```
1
    package team.FixIt;
3
    import java.sql.SQLException;
4
    import java.util.logging.Level;
5
    import java.util.logging.Logger;
6
    import java.util.LinkedList;
7
    import java.util.List;
8
9
    import javafx.geometry.Insets;
10
    import javafx.geometry.Pos;
11
    import javafx.scene.*;
12
    import javafx.scene.control.*;
13
    import javafx.scene.layout.*;
14
    import javafx.scene.text.Text;
15
    import javafx.stage.*;
16
    import team.FixIt.GUI.set;
17
18
19
    public class MainDisplay
20
21
22
     static boolean answer;
23
      \rightarrowstatic String Account = "";
24
      private static mysql MySQL;
25
26
      ->private final static Logger LOGGER =
        Logger.getLogger(MainDisplay.class.getName());
27
28
       ->public static boolean choice(set set) throws SQLException
       \rightarrow{
29
30
           →LOGGER.setLevel(Level.INFO);
31
          Stage mainWindow = new Stage();
32
          \longrightarrowmainWindow.initModality(Modality.APPLICATION MODAL);
33
          mainWindow.setTitle("Main Menu");
         GridPane grid = new GridPane();
34
35
       36
37
         MainMenuLabel.setId("Title");
38
         \rightarrowgrid.add(MainMenuLabel, 0, 2);
39
       40
       >---->Button CreateBtn = new Button("Create Passwords");
41
       \rightarrow HBox CreateHB Box = new HBox (10);
42

>----CreateHB_Box.setAlignment(Pos.CENTER);
43
       >--->CreateHB_Box.getChildren().add(CreateBtn);
44
       \rightarrow grid.add(CreateHB Box, 1, 3);
45
       CreateBtn.setId("MainMenuButton");
       46
47

>---->Button ListBtn = new Button("List passwords");
       \rightarrow HBox ListHB_Box = new HBox(10);
48
49
       ListHB Box.setAlignment(Pos.CENTER);
       >--->ListHB Box.getChildren().add(ListBtn);
50
51
         \rightarrowgrid.add(ListHB Box, 1, 4);
52
          DistBtn.setId("MainMenuButton");
53
          54
          Button DeleteBtn = new Button("Delete Passwords");
55
          \rightarrowHBox DeleteHB Box = new HBox(20);
56
          DeleteHB Box.setAlignment(Pos.CENTER);
57
         DeleteHB Box.getChildren().add(DeleteBtn);
58
         \longrightarrowgrid.add(DeleteHB Box, 1, 5);
59
          DeleteBtn.setId("MainMenuButton");
60
          61
         Button LogOutBtn = new Button("Exit");
62
         \longrightarrowHBox LogOutHB Box = new HBox(20);
63
       LogOutHB Box.setAlignment(Pos.CENTER);
64
       >--->LogOutHB Box.getChildren().add(LogOutBtn);
65
       \rightarrow grid.add(LogOutHB_Box, 1, 6);
66
          DogOutBtn.setId("MainMenuButton");
67
          68
          CreateBtn.setOnAction(e ->
69
         →{
70
               →answer= false;
71
               →try
              \rightarrow{
```

```
73
                         >answer = createLogin(set);
 74
                         →if (answer)
 75
                         }{
 76
                              →mainWindow.close();
 77
                         →}
 78
                    }}
 79
                    catch (SQLException e1)
 80
                    }{
                         \rightarrow// TODO Auto-generated catch block
 81
 82
                         >e1.printStackTrace();
 83
                    \rightarrow}
               →}});
 84
 85
                >ListBtn.setOnAction(e ->
 86
               }{
 87
                    \rightarrowanswer= false;
 88
                    \rightarrowtry
 89
                    >{
 90
                         \rightarrowanswer = listPasswords(set);
 91
                         >if (answer)
 92
                         }{
 93
                              →mainWindow.close();
 94
                         →}
 95
                    →}
 96
                    >catch (SQLException e1)
                    }{
 97
 98
                         →// TODO Auto-generated catch block
 99
                         >e1.printStackTrace();
100
                    →}
101
               →});
102
               →DeleteBtn.setOnAction(e ->
103
104
                    >answer= false;
105
                    \rightarrowtry
106
                    }{
107
                         ⇒answer = deletePasswords(set);
108
                         \rightarrowif (answer)
109
                         >{
110
                              mainWindow.close();
111
                         \rightarrow}
112
                    \rightarrow}
113
                    >catch (SQLException e1)
114
115
                         →// TODO Auto-generated catch block
116
                         →e1.printStackTrace();
117
                    \rightarrow}
118
               →});
119

ightarrowLogOutBtn.setOnAction(e ->
120
               \rightarrow{
121
                    \rightarrowmainWindow.close();
122

ightarrow \} ) ;
