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
- testmedia : media file that will be used automatically
- testinterval : invertval in milliseconds between Javascript lines being executed

Example command line usage:
<<GDAExe>> GoProPlayerPlugin -testscript "/Users/name/Desktop/GDATests/playback.js" -testmedia "/Users/name/Desktop/Media/LemonsHD.mp4" -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

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();
```

5.0 Reference: qgoproapp

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


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.executeProcess(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.executeProcess("/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();

6.0 Example scripts

6.1: Playback frame drop test

```
$(".GoProUIPlayerPlayButton").trigger("click"); // Stop
qgoproapp.showTestMessage("Playback Frame Testing ... starting...");
```

```
var numDrops = GoProEditPlayer.getNumDroppedFrames();
$(".GoProUIPlayerPlayButton").trigger("click"); // Play
qgoproapp.waitTest(20000); // Wait 20 seconds
$(".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());
$(".GoProUIPlayerBackButton").trigger("click"); // Go to Media
Library
qgoproapp.quitApp();
```

6.2: Maximize window test

```
$(".GoProUIPlayerPlayButton").trigger("click"); // Stop
qgoproapp.showTestMessage("Maximize Window Testing ...
starting...");
$(".GoProUIPlayerPlayButton").trigger("click"); // Play
qgoproapp.saveWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
$(".GoProUIPlayerPlayButton").trigger("click"); // Stop
$(".GoProUIPlayerBackButton").trigger("click"); // Go to Media
Library
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
qgoproapp.windowMaximize();
qgoproapp.restoreWindowPositionSettings();
$(".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();
```