```
1 /*-----
2 * Author: Dan Cassidy
               2015-06-23
3 * Date:
4 * Assignment: cView-P4
  * Source File: Modify.aspx.cs
6 * Language:
               C#
7 * Course:
                CSCI-C 490, C# Programming, MoWe 08:00
8 * Purpose:
               Code-behind file for Modify.aspx. Controls the process of modifying an item in the
9 *
               database via the Entity Framework model.
10 -----*/
11
12 using System;
13 using System.Collections.Generic;
14 using System.Data.Entity;
15 using System.Linq;
16 using System.Web;
17 using System.Web.UI;
18 using System.Web.UI.WebControls;
20 namespace cView_P4_DanCassidy
21 {
     public partial class Modify : System.Web.UI.Page
22
23
         /*-----
24
          * Name: btnModify_Click
25
          * Type: Event Handler Method
26
          * Purpose: Handles showing and hiding the various controls to aid in allowing the user to
27
28
                  change the data associated with the chosen item.
29
          ^{st} Input: object sender, holds a reference to the object that raised this event.
30
          * Input: EventArgs e, holds data related to this event.
31
          * Output: Nothing.
32
         -----*/
33
         protected void btnModify_Click(object sender, EventArgs e)
34
         {
35
            // Quick check to make sure that something is selected.
36
            switch ((Global.Enums.ItemTypes)ddlItemType.SelectedIndex)
37
                case Global.Enums.ItemTypes.Business:
38
39
                   if (gViewBusiness.SelectedIndex == -1)
40
                      return;
41
                   break;
42
43
                case Global.Enums.ItemTypes.Park:
44
                   if (gViewPark.SelectedIndex == -1)
45
                      return;
46
                   break;
47
48
                case Global.Enums.ItemTypes.PublicFacility:
49
                   if (gViewPublicFacility.SelectedIndex == -1)
50
                      return;
51
                   break;
52
53
                default:
54
                   break;
55
            }
56
57
            // Hide things until needed.
            lblError.Visible = false;
58
59
            lblResult.Visible = false;
            mViewDisplay.ActiveViewIndex = -1;
60
            mViewModifyBasic.ActiveViewIndex = -1;
61
62
            mViewModifySpecific.ActiveViewIndex = -1;
63
            btnModify.Visible = false;
64
            btnSaveChanges.Visible = false;
65
            btnBack.Visible = false;
66
```

```
67
                try
 68
                {
 69
                    using (CViewDataEntities database = new CViewDataEntities())
 70
                    1
 71
                        object keyToModify = null;
 72
 73
                        // Choose what to display based on the selected item type.
 74
                        switch ((Global.Enums.ItemTypes)ddlItemType.SelectedIndex)
 75
                        {
 76
                             case Global.Enums.ItemTypes.Business:
 77
                                 // Basic UI prep.
                                 mViewModifyBasic.ActiveViewIndex = 0;
 78
 79
                                 mViewModifySpecific.ActiveViewIndex = 0;
                                 lblName.Text = Global.Strings.BusinessName + Global.Strings.Separator;
 80
 81
                                 lblType.Text = Global.Strings.BusinessType + Global.Strings.Separator;
 82
                                 btnSaveChanges.Visible = true;
 83
                                 btnBack.Visible = true;
 84
 85
                                 // Get object to modify.
86
                                 keyToModify = gViewBusiness.SelectedDataKey.Value;
 87
                                 Business businessToModify = database.Businesses.Find(keyToModify);
 88
 89
                                 // Fill in textbox values.
 90
                                 txtName.Text = businessToModify.Name;
91
                                 txtName.Enabled = true;
                                 txtType.Text = businessToModify.Type;
92
93
                                 txtStreetAddress.Text = businessToModify.StreetAddress;
 94
                                 txtCity.Text = businessToModify.City;
 95
                                 txtState.Text = businessToModify.State;
96
                                 txtZip.Text = businessToModify.Zip;
                                 txtLatitude.Text = businessToModify.Latitude.ToString();
97
98
                                 txtLongitude.Text = businessToModify.Longitude.ToString();
 99
                                 txtPhone.Text = businessToModify.Phone;
100
                                 txtLicenseNumber.Text = businessToModify.LicenseNumber;
101
                                 txtLicenseIssueDate.Text = string.Format("{0:d}",
102
                                     businessToModify.LicenseIssueDate);
                                 txtLicenseExpirDate.Text = string.Format("{0:d}",
103
104
                                     businessToModify.LicenseExpirDate);
105
                                 txtLicenseStatus.Text = businessToModify.LicenseStatus;
106
                                 txtCouncilDistrict.Text = businessToModify.CouncilDistrict;
107
                                 break:
108
109
                             case Global.Enums.ItemTypes.Park:
110
                                 // Basic UI prep.