123
               \rightarrowVBox layout= new VBox(20);
124
               →layout.getChildren().addAll(MainMenuLabel, CreateBtn, ListBtn, DeleteBtn,
                LogOutBtn);
125
               →layout.setAlignment(Pos.CENTER);
126
               →Scene scene = new Scene(layout, common.HEIGHT, common.WIDTH);
127
                scene.getStylesheets().add(GUI.class.getResource("CSS/Login.css").toExternalFo
                rm());
128
               mainWindow.getIcons().add(GUI.iconImage);
129
               >mainWindow.setScene(scene);
130
               >mainWindow.showAndWait();
131
               >return answer;
132
          \rightarrow}
133
134

private static TilePane createTile(Button[] Btn, String[] arrayNames)
135
         \rightarrow{
136
               →LOGGER.info("Running TilePane Creation");
137
               \rightarrowint size = arrayNames.length;
               TilePane tileButtons = new TilePane();
138
139
               \rightarrowtileButtons.setPadding(new Insets(10, 10, 10, 10));
140
               >tileButtons.setPrefColumns(size);
141
               \rightarrowHBox hori = new HBox(20);
142
               \rightarrowfor(int i = 0; i < size; i++)
```

```
143
144
                  >if(Btn[i] == null)
145
                  }{
146
                      \rightarrowBtn[i] = new Button();
147
                  →}
148
                  DOGGER.info("Label is empty = " + arrayNames[i]);
149

>Btn[i].setText(arrayNames[i]);
150
                  hori.setMargin(Btn[i], new Insets(20, 20, 20, 20));
151
                  hori.getChildren().addAll(Btn[i]);
152
             \rightarrow}
153
              >tileButtons.getChildren().add(hori);
              >tileButtons.setAlignment(Pos.BOTTOM CENTER);
154
155
              >return tileButtons;
156
        \rightarrow}
157
158
159
         ->private static boolean createLogin(set set) throws SQLException
160
        →{
161
             →Stage mainWindow = new Stage();
162
              mainWindow.initModality(Modality.APPLICATION MODAL);
163
              mainWindow.setTitle("Create a New Login");
164
            165
             TextField accountField = new TextField();
166
             ->accountField.setId("Field");
167
            TextField usernameField = new TextField();
168
            →usernameField.setId("Field");
169
             PasswordField passwordField = new PasswordField();
170
             passwordField.setId("Field");
171
            PasswordField repasswordField = new PasswordField();
172

>repasswordField.setId("Field");
173
             AnchorPane anchorpane = new AnchorPane();
174
            \rightarrowdouble top = 50.0;
175
          \rightarrow double topText = 75.0;
176
            \rightarrow final double left = 60.0;
            \rightarrow final double right = 200.0;
177
            ->String[] names = {"Account:", "Username:", "Password:", "Re-enter \n
178
              Password:"};
             \rightarrowLabel[] Labels = null;
179
180
             \rightarrowLabels = new Label[4];
181
             \rightarrowText text = new Text();
182
             >text.setId("actiontarget");
183
            DOGGER.info("Creating labels");
184
            LOGGER.info("Label is empty = " + names[0]);
185
         \rightarrow for (int i = 0; i < 4; i++)
186
187
                  >if (Labels[i] == null)
188
                  \rightarrow{
189
                      DOGGER.info("Label is empty = " + names[i]);
190
                      \rightarrowLabels[i] = new Label(names[i]);
191
                  \rightarrow}
192

ightarrowanchorpane.setTopAnchor(Labels[i], top);
193

anchorpane.setLeftAnchor(Labels[i], left);
194
                  →anchorpane.setRightAnchor(Labels[i], right);
195
                 \rightarrowLOGGER.info("Label " + Labels[i]);
196
                 \rightarrowtop = top + 50;
197
             \rightarrow}
198

>anchorpane.setTopAnchor(accountField, 50.0);
199
             \rightarrowanchorpane.setLeftAnchor(accountField, 200.0);
200

anchorpane.setRightAnchor(accountField, 0.0);
201
             \rightarrowanchorpane.setTopAnchor(usernameField, 100.0);
202
             \rightarrowanchorpane.setLeftAnchor(usernameField, 200.0);
203
            \longrightarrowanchorpane.setRightAnchor(usernameField, 0.0);\longrightarrow
204
           205
          >--->anchorpane.setLeftAnchor(passwordField, 200.0);
206
         \rightarrow anchorpane.setRightAnchor(passwordField, 0.0);\rightarrow
207

> anchorpane.setTopAnchor(repasswordField, 200.0);
208

> anchorpane.setLeftAnchor(repasswordField, 200.0);

> anchorpane.setRightAnchor(repasswordField, 0.0);
209
210

> anchorpane.setTopAnchor(text, 225.0);
211

> anchorpane.setLeftAnchor(text, 200.0);
212
