EMBEDDED SYSTEMS PROJECT

ACADEMIC YEAR 2021-2024

GROUP : 18

MEMBERS:

NIKHIL KUMAR : S20200020289

ASHWANI KUMAR : S20200020249

SAI MEGHANA TEJAVATH : S20200020304

KAPPARAPU DEEPIKA : S20200020272

LIE DETECTOR

ABSTRACT:

THE IDEA OF THIS PROJECT IS TO HAVE A LIE DETECTOR WHICH CAN IDENTIFY WHETHER THE STATEMENT GIVEN BY A RESPECTIVE PERSON WAS TRUTH OR A LIE .

THE PURPOSE OF THE PROJECT IS TO DESIGN AND IMPLEMENT A LIE DETECTOR WHICH CAN DETECT A LIE

THE MAIN OBJECTIVE OF THIS PROJECT IS TO DESIGN AND IMPLEMENT A LIE DETECTOR USING ARDUINO , SOME SENSORS , COMPUTER AND TO ACHIEVE THE GOAL OF THIS PROJECT.

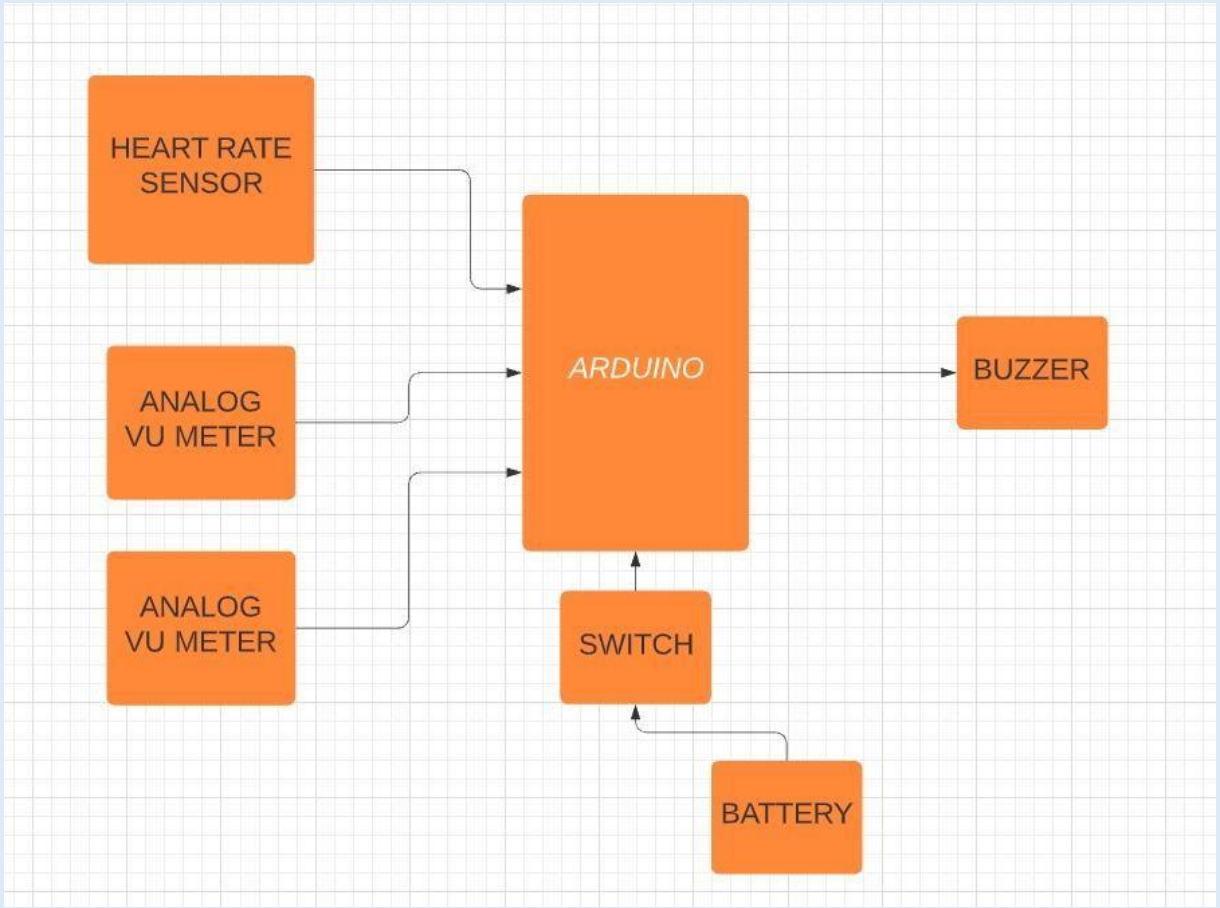
JUSTIFICATION :

MOST PROBABLY THESE DAYS MANY ARE LYING IN MANY CASES LIKE WITH FRIENDS , FAMILIES, OFFICES, COLLEGUES , ETC.,. SO TO FIND THAT WE CAN USE LIE DETECTOR.

AND IN MAIN WE CAN USE IT FOR POLICE INTERROGATIONS TO FIND WHEATHER THE ACCUSED WAS LYING OR NOT. ACTUALLY WE HAVE LIE DETECTORS IN POLICE INTERROGATIONS BUT THOSE ARE MUCH COSTLY WHILE COMPLARING TO THE DEVICE WHICH WE ARE GOING TO DESIGN AND IMPLEMENT .

MOST OF US DON'T KNOW THAT OUR SKIN CHANGES CONDUCTIVITY DEPENDING ON MANY DIFFERENT THINGS ONE BEING OUR MOOD. THAT IS ELECTRO DERMAL ACTIVITY (EDA). THE BASIC THING IS THAT OUR SKIN CHANGES CONDUCTIVITY DEPENDING ON HOW WE FEEL. HERE WE ARE USING THIS POINT TO DETECT THE LIE.

FUNCTIONAL BLOCK DIAGRAM:



COMPONENTS :

HARDWARE COMPONENTS :

*ARDUINO NANO R3 - 1

* 5MM LED RED - 1

* 5MM LED GRE - 1

* LED (GENERIC) - 1

*RESISTOR 2K - 1

*CABLES - 1

NECESSARY TOOLS :

*SOLDERING WIRE

*HOT GLUE GUN

*SOLDERING WIRE

SOFTWARE COMPONENTS:

*ARDUINO IDE APP

*GRAPHING SOFTWARE

DEMONSTRATION:

PHASE-I OUTPUTS FOR PRE-EVALUATION – 21ST OCT 2021

->70% OF HARDWARE IMPLEMENTATION

->50% SOFTWARE IMPLEMENTATION

PHASE-II OUTPUTS FOR PRE-EVALUATION – 13TH DEC 2021

->MAXIMUM HARDWARE AND SOFTWARE IMPLEMENTATION WILL BE DONE

->WILL SHOW THE PROJECT TESTINGS

FINAL DELIVERABLES :

BY THE END OF EVALUATION WE WILL SHOW THE WORKING OF LIE DETECTOR WITH GRAPHS .

- THANKYOU -