**PROBLEM STATEMENT**

Nowadays, road accidents are one of the major causes that lead to human death. Motorbike accidents can cause severe injuries. The helmet is important for every motorcyclist. However, many fail to conform to the law of wearing helmets. A custom object detection model is created using a Machine learning based algorithm which can detect Motorcycle riders. On the detection of a Helmetless rider, the License Plate is extracted and the Licence Plate number is recognized using an Optical Character Recognizer. This Application can be implemented in real-time using a Webcam or a CCTV as input. Automatic accident detection and reporting system is the motivation of this project. To prevent road accidents, our approach is very useful. Thus safety of bike riders is ensured.