M.KUMARASAMY
COLLEGE OF ENGINEERING
NAAC Accredited Autonomous Institution
Approved by AICTE & Affiliated to Anna University
ISO 9001:2015 Certified Institution
Thalavapalayam, Karur, Tamilnadu.

A Minor Project Report

On

SLEEPING ALERT SYSTEM

Submitted in partial fulfillment of requirements for the award of the

Degree of

BACHELOR OF TECHNOLOGY

in

INFORMATION TECHNOLOGY

Under the guidance of

Mr.K.KALAIARASAN

(ASSISTANT PROFESSOR / IT)

Submitted By

KAVIN P	(18BIT4041)
LOGESHWARAN S	(18BIT4045)
TAMIL SELVAN E	(18BIT4095)
VIJAY S	(18BIT4103)

DEPARTMENTOF INFORMATION TECHNOLOGY

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous)

KARUR – 639 113

December, 2020

M.KUMARASAMY COLLEGE OF ENGINEERING

VISION

To emerge as a leader among the top institutions in the field of technical education.

MISSION

- Produce smart technocrats with empirical knowledge who can surmount the global challenges.
- Create a diverse, fully-engaged, learner-centrist campus environment to provide quality education to the students.
- Maintain mutually beneficial partnerships with our alumni, industry and professional associations.

DEPARTMENT OF INFORMATION TECHNOLOGY

VISION

To create groomed, technically competent and skilled intellectual IT professionals to meet the current challenges of the modern computing industry.

MISSION

- To ensure the understanding of fundamental aspects of Information Technology
- Prepare students to adapt to the challenges of changing market needs by providing an environment.
- Build necessary skills required for employ ability through career development training to meet the challenges posed by the competitive world.

PROGRAM EDUCATIONAL OBJECTIVES

I. Solve real world problems using learned concepts pertaining to Information Technology domain.

II. Encompass the ability to examine, plan and build innovative software products.

III. Carry out the profession with ethics, integrity, leadership and social responsibility.

PROGRAM SPECIFIC OUTCOMES

I. Apply knowledge of theoretical computer science to assess the hardware and software aspects of computer systems.

II. Design software in a futuristic approach to support current technology and adapt cutting-edge technologies.

III. Comprehend the technological advancements and practice professional ethics and the concerns for societal and environmental well being.

PROGRAM OUTCOMES

Graduates of Bachelor of Information Technology will have the following ability and capability at the end of course:

a. **Engineering knowledge:** Acquire and apply knowledge of Mathematics, Science and Information Technology appropriate to the discipline.
b. **Problem analysis**: Identify, formulate and analyze complex engineering problems using principles of mathematics and engineering sciences.
c. **Design/development of solutions**: Design and develop software components and systems to meet the industrial and societal needs.
d. **Conduct investigations of complex problems**: An ability to design and conduct experiments, as to analyze and interpret data.

e. **Modern tool usage**: An ability to adopt modern engineering and IT tools to perform complex engineering activities.
f. **The engineer and society**: Assess societal, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
g. **Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts.
h. **Ethics**: Understand professional and ethical responsibilities.
i. **Individual and team work**: Function effectively as an individual and as a team in multidisciplinary background.
j. **Communication**: Communicate effectively with a range of audiences.
k. **Project management and finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply as a member and leader in a team, to manage projects and in multidisciplinary environments.
l. **Life-long learning**: An ability and desire towards life-long learning.

M.KUMARASAMY COLLEGE OF ENGINEERING

(Autonomous Institution affiliated to Anna University, Chennai)

BONAFIDE CERTIFICATE

Certified that this project report **"SLEEPING ALERT SYSTEM" is** the bonafide work of **"P.KAVIN (18BIT4041) ,S.LOGESHWARAN (18BIT4045), E.TAMIL SELVAN (18BIT4095), S.VIJAY(18BIT4103)"** who carried out the minor project work during the academic year 2019-20 under our supervision. Certified further, that to the best of our knowledge the work reported herein does not form part of any other minor project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

SIGNATURE

Dr. R. PUNITHAVATHI M.E, Ph.D.

HEAD OF THE DEPARTMENT

Department of Information Technology,
M.Kumarasamy College of Engineering,
Thalavapalayam, Karur-639113.

SIGNATURE

Ms. K. KALAIARASAN ME

SUPERVISOR

ASSISTANT PROFESSOR

Department of Information Technology,
M.Kumarasamy College of Engineering,
Thalavapalayam, Karur-639113.

