USER MANUAL

Detect whether the person is dead or alive using Arduino UNO and pulse sensor(SEN 11574). Transmit this data wirelessly over Xbee modules

I. INTRODUCTION.

The main purpose of this system is to detect whether the person is dead or alive. The user is required to put the finger on the sensor and output is seen on the PC. The sensor passes the data to Arduino Uno where the signal processing is done. The pulses sensed by the sensor will be used to detect whether the person is dead or alive. This data is wirelessly sent to PC where one wishes to see the output through Xbee modules. One Xbee module is connected to Arduino Nano and other to PC where one wishes to see the output.

II. GETTING STARTED.

1) Power up Arduino Uno.
2) Power up Router Xbee module.
3) Power up Coordinator Xbee module and connect it to the PC where one wishes to see the output.
4) Open the Xbee XCTU software.
5) Search for the Xbee coordinator module connected to the PC.
6) Open serial console for the device found.
7) Click on the "OPEN" button in the serial console.
8) Put finger on the sensor and see whether the person is dead or alive.

III. SETUP

1. Connect Arduino and Pulse sensor with Pins as shown in the HELP section.
2. Connect Router Xbee as shown in HELP section.
3. Connect coordinator Xbee with PC and open console to see the output.
4. The Signal communication between two Xbee is done wirelessly.

For further reference visit https://github.com/harsh-2711/Group_17
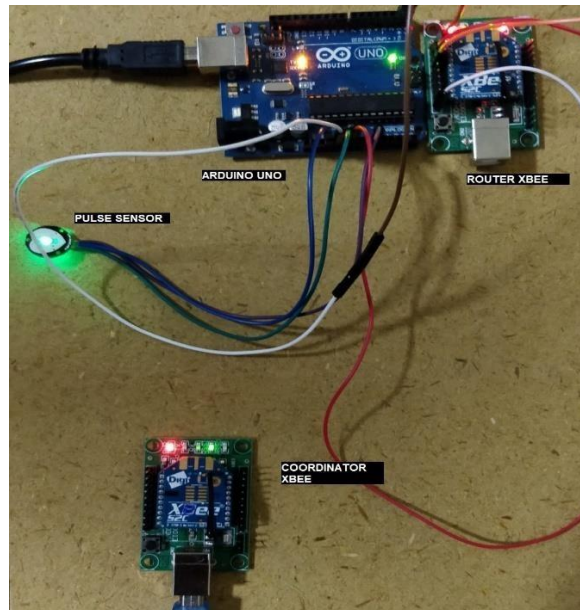
IV.   HELP

In case if wiring of the system gets open then follow the below steps.

1) Press the "RESET" button on Arduino Nano.
2) Connect sensor with the Arduino Uno as shown in the table.

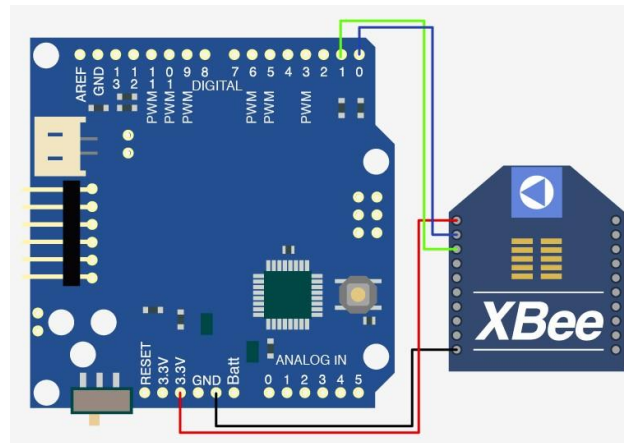ARDUINO UNO   PULSE SENSOR

ARDUINO UNO	PULSE SENSOR
Vin	+ Pin
GND	- PIN
A0	S Pin

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3) Connect router Xbee module with Arduino as shown in figure.

NOTE: Xbee connected in the above figure with Arduino is the Router XBEE module.

4) Connect coordinator Xbee to the PC where one wishes to see output.
5) Power up all the components.

V.   PRECAUTIONS

1) If the Xbee modules are not receiving or sending data, remember that Xbee can be communicated within 1600 meters of range only.
2) In case of heating of the circuit, disconnect the power supply as soon as possible.
3) Refrain from connecting wrong pins in the circuit else the components might get damaged.