```
... ster \verb|\selenium test tool \verb|\GeneralFunctionality \verb|\Functions.cs||
```

```
1
```

```
: GeneralFunctionality
2 // Assembly
                  : G.H.M.H. Schmeits
3 // Author
                 : 01-05-2018
4 // Created
5 //
6 // Last Modified By : G.H.M.H. Schmeits
7 // Last Modified On : 05-15-2019
9 // <copyright file="Functions.cs" company="SCHMEITS SOFTWARE">
10 //
        Copyright © 2018
11 // </copyright>
12 // <summary></summary>
14
using DataStorage;
16 using Microsoft.Win32;
17 using NUnit.Framework;
18 using OpenQA.Selenium;
19 using OpenQA.Selenium.Interactions;
20 using OpenQA.Selenium.Remote;
21 using OpenQA.Selenium.Support.Extensions;
22 using OpenQA.Selenium.Support.UI;
23 using System;
24 using System.Collections.Generic;
25 using System.Diagnostics;
26 using System.IO;
27 using System.Management;
28 using System.Text;
29 using System.Threading;
30 using System.Windows.Forms;
31 using System.Xml;
32 using System.Xml.Linq;
33 using Keys = OpenQA.Selenium.Keys;
34
35 namespace GeneralFunctionality
36 {
37
      /// <summary>
38
      /// Class Functions.
39
      /// </summary>
40
      /// <autogeneratedoc />
      /// TODO Edit XML Comment Template for Functions
41
42
      public class Functions
43
44
          /// <summary>
45
         ///
                The credentials
         /// </summary>
46
47
         /// <autogeneratedoc />
48
         /// TODO Edit XML Comment Template for credentials
49
         public static Credentials credentials;
50
51
         /// <summary>
52
         ///
                The database connection
53
         /// </summary>
54
         /// <autogeneratedoc />
         /// TODO Edit XML Comment Template for databaseConnection
55
56
         public static DatabaseConnection databaseConnection;
```

```
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```

```
2
```

```
57
 58
            /// <summary>
 59
                    The serial key XML
            ///
 60
            /// </summary>
 61
            /// <autogeneratedoc />
            /// TODO Edit XML Comment Template for serialKeyXml
 62
            public static SerialKeyXML serialKeyXml;
 63
 64
 65
            /// <summary>
 66
            ///
                    The testrun
 67
            /// </summary>
 68
            /// <autogeneratedoc />
 69
            /// TODO Edit XML Comment Template for _testrun
 70
            private static string _testrun;
 71
 72
 73
            public static string _project;
 74
 75
            /// <summary>
 76
            ///
                    The application name
 77
            /// </summary>
 78
            /// <autogeneratedoc />
 79
            /// TODO Edit XML Comment Template for applicationName
 80
            private static string applicationName;
 81
            /// <summary>
 82
 83
            ///
                    The class name
 84
            /// </summary>
 85
            /// <autogeneratedoc />
            /// TODO Edit XML Comment Template for className
 86
 87
            private static string className;
 88
 89
            /// <summary>
 90
            ///
                    The counter check
 91
            /// </summary>
 92
            /// <autogeneratedoc />
            /// TODO Edit XML Comment Template for counterCheck
 93
 94
            private static int counterCheck;
 95
 96
            /// <summary>
 97
            ///
                    The testnr
 98
            /// </summary>
 99
            /// <autogeneratedoc />
100
            /// TODO Edit XML Comment Template for testnr
101
            private static string testnr;
102
            public static bool uitgevoerd { get; set; }
103
104
105
            /// <summary>
106
            ///
                    Gets or sets the HTML page.
            /// </summary>
107
108
            /// <value>The HTML page.</value>
            /// <autogeneratedoc />
109
110
            /// TODO Edit XML Comment Template for HtmlPage
            public static string HtmlPage { get; set; }
111
112
```

```
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113
             /// <summary>
114
                     Gets or sets the name of the screenshot.
             ///
115
             /// </summary>
116
             /// <value>The name of the screenshot.</value>
117
             /// <autogeneratedoc />
             /// TODO Edit XML Comment Template for ScreenshotName
118
119
             public static string ScreenshotName { get; set; }
120
121
             /// <summary>
122
             ///
                     Gets or sets the set testnr.
             /// </summary>
123
124
             /// <value>The set testnr.</value>
125
             /// <autogeneratedoc />
126
             /// TODO Edit XML Comment Template for SetTestnr
             private static string SetTestnr { get; set; }
127
128
129
             /// <summary>
130
             ///
                     Checks the by.
131
             /// </summary>
132
             /// <param name="driver">The driver.</param>
133
             /// <param name="idString">The identifier string.</param>
             /// <param name="checkedBy">The checked by.</param>
134
135
             /// <param name="testnr">The testnr.</param>
             /// <param name="browserid">The browserid.</param>
136
137
             /// <param name="tekst">The tekst.</param>
138
             /// <param name="action">The action.</param>
139
             /// <param name="url">The URL.</param>
140
             /// <param name="switch1">The switch1.</param>
141
             /// <param name="description">The description.</param>
             /// <param name="inverseString">The inverse string.</param>
142
143
             /// <param name="comment">The comment.</param>
144
             /// <param name="testname">The testname.</param>
145
             /// <param name="testcase">The testcase.</param>
146
             /// <param name="version">The version.</param>
147
             /// <param name="counter">The counter.</param>
148
             /// <param name="machinenumber">The machinenumber.</param>
             /// <param name="testelementname">The testelementname.</param>
149
150
             /// <param name="start_url">The start URL.</param>
151
             /// <param name="texttext">The texttext.</param>
             /// <param name="testpage">The testpage.</param>
152
153
             /// <param name="testscenario name">Name of the testscenario.</param>
             /// <returns><c>true</c> if XXXX, <c>false</c> otherwise.</returns>
154
155
             public static bool CheckBy(
156
                 IWebDriver driver,
157
                 string idString,
158
                 string checkedBy,
                 string testnr = "1",
159
                 string browserid = "1",
160
                 string tekst = "",
161
162
                 string action = "",
                 string url = "",
163
                 string switch1 = "";
164
                 string description = ""
165
166
                 string inverseString = ""
```

string comment = "",

string testname = "",

167

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```

```
169
                  string testcase = "",
                 string version = "",
170
171
                 int counter = 0,
172
                 string machinenumber = ""
                 string testelementname = ""
173
                 string start_url = "",
string texttext = "",
174
175
                 string testpage = "",
176
                 string testscenario_name = "",
177
178
                 bool opslaan = true,
179
                 bool strikt = true)
180
             {
                 bool present;
181
182
                 var opslaan1 = opslaan;
183
184
                 present = true;
185
                 if (checkedBy != string.Empty || idString != string.Empty)
186
187
188
                      var showBorderWidth = OverallSettings.ShowBorderWidth;
189
                      var showShowTime = OverallSettings.ShowDuration;
                      var showBorderColor = OverallSettings.ShowBorderColor;
190
191
                      var extraTimes = OverallSettings.ShowExtraChecks;
192
193
                      SetTestnr = testnr;
194
                      ScreenshotName = string.Empty;
195
                      var gewoon = 3;
196
                      var ongewoon = 4;
197
                      if (inverseString == "yes")
198
199
                          gewoon = 4;
200
                          ongewoon = 3;
201
                      }
202
203
                      var result = ongewoon;
204
205
                      try
206
                      {
207
                          IWebElement content = null;
208
                          var actions = new Actions(driver);
209
                          switch (checkedBy.ToUpper())
210
211
                              case "NAME":
212
213
                                  driver.FindElement(By.Name(idString));
                                  content = driver.FindElement(By.Name(idString));
214
215
                                  break;
                              case "XPATH":
216
217
                                  driver.FindElement(By.XPath(idString));
218
                                  content = driver.FindElement(By.XPath(idString));
219
                                  break;
                              case "CLASS":
220
221
                                  driver.FindElement(By.ClassName(idString));
222
                                      driver.FindElement(By.ClassName(idString));
223
224
                                  break;
```

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225
                              case "ID":
226
                                  driver.FindElement(By.Id(idString));
227
                                  content = driver.FindElement(By.Id(idString));
228
                                  break;
                              case "CSSSELECTOR":
229
                                  driver.FindElement(By.CssSelector(idString));
230
231
232
                                      driver.FindElement(By.CssSelector(idString));
233
                                  break;
234
                          }
235
                          if (content != null && tekst != string.Empty &&
236
237
                              content.Text != string.Empty)
238
                          {
                              if (strikt)
239
240
                              {
                                  if (tekst != string.Empty &&
241
                                      content.Text == tekst)
242
243
                                      result = gewoon;
244
                              }
                              else
245
246
                              {
                                  if (tekst != string.Empty &&
247
248
                                      content.Text.IndexOf(tekst) != -1)
249
                                      result = gewoon;
250
                              }
251
                              /*if (tekst != string.Empty &&
252
253
                                  content.Text != tekst)
254
                                  result = ongewoon;*/
255
                          }
256
                          /*
257
258
                          if (content != null && tekst != string.Empty &&
259
                              content.TagName == "input" &&
260
                              content.GetAttribute("value") != string.Empty)
261
262
                              //if (content != null && tekst != string.Empty &&
263
                              //(cont/ent.TagName == "input" || content.TagName == >
                          "textarea") &&
                              //content.GetAttribute("value") != string.Empty)
264
265
                          {
266
                              if (strikt == true)
267
                              {
                                  if (tekst != string.Empty &&
268
                                      content.GetAttribute("value").Trim() ==
269
                         tekst)
270
                                      result = gewoon;
271
                              }
272
                              else
273
                                  if (tekst != string.Empty &&
274
275
                                      content.GetAttribute("value").Trim().IndexOf →
                          (tekst) != -1)
```

result = gewoon;

}

276

```
278
279
                              if (tekst != string.Empty &&
                                  content.GetAttribute("value").Trim() != tekst)
280
281
                                  result = ongewoon;
282
                         }
                         */
283
284
285
286
                         /*if (content != null && content.Text != null &&
287
                              content.Text != string.Empty &&
288
                              tekst != string.Empty)
289
                              // MessageBox.Show("|" + content.Text.Trim() + "|" + >
290
                         tekst.Trim() + "|");
291
292
                              if (tekst != string.Empty &&
                                  content.Text.Trim() == tekst.Trim())
293
294
                                  result = gewoon;
295
296
                              if (tekst != string.Empty &&
297
                                  content.Text.Trim() != tekst.Trim())
298
                                  result = ongewoon;
                         }*/
299
300
301
                         if (tekst == string.Empty) result = gewoon;
302
                         HighlightAndScreenshot(driver, content, showShowTime,
303
                              showBorderColor, showBorderWidth);
304
305
                         if (idString.ToUpper().Trim() != "POPUP" &&
306
307
                              idString.Trim().Length > 0)
308
                              if (result == ongewoon)
309
                                  TakeScreenshot(driver, ongewoon);
310
311
                         present = true;
                     }
312
                     catch (NoSuchElementException e)
313
314
315
                         if (gewoon == 3)
316
                         {
                              present = false;
317
318
                              TakeScreenshot(driver, result);
319
320
                              if (counter < extraTimes)</pre>
321
322
                              {
323
                                  counter++;
324
                                  CheckBy(
325
                                      driver,
326
                                      idString,
327
                                      checkedBy,
328
                                      testnr,
329
                                      browserid,
330
                                      tekst,
331
                                      action,
332
                                      url,
```

