra.AbsoluteConstraints(370, 70, -1, -1));
86
87
           name1.setEditable(false);
           name1.addActionListener(new java.awt.event.ActionListener() {
88
89
               public void actionPerformed(java.awt.event.ActionEvent evt) {
90
                    name1ActionPerformed(evt);
91
               }
           });
92
93
           getContentPane().add(name1, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(120, 140, 100, -1));
94
95
           name2.setEditable(false);
96
           getContentPane().add(name2, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(160, 170, 100, -1));
97
98
           numb.setEditable(false);
99
           getContentPane().add(numb, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(260, 230, 100, -1));
100
101
           pt.setEditable(false);
102
           getContentPane().add(pt, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(310, 260, 100, -1));
103
104
           ast.setEditable(false);
105
           getContentPane().add(ast, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(360, 290, 100, -1));
106
107
           rb.setEditable(false);
108
           getContentPane().add(rb, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(410, 320, 100, -1));
109
110
           qms.setEditable(false);
111
           getContentPane().add(gms, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(460, 350, 100, -1));
112
113
           newGms.setBackground(new java.awt.Color(204, 204, 204));
114
           newGms.addKeyListener(new java.awt.event.KeyAdapter() {
115
                public void keyTyped(java.awt.event.KeyEvent evt) {
```

```
116
                   newGmsKeyTyped(evt);
117
               }
           });
118
119
           getContentPane().add(newGms, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(570, 350, 100, -1));
120
121
           FName.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
   NOI18N
122
           FName.setForeground(new java.awt.Color(255, 255, 255));
           FName.setText("First Name:");
123
124
           getContentPane().add(FName, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(20, 130, 100, 30));
125
126
           LName.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
   NOI18N
127
           LName.setForeground(new java.awt.Color(255, 255, 255));
           LName.setText("Last Name:");
128
129
           qetContentPane().add(LName, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(60, 170, -1, -1));
130
131
           Position.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
   NOI18N
132
           Position.setForeground(new java.awt.Color(255, 255, 255));
           Position.setText("Position:");
133
134
           getContentPane().add(Position, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(130, 200, -1, 20));
135
136
           Number.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
   NOI18N
137
           Number.setForeground(new java.awt.Color(255, 255, 255));
           Number.setText("Number:");
138
139
           getContentPane().add(Number, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(180, 230, 70, 20));
140
141
           GmsPlayed.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
   NOI18N
142
           GmsPlayed.setForeground(new java.awt.Color(255, 255, 255));
143
           GmsPlayed.setText("Gms Played:");
           getContentPane().add(GmsPlayed, new
144
   org.netbeans.lib.awtextra.AbsoluteConstraints(350, 350, -1, -1));
145
146
           Points.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
```

```
NOI18N
147
           Points.setForeground(new java.awt.Color(255, 255, 255));
           Points.setText("Points:");
148
149
           getContentPane().add(Points, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(240, 260, -1, -1));
150
151
           Assists.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
   NOI18N
152
           Assists.setForeground(new java.awt.Color(255, 255, 255));
153
           Assists.setText("Assists:");
           getContentPane().add(Assists, new
154
   org.netbeans.lib.awtextra.AbsoluteConstraints(290, 290, -1, -1));
155
156
           Rebounds.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
   NOI18N
157
           Rebounds.setForeground(new java.awt.Color(255, 255, 255));
           Rebounds.setText("Rebounds:");
158
           getContentPane().add(Rebounds, new
159
   org.netbeans.lib.awtextra.AbsoluteConstraints(320, 320, -1, -1));
160
161
           newReb.setBackground(new java.awt.Color(204, 204, 204));
           newReb.addKeyListener(new java.awt.event.KeyAdapter() {
162
163
               public void keyTyped(java.awt.event.KeyEvent evt) {
164
                   newRebKeyTyped(evt);
165
                }
166
           });
167
           getContentPane().add(newReb, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(520, 320, 100, -1));
168
169
           newAst.setBackground(new java.awt.Color(204, 204, 204));
170
           newAst.addKeyListener(new java.awt.event.KeyAdapter() {
171
               public void keyTyped(java.awt.event.KeyEvent evt) {
                   newAstKeyTyped(evt);
172
173
               }
174
           });
175
           getContentPane().add(newAst, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(470, 290, 100, -1));
176
177
           pts.setBackground(new java.awt.Color(204, 204, 204));
           pts.addKeyListener(new java.awt.event.KeyAdapter() {
178
179
                public void keyTyped(java.awt.event.KeyEvent evt) {
180
                   ptsKeyTyped(evt);
```

