Project Guidelines

CSE 331: Microprocessor Interfacing & Embedded System

Fall 2020

1 Project Group

Each of the group for the term project should consist 2-3 members (i.e. not less than 2, neither more than 3). A group of 3 members is perfect. It should be convenient if you form group with the people in your respective sections.

2 Project: Guided or Open

Selection of the project work is both open and guided. Selection of the project depends on your group which one you may want to select mutually.

Guided Project: A list of different projects will be given to you. You may want to select any one project among those for your group. Afterwards, you have to submit a project proposal (i.e. one page) based on the selected project. The submitted project proposal will be used for future references. List of projects will be posted soon for your selection.

Open Project: You will choose the project along with your group members mutually. Make sure that it is not too complex neither too easy as well. Make sure it is doable within the definite time. Once the project is decided, please submit a project proposal (i.e. one page) based on that specific project. The submitted project proposal will be used for future references. The decision (i.e. acceptance-otherwise) about the proposal will be informed to you as soon as possible.

Regardless of your project (i.e. Guided or Open), you have to submit a one-page project proposal.

3 Project Requirement

You have to contribute evenly along with your group members in the following things:

- 1. One-page proposal submission
- 2. Simulation of Microcontroller based system using Proteus software
- 3. Group Report Writing
- 4. Demonstration of Proteus Simulation
- 5. Understanding different segments of the project

Please make sure that you understand the working procedure of each parts of the circuit regardless of your respective contribution to the project.

4 One-Page Project Proposal

Your one-page project proposal should include the following things:

- 1. Name and ID of group members
- 2. Title of the project
- 3. Objective

- 4. Applications
- 5. Block Diagram

5 Simulation Tool: Proteus

The project simulation should be performed using Proteus. You should contribute equally in the schematic design of the circuit (i.e Phase 1) and interfacing codes (i.e. Phase 2). You may use Mikro C as interfacing language for your project. Make sure that you understand both phases (i.e. Schematic design and Codes) regardless of your individual contribution.

6 Group Report

You, as a group, are required to submit a project report based on your simulation work. This should be in word file so that every one of you can contribute to the writings. The following things need to be included in your report:

- 1. Name and ID of the group members
- 2. Title of the project
- 3. Objective
- 4. Applications
- 5. Working procedures
- 6. Images of Schematic circuit
- 7. Code
- 8. Discussion (in detail)
- 9. Contribution (for each group members)

7 Project Demonstration

You along with all of your group members have to demonstrate the simulation work (i.e. no hardware implementation) only of the proposed project on the day of final submission through online Google meeting. Make sure you are well prepared for it. Every member of the group will be evaluated based on their individual performance, understanding, and effort in the project.

8 Deadlines

Multiple deadlines for the corresponding segments of the project will be announced in the Google classroom. Multiple deadlines ensure the incremental progress of your project work. Therefore, please meet the scheduled deadlines.

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