GDA Test Automation

1.0 Purpose

GDA Test Automation is based on running a Javascript test script. In automation mode, GDA will run hands free and will execute each line in the test script one after the other.

The overall design of the test should do the following:

- (optional) Display the purpose of the test
- (optional) Display when the test starts
- Execute the steps in the test
- (optional) Display when the test has finished
- Set the test result (see qgoproapp.testResult)

2.0 Command line arguments

- testscript : path to the Javascript test script
- testinterval : inverval in milliseconds between Javascript lines being executed
- test log : show test log window

Example command line usage:
<<GDAExe>> GoProLoginPlugin –testlog testscript “Tests/test1.js” -testinterval 2000

3.0 Reference: Triggering user interface events

Triggering user interface controls can be done with jquery. For example to trigger a click:

```
$(".GoProUIPlayerPlayButton").trigger("click");
```

The Class ID’s for the Plugins will be published in a different document

3.1 safeQuery

safeQuery can be used instead of jquery $ query, if the query is empty then it will automatically exit with a test failure

Replace:
$(".GoProUIPlayerPlayButton").trigger("click");

With:
safeQuery(".GoProUIPlayerPlayButton").trigger("click");

4.0 Reference: GoProEditPlayer

GoProEditPlayer.getNumDroppedFrames
Purpose: Returns the number of playback dropped frames
Arguments: none
Return type: Integer
Example usage:

```
var numDropFrames =
GoProEditPlayer.getNumDroppedFrames();
```

GoProEditPlayer.toggleFullScreenPlayer
Purpose: Toggle player between full screen and regular
Arguments: none
Return type: none
Example usage:

```
GoProEditPlayer.toggleFullScreenPlayer();
```

GoProEditPlayer.GetNormalizedPlayheadLocation
Purpose: Returns the normalized play head location
Arguments: none
Return type: Double
Example usage:

```
var numDropFrames =
GoProEditPlayer.GetNormalizedPlayheadLocation();
```

5.0 Reference: qgoproapp

qgoproapp.setTestMediaSourceFile
Purpose: sets the test media footage for player
Arguments: #1 file name (string)
Return type: none
Example usage:

```
qgoproapp.setTestMediaSourceFile("/path/to/media.mp4");
```

qgoproapp.setTestWatchFolder
Purpose: sets the watch folder
Arguments: #1 folder name (string)
Return type: none
Example usage:

```
qgoproapp.setTestWatchFolder("/path/to/watch");
```