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```
333
                                       switch1,
334
                                       description,
335
                                       version,
336
                                       inverseString,
337
                                       comment,
338
                                       testname,
339
                                       testcase,
340
                                       counter,
341
                                       machinenumber,
342
                                       testelementname,
343
                                       start_url,
344
                                       texttext,
345
                                       testpage,
346
                                       testscenario_name,
347
                                       opslaan1,
348
                                       strikt);
349
                              }
350
                          }
351
                          else
352
                          {
353
                              present = true;
                          }
354
                      }
355
356
                      finally
357
                          applicationName = testname;
358
359
                          if (result == gewoon) ScreenshotName = string.Empty;
                          if (idString.ToUpper().Trim() == "POPUP") result =
360
                         gewoon;
361
362
                          if (opslaan)
                              TestResults.AddTestResult(
363
364
                                   applicationName,
365
                                   className,
366
                                   _testrun,
367
                                   Functions.testnr,
368
                                   idString,
369
                                   checkedBy,
370
                                   result.ToString(),
371
                                   ScreenshotName,
372
                                   action,
373
                                   tekst,
374
                                   url,
375
                                   switch1,
376
                                   description,
377
                                   browserid,
378
                                   inverseString,
379
                                   comment,
380
                                   version,
381
                                   machinenumber,
382
                                   testelementname,
383
                                   start url,
384
                                   texttext,
                                   "",
385
386
                                   testpage,
                                   Convert.ToString(getProjectID())
387
```

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```

```
388
                             );
389
                     }
390
                 }
391
392
                 return present;
             }
393
394
395
            /// <summary>
396
            ///
                     Gets the HDD serial number.
397
            /// </summary>
398
             /// <returns>System.String.</returns>
399
            /// <autogeneratedoc />
            /// TODO Edit XML Comment Template for getHddSerialNumber
400
401
            public static string getHddSerialNumber()
402
403
                 // --- Win32 Disk
                 var searcher = new ManagementObjectSearcher("\\root\\cimv2",
404
                     "select * from Win32_DiskPartition WHERE
405
                       BootPartition=True");
406
407
                 uint diskIndex = 999;
                 foreach (ManagementObject partition in searcher.Get())
408
409
                 {
410
                     diskIndex =
                         Convert.ToUInt32(partition.GetPropertyValue("Index"));
411
                     break; // TODO: might not be correct. Was : Exit For
412
                 }
413
414
415
                 // I haven't found the bootable partition. Fail.
                 if (diskIndex == 999)
416
417
                     return string.Empty;
418
                 // --- Win32 Disk Drive
419
420
                 searcher = new ManagementObjectSearcher(
                     "SELECT * FROM Win32 DiskDrive where Index = " + diskIndex);
421
422
                 var deviceName = "";
423
424
                 foreach (ManagementObject wmi_HD in searcher.Get())
425
                     deviceName = wmi_HD.GetPropertyValue("Name").ToString();
426
                     break; // TODO: might not be correct. Was : Exit For
427
428
                 }
429
430
                 // I haven't found the disk drive. Fail
431
                 if (string.IsNullOrEmpty(deviceName.Trim()))
432
                     return string.Empty;
433
434
                 // -- Some problems in query parsing with backslash. Using like 🤝
                   operator
435
                 if (deviceName.StartsWith("\\\.\\"))
                     deviceName = deviceName.Replace("\\\.\\", "%");
436
437
438
                 // --- Physical Media
439
                 searcher = new ManagementObjectSearcher(
                     "SELECT * FROM Win32 PhysicalMedia WHERE Tag like '" +
440
```

441

deviceName +

442

443

444

445

446

447

448 449 450

451

452 453

454 455

456

457

458 459

460

461

462 463 464

465

466 467

468 469

470

471

472 473

474 475

476

477

478

479

480 481 482

483

484

485 486

487

488

489

490

491 492

493

494

{

/// <autogeneratedoc />

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
                      "'");
                  var serial = string.Empty;
                 foreach (ManagementObject wmi_HD in searcher.Get())
                      serial = wmi HD.GetPropertyValue("SerialNumber").ToString();
                      break; // TODO: might not be correct. Was : Exit For
                 }
                 return serial;
             }
             public static int getMachineCode()
                 var searcher =
                      new ManagementObjectSearcher("select * from
                       Win32_Processor");
                 var collectedInfo = "";
                 // here we will put the informa
                 foreach (ManagementObject share in searcher.Get())
                      // first of all, the processorid
                      collectedInfo += share.GetPropertyValue("ProcessorId");
                  searcher.Query = new ObjectQuery("select * from Win32_BIOS");
                  foreach (ManagementObject share in searcher.Get())
                      //then, the serial number of BIOS
                      collectedInfo += share.GetPropertyValue("SerialNumber");
                 searcher.Query = new ObjectQuery("select * from
                   Win32_BaseBoard");
                 foreach (ManagementObject share in searcher.Get())
                      //finally, the serial number of motherboard
                      collectedInfo += share.GetPropertyValue("SerialNumber");
                 // patch luca bernardini
                 if (string.IsNullOrEmpty(collectedInfo) | (collectedInfo == "00") →
                      (collectedInfo.Length <= 3))</pre>
                      collectedInfo += getHddSerialNumber();
                  return getEightByteHash(collectedInfo, 100000);
             }
             /// <summary>
             ///
                     Gets the eight byte hash.
             /// </summary>
             /// <param name="s">The s.</param>
             /// <param name="MUST_BE_LESS_THAN">The must be less than.</param>
             /// <returns>System.Int32.</returns>
```

