



CHILD VEHICULAR HEAT STROKE PREVENTION SYSTEM BY CONTROLLING VEHICLE FEATURES USING WIRELESS TECHNOLOGY



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ABSTRACT

Heat stroke – is a heat illness defined as a body temperature is greater than 40.6 °C (105.1 °F) due to environmental heat exposure with lack of thermoregulation. Heat stroke occurs when the body is unable to dissipate the heat that it produces and absorbs in situations of exposure to high temperatures, such as being trapped in an enclosed vehicle parked outdoors after being left unattended and happen to the children from age 1-14 years old cause of the caregivers have unknowingly exposed their small children to dangerous temperature by leaving them unattended in vehicle.

The proactive approach is proposed in order to prevent a heat stroke among children and directly save their live. The controller connected to a sensor that detects a movement inside a vehicle when the caregivers lock the car using car remote control and the detection signal will send to GSM controller which alert the caregiver via phone call and SMS through mobile phone.

This project will integrated with Android Application in order to control the ignition of vehicle and air-conditional system which will granted the parents to turn on aircond wirelessly via smartphone. The vehicle features also can be activated by sending SMS code if the telecommunication coverage is out of range.

PROBLEM STATEMENT

- ◆ Heat stroke is the second leading cause of non-traffic fatalities among children (KidsAndCars.org) and 50% of this tragic death caused by unknowingly left the child in the vehicle.
- ◆ Most of the preventive heat stroke product are restraint base which should be installed in baby car seat and the cost is too expensive.

OBJECTIVE

- ◆ Design and develop a heat stroke preventive system that can prevent children up to 14 years old from being left behind in closed, parked vehicle unattended that can result in heat stroke by alert the caregivers via SMS and phone call and control the vehicle features wirelessly using smart/ mobile phone (Android Apps & SMS code).

BENEFITS

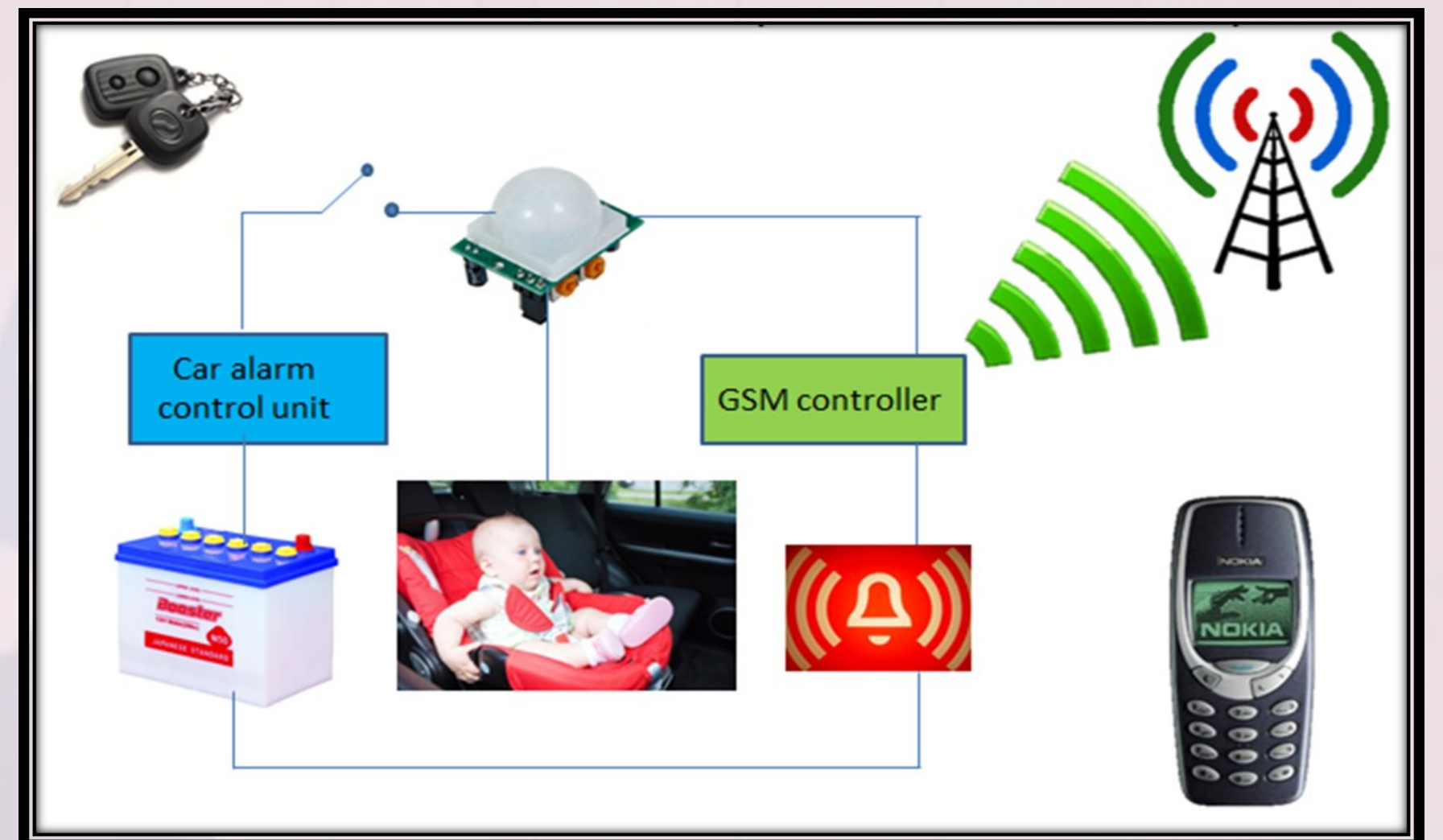
- ◆ One of the preventive system to avoid from heat stroke death.
- ◆ Alert the caregivers via SMS and phone call more than one number of recipients.
- ◆ Controlled the vehicle features (i.e. ignition system and air-condition wirelessly) via smartphone/ mobile phone.
- ◆ Compatibility use for all vehicles, Android Smartphone or mobile phone.

