Alertness Monitoring System

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Abstract: *Driver drowsiness is a leading cause of road accidents, which can result in serious injury or even death. In this research paper, we propose a driver drowsiness detection system using Google ML Kit Face Detection API and Flutter, which can be implemented on mobile phones to detect driver drowsiness in real-time and provide an alert to prevent accidents caused by drowsy driving. The system monitors the driver's facial features and analyses them for signs of drowsiness using the front-facing camera of a mobile device. This system was built with Flutter, a cross-platform framework for mobile app development. We have integrated the Google ML Kit Face Detection API, which provides facial features detection and tracking capabilities. When the system detects signs of drowsiness, it alerts the driver, preventing potential accidents. The proposed system is reliable, accurate, and can be easily implemented on mobile devices, making it a practical solution for detecting driver drowsiness in real-time*

Keywords: Driver drowsiness detection, Machine Learning, Google ML Kit Face Detection API, Flutter, road safety