ECE 321 Project: SRS Document

Fall 2018
(group work; 15% of the total grade)

1. The project asks you to develop software requirement specification (SRS) document for the Traffic Lights System (TLS) elicited during the labs using the IEEE 830 SRS standard template:
   - **one document** shall be submitted by each group
     - each group member will be assigned an individual grade, which will be equal for all team members
   - you shall use the information elicited during the semester; **DO NOT assume**
     - the incorrectly assumed requirements will be marked as incorrect
     - information elicited in the subsequent labs takes precedence over older information, e.g. in case of a conflict between summaries from lab 2 and use cases from lab 4, the latter information is considered correct.
   - financial and scheduling matters shall be disregarded in the SRS
   - you shall use **the IEEE 830 SRS standard**; in particular:
     - you shall use and **correctly number all necessary sections**, as defined in the standard
       - you shall describe the fact that a given section is irrelevant
     - you shall enter the information in the **relevant sections**
     - you shall be **precise**
       - you shall define and use a **consistent set of expressions and abbreviations** through the entire SRS document; they shall be detailed in the Section 1.3.
       - you shall formulate requirements in a precise and unambiguous manner
     - for functional requirements you shall use the **mixed mode template with the system mode first, and the stimulus second**
       - there are three modes: Day, Night, and Emergency
       - there are numerous stimuli: sensor, button, timers, etc.
     - you shall provide **two appendices** in section 4.2, which include 1) the complete use cases, and 2) the Finite State Machine model
       - You shall include all use cases. They must be correct and consistent with the SRS's functional requirements and the operational model. You can re-use the use cases from the GatherSpace.
       - Your FSM model shall include the transition function table, description of all states and inputs of the FSM model, and a graph representation of the FSM model
     - you shall provide the table of contents in section 4.1 and a cover page
   - **remember to allocate enough time** for this project since it will require at least several hours of work. Plan ahead if necessary.

Due Dates and Notes

Your project must be received no later than December 12th, 9am MST on eclass.. Your document must be written single-spaced, using 12 font size, and with standard margins. One Student from each group should upload the SRS document to eclass .