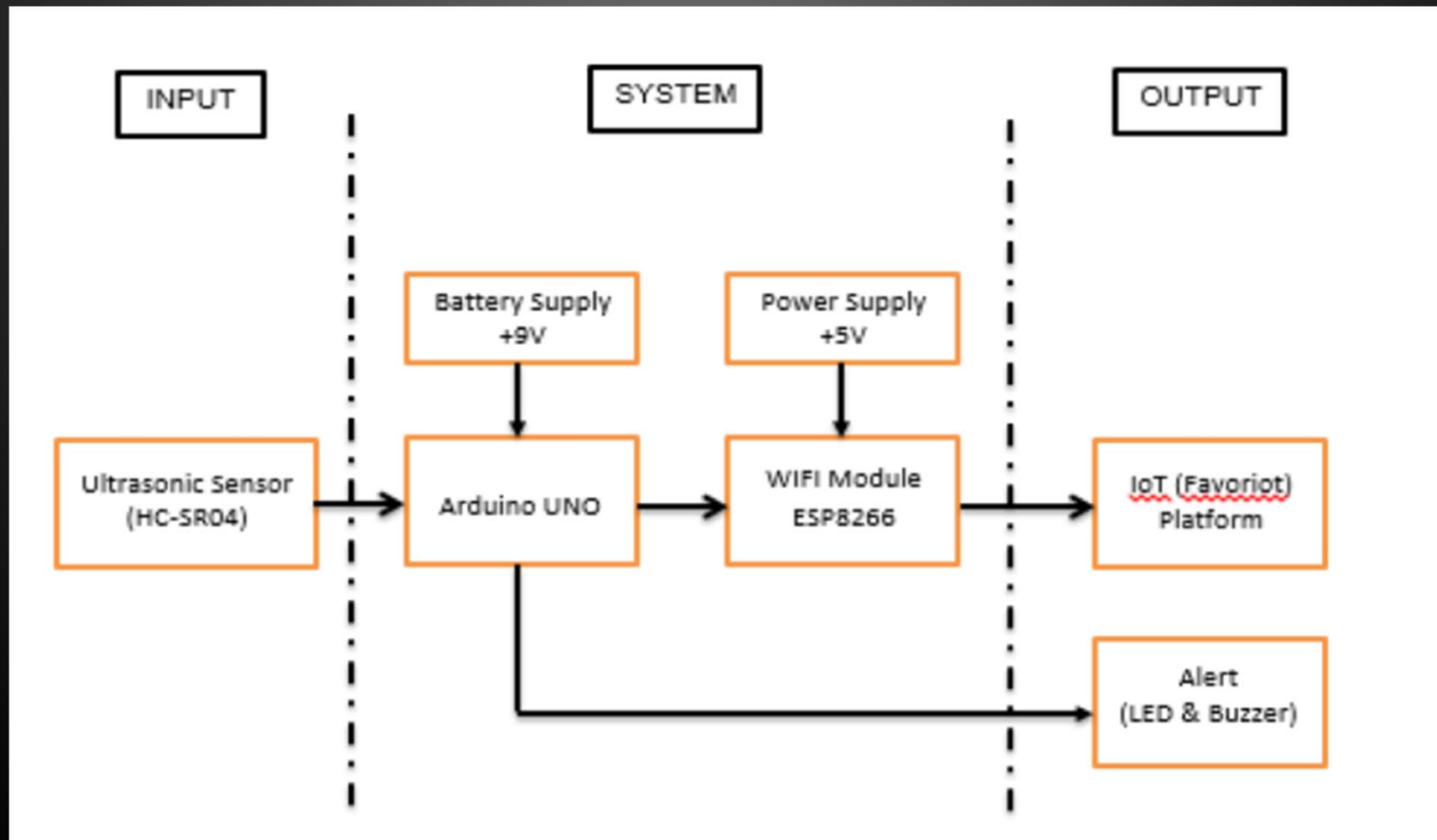


The background of the slide is a dark, textured surface, possibly black or very dark grey, with numerous water droplets of various sizes scattered across it. The droplets are rendered with realistic highlights and shadows, giving them a three-dimensional appearance. Some droplets are large and prominent, while others are small and subtle. The overall effect is a clean, modern, and thematic background for a presentation about flood monitoring.

