

Electronics II

Exercise 9

Deadline Wed 28.3.2018 12:00

1. Display the position of the joystick as a dot on the dot matrix display. Use the joystick button to change display brightness. (1p)
2. Read the RFID tag's ID. (1p)
3. Use Arduino as primitive "USB stick": write a string of text from the computer to the EEPROM, unplug the Arduino, replug it and read the text back to computer. (1p)
4. Make a snake, breakout or tetris game using joystick and dot matrix. Before the game starts display "Show RFID" on the screen. If it's an unknown ID assign a new player number to it and store the ID on the EEPROM. Then display the current highscore and the player number of the record holder. When the game ends, if it's a new highscore congratulate the player and store it on the EEPROM. (3p)