AI Role - Assignment

Task:
Create a program using Computer Vision to track the movement of the balls of different colors across various quadrants in the video provided. The program should record the event of each ball entering and exiting each numbered quadrant. The event data should be recorded in the below format.

Time, Quadrant Number, Ball Colour, Type (Entry or Exit)

Timestamp: consider start of the video as 0 seconds and compute timestamp based on video duration.

The program should have provisions for feeding a new video and output should be saved in the local hard disk. Details of which need to be shared at the time of submission.

Video to process:

https://drive.google.com/file/d/1goI3aHVE29Gko9lpTzgi_g3CZZPjJq8w/view?usp=sharing

Output expected:

The model you create should take the video as input and give the below output

Processed Video:
The processed video should incorporate the following.
- Ball tracking with color
- Overlay text "Entry or Exit" & time stamp at the time of entry/exit of a numbered quadrant

Text File:

Text file with records in the format provided above *(Time, Quadrant Number, Ball Colour, Event Type (Entry or Exit))*

The Code:

Share through github.

Please write to us if you face any issues or if you need any clarification. If you face any issue or you are not able to complete the whole task, don't get disillusioned. Get back to us with details of what you have been able to accomplish.

Please share the code and the output via email to admin@secquraise.com