ABSTRACT

Now a day's people drive a vehicle non-stopping, so they get tiered and they non even take a rest. Because of that they feel sleepy and loss the conscious and sleep suddenly. If they sleep while driving the vehicle they met with an accident. That's why we decided to create an alarm which will woke-up the driver or people who drive the vehicle. It works by detecting the eye of the driver. If the driver of the vehicle closes his for a while and doesn't open for a while means the alarm will work automatically and woke-up the drive so (he or she) they cannot sleep while driving the vehicle. So, the accidents which are available by this might be reduce.

.

ACRONYM / LIST OF ABBREVIATIONS

Acronym	Abbreviations
IR	Infrared

TABLE OF CONTENTS

1.INTRODUCTION

CHAPTER 1

INTRODUCTION.

More than 40% of road accidents are happen all over the world, because people drive a vehicle non-stopping, so they get tiered and they non even take a rest. Because of that they feel sleepy and they felt asleep. If they sleep while driving the vehicle they met with an accident. That's why we decided to create an alarm which will woke-up the person who drive the vehicle. It works by detecting the eye of the driver. If the driver of the vehicle closes his for a while and doesn't open for a while means the alarm will work automatically and woke-up the drive so (he or she) they cannot sleep while driving the vehicle. So, the accidents which are available by felt asleep must be reduced.

1.1 Background

The motto of our project is reducing the accidents happen by sleeping while driving the vehicle. If they sleep while driving the vehicle they met with an accident. That's why we decided to create an alarm which will woke-up the driver or people who drive the vehicle. It works by detecting the eye of the driver. If the driver of the vehicle closes his for a while and doesn't open for a while means the alarm will work automatically and woke-up the drive so (he or she) they cannot sleep while driving the vehicle. So, the accidents which are available by this might be reduce.

1.2 Problem Statement

The concept is focused on under the prime motto of reducing the accidents happen in the road sides by sleeping. The IR sensor is detecting the eye, if the driver of the vehicle closes his/her eye for certain time, the buzzer work automatically create sound to woke up the drive. With this if the drive is slept means it will work to woke up the driver. So, the accident happen in all over world will be reduced.

2.LITERATURE REVIEW

CHAPTER 2

LITERATURE REVIEW

2.1 TREEHOUSE

We use this side to learn the basics in java implemented in our project.

2.2 YOUTUBE-News Great

We used this youtube channel to learn the how to work with IR sensor.

2.3 W3SCHOOLS

We used this site to learn how to use Arduino uno, work and compile in it.

3.FEASIBILITY STUDY

CHAPTER 3

FEASIBILITY STUDY

The project consists of three modules:

The first module is to create the circuit of the project.

The java programming for our project is the second module and testing in the Arduino uno.

The third module is merging the circuit we made and the program and the test the outcome of our project.