FLOOD MONITORING SYSTEM USING IOT

BY
E.R.HARISH

BLOCK DIAGRAM



ULTRASONIC DISTANCE SENSOR

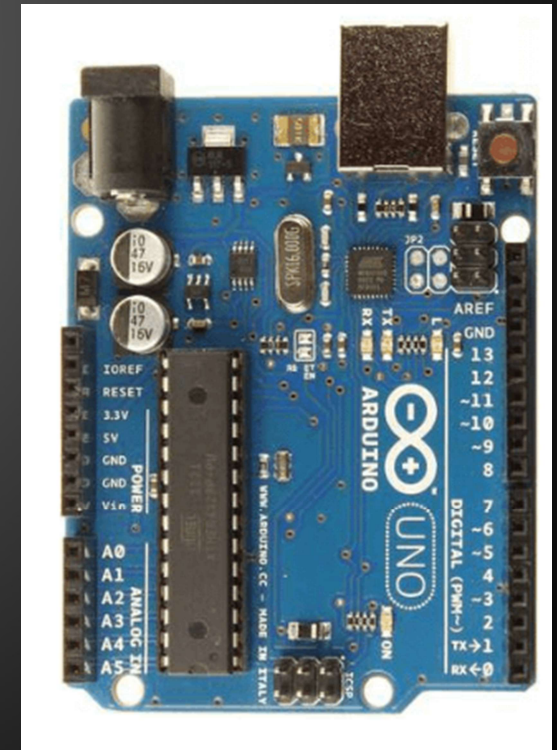
- HC-SR04 (5V)

- ❖ THIS IS THE HC-SR04 ULTRASONIC DISTANCE SENSOR. THIS ECONOMICAL SENSOR PROVIDES 2CM TO 400CM OF NON-CONTACT MEASUREMENT FUNCTIONALITY WITH A RANGING ACCURACY THAT CAN REACH UP TO 3MM. EACH HC-SR04 MODULE INCLUDES AN ULTRASONIC TRANSMITTER, A RECEIVER AND A CONTROL CIRCUIT.
- ❖ THERE ARE ONLY FOUR PINS THAT YOU NEED TO WORRY ABOUT ON THE HC-SR04: VCC (POWER), TRIG (TRIGGER), ECHO (RECEIVE), AND GND (GROUND). YOU WILL FIND THIS SENSOR VERY EASY TO SET UP AND USE FOR YOUR NEXT RANGE-FINDING PROJECT!
- ❖ THIS SENSOR HAS ADDITIONAL CONTROL CIRCUITRY THAT CAN PREVENT INCONSISTENT "BOUNCY" DATA DEPENDING ON THE APPLICATION.



