

**J-Component Registration Form**

**Course Title: Biomedical Instrumentation Course Code: EEE1008**

**Class Number: VL2018195002372 Semester: Winter 2018-19**

**Faculty Name: Prof. N. RUBAN**

**Title of the Project: IOT based heart rate measurement**

**Team Members:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No** | **Reg.No.** | **Name** | **Role in Project** | **Signature** |
| **1** | **16BEE0023** | **Varun Singh Inda** | **Integration and fault detection** | **Varun** |
| **2** | **16BEE0090** | **Rishu Ranjan Choubey** | **Connections** | **Rishu** |
| **3** | **16BEE0119** | **Pranay Sharma** | **Components assembling** | **Pranay** |
| **4** | **16BEE0222** | **Utsav Dasgupta** | **Programming** | **Utsav** |

**Brief Abstract of the project with the major components required:**

This projects aims to use the pulse sensor with arduino uno and Bluetooth module, The pulse sensor is placed on the finger and it measures the heart rate and then sends the heart rate to android mobile via bluetooth device, There is no special Android app is required, any bluetooth terminal app will work perfectly. This project can be used to develop Wearable for mobiles or wrist watches. The major components used in this project are :-

1. Arduino microcontroller
2. Bluetooth module
3. Pulse Sensor
4. Bread board
5. Jumper wires
6. Smartphone for display

For this project some cables are connected the 5V pin of the Arduino board to the red power rail on the breadboard, and GND of the Arduino board to the blue power rail on the breadboard. After that, we are going to connect the pulse rate sensor. Simply connect the red cable to the red power rail, black cable to the blue power rail, and finally the remaining wire to analog pin A0 on the Arduino board. For the Bluetooth module, place it first on the breadboard. Then, connect the power supply: connect the VIN pin to the red power rail, and connect the GND pin to the blue power rail. For now, don’t connect the TX and RX pins, as we need to program our Arduino board first.

**Expected applications:** This product can be used for health watches. Its application are preferable for heart patients. It can be beneficial for notifying about a heart attack which is increasing day by day.

**Working Lab:** Not Required

**Instruction:**

* **Team size: Minimum 3 & maximum 4**
* **Last date of submitting this form: 14-12-2018**