**DUNDALK INSTITUTE OF TECHNOLOGY**

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**Technical Documentation On**

**WRISTBAND AIR QUALITY MONITOR**

Project Carried Out

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**Security and Privacy**

**Device Security:**

The first feature that we will be implementing in order to support device security is a 4-digit pin for the device. When first using the wristband, the user will be prompted to setup a 4-digit PIN which will be used in the future to gain access to the device when attempting to connect to it. This will prevent anyone from connecting to the device and tampering with it.

To build on the security of this PIN, we will also implement a device lockout system. Whenever the user enters the PIN incorrectly 5 times then the device will be locked and not allow any access to it until the lock is lifted. When the device becomes locked, an email will be sent to the email address associated with the device with an option to unlock the device. By using this system. It will prevent unauthorized users to have an infinite number of tries at bypassing the PIN to access the device.

Another feature that we are designing that will increase the level of security for the device is a way for the user to remotely wipe or lock the device if they lose it. Once the device becomes lost, it will be vulnerable if found by someone else. To counter this, we will allow the user to lockdown their lost device from their current location using the app so that no one will be able to access it and tamper with it. As well as this, the user could wipe all of their data from the device and essentially reset it so that if someone would gain access to it, they wouldn’t be able to see any of their data.