**Assignment**

In this assignment your goal is to track a certain surface throughout a series of frame of the video. The input of your algorithm should be a video and a 4 point coordinate rectangle. Your goal is to track that rectangle across the subsequent frames.

**Input:**

There are two videos in this folder. One of them is the one you need to do this assignment and the other one is a challenge (optional):

**video1.mp4**

Rectangle coordinates on first frame:

"x": 17,

"y": 57,

"w": 558,

"h": 303

**video2.mp4 - Optional (challenge)**

Rectangle coordinates on first frame:

"x": 3,

"y": 160,

"w": 600,

"h": 260

**Example of output**

* A video file with the rectangle drawn in each frame (can use OpenCV drawRectangle function)
* The code used to do it (ipython notebook, C++ code, python, matlab).
* A pdf or doc document explaining the approach and why did you choose that approach.