          >--->anchorpane.setRightAnchor(text, 0.0);
213
           anchorpane.getChildren().addAll(Labels[0],
214

→ → → → → → → accountField,
```

```
215
                                             \rightarrowLabels[1],
216
                                             →usernameField,
217
                                             \rightarrowLabels[2],
218
                                             →passwordField,
219
                                             \rightarrowLabels[3],
220
                                             →repasswordField,
221
                                             \rightarrowtext);
             222
223
             Label SceneTitle = new Label("Create Password");
             SceneTitle.setId("Title");
224
225
             >TilePane tileTitle = new TilePane();
226
           tileTitle.setPadding(new Insets(10, 10, 10, 10));
227
           tileTitle.setPrefColumns(1);
228
           \longrightarrowHBox hbox = new HBox(20);
           hbox.setMargin(SceneTitle, new Insets(10, 10, 10, 10));
229
230
           hbox.getChildren().addAll(SceneTitle);
231
           tileTitle.getChildren().add(hbox);
232
           \longrightarrowtileTitle.setAlignment(Pos.CENTER);
233
            >String[] arrayNames = {"Create", "Return to\nMain Menu", "Logout"};
234
235
             \rightarrowButton[] Btn = new Button[3];
236
             →TilePane tileButtons = createTile(Btn, arrayNames);
237
             238
             →BorderPane border = new BorderPane();
239
             border.setTop(tileTitle);
240
             border.setLeft(anchorpane);
241
             border.setBottom(tileButtons);
242
             243
             \rightarrowMySQL = set.MySQL;
             244
245
             →Btn[0].setOnAction(e ->
246
             →{
247
                 String accountString = accountField.getText();
248
                 >String usernameString = usernameField.getText();
249
                 String passwordString = passwordField.getText();
250
                 String repasswordString = repasswordField.getText();
251
                 →try
252
                 }{
253
                     boolean exists = false;
254
                     >exists = MySQL.checkIfAccountExists("accounts", accountString);
255
                     >text.setText("");
256
                     >if(!exists)
                     }{
257
258
                         \rightarrowif(usernameString.length() < 2)
259
260
                             >text.setText("Enter a correct username");
261
                         →}
262
                         >else if(passwordString.length() < 2)</pre>
263
264
                             >text.setText("Enter a correct password");
265
                         \rightarrow}
266
                         >else if(!passwordString.equals(repasswordString))
267
268
                             >text.setText("Passwords do not match");
269
                         →}
270
                         else
271
                         }{
272
                             MySQL.CreateNewLogin("accounts", accountString,
                              usernameString, passwordString);
273
                             >text.setText("Created New Login");
274
                             >accountField.setText("");
275
                             \rightarrowusernameField.setText("");
                             \rightarrowpasswordField.setText("");
276
277

ightarrowrepasswordField.setText("");
278
                         →}
279
                     →}
280
                     else
281
                     }{
282
                         >if(accountString.equals(""))
283
                         }{
284
                             >text.setText("Please enter a account");
285
                         →}
286
                         else
```

```
287
288
                             >text.setText("Account Already Exists");> >>
289
290
                     \rightarrow}
291
                 }}
292
                 catch (SQLException e1)
293
                 }{
294
                     \rightarrow// TODO Auto-generated catch block
                     \rightarrowe1.printStackTrace();
295
296
                 \rightarrow}
             →});
297
             298
299
             \rightarrowBtn[1].setOnAction(e ->
             }{
301
                 \rightarrowanswer = false;
302
             >--->mainWindow.close();
303
             \rightarrow});
304
             \rightarrowBtn[2].setOnAction(e ->
305
             \rightarrow{
306
                 →answer = true;
307
                 \rightarrowmainWindow.close();
308

ightarrow \} ) ;
309
             Scene mainScene = new Scene(border, common.HEIGHT, common.WIDTH);
310