111
                                 mViewModifyBasic.ActiveViewIndex = 0;
112
                                 mViewModifySpecific.ActiveViewIndex = 1;
                                 lblName.Text = Global.Strings.ParkName + Global.Strings.Separator;
113
114
                                 lblType.Text = Global.Strings.ParkType + Global.Strings.Separator;
115
                                 btnSaveChanges.Visible = true;
116
                                 btnBack.Visible = true;
117
118
                                 // Get object to modify.
                                 keyToModify = gViewPark.SelectedDataKey.Value;
119
120
                                 Park parkToModify = database.Parks.Find(keyToModify);
121
122
                                 // Fill in textbox values.
123
                                 txtName.Text = parkToModify.Name;
124
                                 txtName.Enabled = false;
125
                                 txtType.Text = parkToModify.Type;
                                 txtStreetAddress.Text = parkToModify.StreetAddress;
126
127
                                 txtCity.Text = parkToModify.City;
128
                                 txtState.Text = parkToModify.State;
129
                                 txtZip.Text = parkToModify.Zip;
130
                                 txtLatitude.Text = parkToModify.Latitude.ToString();
                                 txtLongitude.Text = parkToModify.Longitude.ToString();
131
132
                                 txtPhone.Text = parkToModify.Phone;
```

```
133
                              txtFeatureBaseball.Text = parkToModify.FeatureBaseball.ToString();
134
                               txtFeatureBasketball.Text = parkToModify.FeatureBasketball.ToString();
135
                               txtFeatureGolf.Text = parkToModify.FeatureGolf.ToString();
136
                               txtFeatureLargeMPField.Text = parkToModify.FeatureLargeMPField.
137
                                   ToString();
                               txtFeatureTennis.Text = parkToModify.FeatureTennis.ToString();
138
139
                               txtFeatureVolleyball.Text = parkToModify.FeatureVolleyball.ToString();
140
                               break:
141
142
                           case Global.Enums.ItemTypes.PublicFacility:
143
                               // Basic UI prep.
144
                               mViewModifyBasic.ActiveViewIndex = 0;
145
                               lblName.Text = Global.Strings.PublicFacilityName +
                                   Global.Strings.Separator;
146
147
                               lblType.Text = Global.Strings.PublicFacilityType +
148
                                   Global.Strings.Separator;
149
                               btnSaveChanges.Visible = true;
150
                               btnBack.Visible = true;
151
152
                               // Get object to modify.
153
                               keyToModify = gViewPublicFacility.SelectedDataKey.Value;
                               PublicFacility publicFacilityToModify = database.PublicFacilities.
154
155
                                   Find(keyToModify);
156
157
                               // Fill in textbox values.
                               txtName.Text = publicFacilityToModify.Name;
158
                               txtName.Enabled = false;
159
                               txtType.Text = publicFacilityToModify.Type;
160
                               txtStreetAddress.Text = publicFacilityToModify.StreetAddress;
161
162
                               txtCity.Text = publicFacilityToModify.City;
163
                               txtState.Text = publicFacilityToModify.State;
164
                               txtZip.Text = publicFacilityToModify.Zip;
165
                               txtLatitude.Text = publicFacilityToModify.Latitude.ToString();
                               txtLongitude.Text = publicFacilityToModify.Longitude.ToString();
166
167
                               txtPhone.Text = publicFacilityToModify.Phone;
168
                               break;
169
170
                           default:
171
                              throw new InvalidOperationException(
172
                                   "Invalid item type dropdown value.");
173
                       }
174
                   }
175
               }
               catch (Exception ex)
176
177
178
                   lblError.Text = "Error: " + ex.Message;
179
                   lblError.Visible = true;
180
               }
181
           }
182
           /*-----
183
184
            * Name:
                       btnSaveChanges Click
            * Name: btnSaveChanges_Click
* Type: Event Handler Method
185
186
            * Purpose: Handles saving the changed data for the specific item back to the database via
187
                       the Entity Framework model.
            * Input:
                       object sender, holds a reference to the object that raised this event.
