```
using MahApps.Metro.Controls;
 2 using Microsoft.Data.Sqlite;
 3 using Microsoft.Win32.TaskScheduler;
 4 using PlotterDataGH.Properties;
 5 using SendFileTo;
 6 using System;
 7 using System.Collections.Generic;
 8 using System.Data;
9 using System.Diagnostics;
10 using System.IO;
11 using System.Linq;
12 using System.Reflection;
13 using System.Text;
14 using System.Threading.Tasks;
15 using System.Windows;
16 using System.Windows.Controls;
17
18 namespace WpfApp2
19 {
20
        /// <summary>
21
        /// Interaction logic for MainWindow.xaml
        /// </summary>
22
23
        public partial class MainWindow: MetroWindow
24
           int addedRows = 0;
25
           DataTable dataTable = new DataTable();
26
27
28
           public MainWindow()
29
                InitializeComponent();
30
31
                LoadData();
32
           }
33
34
           //While a scan is in progress disable the scanning button
           public void DisableWhileScanning()
35
36
                foreach (UserControl1 row in fillerGrid.Children)
37
38
                {
39
                    row.btnScan.IsEnabled = false;
40
                }
41
            }
42
           //Load the data from the local database file
43
           public void LoadData()
44
45
                dataTable.Clear();
46
47
                SqliteConnection cnn;
48
                SqliteCommand cmd = null;
49
                cnn = new SqliteConnection("Data Source=plotterData.db;");
50
                cnn.Open();
51
                string query = "SELECT m1.*, models.plotter type FROM printer data →
52
                   m1 LEFT JOIN printer data m2 ON (m1.serial number =
                  m2.serial_number AND m1.id < m2.id) INNER JOIN models on</pre>
                  models.id = m1.model id WHERE m2.id IS NULL";
53
                cmd = new SqliteCommand(query, cnn);
```

```
...Plotter Data\WpfApp2\WpfApp2\MainWindow.xaml.cs
```

```
2
```

```
54
55
                SqliteDataReader reader = cmd.ExecuteReader();
56
                dataTable.Load(reader);
57
58
                foreach (DataRow row in dataTable.Rows)
59
                    RowDefinition rd = new RowDefinition();
60
61
                    rd.Height = GridLength.Auto;
62
                    fillerGrid.RowDefinitions.Add(rd);
63
                    UserControl1 userControl1 = new UserControl1();
                    userControl1.lblMeterstand.Content = string.Format(row
64
                      ["meters printed"].ToString());
                    userControl1.lblNaam.Content = string.Format(row
65
                      ["naam"].ToString());
                    userControl1.plotterId = Convert.ToInt32(row["id"]);
66
                    userControl1.lblMerk.Content = string.Format(row
67
                      ["plotter_type"].ToString());
68
                    userControl1.lblMerk.Uid = string.Format(row
                      ["model_id"].ToString());
69
                    userControl1.plotterIp = string.Format(row["ip"].ToString());
70
                    userControl1.lblSerialNumber.Content = "S/N: " + string.Format →
                      (row["serial number"].ToString());
71
                    userControl1.serialnm = string.Format(row
                      ["serial_number"].ToString());
72
                    var dt = DateTime.Parse((string)row["datetime"]);
73
74
                    userControl1.lblTime.Content = dt.ToString("dd/MM/yy H:mm");
75
76
                    userControl1.loadData();
                    userControl1.ParentForm = this;
77
78
                    fillerGrid.Children.Add(userControl1);
79
                    Grid.SetRow(userControl1, fillerGrid.RowDefinitions.Count -
                      1);
80
                    addedRows++;
                }
81
82
                //Create a CSV file for mailing
83
84
                try
85
                {
                    StringBuilder sb = new StringBuilder();
86
87
                    IEnumerable<string> columnNames =
88
                      dataTable.Columns.Cast<DataColumn>().
89
                                                       Select(column =>
                        column.ColumnName);
                    sb.AppendLine(string.Join(",", columnNames));
90
91
92
93
94
                    DataTable cartridgeTable = new DataTable();
95
                    foreach (DataRow row in dataTable.Rows)
96
97
98
                        IEnumerable<string> fields = row.ItemArray.Select(field => >
                         field.ToString());
                        sb.AppendLine(string.Join(",", fields));
99
```

```
...Plotter Data\WpfApp2\WpfApp2\MainWindow.xaml.cs
100
101
                         SaliteConnection cnn1;
