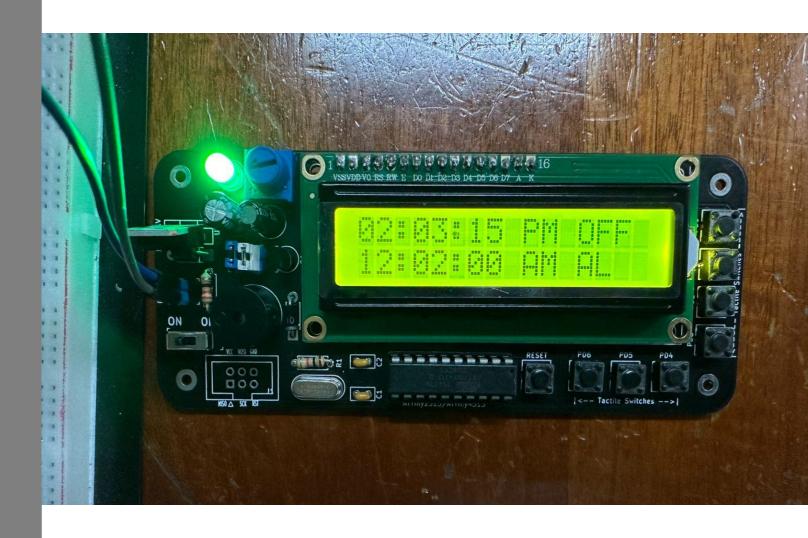
## **PROBLEM**

Have you ever wanted to know what time it is?

Have you ever wanted to be "Alarmed" to a specific time?

## CLOCK

Never be late again.