/// TODO Edit XML Comment Template for getEightByteHash

//This function generates a eight byte hash

public static int getEightByteHash(string s,

int MUST_BE_LESS_THAN = 1000000000)

```
495
                 //The length of the result might be changed to any length
496
                 //just set the amount of zeroes in MUST BE LESS THAN
                 //to any length you want
497
498
                 uint hash = 0;
499
                 foreach (var b in Encoding.Unicode.GetBytes(s))
500
501
502
                     hash += b;
503
                     hash += hash << 10;
504
                     hash ^= hash >> 6;
                 }
505
506
                 hash += hash << 3;
507
                 hash ^= hash >> 11;
508
                 hash += hash << 15;
509
510
511
                 var result = (int)(hash % MUST_BE_LESS_THAN);
512
                 var check = MUST_BE_LESS_THAN / result;
513
514
                 if (check > 1) result *= check;
515
                 return result;
516
             }
517
518
519
             /// <summary>
520
521
            ///
                     Checks the screenshot dir.
             /// </summary>
522
523
             /// <param name="dirName">Name of the dir.</param>
524
            /// <autogeneratedoc />
525
             /// TODO Edit XML Comment Template for CheckScreenshotDir
526
             public static void CheckScreenshotDir(string dirName = "screenshots")
527
             {
528
                 var screenshotsPath = GetCurrentDir(1);
529
                 var pathG = screenshotsPath.Split('\\');
530
                 var g = string.Empty;
531
                 for (var i = 0; i < pathG.Length - 2; i++) g += pathG[i] + "\\";
532
533
                 screenshotsPath = g;
534
                 var di = new DirectoryInfo(screenshotsPath);
535
                 var dis = new DirectoryInfo(screenshotsPath + "\\" + dirName);
536
                 var diserror = new DirectoryInfo(screenshotsPath + "\\" +
537
                   dirName);
538
                 if (!dis.Exists)
539
                 {
540
                     var driverPathSub = di.CreateSubdirectory(dirName);
541
                     var applicationPathSub =
                         di.CreateSubdirectory(dirName + "\\" +
542
543
                                                applicationName.Trim());
                     var applicationPathSubErrors =
544
                         di.CreateSubdirectory(dirName + "\\" +
545
                                                applicationName.Trim());
546
547
                 }
                 else
548
549
                 {
```

```
550
                     var applicationPath =
                         new DirectoryInfo(screenshotsPath + "\\" + dirName + "\\" →
551
552
                                            applicationName.Trim());
553
                     if (applicationPath.Exists)
554
                     {
                     }
555
556
                     else
557
                     {
558
                         var applicationPathSub =
                              di.CreateSubdirectory(dirName + "\\" +
559
560
                                                    applicationName.Trim());
                     }
561
562
                     applicationPath = new DirectoryInfo(screenshotsPath + "\\" +
563
564
                                                           dirName + "\\" +
565
                                                           applicationName.Trim());
566
567
                     if (!applicationPath.Exists)
568
569
                         var applicationPathSubErrors =
                             di.CreateSubdirectory(dirName + "\\" +
570
571
                                                    applicationName.Trim());
572
                     }
                 }
573
             }
574
575
             public static void CheckDir(string project)
576
577
                 var projectPath = GetCurrentDir(1) + project + @"\CSV";
578
579
580
                 var pathG = projectPath.Split('\\');
581
                 var g = string.Empty;
582
                 for (var i = 0; i < pathG.Length - 1; i++) g += pathG[i] + "\\";</pre>
583
584
                 projectPath = g;
585
586
                 var di = new DirectoryInfo(projectPath);
587
                 var dis = new DirectoryInfo(projectPath + "\\CSV");
588
                 var diserror = new DirectoryInfo(projectPath + "\\CSV");
589
                 if (!dis.Exists)
590
                 {
591
                     var driverPathSub = di.CreateSubdirectory("CSV");
                     var applicationPathSub = di.CreateSubdirectory("CSV\\");
592
593
                     var applicationPathSubErrors = di.CreateSubdirectory("CSV\
                       \");
594
                 }
595
                 else
596
                 {
597
                     var applicationPath =
                         new DirectoryInfo(projectPath + "\\CSV");
598
                     if (applicationPath.Exists)
599
600
                     {
601
                     }
602
                     else
603
                     {
```

```
604
                         var applicationPathSub = di.CreateSubdirectory("\\CSV");
605
                     }
606
697
                     applicationPath = new DirectoryInfo(projectPath + "\\CSV");
608
                     if (!applicationPath.Exists)
609
610
611
                         var applicationPathSubErrors =
612
                             di.CreateSubdirectory("CSV\\");
613
                     }
                 }
614
             }
615
616
617
             /// <summary>
618
619
             ///
                     Creates the HTML.
620
             /// </summary>
621
             /// <param name="testrun">The testrun.</param>
622
             /// <autogeneratedoc />
623
             /// TODO Edit XML Comment Template for CreateHTML
624
             public static void CreateHTML(string testrun)
625
626
                 try
627
                 {
                     var totalTestResultsHtmls =
628
                         new List<TestResults.TotalTestResultsHTML>();
629
630
                     totalTestResultsHtmls =
631
                         TestResults.GetTotalTestResultsHTML(testrun);
632
                     var testResults = new List<TestResults.TestResultsHTML>();
633
634
                     testResults = TestResults.GetTestResultsHTML(testrun);
635
                     setApplicationName(testResults[0].application);
636
637
                     var timestring = "run " +
                                       string.Format("{0,8:D8}",
638
639
                                           Convert.ToInt32(testrun));
                     var message = "<!DOCTYPE html>\r\n<html>\r\n<head>";
640
641
                     message += "\t<meta charset=\"UTF-8\">\r\n";
642
                     message +=
643
                         "\t<meta name=\"viewport\" content=\"width=device-
                         width, initial-scale=1\">\r\n";
644
                     message += "\t<title>Testrun: " + testResults[0].application >
                                "_" + timestring + "</title>\r\n";
645
                     message += "\t<link rel=\"stylesheet\" href=\"" +</pre>
646
                                GetCurrentDir(0) + "\\style.css\">\r\n";
647
648
                     message += "</head>";
649
                     message +=
650
                         "<body class=\"dark-theme\"><script id=\" bs script</pre>
                         \">//<![CDATA[document.write(\"<script async src='/
                         browser-sync/browser-sync-client.js?v=2.23.6'><\\/script> >
                         \".replace(\"HOST\", location.hostname));//]]></script>\r >
                         n";
651
                     message += "<div id=\"wrapper\">\r\n";
                     message += "\t<h1>Test: " + testResults[0].application.Trim() >
652
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
```

```
13
```

```
653
                                 "</h1>\r\n";
                     message += "\t<h2>Testrun: " +
654
655
                                testResults[0].testrun.ToString().Trim() +
656
                                 "</h2>\r\n";
                     message += "\t<h2>Browser: " +
657
                                totalTestResultsHtmls[0].testrun_browser +
658
659
                                 "</h2>\r\n";
                     message += "\t<div id=\"dashboard\">\r\n";
660
661
662
                     // TestResults total
663
                     var passedInt =
                         Convert.ToDouble(totalTestResultsHtmls
664
                         [0].testrun passed);
                     var failedInt =
665
                         Convert.ToDouble(totalTestResultsHtmls
666
                         [0].testrun failed);
667
                     var passedAfgerond =
                         Convert.ToInt32(passedInt / (passedInt + failedInt) * 100 →
668
669
                                          0.50);
670
                     var passedAfgerond1 = string.Format("{0:F1}",
                         passedInt / (passedInt + failedInt) * 100);
671
                     message += "\t\t<div class=\"row\">\r\n";
672
673
674
                     // Grafic
                     message += "\t\t\t<div class=\"col-4\">\r\n";
675
                     message += "\t\t\t\t\div class=\"card\">\r\n";
676
677
                     message +=
678
                         "\t\t\t\t\tdiv class=\"card__content row donut\">\r\n";
679
                     message +=
                         "\t\t\t\t\t\t\div id=\"chart\" class=\"col-5\" data-
680
                        percent=\"" +
681
                         passedAfgerond1
682
                         + "\">\r\n";
                     message +=
683
                         "\t\t\t\t\t\t\t<svg width=\"100%\" height=\"100%\"
684
                        viewbox=\"0 0 40 25\" class=\"donut\">\r\n";
685
                     message +=
                         "\t\t\t\t\t\t\t\t\t\circle class=\"donut-ring\" cx=\"20\"
686
                         cy=\"13\" r=\"16\" fill=\"transparant\"></circle>\r\n";
                     message += "\t\t\t\t\t\t\t\t\circle class=\"donut-segment p-" >
687
688
                                passedAfgerond
                                + "\" cx=\"20\" cy=\"13\" r=\"16\" fill=
689
                         \"transparant\" stroke-dashoffset=\"25\"></circle>\r\n";
690
                     message += "\t\t\t\t\t\t\t\t\t\t\svg>\r\n";
                     message += "\t\t\t\t\t\t\t\div>\r\n";
691
                     message += "\t\t\t\t\t\t\tdiv class=\"col-7\">\r\n";
692
693
                     message += "\t\t\t\t\t\t\t\t\t\t\t\t\r\n";
694
                     message +=
                         "\t\t\t\t\t\t\t\t\t\t\t\t\t\t\t\t\rang>Start time: </strong></br>" >
695
696
                         string.Format(
697
                             "{0:dd/MM/yy HH:mm:ss}",
                             totalTestResultsHtmls[0].testrun_begintime) +
698
                         ^{\prime\prime}
699
```

```
700
                   message +=
701
                       702
                       string.Format(
703
                           "{0:dd/MM/yy HH:mm:ss}",
                           totalTestResultsHtmls[0].testrun endtime) + "⟨/li⟩\r →
704
                       \n";
705
                   message +=
                       "\t\t\t\t\t\t\t\t\t\t\t\t\t\t\t\rang>Execution Time: </strong></ >
706
                       br>"
707
                       + string.Format("{0:HH:mm:ss}",
                           totalTestResultsHtmls[0].testrun time) + "\r\n";
708
                   message += "\t\t\t\t\t\t\t\t\\t\/\t\\t\\n";
709
                   message += "\t\t\t\t\t\t\\div>\r\n";
710
                   message += "\t\t\t\t\t</div>\r\n";
711
                   message += "\t\t\t\t</div>\r\n";
712
                   message += "\t\t\t</div>\r\n";
713
714
715
                   // Passed
716
                   message += "\t\t\t<div class=\"col-4\">\r\n";
717
                   message += "\t\t\t\t<div class=\"card success\">\r\n";
                   message += "\t\t\t\t\t\div class=\"card content\">\r\n";
718
                   message += "\t\t\t\t\t\t\t\t\h3>Passed</h3>\r\n";
719
                   message += "\t\t\t\t\t\t\t\div class=\"counter\">\r\n";
720
721
                   message += "\t\t\t\t\t\t\t\div>" + passedInt + "</div>\r\n";
722
                   message += "\t\t\t\t\t\t\t\t\svg class=\"check\">\r\n";
723
                   message +=
                       724
                       \"25\" />\r\n";
725
                   message +=
                       726
                       \"5\" />\r\n";
                   message += "\t\t\t\t\t\t\t\svg>\r\n";
727
                   message += "\t\t\t\t\t\t\t\div>\r\n";
728
729
                   message += "\t\t\t\t\t\t\div>\r\n";
730
                   message += "\t\t\t\t\div>\r\n";
                   message += "\t\t\t</div>\r\n";
731
732
733
                   // Failed
                   message += "\t\t\div class=\"col-4\">\r\n";
734
735
                   message += "\t\t\t\t<div class=\"card error\">\r\n";
                   message += "\t\t\t\t\t\div class=\"card content\">\r\n";
736
                   message += "\t\t\t\t\t\t\t\t\h3>Failed</h3>\r\n";
737
                   message += "\t\t\t\t\t\t\t\div class=\"counter\">\r\n";
738
                   message += "\t\t\t\t\t\t\t\t\t\div>" + failedInt + "</div>\r\n";
739
740
                   message += "\t\t\t\t\t\t\t\t\svg class=\"cross\">\r\n";
741
                   message +=
                       "\t\t\t\t\t\t\t\t\t\t\line x1=\"1\" y1=\"25\" x2=\"25\" y2= >
742
                       \"1\" />\r\n";
743
                   message +=
744
                       "\t\t\t\t\t\t\t\t\t\t\t\line x1=\"1\" y1=\"1\" x2=\"25\" y2=
                       \"25\" />\r\n";
                   message += "\t\t\t\t\t\t\t\t\svg>\r\n";
745
                   message += "\t\t\t\t\t\t\t\div>\r\n";
746
                   message += "\t\t\t\t\t\div>\r\n";
747
748
                   message += "\t\t\t\t</div>\r\n";
                   message += "\t\t\t</div>\r\n";
749
```

```
750
                     message += "\t\t</div>\r\n";
751
752
                     // Header details
753
                     message += "\t\t<div class=\"list\">\r\n";
                     message += "\t\t\t<div class=\"list content\">\r\n";
754
755
                     message += "\t\t\t\t<div class=\"list__content__row\">\r\n";
                     message += "\t\t\t\t\t\div class=\"row details\">\r\n";
756
                     message += "\t\t\t\t\t\t\div class=\"col-1\">\r\n";
757
758
                     message +=
759
                         "\t\t\t\t\t\t\t\t\span><strong>Nr.</strong></span>\r\n";
                     message += "\t\t\t\t\t\t\\div>\r\n";
760
                     message += "\t\t\t\t\t\t\t\div class=\"col-3 action\">\r\n";
761
762
                     message +=
763
                         "\t\t\t\t\t\t\t\t\span><strong>attribute</strong></span>\r >
                         \n";
                     message += "\t\t\t\t\t\t\div>\r\n";
764
                     message += "\t\t\t\t\t\t\div>\r\n";
765
766
                     message +=
                         "\t\t\t\t\tdiv class=\"element\"><strong>element name</ >
767
                         strong>\r\n";
                     message += "\t\t\t\t\div>\r\n";
768
                     message += "\t\t\t</div>\r\n";
769
770
771
                     var showErrorDisplay =
772
                         OverallSettings.ShowErrorDisplay.ToString();
773
774
                     // Details
                     foreach (var testResult in testResults)
775
776
777
                         var testOK = "list__content__row success";
                         if (testResult.result == "4")
778
779
                             testOK = "list content row error";
780
                         if (showErrorDisplay == "0" && testResult.result == "4")
781
782
                             message += "\t\t\t\t<div class=\"" + testOK + "\">\r >
783
784
                             message += "\t\t\t\t\t\div class=\"row details\">\r >
                         \n";
785
                             message += "\t\t\t\t\t\t\tdiv class=\"col-1\">\r\n";
                             message += "\t\t\t\t\t\t\t\t\t\span>" + testResult.testnr >
786
787
                                         "</span>\r\n";
788
                             message += "\t\t\t\t\t\t\div>\r\n";
789
                             message +=
                                  "\t\t\t\t\t\tcdiv class=\"col-3 action\">\r\n";
790
791
                             message += "\t\t\t\t\t\t\t\t\span>" +
                                        testResult.attribute + "</span>\r\n";
792
793
                             message += "\t\t\t\t\t\t\t\/t\/t\/t\/r\n";
794
                             message += "\t\t\t\t\t\t\div>\r\n";
795
                             message +=
                                  "\t\t\t\t\t\tcdiv class=\"element\">" +
796
797
                                 testResult.elementname + "(" +
798
                                 testResult.element + ")</div>\r\n";
                             message += "\t\t\t\t\/t\/div>\r\n";
799
800
                         }
```

```
801
802
                         if (showErrorDisplay == "1")
803
                         {
                             message += "\t\t\t\t<div class=\"" + testOK + "\">\r >
804
805
                             message += "\t\t\t\t\t\div class=\"row details\">\r >
                         \n";
                             message += "\t\t\t\t\t\t\tcdiv class=\"col-1\">\r\n";
806
807
                             message += "\t\t\t\t\t\t\t\t\span>" + testResult.testnr →
                          +
808
                                         "</span>\r\n";
                             message += "\t\t\t\t\t\t\div>\r\n";
809
810
                             message +=
811
                                  "\t\t\t\t\t\tcdiv class=\"col-3 action\">\r\n";
                             message += "\t\t\t\t\t\t\t\t\t\span>" +
812
                                         testResult.attribute + "</span>\r\n";
813
814
                             message += "\t\t\t\t\t\t\div>\r\n";
815
                             message += "\t\t\t\t\t\t\div>\r\n";
816
                             message +=
817
                                  "\t\t\t\t\tdiv class=\"element\">" +
818
                                 testResult.elementname + "(" +
                                 testResult.element + ")</div>\r\n";
819
                             message += "\t\t\t\t</div>\r\n";
820
821
                         }
822
                     }
823
824
                     message += "\t\t\t</div>\r\n";
                     message += "\t\t</div>\r\n";
825
                     message += "\t</div>\r\n";
826
                     message += "</body>\r\n";
827
                     message += "</html>";
828
829
                     TestReportToFile(message, timestring);
830
                 }
831
                 catch (Exception e)
832
                 {
                     Console.WriteLine(e);
833
                     MessageBox.Show(e.Message);
834
835
                 }
836
             }
837
             /// <summary>
838
839
             ///
                     Deteles the images.
840
             /// </summary>
841
             /// <autogeneratedoc />
             /// TODO Edit XML Comment Template for DeteleImages
842
             public static void DeteleImages()
843
844
             {
845
                 var screenshotsPath = GetCurrentDir(1);
846
                 var di = new DirectoryInfo(screenshotsPath + "screenshots\\" +
847
                                             applicationName.Trim());
                 foreach (var file in di.GetFiles()) file.Delete();
848
             }
849
850
851
             /// <summary>
852
             ///
                     Gets the counter check.
853
             /// </summary>
```

```
854
             /// <returns>System.Int32.</returns>
855
             /// <autogeneratedoc />
856
             /// TODO Edit XML Comment Template for GetCounterCheck
857
             public static int GetCounterCheck()
858
             {
859
                 return counterCheck;
             }
860
861
862
             /// <summary>
863
                     Gets the credentials.
             ///
             /// </summary>
864
             /// <param name="bestandsnaam">The bestandsnaam.</param>
865
             /// <returns>Credentials.</returns>
866
867
             /// <autogeneratedoc />
             /// TODO Edit XML Comment Template for GetCredentials
868
869
             public static Credentials GetCredentials(string bestandsnaam)
870
                 var credentials = new Credentials(bestandsnaam);
871
872
                 return credentials;
873
             }
874
875
             /// <summary>
876
             ///
                     Gets the current dir.
877
             /// </summary>
             /// <param name="niveau">The niveau.</param>
878
             /// <returns>System.String.</returns>
879
880
             /// <autogeneratedoc />
             /// TODO Edit XML Comment Template for GetCurrentDir
881
882
             public static string GetCurrentDir(int niveau)
883
884
                 var ValueList = new List<string>();
885
                 if (File.Exists("settings.xml"))
                 {
886
887
                     var xDoc = new XmlDocument();
                     xDoc.Load("settings.xml");
888
889
                     try
890
                     {
891
                         var xelement = XElement.Load("settings.xml");
892
                         var elementVars = xelement.Elements();
                         foreach (var elementVar in elementVars)
893
894
                             ValueList.Add(elementVar.Value);
895
                     }
896
                     catch (Exception ex)
897
898
                         General.LogMessage(ex.Message + ex.StackTrace, 4);
899
                         MessageBox.Show(
                              "The 'settings.xml' file is not found!!!\r\nPlease
900
                         fill in the correct drive and directory.\r\n"
901
                             + Environment.CurrentDirectory,
902
                             "Settings Error",
903
                             MessageBoxButtons.OK,
904
                             MessageBoxIcon.Error);
905
                         ValueList[0] = Environment.CurrentDirectory;
906
                     }
907
                 }
908
                 else
```

```
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```

