A(utomated)Capture

This project automates the process of testing photo/video capture (Android / USB webcam) devices, generation of reports and more.

- Features
- Prerequisites
- Setup project
- Building
- Contact
- License

Features:

- Persistence of devices settings
- Lights control of SpectriWave (easy to add support for more) with GUI and programmatically
- Light Intensity Sensors (Luxmeters) support (Currently supported - Konita Minolta CL-200A)
- Automated capturing of test cases - video/photo based on template build in GUI with different light temperatures and intensities.
- Integration with Imatest IT for automated images analysis

Tools:

- Generating of Objective Testing Reports based on requirements templates build in GUI and using imported files or automatically captured ones.
- Generating of Real-Life Testing Reports based on settings in GUI
- Extract frames from video (names extracted frames accordingly, supports multiple files at once, skipping frames, etc)

Android*:

- Roots, Remounts device automatically

- Sets device sleep time to max, wakes device etc automatically
- Execute taps on Android devices screens (actions) => Works on any rooted Android
- Supports multiple actions (called actions sequence) for capture of video / photos (ex change mode to video then shoot video)
- Capturing Images / Videos using device
- Pulling captured Images / videos to the computer
- Renaming of pulled Images / videos properly
- Getting logs automatically

Android with GUI*:

- Push one or multiple files to device's specific directory
- Pull one or multiple files from device using a visual tree GUI (work in progress)
- Easy to use text editor for frequently used text files (for ex. camxoverridesettings.txt)
- Reboot Device
- View device info (build, android versions etc)
- Device screen control and mirroring
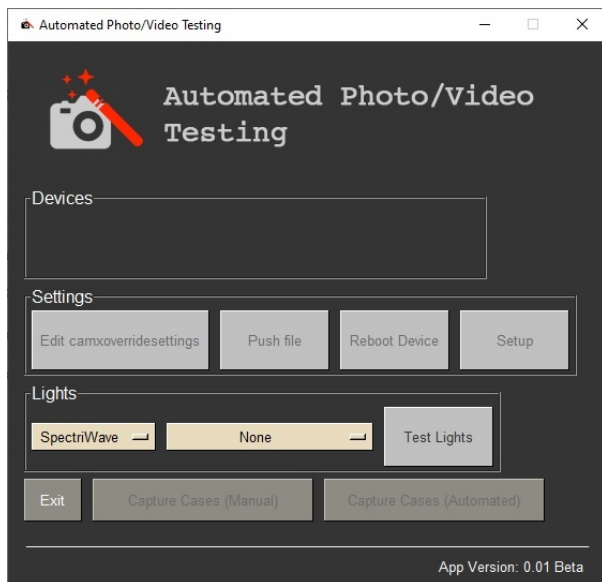
for automated/semi-automated testing:

- Setup aciton sequences in GUI
- Enable/Disable logs during testing
- Add logs filter string
- Change default images capture app for automated testing (dropdown of all apps on device)
- Add a time gap between actions to give time to the device to load the screens and etc
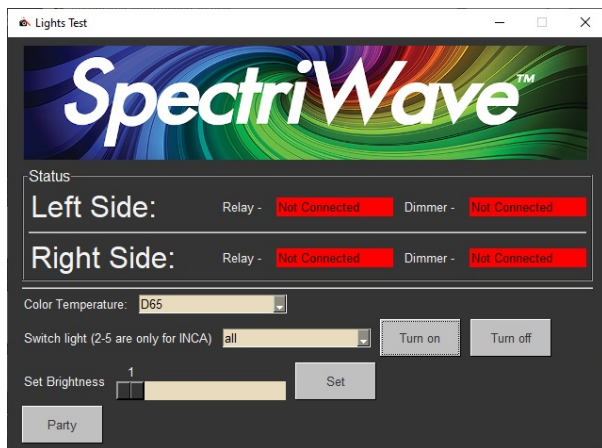
*requires device to be rooted

Devices:

- Set friendly name of device (used for naming saved files/folders etc)
- Identify device (Blink screen/leds)
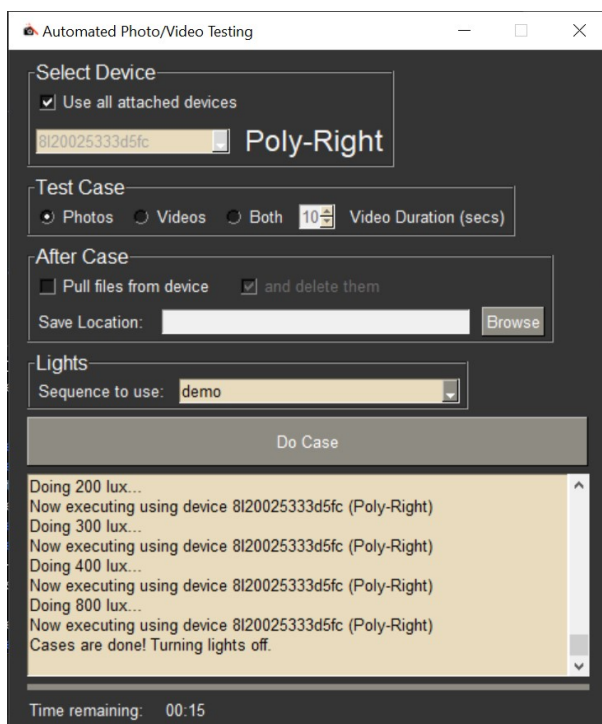- Attach to and capture using multiple devices at once

App GUI Preview

Automated Photo/Video Testing

Automated Photo/Video Testing

Devices

Settings

Edit camxoverridesettings | Push file | Reboot Device | Setup

Lights

SpectriWave | None | Test Lights

Exit | Capture Cases (Manual) | Capture Cases (Automated)

App Version: 0.01 Beta

Lights Control GUI Preview

Lights Test

SpectriWave™

Status

Left Side: Relay - Not Connected   Dimmer - Not Connected

Right Side: Relay - Not Connected   Dimmer - Not Connected

Color Temperature: D65

Switch light (2-5 are only for INCA) all   Turn on   Turn off

Set Brightness   1   Set

Party

Automated Cases GUI Preview

Automated Photo/Video Testing

Select Device
☑ Use all attached devices
8I20025333d5fc   Poly-Right

Test Case
● Photos ○ Videos ○ Both 10⊕ Video Duration (secs)

After Case
☐ Pull files from device ☑ and delete them
Save Location: [   ] Browse

Lights
Sequence to use: demo

Do Case

Doing 200 lux...
Now executing using device 8I20025333d5fc (Poly-Right)
Doing 300 lux...
Now executing using device 8I20025333d5fc (Poly-Right)
Doing 400 lux...
Now executing using device 8I20025333d5fc (Poly-Right)
Doing 800 lux...
Now executing using device 8I20025333d5fc (Poly-Right)
Cases are done! Turning lights off.

Time remaining: 00:15

Contact

If you want to contact me you can reach me at mmaslyankov@mm-sol.com

License