



**SMART INDIA
HACKATHON
2022**

Basic Details of the Team and Problem Statement

Organization Name : AICTE, MIC - Student Innovation

PS Code : SM956

Problem Statement Title : Student Innovation

Team Name : COVEN OF PHOENIX

Team Leader Name : Kubendran N

Institute Code (AISHE) : 3108

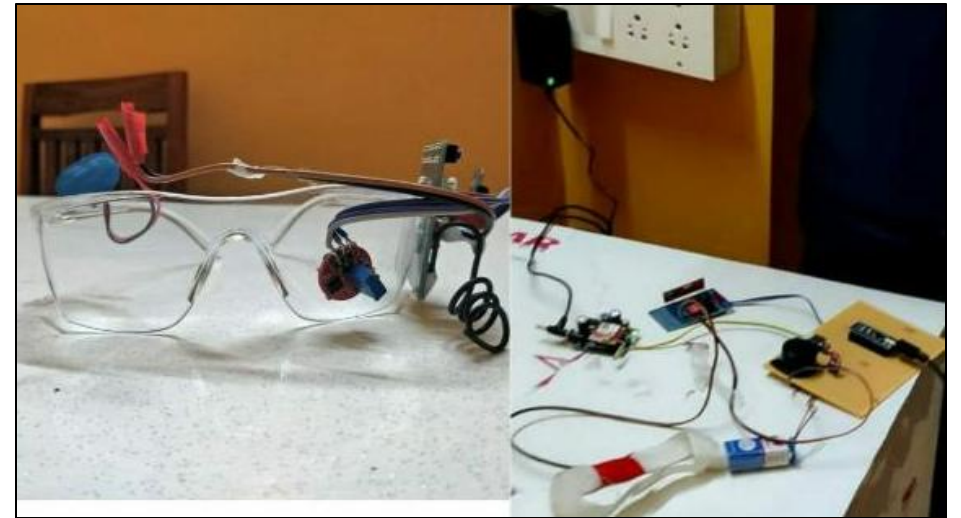
Institute Name : Jeppiaar Engineering College

Theme Name : Smart Automation

Idea/Approach Details

Describe your idea/Solution/Prototype here:

- The proposed project helps to prevent vehicle accidents due to sleep and drunken driving, using **eye blink sensor**.
- Eye blink sensor which is an inbuilt one in the driver's spectacles **detects the frequency of eye blinking**.
- The driver will be alerted through inbuilt vibration. The project is implanted by using **Arduino programming**.
- Through **GSM module**, alert message will be sent to driver's emergency number and Government record.
- Which will help the government to take necessary steps on the drowsy drivers.



Describe your Technology stack here:

- ❑ Using eye blink sensor, it continuously monitors the eye blink rate and if any abnormal blink rate found then Arduino Nano starts its work to alert the driver with alarm and vibrator.
- ❑ After few seconds if driver didn't off the buzzer then GPS/GSM Module starts its work by sending an alert message to other end.

Idea/Approach Details

Describe your Use Cases here

- To prevent accident using eye blink sensor system based with Arduino Nano.
- Eye blink sensor detects the abnormal blink rate of eye and it sends a signal from transmitter to receiver.
- Then receiver, receives the signal and send signals to Arduino board then the alarm starts ringing and vibrator vibrates by sending an alert to the driver and its helps driver to wake up.
- If the driver didn't wake up after a few seconds then GPS/GSM Module start its work.
- GPS/GSM modules send a alert message from driver to other end.
- ³➤ It helps to prevent accident before it occurs.

Describe your Dependencies / Show stopper here

- ❑ It requires **GSM Network** to send the information.
- ❑ The system fails, if the driver is wearing any kind of sunglasses instead of our monitoring glass.

Team Member Details

Team Leader Name: KUBENDRAN N

Branch: M.E	Stream: Mechatronics	Year : II
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Team Member 1 Name: GIRISHA M V

Branch : B.E	Stream : CSE	Year : III
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Team Member 2 Name: PITCHMA PRIYA K

Branch ; B.E	Stream : CSE	Year : III
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Team Member 3 Name: KARTHIKA S

Branch : B.E	Stream : CSE	Year : III
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Team Mentor 1 Name: Mr. J. DILIP SINGH

Category : Academic	Expertise : Mechatronics	Domain Experience (in years) : 6 years
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