**Single Object Tracking (Using MATLAB)**

**Description**

Image processing (object tracking) is a method of extracting some useful information by converting image into digital inform by performing some operations on it. Single Object Tracking takes input as an image, a series of images, or videos, or a video frame. Single Object Tracking gives output as an images or set of characteristics or parameters of the images.

### Track a Single Object Using Kalman Filter

The Kalman filter has many uses, including applications in control, navigation, computer vision, and time series econometrics.

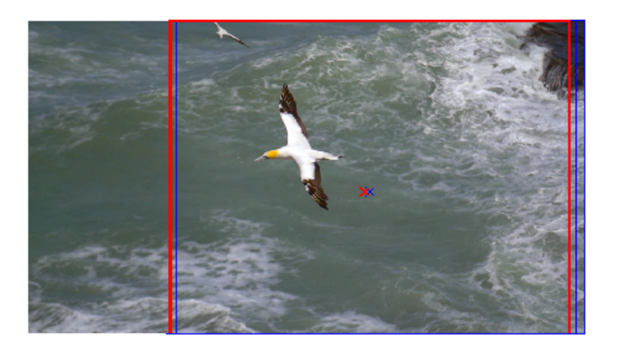
* Prediction of object's future location
* Reduction of noise introduced by inaccurate detections
* Facilitating the process of association of multiple objects to their tracks.

**How to build/compile it?**

Create account in Matlab mathworks online or download and install Matlab software into respective OS.

1. Link for online Matlab mathworks : <https://matlab.mathworks.com/>
2. Run the code Single\_Object\_Tracking\_Code.mlx by uploading the respective images and videos required as input for tracking the object.
3. Make sure the online matlab or offline matlab is R2019b.

**Ouput for Single Object Tracking**

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