```
181
               }
           });
182
           getContentPane().add(pts, new
183
   org.netbeans.lib.awtextra.AbsoluteConstraints(420, 260, 100, -1));
184
185
           nu.setBackground(new java.awt.Color(204, 204, 204));
186
           nu.addKeyListener(new java.awt.event.KeyAdapter() {
               public void keyTyped(java.awt.event.KeyEvent evt) {
187
188
                    nuKeyTyped(evt);
189
               }
190
           });
191
           getContentPane().add(nu, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(370, 230, 100, -1));
192
193
           posit.setEditable(false);
194
           getContentPane().add(posit, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(210, 200, 100, -1));
195
196
           newName2.setBackground(new java.awt.Color(204, 204, 204));
197
           newName2.addKeyListener(new java.awt.event.KeyAdapter() {
198
               public void keyTyped(java.awt.event.KeyEvent evt) {
199
                    newName2KeyTyped(evt);
200
               }
201
           });
202
           getContentPane().add(newName2, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(270, 170, 100, -1));
203
204
           newName1.setBackground(new java.awt.Color(204, 204, 204));
205
           newName1.addKeyListener(new java.awt.event.KeyAdapter() {
206
               public void keyTyped(java.awt.event.KeyEvent evt) {
207
                    newName1KeyTyped(evt);
208
                }
209
           });
210
           getContentPane().add(newName1, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(230, 140, 100, -1));
211
212
           jLabel12.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
   NOI18N
213
           jLabel12.setForeground(new java.awt.Color(255, 255, 255));
           iLabel12.setText("Old Info");
214
           qetContentPane().add(jLabel12, new
215
   org.netbeans.lib.awtextra.AbsoluteConstraints(140, 110, -1, -1));
```

```
216
217
           jLabel13.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
   NOI18N
218
           jLabel13.setForeground(new java.awt.Color(255, 255, 255));
219
           jLabel13.setText("New Info");
220
           getContentPane().add(jLabel13, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(240, 110, -1, -1));
221
222
           posCombo.setModel(new javax.swing.DefaultComboBoxModel<>(new
   String[] { "N/A", "Forward", "Guard" }));
           getContentPane().add(posCombo, new
223
   org.netbeans.lib.awtextra.AbsoluteConstraints(320, 200, 100, -1));
224
225
           UpdateInfo.setFont(new java.awt.Font("Times New Roman", 1,
   14)); // NOI18N
226
           UpdateInfo.setText("Update Info");
           UpdateInfo.addActionListener(new java.awt.event.ActionListener() {
227
               public void actionPerformed(java.awt.event.ActionEvent evt) {
228
229
                   UpdateInfoActionPerformed(evt);
230
               }
           });
231
232
           getContentPane().add(UpdateInfo, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(40, 350, 110, -1));
233
234
           Cancel.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
235
           Cancel.setText("Cancel");
236
           Cancel.addActionListener(new java.awt.event.ActionListener() {
               public void actionPerformed(java.awt.event.ActionEvent evt) {
237
238
                   CancelActionPerformed(evt);
239
               }
240
           });
241
           getContentPane().add(Cancel, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(160, 350, 110, -1));
242
243
           jLabel1.setIcon(new
   javax.swing.ImageIcon(getClass().getResource("/basketball/1.jpg"))); //
   NOI18N
244
           getContentPane().add(jLabel1, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 700, 400));
245
246
           setSize(new java.awt.Dimension(716, 439));
```

