## Guided Project

CSE 331: Microprocessor Interfacing & Embedded System

Fall 2020

## Selected Projects for Simulation using Proteus

You, as a group, can pick any of the following projects:-

- 1. Gas detection and PPM measurement using 8051/PIC microcontroller using MQ Gas sensors
- 2. Rotary encoder interfacing with 8051/PIC microcontroller
- 3. Home automation using 8051/PIC microcontroller
- 4. Heart beat monitoring using 8051/PIC microcontroller
- 5. Zero crossing detector design using 8051/PIC microcontroller
- 6. Foot step power generation system using 8051/PIC microcontroller
- 8. Street light automation using 8051/PIC microcontroller
- 9. Water level monitoring using 8051/PIC microcontroller
- 10. Security lock system using 8051/PIC microcontroller
- 11. Car parking monitoring system using 8051/PIC microcontroller
- 12. Password based door lock system using 8051/PIC microcontroller
- 13. Electronic voting machine using 8051/PIC microcontroller

However, you are not allowed to do the following trivial or popular projects for this course:

- Temperature and humidity sensor based system using 8051/PIC microcontroller
- Fire alarm based system using 8051/PIC microcontroller
- Ultrasound based Obstacle sensor system using 8051/PIC microcontroller

Have you any queries, please send me an email at rishad.arfin@northsouth.edu