```
18
```

```
909
910
                     MessageBox.Show(
911
                         "The 'settings.xml' file is not found!!!\r\nPlease fill >
                         in the correct drive and directory.\r\n"
912
                         + Environment.CurrentDirectory,
                         "Settings Error",
913
914
                         MessageBoxButtons.OK,
915
                         MessageBoxIcon.Error);
916
                 }
917
918
                 return ValueList[niveau];
             }
919
920
             /// <summary>
921
             ///
922
                     Gets the directory.
923
             /// </summary>
924
             /// <returns>System.String.</returns>
925
             /// <autogeneratedoc />
926
             /// TODO Edit XML Comment Template for GetDirectory
927
             public static string GetDirectory()
928
             {
929
                 var driverPath = Environment.CurrentDirectory;
930
931
                 var directory = driverPath.Split('\\');
                 var intX = 0;
932
933
                 foreach (var dir in directory)
934
                     if (dir == "SeleniumCSharpTests")
935
                         break;
936
                     else
937
                         intX++;
938
                 var di = string.Empty;
939
940
                 for (var x = 0; x < directory.Length - intX - 1; <math>x++)
941
                     di += directory[x] + "\\";
942
943
                 return di;
             }
944
945
946
             /// <summary>
947
             ///
                     Gets the settings XML strings.
948
             /// </summary>
949
             /// <param name="xmlFile">The XML file.</param>
950
             /// <param name="dirnr">The dirnr.</param>
951
             /// <returns>List&lt;System.String&gt;.</returns>
952
             public static List<string> GetSettingsXmlStrings(string xmlFile,
953
                 int dirnr = 0)
954
955
                 var ValueList = new List<string>();
956
957
                 var di = GetCurrentDir(dirnr);
                 if (File.Exists(di + xmlFile + ".xml"))
958
959
                     var xDoc = new XmlDocument();
960
961
                     xDoc.Load(di + xmlFile + ".xml");
962
                     try
963
                     {
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
```

```
19
```

```
964
                          var xelement = XElement.Load(di + xmlFile + ".xml");
                          var elementVars = xelement.Elements().Elements();
 965
 966
                          foreach (var elementVar in elementVars)
 967
                              ValueList.Add(elementVar.Value);
 968
                      }
 969
                      catch (Exception ex)
 970
 971
                          General.LogMessage(ex.Message + ex.StackTrace, 4);
 972
                          MessageBox.Show(
 973
                               "The '" + di + xmlFile + ".xml"
                              + ".xml' file is not found!!!\r\nPlease fill in the
 974
                          correct drive and directory.",
 975
                              "Settings Error",
 976
                              MessageBoxButtons.OK,
 977
                              MessageBoxIcon.Error);
 978
                      }
 979
                  }
 980
                  else
 981
                  {
 982
                      if (xmlFile != "serialXML")
 983
                          MessageBox.Show(
                               "The '" + di + xmlFile
 984
                              + ".xml' file is not found!!!\r\nPlease fill in the
 985
                          correct drive and directory.",
 986
                              "Settings Error",
 987
                              MessageBoxButtons.OK,
 988
                              MessageBoxIcon.Error);
 989
                  }
 990
                  return ValueList;
 991
 992
              }
 993
 994
              /// <summary>
 995
              ///
                      Haals the elementop.
 996
              /// </summary>
 997
              /// <param name="driver">The driver.</param>
 998
              /// <param name="testElement">The test element.</param>
 999
              /// <param name="testAttribute">The test attribute.</param>
1000
              /// <returns>IWebElement.</returns>
1001
              /// <autogeneratedoc />
              /// TODO Edit XML Comment Template for HaalElementop
1002
              public static IWebElement HaalElementop(IWebDriver driver,
1003
1004
                  string testElement, string testAttribute)
1005
              {
1006
                  IWebElement webElement = null;
1007
                  switch (testAttribute)
1008
1009
                  {
                      case "ID":
1010
1011
                          // select the drop down list
                          webElement = driver.FindElement(By.Id(testElement));
1012
1013
                          break:
1014
                      case "NAME":
1015
                          webElement = driver.FindElement(By.Name(testElement));
1016
                          break;
1017
                      case "CLASS":
```

```
1018
                          webElement = driver.FindElement(By.ClassName
                          (testElement));
1019
                          break;
1020
                      case "XPATH":
1021
                          webElement = driver.FindElement(By.XPath(testElement));
                          break;
1022
                      case "CSSSELECTOR":
1023
1024
                          webElement =
1025
                              driver.FindElement(By.CssSelector(testElement));
1026
                          break;
1027
                  }
1028
                  return webElement;
1029
1030
              }
1031
1032
              public static bool IsElementVisible(IWebElement element)
1033
1034
                  return element.Displayed && element.Enabled;
1035
              }
1036
1037
             /// <summary>
1038
              ///
                      Highlights the and screenshot.
1039
              /// </summary>
              /// <param name="driver1">The driver1.</param>
1040
1041
             /// <param name="context">The context.</param>
1042
             /// <param name="sleepTime">The sleep time.</param>
1043
             /// <param name="borderColor">Color of the border.</param>
             /// <param name="borderWidth">Width of the border.</param>
1044
1045
              /// <autogeneratedoc />
              /// TODO Edit XML Comment Template for HighlightAndScreenshot
1046
1047
              public static void HighlightAndScreenshot(
1048
                  IWebDriver driver1,
1049
                  IWebElement context,
1050
                  int sleepTime,
1051
                  string borderColor,
1052
                  int borderWidth)
1053
1054
                  var oldScript = context.GetAttribute("style");
1055
                  var rc = (RemoteWebElement)context;
1056
                  var actions = new Actions(driver1);
1057
                  if (rc.Displayed)
1058
                  {
1059
                      var visible = IsElementVisible(context);
1060
                      if (visible)
1061
1062
                          actions = new Actions(driver1);
1063
                          actions.MoveToElement(context);
1064
                          actions.Perform();
1065
                      }
1066
                      var driver = (IJavaScriptExecutor)rc.WrappedDriver;
1067
1068
1069
                      var script = "arguments[0].style.cssText = \"border-width: " >
1070
                                   borderWidth
1071
                                   + "px; border-style: solid; border-color: "
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
```