188
                       EventArgs e, holds data related to this event.
189
            * Input:
            * Output: Nothing.
190
           */----*/
191
           protected void btnSaveChanges_Click(object sender, EventArgs e)
192
193
194
               // Hide things until needed.
195
               lblError.Visible = false;
196
               lblResult.Visible = false;
197
               mViewDisplay.ActiveViewIndex = -1;
198
               mViewModifyBasic.ActiveViewIndex = -1;
```

```
199
                mViewModifySpecific.ActiveViewIndex = -1;
                btnModify.Visible = false;
200
201
                btnSaveChanges.Visible = false;
202
                btnBack.Visible = false;
203
                try
204
205
                    using (CViewDataEntities database = new CViewDataEntities())
206
207
208
                        object keyToModify = null;
209
210
                        // Choose what to do based on the selected item type.
211
                        switch ((Global.Enums.ItemTypes)ddlItemType.SelectedIndex)
212
213
                            case Global.Enums.ItemTypes.Business:
214
                                 // Get object to modify.
                                 keyToModify = gViewBusiness.SelectedDataKey.Value;
215
216
                                 Business businessToModify = database.Businesses.Find(keyToModify);
217
218
                                 // Save values to object.
219
                                 businessToModify.Name = txtName.Text.Trim();
                                 businessToModify.Type = txtType.Text.Trim();
220
221
                                 businessToModify.StreetAddress = txtStreetAddress.Text.Trim();
222
                                 businessToModify.City = txtCity.Text.Trim();
223
                                 businessToModify.State = txtState.Text.Trim();
224
                                 businessToModify.Zip = txtZip.Text.Trim();
225
                                 businessToModify.Latitude = SimpleConvert.ToDecimal(txtLatitude.Text.
226
                                     Trim());
                                 businessToModify.Longitude = SimpleConvert.ToDecimal(txtLongitude.Text.
227
228
                                     Trim());
                                 businessToModify.Phone = txtPhone.Text.Trim();
229
230
                                 businessToModify.LicenseIssueDate = SimpleConvert.ToDateTime(
                                     txtLicenseIssueDate.Text.Trim());
231
                                 businessToModify.LicenseExpirDate = SimpleConvert.ToDateTime(
232
233
                                     txtLicenseExpirDate.Text.Trim());
234
                                 businessToModify.LicenseStatus = txtLicenseStatus.Text.Trim();
235
                                 businessToModify.CouncilDistrict = txtCouncilDistrict.Text.Trim();
236
237
                                 // Modelled off http://stackoverflow.com/a/15339512.
238
                                 database.Businesses.Attach(businessToModify);
                                 database.Entry(businessToModify).State = EntityState.Modified;
239
240
                                 break;
241
                             case Global.Enums.ItemTypes.Park:
242
243
                                 // Get object to modify.
244
                                 keyToModify = gViewPark.SelectedDataKey.Value;
245
                                 Park parkToModify = database.Parks.Find(keyToModify);
246
247
                                 // Save values to object.
248
                                 parkToModify.Type = txtType.Text.Trim();
249
                                 parkToModify.StreetAddress = txtStreetAddress.Text.Trim();
250
                                 parkToModify.City = txtCity.Text.Trim();
251
                                 parkToModify.State = txtState.Text.Trim();
252
                                 parkToModify.Zip = txtZip.Text.Trim();
253
                                 parkToModify.Latitude = SimpleConvert.ToDecimal(txtLatitude.Text.
254
                                     Trim());
255
                                 parkToModify.Longitude = SimpleConvert.ToDecimal(txtLongitude.Text.
256
                                     Trim()):
                                 parkToModify.Phone = txtPhone.Text.Trim();
257
                                 parkToModify.FeatureBaseball = SimpleConvert.ToByte(
258
                                     txtFeatureBaseball.Text.Trim());
259
                                 parkToModify.FeatureBasketball = SimpleConvert.ToDecimal(
260
261
                                     txtFeatureBasketball.Text.Trim());
262
                                 parkToModify.FeatureGolf = SimpleConvert.ToDecimal(
263
                                     txtFeatureGolf.Text.Trim());
264
                                 parkToModify.FeatureLargeMPField = SimpleConvert.ToByte(
```

```
265
                                    txtFeatureLargeMPField.Text.Trim());
                                parkToModify.FeatureTennis = SimpleConvert.ToByte(
266
                                    txtFeatureTennis.Text.Trim());
267
268
                                parkToModify.FeatureVolleyball = SimpleConvert.ToByte(
                                    txtFeatureVolleyball.Text.Trim());
269
270
271
                                // Modelled off http://stackoverflow.com/a/15339512.