```
247
           setLocationRelativeTo(null);
248
       }// </editor-fold>//GEN-END:initComponents
249
       private void updateScreen(){
250
           name1.setText(temp.fName);
251
           name2.setText(temp.lName);
252
           posit.setText(temp.position);
           numb.setText(""+temp.jerseyNumber);
253
254
           pt.setText(""+temp.points);
255
           ast.setText(""+temp.assist);
256
           rb.setText(""+temp.rebounds);
257
           gms.setText(""+temp.totalGames);
258
259
       private void CancelActionPerformed(java.awt.event.ActionEvent evt) {//
   GEN-FIRST:event_CancelActionPerformed
260
           // TODO add your handling code here:
261
           this.setVisible(false);
262
           ViewPlayers pg = new ViewPlayers(ppl);
263
           pa.setVisible(true);
264
       }//GEN-LAST:event_CancelActionPerformed
265
266
       private void UpdateInfoActionPerformed(java.awt.event.ActionEvent evt)
   {//GEN-FIRST:event_UpdateInfoActionPerformed
267
           // TODO add your handling code here:
268
           String name1 = newName1.getText();
269
           String name2 = newName2.getText();
270
           String position = (String) posCombo.getSelectedItem();
271
           int number = 0;
272
           int points = 0;
273
           int assists = 0:
274
           int rebounds = 0;
275
           int qmsPlayed = 0;
           if(!nu.getText().equals("")){
276
                if(!pts.getText().equals("")){
277
278
                    if(!newAst.getText().equals("")){
279
                        if(!newReb.getText().equals("")){
280
                            if(!newGms.getText().equals("")){
281
                                number = Integer.parseInt(nu.getText());
282
                                points = Integer.parseInt(pts.getText());
283
                                assists = Integer.parseInt(newAst.getText());
284
                                rebounds = Integer.parseInt(newReb.getText());
285
                                gmsPlayed =
   Integer.parseInt(newGms.getText());
```

```
286
                            }
                        }
287
                    }
288
                }
289
290
291
            boolean updatePlayer = true;
            if(name1.equals("") || name2.equals("")||position.equals("N/A")||
292
   nu.getText().equals("")|| pts.getText().equals("")||
   newAst.getText().equals("")||newReb.getText().equals("")||
   newGms.getText().equals("")){
                JOptionPane.showMessageDialog(null, "Please input all
293
   fields");
294
                updatePlayer = false;
295
296
            if(updatePlayer == true){
                for(int i = 0; i< ppl.length; i++){</pre>
297
298
                    if(ppl[i] != null){
299
                        if(ppl[i].fName.equals(temp.fName) &&
   ppl[i].lName.equals(temp.lName)){
300
                            ppl[i] = new Player(name1, name2, qmsPlayed,
   number, rebounds, assists, position, points);
                            JOptionPane.showMessageDialog(null, "The Player's
301
   Stats have been updated.");
302
                            //update the file and go back to screen
303
                            try{
304
                                FileOutputStream fos= new
   FileOutputStream("Players");
305
                                ObjectOutputStream oos= new
   ObjectOutputStream(fos);
306
                                oos.writeObject(ppl); //this is a way to store
   the arraylist in a file
307
                                oos.close();
308
                                fos.close();
309
                            }catch(IOException ioe){
310
                                ioe.printStackTrace();
311
                            }
312
313
                            this.setVisible(false);
314
                            ViewPlayers plt = new ViewPlayers(ppl);
                            plt.setVisible(true);
315
316
                        }
317
                    }
```

```
318
               }
319
           }
320
       }//GEN-LAST:event_UpdateInfoActionPerformed
321
322
       private void newName1KeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_newName1KeyTyped
323
           // TODO add your handling code here:
324
           char c=evt.getKeyChar();
325
           if(!(Character.isAlphabetic(c) || (c==KeyEvent.VK_BACK_SPACE)||
   c==KeyEvent.VK_DELETE ))
326
                evt.consume();
327
       }//GEN-LAST:event_newName1KeyTyped
328
329
       private void newName2KeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_newName2KeyTyped
330
           // TODO add your handling code here:
331
           char c=evt.getKeyChar();
332
           if(!(Character.isAlphabetic(c) || (c==KeyEvent.VK_BACK_SPACE)||
   c==KeyEvent.VK_DELETE ))
333
               evt.consume();
334
       }//GEN-LAST:event_newName2KeyTyped
335
336
       private void nuKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_nuKeyTyped
337
           // TODO add your handling code here:
338
           char c = evt.getKeyChar();
339
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
   KeyEvent.VK_DELETE){
340
               evt.consume();
341
342
       }//GEN-LAST:event_nuKeyTyped
343
344
       private void ptsKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_ptsKeyTyped
345
           // TODO add your handling code here:
346
           char c = evt.getKeyChar();
347
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
   KeyEvent.VK_DELETE){
348
               evt.consume();
349
           }
350
       }//GEN-LAST:event_ptsKeyTyped
351
```

