T869COMP - Assignemt 1

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GitHub repo: https://github.com/AlmaESL/T869COMP_Assignments.git

The processing time for one video frame or image
Most frames on average take approximately `0.03 seconds` to process, although some frames may take as long as `0.05 seconds` or as short as `0.01 seconds`.

How does the processing time change when you add the bright spot detection?
The processing time for each frame still centers around `0.03 seconds`, but with larger deviation both up and down, that is sometimes processing time can be as fast as `0.009 seconds` and sometimes as long as `0.08 seconds`.

Is the processing time identical when you do not display the image?
When still computing and marking the brightest point, processing time is in general faster - around `0.03-0.04 seconds` most of the time.
When removing the brightest point implementation, the processing time remains around `0.03 seconds`, but faster instances below `0.01 seconds` occur more often so it is marginally faster in this case to remove the displaying of the image.

How does your for-loop implementation compare to the built-in function?
The processing time with using a for-loop is approximately 10 times slower (`0.3-0.4 seconds`) compared to the inbuilt function.

Moving your hand in front of the camera, estimate the latency between image capture and display
Latency for rapid hand movements barely noticeable with the naked eye. By computing the time of clock ticks to process each frame, we can approximate the latency time to around `30-60 ms`. This approach doesn't consider the hardware properties though. These tests were carried out on the built-in function of finding the brightest point in the gray scale images.

Is the latency different when capturing from a mobile phone?
Latency computed as in the question above and using the mobile camera via *iVCam* gave a slightly improved latency time; around `20-40 ms`.