POTENTIAL MARKET

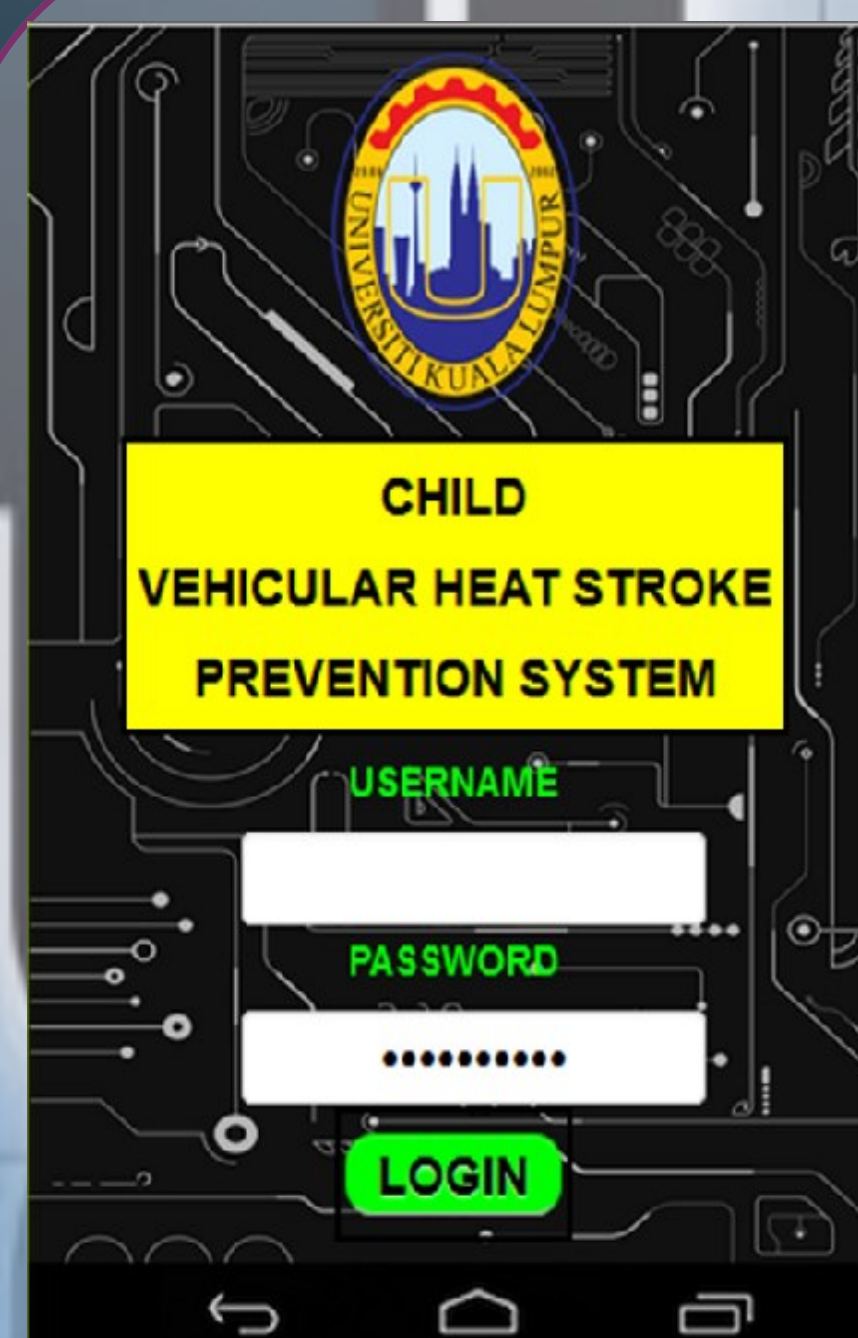
- ◆ This system build up with compatibility use for all vehicles and embedded with some hardwire attach to vehicles wiring system.
- ◆ The price is affordable to all parents/ caregivers/ user.

METHODOLOGY

Alerting Stage



Controlling Feedback



NOVELTY

- ◆ A new invention with no copyright for child vehicular heat stroke prevention system by sensing a motion inside vehicle and send SMS and call to alert the caregivers and control the vehicle features wirelessly.
- ◆ PI 2015002044 (Vehicle Control System)



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