```
352
       private void newAstKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_newAstKeyTyped
353
           // TODO add your handling code here:
354
           char c = evt.getKeyChar();
355
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
   KeyEvent.VK_DELETE){
356
               evt.consume();
357
358
       }//GEN-LAST:event_newAstKeyTyped
359
360
       private void newRebKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_newRebKeyTyped
361
           // TODO add your handling code here:
362
           char c = evt.getKeyChar();
363
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
   KeyEvent.VK_DELETE){
364
               evt.consume();
365
366
       }//GEN-LAST:event_newRebKeyTyped
367
368
       private void newGmsKeyTyped(java.awt.event.KeyEvent evt) {//GEN-
   FIRST:event_newGmsKeyTyped
369
           // TODO add your handling code here:
370
           char c = evt.getKeyChar();
371
           if(!(Character.isDigit(c) || c == KeyEvent.VK_BACK_SPACE) || c ==
   KeyEvent.VK_DELETE){
372
               evt.consume();
373
           }
374
       }//GEN-LAST:event_newGmsKeyTyped
375
376
       private void name1ActionPerformed(java.awt.event.ActionEvent evt) {//
   GEN-FIRST:event_name1ActionPerformed
377
           // TODO add your handling code here:
378
       }//GEN-LAST:event_name1ActionPerformed
379
380
381
        * @param args the command line arguments
382
383
       public static void main(String args[]) {
           /* Set the Nimbus look and feel */
384
385
           //<editor-fold defaultstate="collapsed" desc=" Look and feel
   setting code (optional) ">
```

```
386
           /* 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/
387
   uiswing/lookandfeel/plaf.html
388
            */
           try {
389
390
                for (javax.swing.UIManager.LookAndFeelInfo info :
   javax.swing.UIManager.getInstalledLookAndFeels()) {
391
                    if ("Nimbus".equals(info.getName())) {
392
   javax.swing.UIManager.setLookAndFeel(info.getClassName());
393
                        break;
394
                    }
395
                }
396
           } catch (ClassNotFoundException ex) {
397
   java.util.logging.Logger.getLogger(updateInfo.class.getName()).log(java.ut
   il.logging.Level.SEVERE, null, ex);
398
           } catch (InstantiationException ex) {
399
   java.util.logging.Logger.getLogger(updateInfo.class.getName()).log(java.ut
   il.logging.Level.SEVERE, null, ex);
400
           } catch (IllegalAccessException ex) {
401
   java.util.logging.Logger.getLogger(updateInfo.class.getName()).log(java.ut
   il.logging.Level.SEVERE, null, ex);
402
           } catch (javax.swing.UnsupportedLookAndFeelException ex) {
403
   java.util.logging.Logger.getLogger(updateInfo.class.getName()).log(java.ut
   il.logging.Level.SEVERE, null, ex);
404
405
           //</editor-fold>
406
407
           /* Create and display the form */
408
           java.awt.EventQueue.invokeLater(new Runnable() {
409
               public void run() {
410
                    new updateInfo().setVisible(true);
411
               }
           });
412
       }
413
414
415
       // Variables declaration - do not modify//GEN-BEGIN:variables
```

```
416
       private javax.swing.JLabel Assists;
417
       private javax.swing.JLabel BBallTeam;
418
       private javax.swina.JButton Cancel;
419
       private javax.swing.JLabel FName;
420
       private javax.swing.JLabel GRU;
421
       private javax.swing.JLabel GmsPlayed;
422
       private javax.swing.JLabel LName;
423
       private javax.swing.JLabel Number;
       private javax.swing.JLabel Points;
424
425
       private javax.swing.JLabel Position;
       private javax.swing.JLabel Rebounds;
426
427
       private javax.swing.JButton UpdateInfo;
428
       private javax.swing.JTextField ast;
429
       private javax.swing.JTextField gms;
430
       private javax.swing.JLabel jLabel1;
431
       private javax.swing.JLabel jLabel12;
432
       private javax.swing.JLabel jLabel13;
433
       private javax.swing.JTextField name1;
434
       private javax.swing.JTextField name2;
435
       private javax.swing.JTextField newAst;
436
       private javax.swing.JTextField newGms;
437
       private javax.swina.JTextField newName1;
438
       private javax.swing.JTextField newName2;
       private javax.swing.JTextField newReb;
439
440
       private javax.swina.JTextField nu;
441
       private javax.swing.JTextField numb;
442
       private javax.swing.JComboBox<String> posCombo;
443
       private javax.swing.JTextField posit;
444
       private javax.swing.JTextField pt;
445
       private javax.swing.JTextField pts;
446
       private javax.swing.JTextField rb;
447
       // End of variables declaration//GEN-END:variables
448 }
449
```