```
1072
                                    + borderColor.ToLower() + "\";";
1073
                      driver.ExecuteScript(script, rc);
1074
1075
                      Thread.Sleep(sleepTime);
1076
                      var clear = string.Empty;
1077
1078
                      if (oldScript.Length > 0)
1079
                          clear = @"arguments[0].style.cssText = 'oldScript'";
1080
                      else
1081
                          clear = @"arguments[0].style.cssText = """"; ";
1082
                      driver.ExecuteScript(clear, rc);
1083
                  }
1084
1085
              }
1086
1087
              /// <summary>
1088
                      Initalizes the serial key.
              ///
1089
              /// </summary>
1090
              /// <returns>System.Int32.</returns>
              public static int InitalizeSerialKey()
1091
1092
              {
1093
                  var value = 1;
                  var xmlSerial = GetSettingsXmlStrings("serialXML");
1094
1095
                  if (xmlSerial.Count > 0)
1096
                      serialKeyXml = new SerialKeyXML(
1097
1098
                          xmlSerial[0],
1099
                          xmlSerial[1],
1100
                          xmlSerial[2],
1101
                          xmlSerial[3],
1102
                          xmlSerial[4],
1103
                          xmlSerial[5]);
                      General.SetSerialKeyXML(serialKeyXml);
1104
1105
                      value = 2;
                  }
1106
1107
                  return value;
1108
1109
              }
1110
              /// <summary>
1111
1112
                      Initializes the database connection.
1113
              /// </summary>
1114
              /// <param name="loginU">if set to <c>true</c> [login u].</param>
1115
              public static void InitializeDatabaseConnection(bool loginU)
1116
              {
1117
                   * Gebruiker dient in te loggen op een andere database als waar 🔻
1118
                     de data staan
1119
1120
                   */
                  //var host = "SCHMEITSNAS.SYNOLOGY.ME";
1121
                  //var database = "autotest";
1122
1123
                  //var port = "3306";
                  //var user = "autotest";
1124
                  //var password = "NiFSi1fZjbJ4zXE8";
1125
1126
                  //
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
                                                                                    22
1127
                  var host = "";
                  var database = "":
1128
                  var port = "";
1129
                  var user = "";
1130
                  var password = "";
1131
                  General.LogMessage("InitializeDatabaseConnection(" + loginU +
1132
                    ");",
1133
                      1);
1134
1135
                  if (loginU == false)
1136
                      var xelement = XElement.Load(GetCurrentDir(0) +
1137
                        "connect.xml");
1138
                      General.LogMessage("xelement: " + xelement, 1);
                      var testsElements = xelement.Elements();
1139
1140
                      foreach (var testElement in testsElements)
1141
                          host = testElement.Element("host").Value;
1142
1143
                          database = testElement.Element("database").Value;
1144
                          port = testElement.Element("port").Value;
1145
                          user = testElement.Element("username").Value;
                          password = testElement.Element("password").Value;
1146
1147
                      }
1148
                  }
1149
1150
                  // anders hard gecodeerde gegevens gebruiker voor de database
1151
                  databaseConnection = new DatabaseConnection(
1152
                      host,
1153
                      database,
1154
                      port,
1155
                      user,
1156
                      password);
1157
                  General.LogMessage(databaseConnection.ToString(), 1);
1158
                  General.LogMessage("Host:
                                                " + databaseConnection.Host, 1);
1159
                  General.LogMessage("Database: " + databaseConnection.Database,
1160
                    1);
1161
                  General.LogMessage("Port:
                                                 " + databaseConnection.Port, 1);
1162
                  General.LogMessage("User:
                                                 " + databaseConnection.User, 1);
                  General.LogMessage("Password: " + databaseConnection.Password,
1163
1164
                  General.SetDatabaseConnection(databaseConnection);
1165
              }
1166
1167
              /// <summary>
              ///
                      Determines whether [is element present] [the specified
1168
                driver].
1169
              /// </summary>
1170
              /// <param name="driver">The driver.</param>
              /// <param name="idString">The identifier string.</param>
1171
              /// <returns><c>true</c> if [is element present] [the specified
1172
                driver]; otherwise, <c>false</c>.</returns>
1173
              /// <autogeneratedoc />
```

/// TODO Edit XML Comment Template for IsElementPresent

public static bool IsElementPresent(IWebDriver driver, string

1174

```
idString)
1176
              {
1177
                  try
1178
                  {
1179
                      driver.FindElement(By.Id(idString));
1180
                      return true;
                  }
1181
1182
                  catch (NoSuchElementException)
1183
1184
                      return false;
1185
                  }
1186
              }
1187
1188
              /// <summary>
                      Determines whether this instance is windows10.
1189
1190
              /// </summary>
              /// <returns><c>true</c> if this instance is windows10; otherwise,
1191
                <c>false</c>.</returns>
1192
              /// <autogeneratedoc />
1193
              /// TODO Edit XML Comment Template for IsWindows10
1194
              public static bool IsWindows10()
1195
              {
1196
                  var reg =
1197
                      Registry.LocalMachine.OpenSubKey(
1198
                          @"SOFTWARE\Microsoft\Windows NT\CurrentVersion");
1199
                  var productName = (string)reg.GetValue("ProductName");
1200
1201
1202
                  return productName.StartsWith("Windows 10");
1203
              }
1204
1205
              public static void TestUitgevoerd(bool uit)
1206
1207
                  uitgevoerd = uit;
1208
              }
1209
              /// <summary>
1210
1211
              ///
                      Sets the name of the application.
1212
              /// </summary>
1213
              /// <param name="name">The name.</param>
1214
              /// <autogeneratedoc />
1215
              /// TODO Edit XML Comment Template for setApplicationName
1216
              public static void setApplicationName(string name)
1217
              {
1218
                  applicationName = name;
1219
              }
1220
1221
              /// <summary>
1222
              ///
                      Sets the name of the class.
1223
              /// </summary>
1224
              /// <param name="name">The name.</param>
1225
              /// <autogeneratedoc />
1226
              /// TODO Edit XML Comment Template for setClassName
1227
              public static void setClassName(string name)
1228
              {
1229
                  className = name;
```

```
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```

```
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```

```
1230
1231
1232
              /// <summary>
1233
             ///
                      Sets the counter check.
1234
             /// </summary>
1235
             /// <param name="value">The value.</param>
1236
              /// <autogeneratedoc />
1237
              /// TODO Edit XML Comment Template for SetCounterCheck
1238
              public static void SetCounterCheck(int value)
1239
              {
                  counterCheck = value;
1240
1241
              }
1242
             /// <summary>
1243
1244
              ///
                      Sets the HTML code.
1245
             /// </summary>
1246
             /// <param name="timestring">The timestring.</param>
1247
              /// <returns>System.String.</returns>
1248
             /// <autogeneratedoc />
1249
             /// TODO Edit XML Comment Template for SetHTMLCode
1250
             public static string SetHTMLCode(string timestring)
1251
1252
                  var testResults = new List<TestResults.TestResultsHTML>();
1253
                  testResults = TestResults.GetTestResultsHTML(timestring);
1254
                  setApplicationName(testResults[0].application);
1255
1256
                  var screenshotsPath = GetCurrentDir(1);
1257
                  var pathG = screenshotsPath.Split('\\');
1258
                  var g = string.Empty;
1259
1260
                  for (var i = 0; i < pathG.Length - 2; i++) g += pathG[i] + "\\";</pre>
1261
1262
                  screenshotsPath = g;
1263
                  var name1 = applicationName.Trim();
1264
                  CheckScreenshotDir("TestReports\\" + name1);
1265
1266
1267
                  var relativePath = screenshotsPath + "TestReports\\" + name1 + "\ >
                    \";
1268
                  HtmlPage = relativePath + "TestReport_" + timestring + ".html";
1269
                  return HtmlPage;
              }
1270
1271
1272
              /// <summary>
1273
              ///
                      Sets the testnr.
1274
              /// </summary>
              /// <param name="testnr">The testnr.</param>
1275
1276
             /// <autogeneratedoc />
1277
             /// TODO Edit XML Comment Template for setTestnr
1278
             public static void setTestnr(string testnr)
1279
              {
1280
                  Functions.testnr = testnr;
1281
              }
1282
              /// <summary>
1283
1284
                      Sets the testrun identifier.
```

```
1285
              /// </summary>
1286
              /// <param name="testrun">The testrun.</param>
1287
              /// <autogeneratedoc />
1288
              /// TODO Edit XML Comment Template for setTestrunID
1289
              public static void setTestrunID(string testrun)
1290
              {
1291
                  _testrun = testrun;
1292
              }
1293
1294
              public static void setProjectName(string project)
1295
1296
                  project = project;
1297
              }
1298
1299
              public static int getProjectID()
1300
1301
                  var projectID = 0;
1302
                  if (_project != null)
1303
1304
                      var query =
1305
                          "SELECT id FROM projects WHERE UPPER(project_name) = '" +
                          project.ToUpper() + "';";
1306
1307
                      var ds = GenericDataRead.GetData(query);
1308
                      if (ds.Rows.Count > 0)
1309
                          projectID = Convert.ToInt32(ds.Rows[0][0].ToString());
                  }
1310
1311
1312
                  return projectID;
1313
              }
1314
1315
              /// <summary>
1316
              ///
                      Shows the data.
1317
              /// </summary>
1318
              /// <param name="driver">The driver.</param>
1319
              /// <autogeneratedoc />
              /// TODO Edit XML Comment Template for ShowData
1320
              public static void ShowData(IWebDriver driver)
1321
1322
              {
1323
                  var PageURL = driver.Url;
1324
                  var PageSource = driver.PageSource;
1325
1326
                  var stringL = PageSource;
1327
                  General.LogMessage(stringL, 5);
1328
              }
1329
1330
              /// <summary>
1331
                      Splits the bestand.
              ///
1332
              /// </summary>
1333
              /// <param name="bestand">The bestand.</param>
1334
              /// <returns>System.String.</returns>
              /// <autogeneratedoc />
1335
              /// TODO Edit XML Comment Template for SplitBestand
1336
1337
              public static string SplitBestand(string bestand)
1338
1339
                  var ele = bestand.Split('\\');
1340
                  var laatste = ele[ele.Length - 1];
```

```
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```

```
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```

