

Electronics II

Exercise 6

Deadline **Thu** 8.3.2018 12:00

1. Make your favourite poem scroll on the LCD. Backlight the screen and make the contrast adjustable with a potentiometer. (2p)
2. Set the RTC to the correct time and display the time and date on the LCD. (2p)
3. Mod your code from the previous problem so that the microcontroller is in power-down mode and it updates the time only when a button is pressed. Estimate roughly how much is the average current consumption. How long would a 1000mAh battery last with and without the power-down mode? Consider only the current consumption of the microcontroller. (2p)
Feel free to optimize the power consumption of the whole system.