```
2 * To change this license header, choose License Headers in Project
  Properties.
11 import java.util.*;
15 public class ViewPlayers extends javax.swing.JFrame {
16
17
18
       * Creates new form ViewPlayers
19
20
      Player[] playerList = new Player[30];
      Player ☐ seeing; //the list that is printed on the screen
21
22
23
      ///public ViewPlayers(){
24
         // initComponents();
25
      //}
26
27
      public ViewPlayers(Player[] fat) {
28
          playerList = fat;
29
          seeing = fat;
30
          initComponents();
31
          seeList();
32
      }
33
34
35
       * This method is called from within the constructor to initialize the
  form.
       * WARNING: Do NOT modify this code. The content of this method is
36
  always
37
       * regenerated by the Form Editor.
38
39
      @SuppressWarnings("unchecked")
40
      // <editor-fold defaultstate="collapsed" desc="Generated Code">//GEN-
  BEGIN: initComponents
41
      private void initComponents() {
42
43
          jScrollPane1 = new javax.swing.JScrollPane();
          jList1 = new javax.swing.JList<>();
44
45
          jScrollPane2 = new javax.swing.JScrollPane();
46
          show = new javax.swing.JList<>();
47
          GRU = new javax.swing.JLabel();
48
          BBallTeam = new javax.swing.JLabel();
49
          Sort = new javax.swing.JButton();
50
          sortCombo = new javax.swing.JComboBox<>();
```

```
51
          jScrollPane3 = new javax.swing.JScrollPane();
52
          display = new javax.swing.JTextArea();
53
          Cancel = new javax.swing.JButton();
54
          EditPLayer = new javax.swing.JButton();
55
          ShowStats = new javax.swing.JButton();
56
          removeButton = new javax.swing.JButton();
          jLabel1 = new javax.swing.JLabel();
57
58
59
  setDefaultCloseOperation(javax.swing.WindowConstants.EXIT_ON_CLOSE);
          setMinimumSize(new java.awt.Dimension(700, 400));
60
61
          getContentPane().setLayout(new
  org.netbeans.lib.awtextra.AbsoluteLayout());
62
63
          jList1.setModel(new javax.swing.AbstractListModel<String>() {
              String[] strings = { "Item 1", "Item 2", "Item 3", "Item 4",
64
  "Item 5" };
65
               public int getSize() { return strings.length; }
66
              public String getElementAt(int i) { return strings[i]; }
67
          });
68
          jScrollPane1.setViewportView(jList1);
69
70
          getContentPane().add(jScrollPane1, new
  org.netbeans.lib.awtextra.AbsoluteConstraints(714, 93, -1, -1));
71
72
          show.setFont(new java.awt.Font("Times New Roman", 1, 18)); //
  NOI18N
73
          jScrollPane2.setViewportView(show);
74
75
          getContentPane().add(jScrollPane2, new
  org.netbeans.lib.awtextra.AbsoluteConstraints(30, 130, 370, 210));
76
77
          GRU.setFont(new java.awt.Font("Tahoma", 1, 36)); // NOI18N
78
          GRU.setForeground(new java.awt.Color(255, 255, 255));
79
          GRU.setText("Grand Ridge University ");
          getContentPane().add(GRU, new
80
  org.netbeans.lib.awtextra.AbsoluteConstraints(50, 20, -1, -1));
81
82
          BBallTeam.setFont(new java.awt.Font("Times New Roman", 1, 36)); //
  NOI18N
83
          BBallTeam.setForeground(new java.awt.Color(255, 255, 255));
84
          BBallTeam.setText("Basketball Team");
```

```
85
           getContentPane().add(BBallTeam, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(380, 70, -1, -1));
86
87
           Sort.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
88
           Sort.setText("Sort");
89
           Sort.addActionListener(new java.awt.event.ActionListener() {
90
               public void actionPerformed(java.awt.event.ActionEvent evt) {
91
                   SortActionPerformed(evt);
92
               }
93
           });
94
           getContentPane().add(Sort, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(280, 90, 80, 30));
95
96
           sortCombo.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
97
           sortCombo.setModel(new javax.swing.DefaultComboBoxModel<>(new
   String[] { "View All", "Jersey Number", "Last Name", "Guards",
   "Forwards" }));
98
           getContentPane().add(sortCombo, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(80, 90, 190, 30));
99
100
           display.setEditable(false);
101
           display.setColumns(20);
102
           display.setFont(new java.awt.Font("Times New Roman", 0, 18)); //
   NOI18N
103
           display.setRows(5);
104
           jScrollPane3.setViewportView(display);
105
106
           getContentPane().add(jScrollPane3, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(420, 130, 250, 210));
107
108
           Cancel.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
109
           Cancel.setText("Cancel");
110
           Cancel.addActionListener(new java.awt.event.ActionListener() {
111
               public void actionPerformed(java.awt.event.ActionEvent evt) {
112
                   CancelActionPerformed(evt);
113
                }
114
           });
115
           getContentPane().add(Cancel, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(560, 350, 100, 30));
```