102
                         SqliteCommand cmd1 = null;
103
                         cnn1 = new SqliteConnection("Data
                         Source=plotterData.db;");
104
                         cnn1.0pen();
105
                         string query1 = string.Format("SELECT * FROM
106
                         `cartridge_reading` where `parent_id` = {0}", row[0]);
107
                         cmd1 = new SqliteCommand(query1, cnn1);
108
109
                         SqliteDataReader reader1 = cmd1.ExecuteReader();
110
111
                         cartridgeTable.Load(reader1);
                     }
112
113
                     File.WriteAllText("plotterData.csv", sb.ToString());
114
115
116
                     StringBuilder sb1 = new StringBuilder();
117
118
                     IEnumerable<string> columnNames1 =
                       cartridgeTable.Columns.Cast<DataColumn>().
119
                                                       Select(column =>
                         column.ColumnName);
120
                     sb1.AppendLine(string.Join(",", columnNames1));
121
122
                     foreach (DataRow row1 in cartridgeTable.Rows)
123
124
                         IEnumerable<string> fields = row1.ItemArray.Select(field
                         => field.ToString());
                         sb1.AppendLine(string.Join(",", fields));
125
126
                     }
127
128
                     File.WriteAllText("cartridgeData.csv", sb1.ToString());
129
                 }
                 catch (System.IO.IOException)
130
131
                 {
132
                     MessageBox.Show("Please close Excel");
133
                 }
134
             }
135
136
137
             //Add another plotter
138
             private void btnAdd_Click(object sender, RoutedEventArgs e)
139
                 AddPlotter addPlotter = new AddPlotter();
140
                 addPlotter.ParentForm = this;
141
142
                 addPlotter.Show();
143
             }
144
145
146
             //Opens the settings page
             private void Button Click(object sender, RoutedEventArgs e)
147
148
149
                 SettingsPage sp = new SettingsPage();
150
                 sp.Show();
```

```
...Plotter Data\WpfApp2\WpfApp2\MainWindow.xaml.cs
151
                 this.Close();
152
             }
153
154
             #region Mailer
155
             private void btnSendMail Click(object sender, RoutedEventArgs e)
156
157
158
                 MAPI mapi = new MAPI();
159
160
                 //mapi.AddAttachment("plotterData.db");
                 mapi.AddRecipientTo("Helpdesk@goedhart-its.com");
161
                 mapi.AddAttachment(Environment.CurrentDirectory + "\
162
                   \plotterData.csv");
163
                 mapi.AddAttachment(Environment.CurrentDirectory + "\
                   \cartridgeData.csv");
164
                 mapi.SendMailPopup("Testen plotter data", getMailData());
165
             }
166
167
             private string getMailData()
168
                 dataTable.Clear();
169
170
                 SqliteConnection cnn;
171
                 SqliteCommand cmd = null;
172
                 cnn = new SqliteConnection("Data Source=plotterData.db;");
173
                 cnn.Open();
174
175
                 string query = "SELECT m1.*, models.plotter type FROM printer data →
                    m1 LEFT JOIN printer_data m2 ON (m1.serial_number =
                   m2.serial_number AND m1.id < m2.id) INNER JOIN models on</pre>
                                                                                     P
                   models.id = m1.model_id WHERE m2.id IS NULL";
176
                 cmd = new SqliteCommand(query, cnn);
177
                 string mailBody = "";
178
179
                 foreach (DataRow row in dataTable.Rows)
180
181
                 {
                     mailBody += "Plotters: \n";
182
183
                     mailBody += string.Format(row["serial_number"].ToString());
184
                     mailBody += "\n";
185
                     mailBody += string.Format(row["meters_printed"].ToString());
                     mailBody += "\n";
186
                     mailBody += string.Format(row["plotter type"].ToString());
187
                     mailBody += "\n";
188
                     mailBody += "\n";
189
                     mailBody += "Cartridges: \n";
190
191
192
193
                     DataTable dataTableCartridge = new DataTable();
194
                     SqliteCommand cmd1 = null;
195
                     string query1 = string.Format("SELECT * FROM
196
                       `cartridge_reading` where `parent_id` = {0}", row["id"]);
```