              mainScene.getStylesheets().add(GUI.class.getResource("CSS/Login.css").toExtern
              alForm());
311
             →mainWindow.setScene(mainScene);
312
             >mainWindow.getIcons().add(GUI.iconImage);
313
             →mainWindow.showAndWait();
314
             >return answer;
315
         \rightarrow}
316
317
         private static boolean listPasswords(set set) throws SQLException
318
         \rightarrow{
319
             >Stage mainWindow = new Stage();
320
             →mainWindow.initModality(Modality.APPLICATION MODAL);
321
             →mainWindow.setTitle("List Passwords");
322
             323
             Dabel SceneTitle = new Label("List Passwords");
324
             SceneTitle.setId("Title");
325
             >TilePane tileTitle = new TilePane();
326

>tileTitle.setPadding(new Insets(10, 10, 10, 10));
327
            \rightarrowtileTitle.setPrefColumns(1);
328
            \rightarrowHBox hbox = new HBox(20);
329
             hbox.setMargin(SceneTitle, new Insets(10, 10, 10, 10));
330
             hbox.getChildren().addAll(SceneTitle);
331
             >tileTitle.getChildren().add(hbox);
332

ightarrowtileTitle.setAlignment(Pos.CENTER);
             333
334
             \rightarrowLabel account = new Label("Account:");
335
             >TextField accountField = new TextField();
336

>accountField.setId("Field");
337
             →AnchorPane anchorpane = new AnchorPane();
338

anchorpane.setTopAnchor(account, 50.0);
339
             →anchorpane.setLeftAnchor(account, 60.0);
340

anchorpane.setRightAnchor(account, 200.0);
341
             342
             \rightarrowMySQL = set.MySQL;
343
             344
             >final ComboBox<String> accountComboBox = new ComboBox<String>();
345
             >LinkedList<String> mysqlAccounts = MySQL.PrintDetails("accounts");
346
             >for(int i = 0; i < mysqlAccounts.size(); i++)</pre>
347
348
                 String value = mysqlAccounts.get(i);
349
                \rightarrowaccountComboBox.getItems().add(value);
350
             \rightarrow}
351

anchorpane.setTopAnchor(accountComboBox, 50.0);
352

anchorpane.setLeftAnchor(accountComboBox, 200.0);
353
             	oanchorpane.setRightAnchor(accountComboBox, 0.0);-
354
             355
             >Text username = new Text();
356
             \rightarrowusername.setId("Output");
357
             \rightarrowText password = new Text();
```

```
358
            password.setId("Output");
359
             →List<TextField> anchorList = new LinkedList<TextField>();
360

anchorpane.setTopAnchor(username, 125.0);
361

anchorpane.setLeftAnchor(username, 60.0);
362

>anchorpane.setRightAnchor(username, 200.0);
363

anchorpane.setTopAnchor(password, 200.0);
364

anchorpane.setLeftAnchor(password, 60.0);
365
             \rightarrowanchorpane.setRightAnchor(password, 200.0);\Rightarrow
366
             →username.setId("actiontarget");
367
             >password.setId("actiontarget");
368

ightarrowanchorpane.getChildren().addAll(account, accountComboBox, username, password);
369
            370
            →String[] arrayNames = {"List", "Return to\nMain Menu", "Logout"};
            \rightarrowButton[] Btn = new Button[3];
371
372

ightarrowTilePane tileButtons = createTile(Btn, arrayNames);
373
            374
           BorderPane border = new BorderPane();
375

border.setTop(tileTitle);
376

border.setLeft(anchorpane);
377
             ⇒border.setBottom(tileButtons);
378
             379
             \rightarrowBtn[0].setOnAction(e ->
380
             }{
381
                 >System.out.print("Button List was pressed");
382
                 \rightarrowString thisAccount = accountComboBox.getValue();
                 →try
383
384
                 }{
385
                     String usernameText = MySQL.getUsername("accounts", thisAccount);
386
                     dusername.setText (usernameText);
387
                     String passwordText = MySQL.getPassword("accounts", thisAccount);
388
                     >password.setText(passwordText);
389
                 →}
390
                 >catch (SQLException e1)
391
392
                     \rightarrowe1.printStackTrace();
393
                 →}
394
             \rightarrow});
395
             396
             \rightarrowBtn[1].setOnAction(e ->
397
398
                 →answer = false;
399
                \rightarrowmainWindow.close();
400
             →});
401
             \rightarrowBtn[2].setOnAction(e ->
402
             \rightarrow{
403
                 →answer = true;
404
                \rightarrowmainWindow.close();
405

ightarrow \} ) ;
406
             >Scene mainScene = new Scene(border, common.HEIGHT, common.WIDTH);
407
              mainScene.getStylesheets().add(GUI.class.getResource("CSS/Login.css").toExtern