```
116
117
           EditPLayer.setFont(new java.awt.Font("Times New Roman", 1,
   14)); // NOI18N
118
           EditPLayer.setText("Edit Player");
119
           EditPLayer.addActionListener(new java.awt.event.ActionListener() {
               public void actionPerformed(java.awt.event.ActionEvent evt) {
120
                    EditPLayerActionPerformed(evt);
121
122
                }
123
           });
124
           getContentPane().add(EditPLayer, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(440, 350, -1, 30));
125
126
           ShowStats.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
           ShowStats.setText("Show Stats");
127
128
           ShowStats.addActionListener(new java.awt.event.ActionListener() {
               public void actionPerformed(java.awt.event.ActionEvent evt) {
129
130
                   ShowStatsActionPerformed(evt);
131
               }
132
           });
133
           getContentPane().add(ShowStats, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(210, 350, 140, 30));
134
135
           removeButton.setFont(new java.awt.Font("Times New Roman", 1,
   14)); // NOI18N
136
           removeButton.setText("Remove");
           removeButton.addActionListener(new java.awt.event.ActionListener()
137
   {
138
               public void actionPerformed(java.awt.event.ActionEvent evt) {
139
                    removeButtonActionPerformed(evt);
140
               }
141
           });
142
           getContentPane().add(removeButton, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(60, 350, 140, 30));
143
144
           jLabel1.setFont(new java.awt.Font("Times New Roman", 1, 14)); //
   NOI18N
145
           jLabel1.setIcon(new
   javax.swing.ImageIcon(getClass().getResource("/basketball/1.jpg"))); //
   NOI18N
146
           getContentPane().add(jLabel1, new
   org.netbeans.lib.awtextra.AbsoluteConstraints(0, 0, 700, 400));
```

```
147
148
            setSize(new java.awt.Dimension(716, 439));
149
            setLocationRelativeTo(null);
       }// </editor-fold>//GEN-END:initComponents
150
151
152
       private void seeList(){
153
            DefaultListModel a = new DefaultListModel();
154
155
            for(int i = 0; i < seeing.length; i++){</pre>
156
                if(seeing[i] != null){
157
                    a.addElement(seeing[i].fName + " " + seeing[i].lName);
158
                }
159
160
            show.setModel(a);
161
       }
162
       private void CancelActionPerformed(java.awt.event.ActionEvent evt) {//
   GEN-FIRST:event_CancelActionPerformed
163
            StartFrame stf = new StartFrame();
164
            this.setVisible(false);
165
            stf.setVisible(true);
       }//GEN-LAST:event_CancelActionPerformed
166
167
168
       private void EditPLayerActionPerformed(java.awt.event.ActionEvent evt)
   {//GEN-FIRST:event_EditPLayerActionPerformed
169
            // TODO add your handling code here:
170
            Player pl = null;
            String full = "";
171
172
            if(show.getSelectedValue() != null){
173
                full = show.getSelectedValue();
174
                Scanner kboard = new Scanner(full);
175
                String f = kboard.next();
176
                String l = kboard.next();
177
                for(int i = 0; i < playerList.length;i++ ){</pre>
178
                    if(playerList[i]!= null){
179
                        if(playerList[i].fName.equals(f) &&
   playerList[i].lName.equals(l)){
180
                            pl = playerList[i];
181
                        }
182
                    }
                }
183
184
185
            if(show.getSelectedValue() != null && pl != null){
```

