LanderNUS Enhancements

After all the requirements set out in the earlier sub-sections **have been met**, you are encouraged to use additional peripherals or add features related to LanderNUS, such as:

- SW2, SW5, etc.
- Other methods of interfacing such as Timer, ADC, etc.
- Interrupts for the different peripherals connected to the LPC1769
- More complex helper functions from the device libraries

With these additional peripherals, application logic enhancement can be implemented, including and not limited to what is to be done with the values from the different sensors. This is an independent and self-learning task, for which help will be limited in order to prevent such enhancements from becoming too common, and therefore worth less. The more complex and rarer the enhancement, the more impressive your will be. Peripherals whose usage and codes have been discussed during the lab sessions will not be given extra credits.

You should focus **on one well-thought of application logic** to showcase your enhancement, instead of several smaller application logics. Your enhancement for **LanderNUS** must be related to the given scenario in order to score good marks for enhancement. Marks are only given for one application logic depending on (i) the novelty and value it adds to **LanderNUS** (ii) the complexity in implementing it, and (iii) how well the claimed enhancement works. You should be able to state something like "My system has <<some feature of behaviour of the system>> enhanced through <<use of a new peripheral / different way to access a peripheral / some kind of optimization>>". Mentioning a list of things you did such as "I did x, y and z" or mentioning a list of new peripherals you used such as "I used x, y, z etc." without adding value to the system will not be very useful.

While trying out different things can be good for your learning, you have to keep in mind the fact that Assignment #2 contributes only 30% of the grades of a 4MC module. Furthermore, the enhancements carry only a limited amount of marks as compared to the basic requirements of the assignment. In other words, a program with excellent enhancements, but poor completion of basic requirements, will not score well.

During the assessment, you will be required to show all the basic requirements without your application logic enhancements. The latter should only be shown after the basic requirements have been demonstrated. You are not allowed to upload multiple programs to your LPC1769 to demonstrate your application logic enhancements. Only one program will be allowed for upload to the LPC1769.