              alForm());
408
             →mainWindow.setScene(mainScene);
409
             mainWindow.getIcons().add(GUI.iconImage);
410
             →mainWindow.showAndWait();
411
             >return answer;
412
         \rightarrow}
413
414
        private static boolean deletePasswords(set set) throws SQLException
415
         →{
416
             Stage mainWindow = new Stage();
417
             >mainWindow.initModality(Modality.APPLICATION MODAL);
418
             mainWindow.setTitle("Delete Passwords");
419
             420
            Dabel SceneTitle = new Label("Delete Passwords");
421
            →SceneTitle.setId("Title");
422
            TilePane tileTitle = new TilePane();
423
            \rightarrowtileTitle.setPadding(new Insets(10, 10, 10, 10));
424

> tileTitle.setPrefColumns(1);
425
         \rightarrow HBox hbox = new HBox(20);
426

hbox.setMargin(SceneTitle, new Insets(10, 10, 10, 10));

427
            hbox.getChildren().addAll(SceneTitle);
428
           tileTitle.getChildren().add(hbox);
```

```
429
            \rightarrowtileTitle.setAlignment(Pos.CENTER);
430
            431
            Label account = new Label("Account:");
432
            >TextField accountField = new TextField();
433
            >accountField.setId("Field");
434
            →AnchorPane anchorpane = new AnchorPane();
435

anchorpane.setTopAnchor(account, 50.0);
436

>anchorpane.setLeftAnchor(account, 60.0);
437

>anchorpane.setRightAnchor(account, 200.0);
438
            439
            MySQL = set.MySQL;
440
            441
            →final ComboBox<String> accountComboBox = new ComboBox<String>();
442
            →LinkedList<String> mysqlAccounts = MySQL.PrintDetails("accounts");
443
            \rightarrow for (int i = 0; i < mysqlAccounts.size(); i++)
444
445
                \rightarrowString value = mysqlAccounts.get(i);
446
               →accountComboBox.getItems().add(value);
447
            \rightarrow}
448

anchorpane.setTopAnchor(accountComboBox, 50.0);
449

anchorpane.setLeftAnchor(accountComboBox, 200.0);
450
            \rightarrowanchorpane.setRightAnchor(accountComboBox, 0.0); \longrightarrow
451
            452
            \rightarrowText text = new Text();
            >text.setId("actiontarget");
453
454
            →anchorpane.setTopAnchor(text, 150.0);
            anchorpane.setLeftAnchor(text, 200.0);
455
456
            →anchorpane.setRightAnchor(text, 0.0);
457
            →anchorpane.getChildren().addAll(account, accountComboBox, text);
458
            459
            >String[] arrayNames = {"Delete", "Return to\nMain Menu", "Logout"};
460
            Button[] Btn = new Button[3];
461
            TilePane tileButtons = createTile(Btn, arrayNames);
462
            463
            →BorderPane border = new BorderPane();
464

border.setTop(tileTitle);
465

border.setLeft(anchorpane);
466

>border.setBottom(tileButtons);
467
            468
            →Btn[0].setOnAction(e ->
469
470
                >String thisAccount = accountComboBox.getValue();
471

>if(!thisAccount.equals(null))
472
                }{
473
                    →try
474
                    }{
475
                        >boolean deleted = MySQL.DeleteLogin(common.TABLE, thisAccount);
476
                        →if (deleted)
477
                        \rightarrow{
478
                           >text.setText("The login has been removed");
479
                        →}
480
                        else
481
                        \rightarrow{
482
                           text.setText("The login was not removed");
483
                        \rightarrow}
484
                    →}
485
                    catch (SQLException e1)
486
487
                       \rightarrow// TODO Auto-generated catch block
488
                        >e1.printStackTrace();
489
                    →}
490

>//DeleteActionTarget.setText("Password Removed");
491
492
493
            494
            →Btn[1].setOnAction(e ->
495
            }{
496
                \rightarrowanswer = false;
497
                \rightarrowmainWindow.close();
498
            →});
499
            →Btn[2].setOnAction(e ->
500
            }{
501
               \rightarrowanswer = true;
```

```
502
             >>>mainWindow.close();
503
             →});
504
             Scene mainScene = new Scene(border, common.HEIGHT, common.WIDTH);
505
             mainScene.getStylesheets().add(GUI.class.getResource("CSS/Login.css").toExtern
              alForm());
506
            mainWindow.setScene(mainScene);
507
             mainWindow.getIcons().add(GUI.iconImage);
508
             →mainWindow.showAndWait();
509
             →return answer;
510
        →}
511
512
     }
513
```