Software Systems Design & Architecture Project Proposal Guidelines

(5 Points)

You are responsible to submit the proposal for your group project. In the project, SIX to EIGHT students need to form a group, act as different stakeholder roles of the software system to be developed, collectively execute the project from requirements, to architecture design and documentation. Another group will evaluate your group's architecture design using your requirements and architectural documents. Both groups will finally present your work (design and evaluation) in class. While your group will take the role of evaluating other's architecture design as well.

Your group has to describe at least TWO significantly different architectural designs, and select one for implementation. (Later the evaluation group will make the decision whether the design decision is rational and can be accepted or not) The proposal should be at maximum THREE pages (A4 size), describing *Who, What, How, Why,* and *How much* you plan to do on this project.

DEADLINE: 11:59pm on (Sunday) February 24, 2019

Project Title:

[This will be used to identify your group. Keep it informative but as short as a few words.]

Your Information:

- 1. Group name (if you would like to have)
- 2. Group members' names, student numbers, and roles in the project

Project Overview:

- 1. Describe the main functions of your software system to be developed.
- 2. Describe the expected outputs or results of your software system.
- 3. Prototyping interfaces for the selected functions if any [Give snapshots of your prototype by the time you submit this proposal, if you have any static prototyping interfaces to demonstrate your project. Keep your interfaces simple and intuitive.]

Project Design:

- 1. Select at least TWO different component-connector architecture styles to design. Provide a brief rationale of your selection.
- 2. Architecture diagrams [Draw two <u>high-level</u> architecture diagrams of your system, one for each architecture style.]

Project Implementation Plan:

Explain the platform, framework, language and toolkits you will use to implement your system, e.g., Java, Eclipse, Microsoft J++, C, C++, C#, ...