Final Project documentation

My final project consist of two application hardware and software integration which is integrating AVR Microcontroller with a hardware which uses a MIC as a communication system like using NE555 and other components to create a clap switch circuit so the signal is send to my AVR Microcontroller chip to switch on leds according to the specified commands given to it.

Figure1:



This is the hardware part or the first part of the project which contain the main sensor the MIC.

Figure2:



This is the part where the software plays an important role for this project to work perfectly as you have to tell it what to do so I decide to use AVR Microcontroller (ATTINY26) as it offers enough pins to drive anything like the rest of the AVR Microcontrollers some have bigger space

for you to write your program some don't and some have many pins to use some don't so I'm using this one because my program is not to long but short and I needed to use many pins



HERE IS THE DIAGRAM OF WHAT MY FINAL PROJECT IS

I hope I'm going to finish it in time before the graduations as it has lot of work to be done here.

MATERIAL/COMPONENTS NEEDED

PERSPEX

#LM555 TIMER(4)

#BC 547 TRANSISTORS(8)

#100N CAPS(10)

#4.7K RESISTORS(10)

#1K RESISTORS (10)

#4700HMS RESISTORS (10)

#47K RESISTORS (10)

#100UF CAPS (10)

CONDENSOR MIC (3)

#6-9V BATTRIES (3)

COMPONENTS I HAVE

ATTINY26

#SURFACEMOUNT COMPONENTS

COSTS OF MATERIAL/COMPONENTS

PERSPEX = R200.00

#LM555 TIMER (4) = R11.20

#BC 547 TRANSISTORS (8) = R9.50

#100N CAPS (10) = R3.50

#4.7K RESISTORS (10) = R3.90

#1K RESISTORS (10) = R3.90

#4700HMS RESISTORS (10) = R3.90

#47K RESISTORS (10) = R3.90

#100UF CAPS (10) = R3.50

CONDENSOR MIC (3) = R18.00

#6-9V BATTRIES (3) = R75.00