4. PROJECT METHODOLOGY

CHAPTER 4

PROJECT METHODOLOGY

4.1 Circuit diagram

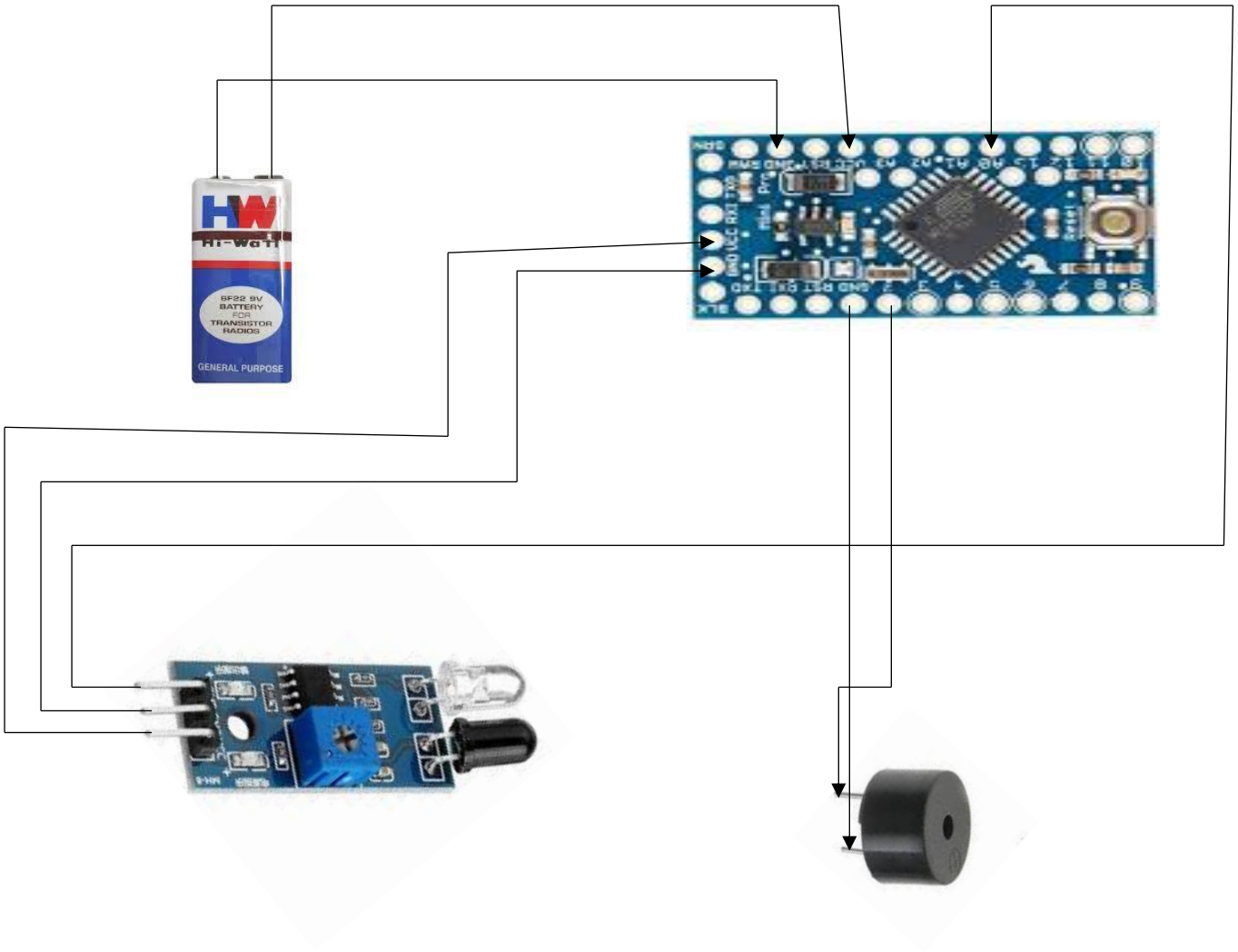
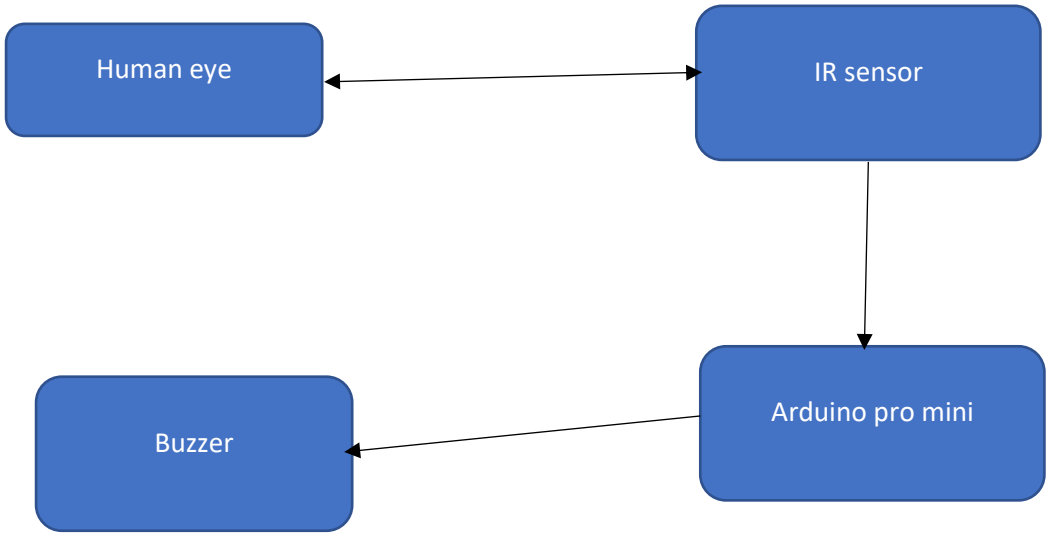


FIGURE 4.1 CIRCUIT DIAGRAM

This circuit diagram of the project.

