Camera

Camera module provides ability to capture data from local or IP cameras using OpenCV library. It also allows detecting faces on captured images.

Implementing class: `com.arrow.selene.device.uvc.CameraModule`

OS dependency: None

Requirements: OpenCV library

Properties:

Name	Data type	Unit of measurement	Valid values	Default value	Description
index	integer	N/A	0-2147483647 (0x7fffffff)	0	Defines index of local camera to be used for capturing. Makes sense only in case if `ipCamera=false`
streamUrl	string	N/A	*<URL>*	N/D	Defines URL of IP-camera. Makes sense only in case if `ipCamera=true`
width	integer	pixels	0-2147483647 (0x7fffffff)	640	Defines width of captured images
height	integer	pixels	0-2147483647 (0x7fffffff)	480	Defines height of captured images
format	string	N/A	bmp/gif/jpg/jpeg/png/wbmp	jpg	Defines format of captured images
frequencyInSecs	integer	seconds	0-2147483647 (0x7fffffff)	10	Defines interval of image capturing
directory	string	N/A	N/A	/opt/selene/images	Defines directory where captured images should be saved to. Makes sense only in case if `saveLocal=true`
saveLocal	boolean	N/A	true/false	false	Allows to save captured images locally
detectFace	boolean	N/A	true/false	false	Allows to detect faces on captured images
markDetectedFace	boolean	N/A	true/false	false	Allow to draw rectangles on detected faces. Makes sense only in case if `detectFace=true`
overlayEnabled	boolean	N/A	true/false	true	Allows to draw current time and text from `overlayUrl` on captured images
overlayUrl	string	N/A	N/A	http://iot.arrow.com	Defines text to be drawn on captured images. Makes sense only in case if `overlayEnabled=true`
ipCamera	boolean	N/A	true/false	false	Defines which camera should be used (IP or local)
faceDetectionFile	string	N/A	N/A	N/D	Defines file to be used by face detection
faceDetectionScaleFactor	double	N/A	*<double value>*	1.1	Defines scale factor specifying how much the image size is reduced at each image scale
faceDetectionMinNeighbors	integer	N/A	0-2147483647 (0x7fffffff)	3	Defines how many neighbors each candidate rectangle should have to retain it
faceDetectionFlags	integer	N/A	0-2147483647 (0x7fffffff)	0	
faceDetectionMinSizeX	integer	N/A	0-2147483647 (0x7fffffff)	30	Defines minimum possible object size. Objects smaller than that are ignored.
faceDetectionMinSizeY	integer	N/A	0-2147483647 (0x7fffffff)	30	Defines maximum possible object size. Objects larger than that are ignored.
comTrigger	boolean	N/A	true/false	false	Allows to trigger image capture on receiving specific text from serial port
comTriggerValue	string	N/A	N/A	T	Defines text which triggers image capture
comTriggerThresholdInSecs	integer	seconds	0-2147483647 (0x7fffffff)	5	Defines minimum interval of capture triggering
comTriggerPort	string	N/A	N/A	N/D	Defines serial port name to be used to trigger image capture
comTriggerBaudRate	integer	bauds	0-2147483647 (0x7fffffff)	115200	Defines baudrate to be used to configure serial port
comTriggerDataBits	integer	N/A	0-2147483647 (0x7fffffff)	8	Defines number of databits to be used to configure serial port

| comTriggerStopBits | integer | N/A | 0-2147483647 (0x7fffffff) | 1 | Defines number of stopbits to be used to configure serial port |
| comTriggerParity | integer | N/A | 0-2147483647 (0x7fffffff) | 0 | Defines parity to be used to configure serial port |