```
1341
                  var naam = laatste.Split('.');
1342
                  return naam[0];
1343
              }
1344
1345
              /// <summary>
1346
              ///
                      Switches to next tab.
              /// </summary>
1347
1348
              /// <param name="driver">The driver.</param>
1349
              /// <param name="handlesNr">The handles nr.</param>
1350
              /// <autogeneratedoc />
1351
              /// TODO Edit XML Comment Template for SwitchToNextTab
1352
              public static void SwitchToNextTab(IWebDriver driver, int handlesNr)
1353
1354
                  if (driver.WindowHandles.Count > handlesNr)
1355
                  {
1356
                      driver.SwitchTo().Window(driver.WindowHandles[handlesNr]);
1357
                  }
1358
                  else
1359
                  {
1360
                      Thread.Sleep(2000);
1361
                      SwitchToNextTab(driver, handlesNr);
                  }
1362
1363
              }
1364
1365
              /// <summary>
1366
              ///
                      Takes the screenshot.
1367
              /// </summary>
1368
              /// <param name="driver">The driver.</param>
1369
              /// <param name="result">The result.</param>
1370
              /// <param name="name">The name.</param>
1371
              /// <autogeneratedoc />
1372
              /// TODO Edit XML Comment Template for TakeScreenshot
              public static void TakeScreenshot(IWebDriver driver, int result,
1373
1374
                  string name = "screenshot")
1375
              {
1376
                  var screenshotsPath = GetCurrentDir(1);
1377
                  var pathG = screenshotsPath.Split('\\');
1378
                  var g = string.Empty;
1379
1380
                  for (var i = 0; i < pathG.Length - 2; i++) g += pathG[i] + "\\";</pre>
1381
1382
                  screenshotsPath = g;
1383
                  var name1 = applicationName.Trim();
1384
1385
                  if (result == 4)
1386
                  {
1387
                      var relativePath =
1388
                          screenshotsPath + "screenshots\\" + name1 + "\\";
1389
                      ScreenshotName =
1390
                          relativePath + name1 + "-" +
                          string.Format("{0:yyyyMMddHHmmssFFF}", DateTime.UtcNow)
1391
                          + "testnr_" + SetTestnr + ".png";
1392
                      General.LogMessage("Screenshot name: " + ScreenshotName, 1);
1393
1394
                      driver.TakeScreenshot().SaveAsFile(ScreenshotName,
1395
                          ScreenshotImageFormat.Png);
1396
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
```

```
27
```

```
1397
                      General.LogMessage("Error", result, name1,
1398
                          Convert.ToInt32(SetTestnr));
1399
                  }
1400
1401
                  ShowData(driver);
              }
1402
1403
1404
             /// <summary>
1405
              ///
                      Teksts the vervanging.
1406
             /// </summary>
1407
             /// <param name="tekst">The tekst.</param>
1408
             /// <returns>System.String.</returns>
1409
             /// <autogeneratedoc />
1410
              /// TODO Edit XML Comment Template for TekstVervanging
              public static string TekstVervanging(string tekst)
1411
1412
              {
1413
                  var tekstGewijzigd = tekst;
1414
                  switch (tekst)
1415
                  {
                      case "=CurrentDate()":
1416
1417
                          tekstGewijzigd = DateTime.Now.Day + "-" +
                                           DateTime.Now.Month + "-" +
1418
1419
                                           DateTime.Now.Year;
1420
                          break;
1421
                  }
1422
1423
                  return tekstGewijzigd;
1424
              }
1425
              /// <summary>
1426
1427
              ///
                      Tests the report to file.
1428
              /// </summary>
1429
             /// <param name="message">The message.</param>
1430
             /// <param name="timestring">The timestring.</param>
1431
             /// <autogeneratedoc />
              /// TODO Edit XML Comment Template for TestReportToFile
1432
              public static void TestReportToFile(string message, string
1433
                timestring)
1434
              {
1435
                  SetHTMLCode(Convert.ToInt32(timestring.Substring(4, 8)).ToString →
1436
                  var sw = File.AppendText(HtmlPage); // Change filename
1437
                  try
1438
                  {
                      var logLine = $"{message}";
1439
1440
                      sw.WriteLine(logLine);
1441
                  }
                  finally
1442
1443
                  {
1444
                      sw.Close();
                  }
1445
1446
              }
1447
1448
              public static void CodeToFile(string message, string timestring)
1449
              {
1450
                  var sw = File.AppendText(HtmlPage); // Change filename
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
```

```
28
```

```
1451
                  try
1452
                  {
1453
                      var logLine = $"{message}";
1454
                      sw.WriteLine(logLine);
1455
                  }
1456
                  finally
1457
1458
                      sw.Close();
1459
                  }
1460
              }
1461
1462
              /// <summary>
1463
              ///
                      Teststaps the specified driver.
1464
              /// </summary>
              /// <param name="driver">The driver.</param>
1465
1466
              /// <param name="machinestatic">The machinestatic.</param>
1467
              /// <param name="radiobutton">The radiobutton.</param>
1468
              /// <param name="version">The version.</param>
1469
              /// <param name="bestandsnaamArgument">The bestandsnaam argument.</ >
                param>
1470
              /// <autogeneratedoc />
              /// TODO Edit XML Comment Template for Teststap
1471
1472
              public static void Teststap(IWebDriver driver, string machinestatic,
1473
                  string radiobutton, string version,
                  string bestandsnaamArgument, bool opslaan, string saveWat = "")
1474
1475
              {
1476
                  var table = General.GetTestrun(bestandsnaamArgument);
1477
                  var actions = new Actions(driver);
1478
                  // var credits = GetCredentials(bestandsnaamArgument);
1479
1480
                  var inhoud = "";
1481
                  var vestandsnaam = "";
1482
                  var credits =
1483
                      GetCredentials( project + @"\" + bestandsnaamArgument);
1484
1485
                  var machineNumber = Convert.ToString(getMachineCode());
1486
1487
                  for (var intx = 0; intx < table.Rows.Count; intx++)</pre>
1488
1489
                      var strikt = true;
1490
                      var savedAttribute =
                          table.Rows[intx]["save attribute"].ToString().Trim();
1491
1492
                      var drTitle = driver.Title;
1493
                      if (drTitle != null)
1494
                      {
1495
                          vestandsnaam =
                              table.Rows[intx]["testcase"].ToString().Trim();
1496
1497
                          setClassName(table.Rows[intx]["testcase"].ToString()
1498
                              .Trim());
1499
                          setTestnr(table.Rows[intx]["testnr"].ToString().Trim());
1500
                          if (table.Rows[intx]["test check strict"].ToString()
1501
                              .ToUpper() == "TRUE")
1502
1503
                              strikt = true;
1504
                          else
1505
                              strikt = false;
```

```
1506
1507
                           var v = (table != null
1508
                               ? table != null ? table.Rows[intx]["testurl"] : null
1509
                               : null) != string.Empty;
1510
                           if (table.Rows[intx]["testurl"] != null &&
1511
                               table.Rows.Count > intx && v)
1512
1513
                               if (table.Rows[intx]["testurl"].ToString().Trim()
1514
                                       .Length > 0
1515
                                   && table.Rows[intx]["testswitch"].ToString()
1516
                                       .ToUpper() == "YES")
1517
                               {
1518
                                   var handles = driver.WindowHandles;
1519
                                   foreach (var handle in handles)
1520
1521
                                       var contains = driver.SwitchTo().Window
                          (handle)
                                            .Url
1522
1523
                                            .Contains(table.Rows[intx]["testurl"]
1524
                                                .ToString().Trim());
1525
                                   }
                               }
1526
1527
1528
                           try
1529
                           {
                               if (table.Rows[intx]["testaction"].ToString() ==
1530
                          "wait")
1531
1532
                                   Thread.Sleep(Convert.ToInt32(
1533
                                       table.Rows[intx]["testtext"].ToString()
1534
                                            .Trim()) * 1000);
1535
                               }
                               else
1536
1537
                               {
1538
                                   var idString = table.Rows[intx]["testelement"]
1539
                                       .ToString().Trim();
1540
                                   var testname = table.Rows[intx]["testname"]
1541
                                       .ToString().Trim();
1542
                                   var testcase = table.Rows[intx]["testcase"]
1543
                                       .ToString().Trim();
                                   var testaction = table.Rows[intx]["testaction"]
1544
1545
                                       .ToString().Trim();
1546
1547
                                   if(idString != string.Empty)
1548
1549
                                       Assert.IsTrue(
1550
                                           CheckBy(
1551
                                               driver,
1552
                                               table.Rows[intx]
                          ["testelement"].ToString()
1553
                                                    .Trim(),
1554
                                               table.Rows[intx]
                          ["testattribute"].ToString()
1555
                                                    .Trim(),
                                               table.Rows[intx]["testnr"].ToString()
1556
1557
                                                    .Trim(),
```

```
... ster \verb|\selenium| test tool \verb|\GeneralFunctionality| Functions.cs
1558
                                                 radiobutton,
1559
                                                 table.Rows[intx]
                           ["testext_check"].ToString()
1560
                                                     .Trim(),
1561
                                                 table.Rows[intx]
                                                                                         P
                           ["testaction"].ToString()
1562
                                                     .Trim(),
                                                 table.Rows[intx]["testurl"].ToString >
1563
                           ()
1564
                                                     .Trim(),
1565
                                                table.Rows[intx]
                                                                                         P
                           ["testswitch"].ToString()
1566
                                                     .Trim(),
                                                 table.Rows[intx]["testdescription"]
1567
1568
                                                     .ToString().Trim(),
1569
                                                 table.Rows[intx]
                                                                                         P
                           ["testinverse"].ToString()
1570
                                                     .Trim(),
1571
                                                 table.Rows[intx]
                                                                                         P
                           ["test_comment"].ToString()
1572
                                                     .Trim(),
                                                 table.Rows[intx]["testname"].ToString →
1573
                           ()
1574
                                                     .Trim(),
1575
                                                 table.Rows[intx]["testcase"].ToString >
                           ()
1576
                                                     .Trim(),
1577
                                                 version,
1578
                                                 0,
1579
                                                machineNumber,
1580
                                                 table.Rows[intx]
                           ["testlogicalobjectname"]
1581
                                                     .ToString().Trim(),
1582
                                                 credits.Url,
1583
                                                 table.Rows[intx]["testtext"].ToString →
                           ()
1584
                                                     .Trim(),
1585
                                                 bestandsnaamArgument,
1586
1587
                                                 opslaan,
1588
                                                 strikt
1589
                                            ));
1590
                                    }
1591
1592
1593
                                    IWebElement content = null;
1594
                                    var tekst1 = string.Empty;
1595
1596
                                    var testElement = table.Rows[intx]["testelement"]
1597
                                        .ToString().Trim();
1598
1599
1600
1601
1602
                                    var testAttribute =
                                        table.Rows[intx]["testattribute"].ToString()
1603
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
```