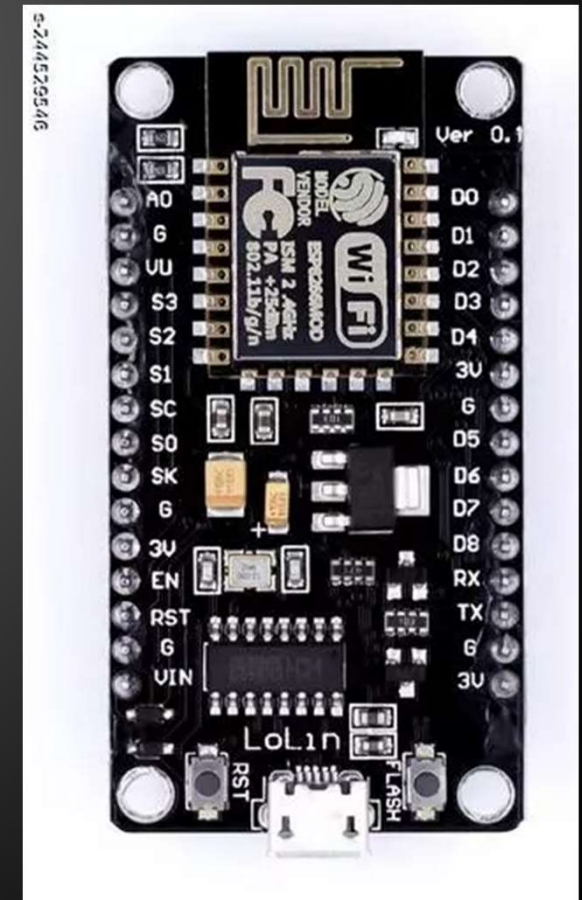
ARDUINO UNO

- ❖ ARDUINO UNO IS A MICROCONTROLLER BOARD BASED ON THE ATMEGA328P MICROCONTROLLER. IT IS A POPULAR CHOICE FOR BUILDING DIY ELECTRONICS PROJECTS, INCLUDING FLOOD MONITORING SYSTEMS.
- ❖ ARDUINO UNO HAS A NUMBER OF FEATURES THAT MAKE IT WELL-SUITED FOR FLOOD MONITORING SYSTEMS:
- ❖ IT IS RELATIVELY INEXPENSIVE AND EASY TO OBTAIN.
- ❖ IT IS EASY TO PROGRAM USING THE ARDUINO IDE SOFTWARE.
- ❖ IT HAS A WIDE RANGE OF COMPATIBLE SENSORS AND OTHER HARDWARE MODULES.
- ❖ IT IS SUPPORTED BY A LARGE AND ACTIVE COMMUNITY OF DEVELOPERS AND USERS.



ESP8266

- ❖ THE ESP8266 CAN BE PROGRAMMED TO GENERATE ALERTS IN A VARIETY OF WAYS, SUCH AS BY SENDING AN EMAIL, TEXT MESSAGE, OR PUSH NOTIFICATION.
- ❖ IT CAN ALSO BE PROGRAMMED TO TRIGGER AN ALARM OR OTHER DEVICE WHEN THE WATER LEVEL REACHES A CERTAIN THRESHOLD.
- ❖ ESP8266 FLOOD MONITORING SYSTEMS ARE A RELATIVELY INEXPENSIVE AND EASY-TO-DEPLOY WAY TO MONITOR WATER LEVELS AND GENERATE ALERTS WHEN THE WATER LEVEL REACHES A CERTAIN THRESHOLD.
- ❖ THIS CAN BE HELPFUL FOR PREVENTING FLOOD DAMAGE TO PROPERTY AND INFRASTRUCTURE



ALARM AND BUZZER

- ❖ AN AUDIO SIGNALING DEVICE LIKE A BEEPER OR BUZZER MAY BE ELECTROMECHANICAL OR PIEZOELECTRIC OR MECHANICAL TYPE. THE MAIN FUNCTION OF THIS IS TO CONVERT THE SIGNAL FROM AUDIO TO SOUND.
- ❖ BASED ON THE VARIOUS DESIGNS, IT CAN GENERATE DIFFERENT SOUNDS LIKE ALARM, MUSIC, BELL & SIREN.
- ❖ THE **PIN CONFIGURATION OF THE BUZZER** IS SHOWN BELOW. IT INCLUDES TWO PINS NAMELY POSITIVE AND NEGATIVE.



The image features a dark gray background with the text "THANK YOU" centered in a white, serif font. The corners of the image are decorated with several realistic-looking bubbles of varying sizes, some of which are partially cut off by the edges. The bubbles have highlights and shadows, giving them a three-dimensional appearance.

THANK YOU