```
186
               this.setVisible(false);
187
               updateInfo ui = new updateInfo(playerList, pl);
188
               ui.setVisible(true);
189
190
       }//GEN-LAST:event_EditPLayerActionPerformed
191
192
       private void ShowStatsActionPerformed(java.awt.event.ActionEvent evt)
   {//GEN-FIRST:event_ShowStatsActionPerformed
193
           // TODO add your handling code here:
194
195
           String se = "";
           String f = "";
196
197
           String l = "";
198
           if(show.getSelectedValue() != null){
199
                se = show.getSelectedValue();
200
201
               Scanner kboard = new Scanner(se);
202
               f = kboard.next();
203
               l = kboard.next();
204
205
           DecimalFormat df = new DecimalFormat("#.#"); //for decimal format
   when rounding
206
           if(!se.equals("")){
207
                for(int i = 0; i < seeing.length; i++){</pre>
208
                    if(seeing[i] != null){
209
                        if(seeing[i].fName.equals(f) &&
   seeing[i].lName.equals(l)){
                            display.setText("Name: "+seeing[i].fName +" " +
210
   seeing[i].lName+"\nPosition: " + seeing[i].position+"\nJersey Number: "+
   seeing[i].jerseyNumber+"\nTotal Points: "+ seeing[i].points+"
   "+df.format((double)seeing[i].points/seeing[i].totalGames)+"\nAssists: " +
                          APG: "+df.format((double)seeing[i].assist/
   seeina[i].assist+"
   seeing[i].totalGames)+"\nRebounds: "+seeing[i].rebounds+"
   "+df.format((double)seeing[i].rebounds/seeing[i].totalGames)+"\nGames
   Played: "+ seeing[i].totalGames);
211
                        }
212
                    }
213
               }
214
215
       }//GEN-LAST:event_ShowStatsActionPerformed
216
217
       private void removeButtonActionPerformed(java.awt.event.ActionEvent
```

```
evt) {//GEN-FIRST:event_removeButtonActionPerformed
            // TODO add your handling code here:
218
219
            String f = "";
220
            String l = "";
            if(show.getSelectedValue() != null){
221
222
                Scanner kboard = new Scanner(show.getSelectedValue());
223
                f = kboard.next();
224
                l = kboard.next();
225
226
                for(int i = 0; i < playerList.length; i++){</pre>
227
                    if(playerList[i]!= null){
228
                        if(playerList[i].fName.equals(f) &&
   playerList[i].lName.equals(l)){
229
                            playerList[i]= null;
230
                            seeing = playerList;
231
                            seeList();
232
                            //update the file
233
                            try{
234
                                FileOutputStream fos= new
   FileOutputStream("Players");
235
                                ObjectOutputStream oos= new
   ObjectOutputStream(fos);
236
                                oos.writeObject(playerList); //this is a way
   to store the arraylist in a file
237
                                oos.close();
238
                                fos.close();
239
                            }catch(IOException ioe){
240
                                ioe.printStackTrace();
241
                            }
242
                        }
243
                    }
                }
244
245
            }
       }//GEN-LAST:event_removeButtonActionPerformed
246
247
248
       private void SortActionPerformed(java.awt.event.ActionEvent evt) {//
   GEN-FIRST:event_SortActionPerformed
249
            // TODO add your handling code here:
250
            String select = (String) sortCombo.getSelectedItem();
251
            if(select != null){
252
                if(select.equalsIgnoreCase("Jersey Number")){
253
                    seeing = readFile();
```

```
254
                    for(int i = 0; i < seeing.length-1; i++){</pre>
255
                        int index = i; //the first index is the smallest
   number
256
                        for(int j = i+1; j < seeing.length; j++){</pre>
257
                             try{//fof all the null pointers, there's
   exceptions
258
                                 if(seeing[j].jerseyNumber <</pre>
   seeing[index].jerseyNumber)
259
                                    index = j; //the neew index is where the
   lowest number is
260
                             }catch(NullPointerException n){}
261
                        }//loop through the entire list to find the lowest
   number then make the swap
262
                        Player high =seeing[i];
263
                        seeing [i] = seeing[index];
264
                        seeing[index] = high;
                    }
265
266
                    seeList();
                }else if(select.equalsIgnoreCase("View All")){
267
268
                    seeing = readFile();
269
                    seeList();
                }else if(select.equalsIgnoreCase("Last Name")){
270
                    seeing = readFile();
271
272
                    for(int i = 0; i < seeing.length-1; i++){</pre>
                        int index = i; //the first index is the smallest
273
   number
274
                        for(int j = i+1; j < seeing.length; j++){</pre>
275
                             try{//fof all the null pointers, there's
   exceptions
276
   if(seeing[j].lName.toLowerCase().compareTo(seeing[index].lName.toLowerCase
   ()) < 0)
277
                                    index = j; //the neew index is where the
   lowest number is
278
279
                             }catch(NullPointerException n){}
                        }//loop through the entire list to find the lowest
280
   number then make the swap
281
                        Player high =seeing[i];
282
                        seeing [i] = seeing[index];
283
                        seeing[index] = high;
284
                    }
```