```
31
```

```
1604
                                            .Trim()
1605
                                            .ToUpper();
1606
                                   if (testElement != string.Empty)
1607
1608
                                       switch (testAttribute)
1609
                                            case "ID":
1610
1611
                                                content =
1612
                                                    driver.FindElement(By.Id
                          (testElement));
1613
                                                break;
                                            case "NAME":
1614
1615
                                                content =
1616
                                                    driver.FindElement(
1617
                                                        By.Name(testElement));
1618
                                                break;
                                            case "CLASS":
1619
1620
                                                content =
1621
                                                    driver.FindElement(
1622
                                                        By.ClassName(testElement));
1623
                                                break;
                                            case "XPATH":
1624
1625
                                                content =
1626
                                                    driver.FindElement(
1627
                                                        By.XPath(testElement));
1628
                                                break;
1629
                                            case "CSSSELECTOR":
1630
                                                content =
1631
                                                    driver.FindElement(
1632
                                                        By.CssSelector(testElement));
1633
                                                break;
1634
                                       }
                                   }
1635
1636
                                   if (table.Rows[intx]["testelement"].ToString()
1637
                                            .Trim().Length == 0
1638
                                       || table.Rows[intx]["testelement"].ToString()
1639
                                            .ToUpper().Trim() == "POPUP")
1640
1641
                                   {
1642
                                       if (table.Rows[intx]["testtext"].ToString()
1643
                                            .ToUpper() == "DISMISS")
                                            ExpectedConditions.AlertIsPresent()
1644
1645
                                                .Invoke(driver).Dismiss();
                                       if (table.Rows[intx]["testtext"].ToString()
1646
                                            .ToUpper() == "ACCEPT")
1647
                                            ExpectedConditions.AlertIsPresent()
1648
1649
                                                .Invoke(driver).Accept();
1650
                                   }
1651
1652
                                   if (table.Rows[intx]["testaction"].ToString() !=
1653
1654
1655
                                       if (table.Rows[intx]["testaction"].ToString()
1656
                                                .Trim().Length > 0
1657
                                            || table.Rows[intx]
                                                                                       P
                          ["testaction"].ToString()
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
                                                                                      32
1658
                                                .Trim().ToLower() != "empty")
1659
                                            switch (table.Rows[intx]["testaction"]
1660
                                                .ToString())
1661
                                            {
1662
                                                case "switch to url":
                                                    driver.Navigate()
1663
                                                        .GoToUrl(
1664
1665
                                                            table.Rows[intx]
                          ["testurl"]
1666
                                                                 .ToString());
1667
1668
                                                    inhoud +=
1669
                                                        "driver.Navigate().GoToUrl('" →
1670
                                                        table.Rows[intx]["testurl"] +
                                                        "')\r\n";
1671
1672
                                                    break;
1673
1674
                                                case "click":
1675
                                                    actions = new Actions(driver);
1676
                                                    actions.MoveToElement(content);
1677
                                                    actions.Perform();
1678
                                                    content.Click();
1679
                                                    break;
1680
                                                case "value":
1681
                                                    if (table.Rows[intx]
                          ["testtext"] !=
                                                        null && table.Rows.Count >
1682
                          intx
1683
                                                        && (string)table.Rows[intx][
1684
                                                            "testtext"]
1685
                                                        != string.Empty)
1686
                                                    {
1687
                                                        tekst1 = TekstVervanging(
                                                            table.Rows[intx]
1688
                          ["testtext"]
1689
                                                                 .ToString().Trim());
1690
                                                        actions = new Actions
                          (driver);
1691
                                                        actions.MoveToElement
                          (content);
1692
                                                        actions.Perform();
1693
                                                        content.Click();
1694
                                                        content.Clear();
                                                        content.SendKeys(tekst1);
1695
1696
                                                    }
1697
1698
                                                    break;
1699
                                                case "sendkeys":
1700
                                                    if (table.Rows[intx]
                          ["testtext"] !=
                                                        null && table.Rows.Count >
1701
                          intx
1702
                                                        && (string)table.Rows[intx][
1703
                                                            "testtext"]
1704
                                                        != string.Empty)
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
```

```
1705
                                                        tekst1 = TekstVervanging(
1706
                                                            table.Rows[intx]
                                                                                       P
                          ["testtext"]
1707
                                                                 .ToString().Trim());
                                                    if (table.Rows[intx][
1708
1709
                                                             "test password"] != null →
                          &&
                                                        table.Rows.Count > intx
1710
1711
                                                        && table.Rows[intx][
1712
                                                             "test_password"].ToString →
                          ()
1713
                                                        != string.Empty)
1714
                                                        tekst1 = TekstVervanging(
1715
                                                            table.Rows[intx][
1716
                                                                     "test_password"]
                                                                 .ToString().Trim());
1717
1718
                                                    actions = new Actions(driver);
1719
1720
                                                    actions.MoveToElement(content);
1721
                                                    actions.Perform();
1722
1723
                                                    var tekst27 = tekst1;
1724
1725
                                                    if (tekst1.ToUpper()
1726
                                                         .Contains("{ENTER}"))
1727
                                                    {
1728
                                                        var splitTekst =
                                                            tekst1.Split('{');
1729
1730
                                                        content.Click();
1731
                                                        content.Clear();
1732
                                                        content.SendKeys(splitTekst
                          [0] +
1733
                                                            Keys.Enter);
1734
                                                    }
1735
                                                    else
1736
                                                    {
1737
                                                        switch (tekst1.ToUpper())
1738
                                                        {
1739
                                                             case "TAB":
1740
                                                                tekst1 = Keys.Tab;
1741
                                                                break;
                                                             case "PGUP":
1742
1743
                                                                tekst1 = Keys.PageUp;
1744
                                                                break;
1745
                                                            case "PGDN":
1746
                                                                tekst1 =
                                                                                       P
                          Keys.PageDown;
1747
                                                                break;
1748
                                                            case "ENTER":
1749
                                                                tekst1 = Keys.Enter;
1750
                                                                break;
                                                            case "ESC":
1751
1752
                                                                tekst1 = Keys.Escape;
1753
                                                                 break;
1754
                                                        }
1755
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
```

```
1756
                                                        content.Click();
1757
                                                        if (tekst27.ToUpper() !=
                                                             "ENTER" &&
1758
1759
                                                            tekst27.ToUpper() !=
                                                             "TAB" &&
1760
1761
                                                            tekst27.ToUpper() !=
1762
                                                             "PGUP" &&
1763
                                                            tekst27.ToUpper() !=
                                                             "PGDN" &&
1764
1765
                                                            tekst27.ToUpper() !=
                          "ESC")
1766
                                                             content.Clear();
1767
                                                        content.SendKeys(tekst1);
1768
                                                    }
1769
1770
1771
                                                    break;
1772
1773
                                                case "select":
1774
                                                    var tekst2 = TekstVervanging(
1775
                                                        table.Rows[intx]["testtext"]
1776
                                                             .ToString().Trim());
1777
1778
                                                    IWebElement education = null;
1779
                                                    SelectElement selectElement =
                          null;
1780
1781
                                                    switch (table.Rows[intx][
1782
                                                             "testattribute"].ToString >
                          ()
1783
                                                        .Trim().ToUpper())
1784
                                                    {
                                                        case "ID":
1785
1786
                                                            // select the drop down
                          list
1787
                                                            education =
1788
                                                                 driver.FindElement(
1789
                                                                     By.Id(table.Rows[
                                                                             intx][
1790
1791
                                                                                       P
      "testelement"]
1792
                                                                         .ToString()
1793
                                                                         .Trim()));
1794
                                                            break;
1795
                                                        case "NAME":
1796
                                                            education =
1797
                                                                 driver.FindElement(
1798
                                                                     By.Name(
1799
                                                                         table.Rows
                          [intx]
1800
      ["testelement"]
1801
                                                                              .ToString →
                          ()
1802
                                                                              .Trim
                                                                                       P
                          ()));
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
                                                                                       35
1803
                                                             break;
                                                        case "CLASS":
1804
1805
                                                            education =
1806
                                                                 driver.FindElement(
                                                                     By.ClassName(
1807
1808
                                                                         table.Rows
                          [intx]
1809
                                                                                       P
      ["testelement"]
1810
                                                                              .ToString →
                          ()
1811
                                                                              .Trim
                          ()));
1812
                                                            break;
1813
                                                        case "XPATH":
1814
                                                            education =
1815
                                                                 driver.FindElement(
1816
                                                                     By.XPath(
1817
                                                                         table.Rows
                                                                                       P
                          [intx]
1818
      ["testelement"]
1819
                                                                              .ToString →
                          ()
1820
                                                                              .Trim
                          ()));
1821
                                                            break;
1822
                                                        case "CSSSELECTOR":
1823
                                                            education =
1824
                                                                 driver.FindElement(
1825
                                                                     By.CssSelector(
1826
                                                                         table.Rows
                                                                                       P
                          [intx]
1827
                                                                                       P
      ["testelement"]
1828
                                                                              .ToString →
                          ()
1829
                                                                              .Trim
                          ()));
1830
                                                            break;
1831
                                                    }
1832
1833
                                                    //create select element object
1834
                                                    selectElement =
1835
                                                        new SelectElement(education);
1836
                                                    // select by text
                                                    selectElement.SelectByText
1837
                          (tekst2);
1838
                                                    break;
1839
                                                case "move_to":
1840
                                                    actions = new Actions(driver);
1841
                                                    actions.MoveToElement(content);
1842
                                                    actions.Perform();
1843
                                                    break;
1844
                                                case "upload":
1845
```

```
...ster\seleniumtesttool\GeneralFunctionality\Functions.cs
```

```
1846
                                                    tekst1 = TekstVervanging(
1847
                                                        table.Rows[intx]["testtext"]
1848
                                                            .ToString().Trim());
1849
                                                    var file1 =
                                                        tekst1.Replace("\'", "\\'");
1850
                                                    content.Click();
1851
                                                    Thread.Sleep(5000);
1852
1853
                                                    SendKeys.SendWait(file1);
1854
                                                    SendKeys.SendWait(@"{Enter}");
1855
                                                    break;
                                                case "checkbox":
1856
                                                    IWebElement checkbox1 = null;
1857
1858
1859
                                                    checkbox1 = HaalElementop(driver,
                                                        testElement, testAttribute);
1860
1861
                                                    var oldScript =
1862
                                                        checkbox1.GetAttribute(
1863
1864
                                                            "checked");
1865
1866
                                                    var tekst3 =
                                                        table.Rows[intx]["testtext"]
1867
1868
                                                            .ToString().Trim();
1869
                                                    var rc =
1870
                                                        (RemoteWebElement)checkbox1;
1871
                                                    var driver1 =
                                                        (IJavaScriptExecutor)rc
1872
1873
                                                            .WrappedDriver;
1874
                                                    var script1 = "";
                                                    if (tekst3.ToUpper() == "TRUE" &&
1875
1876
                                                        oldScript == null)
1877
                                                        script1 =
1878
                                                            "arguments
                                                                                       P
                          [0].setAttribute('checked', 'true');";
1879
                                                    if (tekst3.ToUpper() == "FALSE"
                          &&
                                                        oldScript != null)
1880
1881
                                                        script1 =
1882
                                                            "arguments
                                                                                       P
                          [0].removeAttribute('checked');";
1883
1884
                                                    driver1.ExecuteScript(script1,
                          rc);
1885
                                                    break;
                                                case "switch to iFrame":
1886
1887
                                                    var tekstFrame =
                                                        table.Rows[intx]["testtext"]
1888
                                                            .ToString().Trim();
1889
1890
                                                    var detailFrame = content;
1891
                                                    driver.SwitchTo()
                                                        .Frame(detailFrame);
1892
1893
                                                    break:
1894
                                                case "switch to default":
1895
                                                    driver.SwitchTo().DefaultContent >
                          ();
1896
                                                    break;
```