qgoproapp.setTestOffloadFolder
Purpose: sets the offload folder
Arguments: #1 folder name (string)

```
      Return type: none
      Example usage:
            qgoproapp.setTestOffloadFolder("/path/to/offload");


qgoproapp.showTestMessage(message)
      Purpose: show a message in the overlay
      Arguments: #1 message (string)
      Return type: none
      Example usage:
            qgoproapp.showTestMessage("Test starting");

qgoproapp.setTestTimerInterval(msecs)
      Purpose: sets the number of milliseconds to wait between each
command that is executed
      Arguments: #1 interval in milliseconds (integer)
      Return type: none
      Example usage:
            qgoproapp.setTestTimerInterval(4000);

qgoproapp.testResult(result, passMessage, failMessage)
      Purpose: sets the overall test result, either pass or fail
      Arguments: #1 success flag (bool)
                 #2 pass message (string)
                 #3 failMessage (string)
      Return type: none
      Example usage:
            qgoproapp.testResult(numDrops < 10, "Dropped frames = " +
numDrops.toString() + " < 10", "Dropped frames = " +
numDrops.toString());

qgoproapp.executeTestProcess(execPath, arguments)
      Purpose: executes a process command
      Arguments: #1 name of executable to process (string)
                 #2 Array list of string for command arguments
      Return type: none
      Example usage:
            var returnCode = goproapp.executeTestProcess("/path/
imgtest", ["file1.png", "file2.png"]);

qgoproapp.saveWindowPositionSettings()
      Purpose: Store the position and size of the application window
      Arguments: none
      Return type: none
      Example usage:
            qgoproapp.saveWindowPositionSettings();

qgoproapp.windowMaximize()
      Purpose: Maximize the application window
      Arguments: none
```

```
      Return type: none
      Example usage:
            qgoproapp.windowMaximize();

qgoproapp.windowMinimize()
      Purpose: Minimize the application window
      Arguments: none
      Return type: none
      Example usage:
            qgoproapp.windowMinimize();

qgoproapp.restoreWindowPositionSettings()
      Purpose: Retore the position and size of the application window
      Arguments: none
      Return type: none
      Example usage:
            qgoproapp.restoreWindowPositionSettings();

qgoproapp.quitApp()
      Purpose: Quit application
      Arguments: none
      Return type: none
      Example usage:
            qgoproapp.quitApp();

qgoproapp.waitTest
      Purpose: wait for a number of milliseconds
      Arguments: #1 number of milliseconds (integer)
      Return type: none
      Example usage:
            qgoproapp.waitTest(2000);

qgoproapp.pauseTest
      Purpose: pause the test or continue
      Arguments: #1 pause test (bool)
      Return type: none
      Example usage:
            qgoproapp.pauseTest(someCondition);

qgoproapp.gotoTestLabel
      Purpose: jump the test to the line with the label
      Arguments: #1 label name (string)
      Return type: none
      Example usage:
            qgoproapp.gotoTestLabel("start_loop");

qgoproapp.executeTestProgram
      Purpose: executes an entire test program
      Arguments: #1 file name (string)
```

Return type: none
Example usage:

```
qgoproapp.executeTestProgram(“/path/to/program.js”);
```

6.0 Example scripts

6.1: Playback frame drop test

```
qgoproapp.showTestMessage("Playback Frame Testing ... 
starting...");
qgoproapp.setTestMediaSourceFile("/Users/sukendeepsamra/
Desktop/Media/LemonsHD.mp4");
safeQuery(".GoProUIPlayerSourceButton").trigger("click");
var numDrops = GoProEditPlayer.getNumDroppedFrames();
safeQuery(".GoProUIPlayerPlayButton").trigger("click"); //
Play
qgoproapp.waitTest(20000); // Wait 20 seconds
safeQuery(".GoProUIPlayerPlayButton").trigger("click"); //
Stop
qgoproapp.showTestMessage("Playback Testing ... analysing
results...");
numDrops = GoProEditPlayer.getNumDroppedFrames() -
numDrops;
qgoproapp.testResult(numDrops < 10, "Dropped frames = " +
numDrops.toString() + " < 10", "Dropped frames = " +
numDrops.toString());
safeQuery(".GoProUIPlayerBackButton").trigger("click"); //
Go to Media Library
qgoproapp.quitApp();
```

6.2: Maximize window test

```
qgoproapp.showTestMessage("Maximize Window Testing ... 
starting...");
qgoproapp.setTestMediaSourceFile("/Users/sukendeepsamra/
Desktop/Media/LemonsHD.mp4");
safeQuery(".GoProUIPlayerSourceButton").trigger("click");
safeQuery(".GoProUIPlayerPlayButton").trigger("click"); //
```

```
Play
qgoproapp.saveWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
safeQuery(".GoProUIPlayerPlayButton").trigger("click"); //
Stop
safeQuery(".GoProUIPlayerBackButton").trigger("click"); //
Go to Media Library
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
safeQuery(".GoProUILoginButton").trigger("click"); // Go to
Login
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.showTestMessage("Maximize Window Testing ...
analysing results...");
qgoproapp.testResult(true, "not crashed", "");
qgoproapp.quitApp();
```

6.3: Other Example Test Scripts

Example 1 - GUMI API
Example 2 – jQuery / Double Click Event
Example 3 - jQuery / Context Menu
Example 4 - Auto Comp Test
Example 5 – Events / pauseTest
Example 6 - Loop Testing
Example 7 - Execute JS Program
Example 8 - Watch Folder