Life saver while driving

This project will detect if the person driving is drowsy/sleepy or not

Things used in this project

Hardware components

	Arduino UNO	× 1
	Jumper wires (generic)	× 1
	Thermopile IR Sensor, TS105-10L5.5mm	× 1
	9V battery (generic)	× 1

Software apps and online services

	Arduino IDE

Hand tools and fabrication machines

	Multitool, Screwdriver
	Hot glue gun (generic)

Drill / Driver, Cordless

Story

Have you ever heard about any accident on roads, in particular National Highways, occurring due to drinking and driving? You must have. But have you ever thought that the accidents also occur due to vehicle driving by a driver in a drowsy state?

Well, let me tell you that around 72000 accidents occur the United States each year due to drowsy driving alone. Drowsy driving is indeed a silent killer. The aim of my project, therefore, was to prevent the accidents caused by driving while you're drowsy.

I actually got the idea when I heard from one of my friends that his uncle often falls asleep while driving. Therefore I began research on it.

Most of the people had made things like goggles attached with Infrared sensors on one of its glasses that could define if the eye of the person was closed.

When the eye seemed to be closed (to the sensor), for a specific period of time, let's say 2 seconds, the car automatically decelerated and slowly stopped.

But do you really think this idea is practical at all? What is the driver doesn't want to wear a goggle every time he drives a car? Think about how irritating it would be for the driver if one of his eyes always had a sensor obstructing his vision while he is driving – he probably wouldn't be able to concentrate. This may even lead to an increase in number of road accidents!

Looking at all these facts, I decided find a new solution to this problem. Where everyone was copying the same thing to reproduce it, I wanted to innovate my own solution that actually worked.