### SET & DISPLAY THE CURRENT TIME





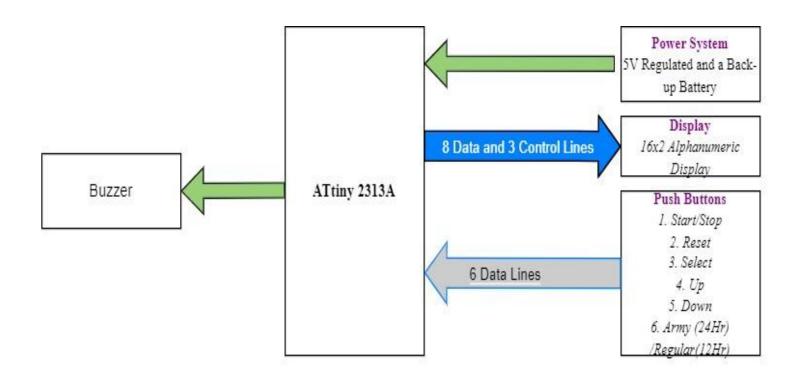
### 12HR AND 24HR FORMAT



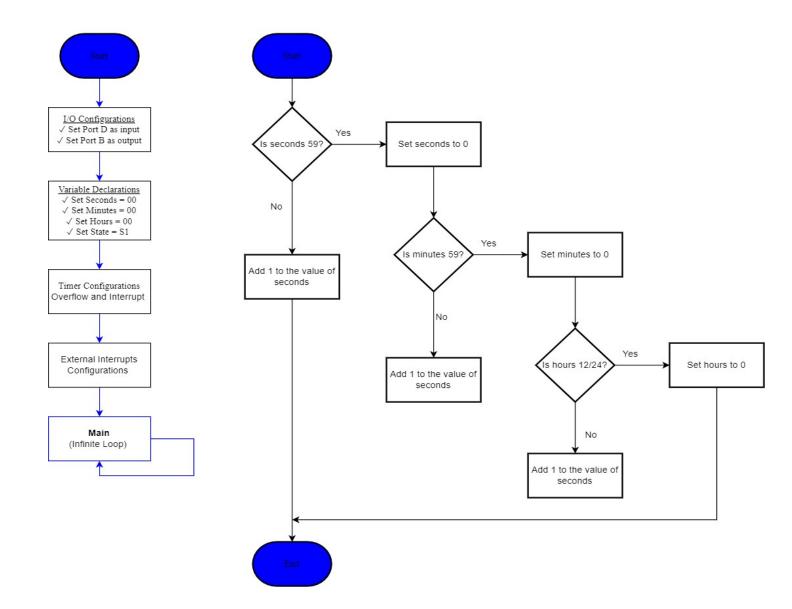


**ALARM** 

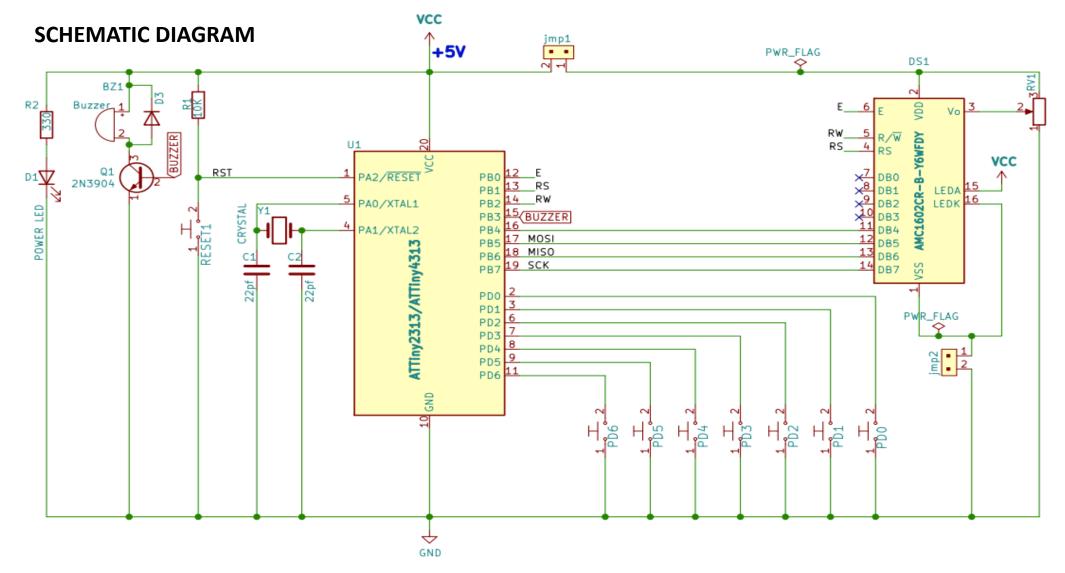
## **BLOCK DIAGRAM**



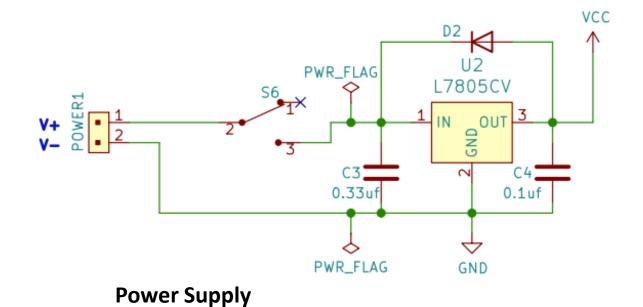
## FLOW CHART

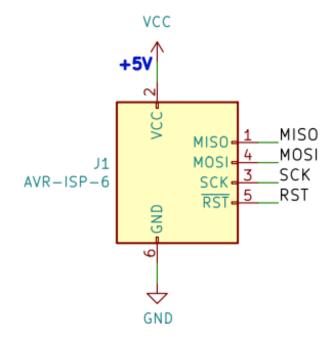


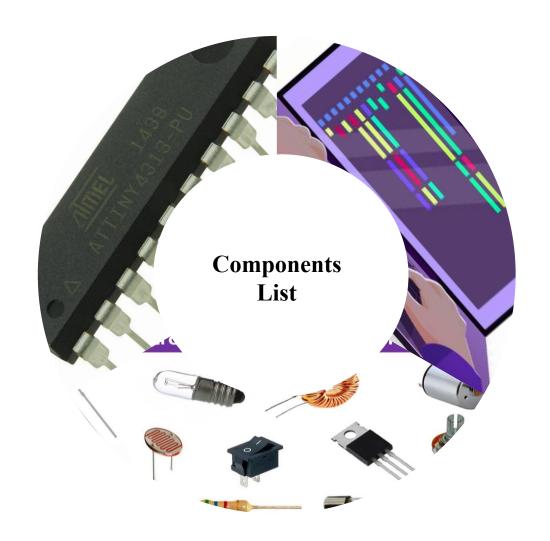
## DEVELOPMENT PERIOD



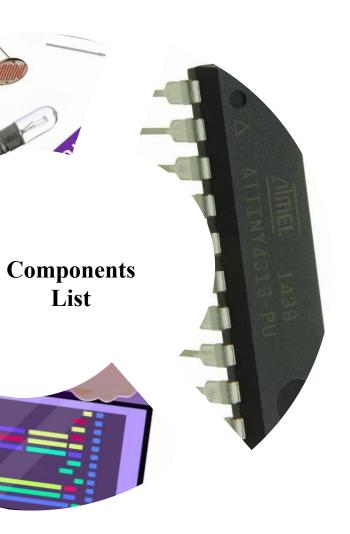
## DEVELOPMENT PERIOD



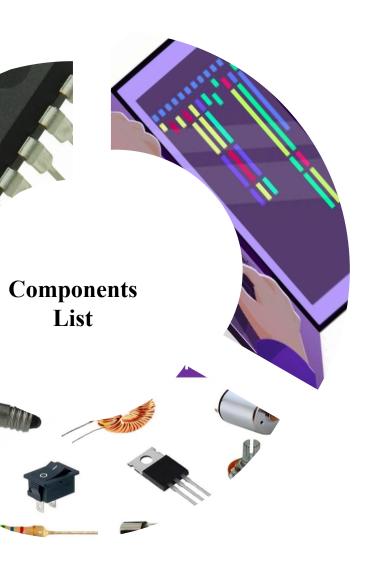




### ATtiny 4313A



The ATtiny4313A is a microcontroller from the AVR family manufactured by Microchip Technology (formerly Atmel). It's part of the Atmel AVR 8-bit RISC-based microcontroller series, known for its low power consumption, simplicity, and versatility. A microcontroller is basically a computer on a single IC (integrated circuit).



### **C-CODE**

Instructions are written and coded in the C programming language and then the microcontroller is programmed with said instruction to carry out the functionality. These instructions are written in Microchip Studio and are uploaded to the microchip using the Polou AVR



## **Other Components**

### Project Kit

- 16x2 LCD
- Crystal
- Voltage Regulator
- 8 Pin Push Buttons
- 2 0.33uf capacitors
- 1 Diode
- Speaker
- Transistor
- Switch
- Microchip Holder
- 1 10K resistor
- 1 330 Resistor
- Knobb Shifter
- Connectro clips
- PCB Bed
- Diode

### Other Equipment

- Breadboard- \$2500
- Twin and Earth wire- 1000
- Transformer-\$2000
- Poloulu AVR Programmer-\$1200
- Plug (3 Prong)-\$500

=\$6000 JMD

## TIMES UP!!!

