COEN 241 Project
Final Presentation & Report Instructions

For the COEN 241 final project, each team must present their work (30%) and submit a project report (50%). This document specifies what information you should include in your presentation and your report.

Presentation Contents (15~20 minutes)

You must present your work in a way that fellow COEN 241 students could understand. Your presentation should be 15 to 20 minutes and must have a demo of your working project. **It must be a live demo and video recordings will not be accepted.** The following are the set of information that must be included in your presentation.

- Introduction
  - Present the title and team member names
- Motivation & Problem Statement
  - What motivated you to take on this project?
  - What is the problem that your team is trying to solve?
- Background information
  - What are some background information you should give to the class regarding the project? For example, if you are using AWS, you must give enough background knowledge on what AWS, which resources you are using, why it is relevant and how you are using it.
  - Failure to provide enough background information will result in deduction of points.
- Related work
  - Please list 1~2 related work that already exists.
  - If you are replicating a research paper, related work should be provided in the research paper.
- System Architecture
  - What is the overall architecture of the system?
  - What cloud resources are you using and how?
- Software Architecture
  - How did you structure your software?
  - How do each piece communicate with each other?
  - What did you build and what was already available?
- Outcome / Improvements

- ○ What is the final outcome of your project?
  - ○ Have you improved from any existing software?
- ● Possible Future Work
- ● Demo
  - ○ Each team member must demonstrate their piece of work
  - ○ You will be receiving individual feedback based on the demo

Final Report Contents (6~8 Pages)

Your final report should be written in the same style as a short research paper, and written in a way that a fellow COEN 241 student can understand. **The project should be submitted in PDF format** and preferably using LATEX templates used for research paper submissions. Your final report must contain the following information.

- ● Title Section
  - ○ The title of your project.
  - ○ Team member names: List the names and @scu.edu email addresses of all of your team members
- ● Abstract
  - ○ An abstract should concisely (less than 300 words) motivate theproblem, describe your aims, describe your contribution, and highlight your main outcome.
- ● Introduction
  - ○ The introduction explains the problem, why it's difficult, interesting, or important, how and why current methods succeed/fail at the problem, and explains the key ideas of your approach and results. Though an introduction covers similar material as an abstract, the introduction gives more space for motivation, detail, references to existing work, and to capture the reader's interest.
- ● Background and Related work
  - ○ This section helps the reader understand the research context of your work, by providing background information and an overview of existing work in the area.
  - ○ You might discuss: works that inspired your project, works that you use as baselines, works proposing alternative approaches to the problem, etc.
  - ○ This section shouldn't go into deep detail in any one work. Instead it should explain how each work relates to each other, and how they relate to your project
  - ○ Attempt to demonstrate why your project is a nice next step, or useful replication, of the existing works.
- ● Approach
  - ○ This section details your approach(es) to building your project.
  - ○ For example, this is where you describe the high-level architecture of your project, as well as your software architecture.
  - ○ If you designed a new algorithm, please list it here.

- - **If you're using any code that you didn't write yourself, make it clear and provide a reference or link. When describing something you coded yourself, make it clear (so we can give you credit!).**
- Outcome
  - This section contains the following.
  - Runtime details: Report how you ran your project. Is it configurable to run in different ways?
  - Report on end-to-end performance of your system.
    - For example, how long does it take for a user to send a message from one server to another?
    - How much memory does your system use?
- Analysis and Future Work
  - What are some shortcomings of your project?
  - What can you do to improve this for the future?
- Conclusion
  - Summarize the main findings of your project, and what you have learnt. Highlight your achievements, and note the primary limitations of your work.
- References
  - List all your references / existing work used for this project

Submission Instruction

Submit your **final presentation and final report** on Camino. **Each team member should submit a copy of the milestone separately.**