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Project Name: Autonomous car following robot with LEGO Mindstorm EV3

Course Name: Real Time Systems

**Abstract/summary:**

Autonomous driving assist human to drive safely and with less effort. In traffic, an autonomous driving system manages a vehicle with respect to other vehicles without human intervention. There are many possible scenarios like following a car in forward direction, right turn, left turn etc. One must balance the behavior so that the system always maintain a safety criteria. At the same time the system should not be so defensive to keep the normal traffic flow.

In this project we are working with two vehicle. First one is controlled with mobile apps via Bluetooth. Second one follows the first one without intervention in forward direction. When the first car starts moving, the second one also starts moving. When the first one stops, second one also stops keeping a certain distance. During follow up, the second car maintains safety level by speed up and down. In a very low distance, the car stops to avoid unexpected event. Hence, safety issues are ensured during follow up.