```
1897
                                               case "set_value":
                                                   var query = string.Empty;
1898
1899
1900
                                                       "SELECT * FROM saved_values
1901
                          WHERE ";
1902
                                                   query +=
                                                       "saved_values_testname = '" +
1903
                                                       bestandsnaamArgument + "' AND →
1904
                                                   query += "saved_values_name = '" >
1905
1906
                                                       table.Rows[intx]["testtext"]
1907
                                                            .ToString().Trim() +
1908
                                                   var dt =
1909
                                                       GenericDataRead.GetData
                          (query);
1910
1911
                                                   if (dt.Rows.Count > 0)
1912
1913
                                                       // Indien variable voor
                          testscript bestaat, update deze uit tabel 'saved_values'
1914
                                                       var save_id = dt.Rows[0][0]
1915
                                                            .ToString();
1916
                                                       query =
1917
                                                           "UPDATE saved_values SET >
                          saved_values_value = '";
1918
                                                       if (savedAttribute ==
                          string.Empty)
1919
                                                           query +=
                          content.Text.Trim()
                                                                    .Replace("\r\n",
1920
1921
                                                                        string.Empty) →
1922
1923
                                                       if (savedAttribute.ToUpper() →
                          == "HREF")
1924
                                                           query +=
                          content.GetAttribute(
                                                                    "href").Trim()
1925
1926
                                                               "";
1927
1928
                                                       if (savedAttribute.ToUpper() →
                          == "ID")
1929
                                                           query +=
                          content.GetAttribute(
                                                                         "id").Trim()
1930
1931
                                                                     T" ";
1932
1933
                                                       if (savedAttribute.ToUpper() →
                          == "NAME")
1934
                                                           query +=
                          content.GetAttribute(
1935
                                                                         "name").Trim →
                          ()
```

```
1936
                                                                      "' ";
1937
                                                        query += "WHERE ";
1938
1939
                                                        query += "saved_values_id = " →
1940
                                                             save_id + ";";
                                                    }
1941
1942
                                                    else
1943
                                                    {
1944
                                                        // anders Voeg de gegevens
                          toe aan de tabel 'saved_values'
1945
                                                        query =
1946
                                                             "INSERT INTO saved_values >
                           (saved_values_testname, ";
1947
                                                        query +=
                                                             "saved_values_name,
1948
                          saved_values_value, projectid) ";
                                                        query += "VALUES('" +
1949
1950
                                                             bestandsnaamArgument +
                                                        "', ";
query += "'" +
1951
1952
1953
                                                             table.Rows[intx]
                          ["testtext"]
1954
                                                                 .ToString().Trim() +
1955
1956
1957
                                                        if (savedAttribute ==
                          string.Empty)
1958
                                                             query +=
                          content.Text.Trim()
1959
                                                                     .Replace("\r\n",
1960
                                                                         string.Empty) →
1961
1962
                                                        if (savedAttribute.ToUpper() >
                          == "HREF")
1963
                                                             query +=
                          content.GetAttribute(
1964
                                                                     "href").Trim()
1965
                                                                 "', ";
1966
1967
                                                        if (savedAttribute.ToUpper() >
                          == "ID")
1968
                                                                                        P
                                                             query +=
                          content.GetAttribute(
1969
                                                                          "id").Trim()
1970
                                                                      "', ";
1971
1972
                                                        if (savedAttribute.ToUpper() →
                          == "NAME")
1973
                                                             query +=
                          content.GetAttribute(
1974
                                                                          "name").Trim →
                          ()
1975
1976
```

```
... ster \verb|\selenium test tool \verb|\GeneralFunctionality \verb|\Functions.cs||
```

```
39
```

```
1977
                                                        query += getProjectID() +
                          ");";
1978
                                                    }
1979
1980
                                                    GenericDataRead.INUPDEL(query);
1981
                                                    break;
                                                case "get_value":
1982
1983
1984
                                                    query =
1985
                                                        "SELECT saved_values_value,
                          attribute FROM saved_values ";
                                                    // query += "WHERE
1986
                          saved_values_testname = '" + bestandsnaamArgument + "' AND?
                                                    query += "WHERE ";
1987
                                                    query += "projectid = " +
1988
                                                        getProjectID() + " AND ";
1989
                                                    query += "saved_values_name = '" >
1990
1991
                                                        table.Rows[intx]["testtext"]
1992
                                                            .ToString().Trim() +
1993
                                                    var dtget =
1994
                                                        GenericDataRead.GetData
                          (query);
1995
1996
                                                    if (dtget.Rows.Count > 0)
1997
1998
                                                        if (dtget.Rows[0][1]
1999
                                                            .ToString() ==
                          string.Empty)
2000
                                                        {
2001
                                                            actions =
2002
                                                                new Actions(driver);
                                                            actions.MoveToElement(
2003
2004
                                                                content);
2005
                                                            actions.Perform();
2006
                                                            var tekstget =
2007
                                                                dtget.Rows[0][0]
2008
                                                                     .ToString();
2009
                                                            content.Click();
2010
                                                            content.Clear();
2011
                                                            content.SendKeys
                          (tekstget);
                                                        }
2012
2013
2014
                                                        if (dtget.Rows[0][1]
2015
                                                             .ToString().ToUpper() == →
                          "HREF")
2016
                                                        {
2017
                                                            driver.Navigate()
2018
                                                                 .GoToUrl(
2019
                                                                     dtget.Rows[0][0]
2020
                                                                         .ToString());
2021
                                                        if (dtget.Rows[0][1]
2022
```

```
2023
                                                                 .ToString().ToUpper() →
                           == "ID")
2024
                                                        {
                                                            MessageBox.Show("Waarde →
2025
                          ID: " + dtget.Rows[0][0].ToString());
2026
                                                        if (dtget.Rows[0][1]
2027
2028
                                                                 .ToString().ToUpper() →
                           == "NAME")
2029
2030
                                                            MessageBox.Show("Waarde
                          Name: " + dtget.Rows[0][0].ToString());
2031
2032
                                                    }
2033
2034
                                                    break;
2035
                                                case "scroll":
2036
                                                    var richting =
2037
                                                        table.Rows[intx]["testtext"]
2038
                                                            .ToString().Trim();
2039
                                                    var js =
2040
                                                        (IJavaScriptExecutor)driver;
2041
                                                    if (richting.ToUpper() ==
                          "BOTTOM")
2042
                                                        js.ExecuteScript(
2043
                                                            "window.scrollTo(0,
                          document.body.scrollHeight)");
2044
                                                    if (richting.ToUpper() == "TOP")
2045
                                                        js.ExecuteScript(
2046
                                                            "window.scrollTo(0, 0)");
2047
                                                    if (richting.ToUpper() == "DOWN")
2048
                                                        js.ExecuteScript(
2049
                                                            "window.scrollTo(0,
                          1000)");
2050
                                                    if (richting.ToUpper() == "UP")
2051
                                                        js.ExecuteScript(
                                                            "window.scrollTo(0,
2052
                          1000)");
2053
                                                    break;
2054
                                                case "cmd":
2055
                                                    if (intx != 0)
2056
                                                        using (var cmd =
2057
                                                            Process.Start(
2058
                                                                table.Rows[intx][
                                                                         "testtext"]
2059
2060
                                                                     .ToString().Trim →
                          ()))
2061
                                                        {
2062
                                                            cmd.WaitForExit();
2063
                                                        }
2064
2065
                                                    break;
2066
                                                case "screenshot":
2067
                                                    var screenshotsPath =
                                                        GetCurrentDir(1);
2068
2069
                                                    var pathG =
```

```
... ster \verb|\selenium test tool \verb|\GeneralFunctionality \verb|\Functions.cs||
2070
                                                         screenshotsPath.Split('\\');
2071
                                                     var g = string.Empty;
2072
2073
                                                     for (var i = 0;
                                                         i < pathG.Length - 2;</pre>
2074
                                                         i++) g += pathG[i] + "\\";
2075
2076
2077
                                                     screenshotsPath = g;
2078
                                                     var name1 = applicationName.Trim →
                          ();
2079
2080
                                                     var relativePath =
2081
                          screenshotsPath +
2082
                                                         "screenshots\\" + name1 + "\ →
                          \";
2083
                                                    ScreenshotName =
2084
                                                         relativePath + name1 + "-" +
2085
                                                         string.Format(
2086
                                                             "{0:yyyyMMddHHmmssFFF}",
2087
                                                             DateTime.UtcNow)
                                                         + "testnr_" + SetTestnr +
2088
                                                         ".png";
2089
2090
                                                     General.LogMessage(
2091
                                                         "Screenshot name: " +
                                                         ScreenshotName, 1);
2092
2093
                                                     driver.TakeScreenshot()
2094
                                                         .SaveAsFile(ScreenshotName,
2095
      ScreenshotImageFormat.Png);
2096
                                                    break;
2097
2098
                                                case "logout":
2099
                                                     driver.Manage().Cookies
2100
                                                         .DeleteAllCookies();
2101
                                                    break;
                                            }
2102
2103
2104
                                    if (testElement == string.Empty)
2105
                                        General.LogMessage("", 1, testname,
                                            Convert.ToInt32(testnr), testcase,
2106
2107
                                            testaction, testAttribute);
2108
                                    else
2109
                                        General.LogMessage(
                                            "Element '" + testElement + "'
2110
                          gevonden!",
2111
                                            1, testname,
2112
                                            Convert.ToInt32(testnr), testcase,
2113
                                            testaction, testAttribute);
2114
                               }
2115
                               /*var appendtext = GetCurrentDir(2) + "\\" +
2116
2117
                                                 vestandsnaam + ".js";
```

var sw = File.CreateText(appendtext);

sw.WriteLine(inhoud);

2118

```
2121
                               sw.Close(); */
2122
                           }
2123
                           catch (Exception exception)
2124
                               General.LogMessage(exception.Message, 4,
2125
2126
                                   table.Rows[intx]["testname"].ToString().Trim(),
2127
                                   Convert.ToInt32(table.Rows[intx]["testnr"]
2128
                                       .ToString().Trim()), string.Empty,
2129
                                   machinestatic);
2130
                           }
2131
                      }
2132
                      else
2133
                       {
                           MessageBox.Show("e.Message");
2134
2135
                           break;
2136
                      }
2137
                  }
2138
              }
2139
2140
2141
              /// <summary>
2142
              ///
                      Verifies the specified element name.
2143
              /// <param name="elementName">Name of the element.</param>
2144
2145
              /// <returns><c>true</c> if XXXX, <c>false</c> otherwise.</returns>
2146
              /// <autogeneratedoc />
2147
              /// TODO Edit XML Comment Template for verify
              public static bool verify(string elementName)
2148
2149
              {
2150
                  try
2151
                  {
2152
                      return true;
2153
                  }
2154
                  catch
2155
                  {
2156
                      return false;
2157
                  }
2158
              }
2159
          }
2160 }
```