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## The Wake Up Band

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# The Wake-Up Band

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The Wake-Up Band is an alarm clock for your wrist. It's designed to wake you up silently and no one else gets disturbed. It also features a light to help you navigate in a dark room. There's no need to turn on any lights. The Wake-Up Band uses vibrations to help you rise gently. The best feature of this device is that it would make a great alarm clock for the hearing impaired. The Wake-Up Band is very easy to use. Just sync your phone to the bluetooth feature and set your wake up time!

Regular alarm clocks are a problem for people who don't want others disturbed and it would work best for the hearing impaired.

### **Materials:**

1. Vibration motor: \$6
2. Flashlight: \$5
3. Arduino uno: Owned
4. Arduino uno case: \$6.28
5. Hc-05 bluetooth module: Owned
6. Electrical tape: Owned
7. Jumper wires: Owned
8. 9 volt battery: Owned
9. Glue: Owned
10. Velcro strap: Owned
11. 9 volt battery clip: Owned
12. Running band: Owned
13. Samsung Phone: Owned

### **Procedures:**

1. Ordered materials.
2. We built it by putting code in the arduino and used a 9 volt battery to power it
3. Code the app finished.
4. Tested the project with a phone.

### **Results:**

The arduino stopped working after a few trials. We reset it and uploaded the code more carefully. The code didn't upload so we downloaded the newer version. We figured out that the wiring wasn't set properly and we changed it from 6 to 13. The wristbands were not compatible with the arduino so we

got a running band.

**Conclusion:**

The Wake-Up Band is designed to help people who find it hard to wake up with a traditional alarm clock. We learned that it can be very helpful for the hearing impaired and can also be used other than an alarm clock such as reminders.