272
                                database.Parks.Attach(parkToModify);
273
                                database.Entry(parkToModify).State = EntityState.Modified;
274
                                break;
275
                            case Global.Enums.ItemTypes.PublicFacility:
276
277
                                // Get object to modify.
                                keyToModify = gViewPublicFacility.SelectedDataKey.Value;
278
279
                                PublicFacility publicFacilityToModify = database.PublicFacilities.
280
                                    Find(keyToModify);
281
282
                                // Save values to object.
                                publicFacilityToModify.Type = txtType.Text.Trim();
283
284
                                publicFacilityToModify.StreetAddress = txtStreetAddress.Text.Trim();
285
                                publicFacilityToModify.City = txtCity.Text.Trim();
                                publicFacilityToModify.State = txtState.Text.Trim();
286
287
                                publicFacilityToModify.Zip = txtZip.Text.Trim();
288
                                publicFacilityToModify.Latitude = SimpleConvert.ToDecimal(
289
                                    txtLatitude.Text.Trim());
                                publicFacilityToModify.Longitude = SimpleConvert.ToDecimal(
290
291
                                    txtLongitude.Text.Trim());
292
                                publicFacilityToModify.Phone = txtPhone.Text.Trim();
293
294
                                // Modelled off http://stackoverflow.com/a/15339512.
295
                                database.PublicFacilities.Attach(publicFacilityToModify);
296
                                database.Entry(publicFacilityToModify).State = EntityState.Modified;
297
                                break;
298
299
                           default:
300
                                throw new InvalidOperationException(
301
                                    "Invalid item type dropdown value.");
302
303
                       // Save any changes to the database and refresh gridviews.
304
                       database.SaveChanges();
                       mViewDisplay.DataBind();
305
306
307
                    // Go back to item selection and let the user know the operation was successful.
308
                    ddlItemType_SelectedIndexChanged(sender, e);
                    lblResult.Text = "Item modified successfully.";
309
                    lblResult.Visible = true;
310
311
                }
312
               catch (Exception ex)
313
                {
                    lblError.Text = "Error: " + ex.Message;
314
                    lblError.Visible = true;
315
316
                }
317
           }
318
319
            * Name:
                       ddlItemType_SelectedIndexChanged
320
            * Type: Event Handler Method
321
            * Purpose: Handles showing and hiding the various controls to aid in allowing the user to
322
323
                       select an item to modify.
            * Input:
                       object sender, holds a reference to the object that raised this event.
324
            * Input:
                       EventArgs e, holds data related to this event.
325
326
            * Output: Nothing.
327
                               -----*/
328
           protected void ddlItemType_SelectedIndexChanged(object sender, EventArgs e)
329
330
                // Hide things until needed.
```

```
331
                lblError.Visible = false;
                lblResult.Visible = false;
332
                mViewDisplay.ActiveViewIndex = -1;
333
334
                mViewModifyBasic.ActiveViewIndex = -1;
335
                mViewModifySpecific.ActiveViewIndex = -1;
336
                btnModify.Visible = false;
337
                btnSaveChanges.Visible = false;
                btnBack.Visible = false;
338
339
                // Reset selected indexes of GridView controls.
340
341
                gViewBusiness.SelectedIndex = -1;
342
                gViewPark.SelectedIndex = -1;
343
                gViewPublicFacility.SelectedIndex = -1;
344
345
                // Show the appropriate view.
                switch ((Global.Enums.ItemTypes)ddlItemType.SelectedIndex)
346
347
348
                    case Global.Enums.ItemTypes.Business:
349
                        mViewDisplay.ActiveViewIndex = 0;
                        btnModify.Visible = true;
350
351
                        break;
352
353
                    case Global.Enums.ItemTypes.Park:
354
                        mViewDisplay.ActiveViewIndex = 1;
                        btnModify.Visible = true;
355
356
                        break;
357
358
                    case Global.Enums.ItemTypes.PublicFacility:
359
                        mViewDisplay.ActiveViewIndex = 2;
360
                        btnModify.Visible = true;
361
                        break;
362
363
                    default:
364
                        break;
365
366
            }
367
        }
368 }
```