**School of Electronics and Computer Science**

**ELEC6200 Wireless Networks Group Project**

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| **Project Brief** | |
| **Title** | LPWAN2 |
| **Supervisor** | Steve Braithwaite |
| **Team Members** | Dominic Heaton, Pawel Kostkowski, Samuel Wong, Kah Yap |
| **Abstract** | Design a remote data collection device (of low-rate sensor data, measured every 10 minutes) and send it to a remote location viewable on a web browser via a local LPWAN network. |
| **Use cases:**   * Integrate a noise sensor to provide real-time readings of the noise levels changing throughout the day. Such sensors could be deployed near schools, offices, living areas to help us understand the generated noise and possibly implement means of reducing it if it is undesirable. * Integrate basic meteorological sensors like temperature, humidity, pressure and keep track of daily changes of these paraments. By deploying such sensors in various locations in cities it would be possible to understand the minor changes in the weather conditions and possibly provide more accurate/ adequate forecasting based on persons proximity to a specific sensor.   **Minimum project requirements:**   * Website based on Bootstrap dashboard template * Simple website hosted on the AWS EC2/S3 server * Implement basic data base where sensor data is stored and accessed by the website * Integration of a simple sensor with Arduino based microcontroller * Sensor data transmitted and received once every 10min | |