cmd1 = new SqliteCommand(query1, cnn);

dataTableCartridge.Load(reader1);

SqliteDataReader reader1 = cmd1.ExecuteReader();

197

198 199

200

```
...Plotter Data\WpfApp2\WpfApp2\MainWindow.xaml.cs
```

```
5
```

```
201
202
                     foreach (DataRow rowCartridge in dataTableCartridge.Rows)
203
                     {
204
                         mailBody += string.Format(rowCartridge
                                                                                     P
                         ["cartridge model"].ToString());
                         mailBody += "\n";
205
                         mailBody += string.Format(rowCartridge["volume"].ToString >
206
207
                         mailBody += "\n";
208
                         mailBody += "\n";
209
                     }
210
                 }
211
212
213
                 return mailBody;
214
             }
215
            #endregion
216
217
218
            public void TaskCreater()
219
                 // Get the service on the local machine
220
221
                 using (TaskService ts = new TaskService())
222
223
                     if (ts.GetTask("Plotter Scanner") != null)
224
                         ts.RootFolder.DeleteTask("Plotter Scanner");
225
226
                     }
227
                 }
228
229
                 foreach (UserControl1 row in fillerGrid.Children)
230
231
                     // Get the service on the local machine
232
                     using (TaskService ts = new TaskService())
233
234
                         var debugField = System.IO.Path.GetDirectoryName(
235
236
        Assembly.GetExecutingAssembly().GetName().CodeBase);
237
238
                         debugField = debugField.Substring(6);
239
240
                         var filename = debugField + @"/ghWebscraper.exe";
241
242
                         //Start the Converted python file and pass the paramater
243
                         string arguments = string.Format(@"{0} {1} {2} {3}",
                         row.lblMerk.Uid.ToString(), row.plotterIp,
                         Settings.Default.bedrijfsNaam, row.lblNaam.Content);
244
245
                         TaskDefinition td = ts.NewTask();
246
                         if (ts.GetTask("Plotter Scanner") != null)
247
248
249
                             td = ts.GetTask("Plotter Scanner").Definition;
250
                         }
251
252
                         // Create a new task definition and assign properties
```

```
...Plotter Data\WpfApp2\WpfApp2\MainWindow.xaml.cs
```

```
6
```

```
253
254
                         td.RegistrationInfo.Description = "Scans plotter";
                         td.RegistrationInfo.Author = "Goedhart Groep";
255
256
                         if (td.Triggers.Count == 0)
257
258
                             // Create a trigger that will fire the task at this
259
                         time every day
                             td.Triggers.Add(new DailyTrigger { DaysInterval =
260
                         1 });
261
                         }
262
                         // Create an action that will launch Notepad whenever the >
263
                         trigger fires
                         td.Actions.Add(new ExecAction(filename, arguments,
264
                         debugField));
265
266
                         // Register the task in the root folder
267
                         ts.RootFolder.RegisterTaskDefinition(@"Plotter Scanner",
                         td);
268
269
                     }
270
271
272
                 }
273
274
                 using (TaskService ts = new TaskService())
275
276
                     var debugField = System.IO.Path.GetDirectoryName(
277
         Assembly.GetExecutingAssembly().GetName().CodeBase);
278
                     debugField = debugField.Substring(6);
279
280
281
                     var filename = debugField + @"/NewWay.exe";
282
                     TaskDefinition td = ts.NewTask();
283
284
                     if (ts.GetTask("Plotter Scanner") != null)
285
286
287
                         td = ts.GetTask("Plotter Scanner").Definition;
288
                     }
289
290
                     // Create a new task definition and assign properties
291
                     td.RegistrationInfo.Description = "Scans plotter";
292
293
                     td.RegistrationInfo.Author = "Goedhart Groep";
294
295
                     if (td.Triggers.Count == 0)
296
                     {
297
                         // Create a trigger that will fire the task at this time
                         every day
                         td.Triggers.Add(new DailyTrigger { DaysInterval = 1 });
298
299
                     }
300
                     // Create an action that will launch Notepad whenever the
301
                                                                                     P
                       trigger fires
```

```
...Plotter Data\WpfApp2\WpfApp2\MainWindow.xaml.cs
302
                     td.Actions.Add(new ExecAction(filename, null, debugField));
303
304
                     // Register the task in the root folder
                     ts.RootFolder.RegisterTaskDefinition(@"Plotter Scanner", td);
305
306
                }
307
             }
308
309
            #region Scanning
310
            public void RunScan(string Merk, string IP, string Naam)
311
                 var debugField = System.IO.Path.GetDirectoryName(
312
        Assembly.GetExecutingAssembly().GetName().CodeBase);
313
314
315
                 debugField = debugField.Substring(6);
316
                 var filename = debugField + @"/ghWebscraper.exe";
317
318
319
                 //Start the Converted python file and pass the paramater
320
                 string arguments = string.Format(@"{0} {1} {2} {3}", Merk, IP,
                   Settings.Default.bedrijfsNaam, Naam);
321
322
                 //Process myProcess = new Process();
323
                 //myProcess.Exited += new EventHandler(myProcess Exited);
324
                 //myProcess.StartInfo.FileName = filename;
325
                 //myProcess.StartInfo.Arguments = arguments;
326
                 //myProcess.Start();
327
328
                 doStuff(filename, arguments);
329
            }
330
331
            async System.Threading.Tasks.Task doStuff(string fileName, string
               args)
332
             {
333
                 DisableWhileScanning();
                 await RunProcessAsync(fileName, args);
334
335
                 //MahApps.Metro.IconPacks.PackIconFontAwesome fe = btnScan.Content →
336
                    as MahApps.Metro.IconPacks.PackIconFontAwesome;
337
                 //fe.Kind =
                   MahApps.Metro.IconPacks.PackIconFontAwesomeKind.BinocularsSolid;
338
                 //btnScan.IsEnabled = true;
339
                 fillerGrid.RowDefinitions.Clear();
340
341
                 fillerGrid.Children.Clear();
342
                 LoadData();
343
            }
344
345
            public static async Task<int> RunProcessAsync(string fileName, string →
               args)
346
             {
                using (var process = new Process
347
348
```

