Guidelines for Term Project Presentations

Department of Computer Science,
Colorado State University

This document lays out the skeleton for your term project presentations. All presentations *must follow* this skeleton. Presentations will be for 15 minutes and it expected that you have rehearsed your talk at least 3 times.

[1] Title Slide

This should include (a) The title of the presentation (b) author, and (c) the course information: CS 555: Distributed Systems.

[2] Background Information

Describe why the problem you have chosen matters; how this plays a role in our daily lives, etc.

[3] Problem characterization

This is a technical description of the problem. Your audience is your peers so express it in a way that they can appreciate.

[4] Trade-off space for solutions to your problem

Often the problem space is big enough that optimal solutions might be computationally intractable. In some cases, the memory requirements may be too high or may entail far too many message exchanges. Add in consumer demands such as fast response times and things get even trickier.

To cope with such scenarios, solutions often go for the "good enough" approach. The trade-off space describes which element of the solution space was traded off for achieving a certain objective. In cloud settings for example, solutions often trade-off consistency for availability; if there are failures in the system, you will still be able to access the service but consistency might be off – it is always a good idea to check if the quantities are correct in your online shopping cart before you complete the checkout.

[5] Methodology [3 slides]

This portion of your talk describes your solution to the problem. Identify the key elements of your solution; this may include: algorithms, data structures, software stack, etc.

[6] Performance Benchmarks [3-4 slides]

These should identify the experimental setting including the OS on the machines, the number of machines, dataset, etc. Identify experiments that you performed that substantiate your claims for the item **[7]** below.

[7] Key Innovations

List the key, innovative aspects of your proposed solution. For example, why do you think your proposed system will scale with increases in data, requests, or number of machines.