```
285
                    seeList();
286
                }else if(select.equalsIgnoreCase("Guards")){
287
                    seeing = readFile();
288
                    for(int i = 0; i < seeing.length; i++){</pre>
289
                        if(seeing[i]!= null){
290
                             if(!seeing[i].position.equalsIgnoreCase("Guard")){
291
                                 seeing[i] = null;
292
                             }
293
                        }
294
                    }
295
                    seeList();
296
                }else if(select.equalsIgnoreCase("Forwards")){
297
                    seeing = readFile();
                    for(int i = 0; i < seeing.length; i++){</pre>
298
299
                        if(seeing[i]!= null){
300
                             if(!
   seeing[i].position.equalsIgnoreCase("Forward")){
                                 seeing[i] = null;
301
302
                             }
303
                        }
                    }
304
                    seeList();
305
306
                }
307
       }//GEN-LAST:event_SortActionPerformed
308
309
       private Player [] readFile(){
310
            Player ☐ temp = null;
311
            try
312
                {
313
                    FileInputStream fis = new FileInputStream("Players");
314
                    ObjectInputStream ois = new ObjectInputStream(fis);
315
                    temp = (Player[]) ois.readObject();
316
                    ois.close();
317
                    fis.close();
318
                }catch(IOException ioe){
319
                    ioe.printStackTrace();
320
                    //return;
321
                }catch(ClassNotFoundException c){
322
                    System.out.println("Class not found");
                    c.printStackTrace();
323
324
                    //return;
325
                }
```

```
326
           return temp;
327
       }
328
       private Player[] clear(Player[] temp){
329
330
           for(int i = 0; i < temp.length; i++){</pre>
331
                temp[i] = null;
332
333
           return temp;
334
       }
335
336
       /**
337
        * @param args the command line arguments
338
339
       public static void main(String args□) {
340
           /* Set the Nimbus look and feel */
341
           //<editor-fold defaultstate="collapsed" desc=" Look and feel
   setting code (optional) ">
342
           /* If Nimbus (introduced in Java SE 6) is not available, stay with
   the default look and feel.
343
            * For details see http://download.oracle.com/javase/tutorial/
   uiswing/lookandfeel/plaf.html
344
            */
345
           try {
346
                for (javax.swing.UIManager.LookAndFeelInfo info :
   javax.swing.UIManager.getInstalledLookAndFeels()) {
347
                    if ("Nimbus".equals(info.getName())) {
348
   javax.swing.UIManager.setLookAndFeel(info.getClassName());
349
                        break:
350
                    }
351
352
           } catch (ClassNotFoundException ex) {
353
   java.util.logging.Logger.getLogger(ViewPlayers.class.getName()).log(java.u
   til.logging.Level.SEVERE, null, ex);
354
           } catch (InstantiationException ex) {
355
   java.util.logging.Logger.getLogger(ViewPlayers.class.getName()).log(java.u
   til.logging.Level.SEVERE, null, ex);
356
           } catch (IllegalAccessException ex) {
357
   java.util.logging.Logger.getLogger(ViewPlayers.class.getName()).log(java.u
```

```
til.logging.Level.SEVERE, null, ex);
358
           } catch (javax.swing.UnsupportedLookAndFeelException ex) {
359
   java.util.logging.Logger.getLogger(ViewPlayers.class.getName()).log(java.u
   til.logging.Level.SEVERE, null, ex);
360
361
           //</editor-fold>
362
363
           /* Create and display the form */
364
           java.awt.EventQueue.invokeLater(new Runnable() {
365
               public void run() {
366
                    //new ViewPlayers().setVisible(true);
367
               }
368
           });
369
       }
370
371
       // Variables declaration - do not modify//GEN-BEGIN:variables
372
       private javax.swing.JLabel BBallTeam;
373
       private javax.swing.JButton Cancel;
374
       private javax.swing.JButton EditPLayer;
375
       private javax.swing.JLabel GRU;
376
       private javax.swing.JButton ShowStats;
377
       private javax.swing.JButton Sort;
       private javax.swing.JTextArea display;
378
379
       private javax.swing.JLabel jLabel1;
380
       private javax.swing.JList<String> jList1;
381
       private javax.swing.JScrollPane jScrollPane1;
382
       private javax.swing.JScrollPane jScrollPane2;
383
       private javax.swing.JScrollPane jScrollPane3;
384
       private javax.swing.JButton removeButton;
385
       private javax.swing.JList<String> show;
386
       private javax.swing.JComboBox<String> sortCombo;
       // End of variables declaration//GEN-END:variables
387
388 }
```

389