349

350

351 352 {

StartInfo =

FileName = fileName, Arguments = args,

UseShellExecute = false, CreateNoWindow = true,

```
...Plotter Data\WpfApp2\WpfApp2\MainWindow.xaml.cs
```

387

```
353
                 RedirectStandardOutput = true, RedirectStandardError = true
354
             },
355
                     EnableRaisingEvents = true
356
                 })
357
                 {
                     return await RunProcessAsync(process).ConfigureAwait(false);
358
                 }
359
360
             }
361
             private static Task<int> RunProcessAsync(Process process)
362
             {
                 var tcs = new TaskCompletionSource<int>();
363
364
365
                 process.Exited += (s, ea) => tcs.SetResult(process.ExitCode);
366
                 process.OutputDataReceived += (s, ea) => Console.WriteLine
                   (ea.Data);
                 process.ErrorDataReceived += (s, ea) ⇒ Console.WriteLine("ERR: " >
367
                   + ea.Data);
368
369
                 bool started = process.Start();
370
                 if (!started)
371
                 {
372
                     //you may allow for the process to be re-used (started =
                       false)
373
                     //but I'm not sure about the guarantees of the Exited event in ₹
                        such a case
                     throw new InvalidOperationException("Could not start process: →
374
                       " + process);
375
                 }
376
                 process.BeginOutputReadLine();
377
378
                 process.BeginErrorReadLine();
379
380
                 return tcs.Task;
381
             }
382
383
384
             #endregion
385
         }
386 }
```