4.2 Working Process



In this, the IR sensor first detect the human eye and send message to the arduino. In the Arduino we have already inserted the required program it will work accordingly and activate the buzzer.

5.RESULTS AND DISCUSSION

CHAPTER 5

RESULTS AND DISCUSSION

Figure 5.1

The above image is the Arduino pro mini

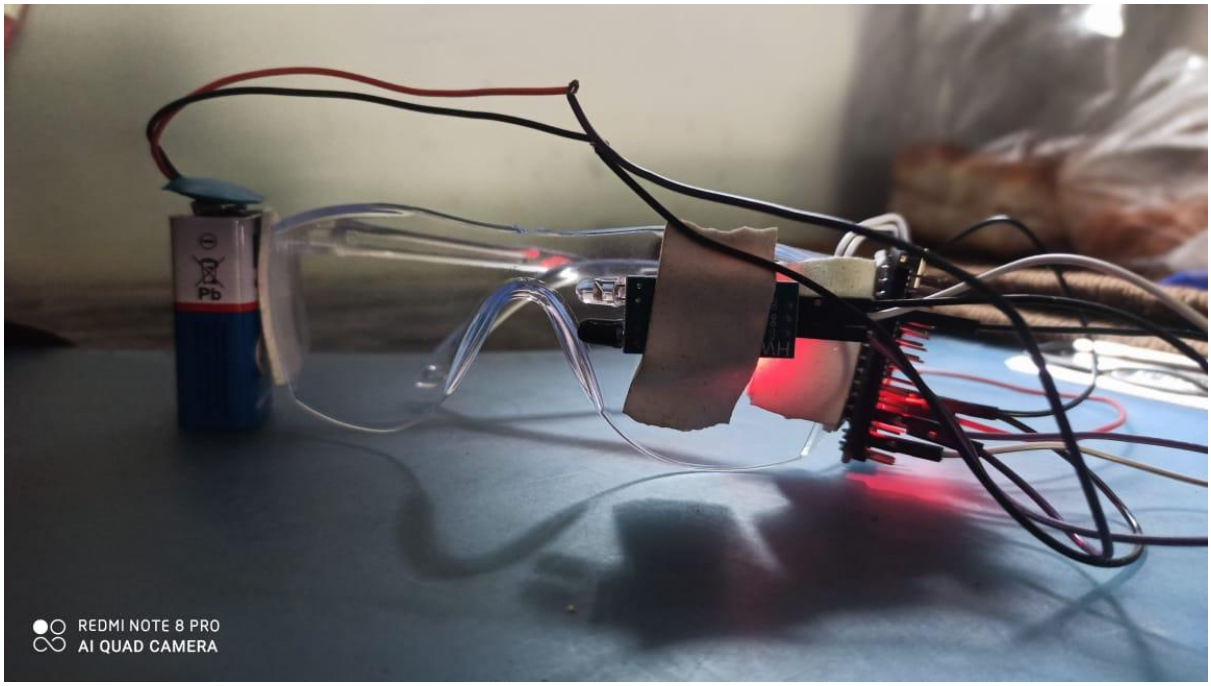
Figure 5.2

The above image is the IR sensor.

Figure 5.3

The above image is the buzzer.

Figure 5.4



The above image is SLEEPING ALERTER.

6.CONCLUSION

CHAPTER 6

CONCLUSION

By using our project number of accidents happen in all over the world will reduced. Peoples can drive the vehicle without worrying. Accident happen by sleeping while driving the vehicle is majority. While using our project, there is a major chance for 40% accidents reduces in all over the world. If everyone once starts to use our project “SLEEPING ALART SYSTEM”, we believe the accident rate in the world will be reduced.

7.REFERENCES

CHAPTER 7

REFERENCES

[1] https://www.arduino.cc/en/Main/ArduinoBoardUnoSMD

[2] https://www.youtube.com/watch?v=PyAqF3ScEDc

[3 https://www.programiz.com/java-programming/examples

[4] https://www.fierceelectronics.com/sensors/what-ir-sensor#:~:text=An%20infrared%20(IR)%20sensor%20is,named%20William%20Herchel%20in%201800.

[5] https://www.makerspaces.com/arduino-uno-tutorial-beginners/