

Example Presentation Outline

Capstone or Term Project

Title Slide

Include your team number, project title, and full names of all team members

Problem or Need

What is the problem being solved? Where does it arise?

Motivation

Why is it important? What is the value of a solution (lives, money, effort, energy saved)?

Objective

What is the specific objective of this project? A design? A working prototype?

Alternatives

How is it done today or what other alternatives exist?

Requirements

What are the requirements for an acceptable solution?

Your Approach

Brief overview of your approach and your project schedule

Concept of Operations

Describe how your solution "works" from the point of view of the user. Taking into account the requirements, you are now proposing a particular solution (but not the internal design – yet). Think of this as almost writing the user manual for the product before doing the detailed design and implementation – it's a specification of what the system is supposed to do before you design and implement it. Equipped with this, another team should be able to design and build a functionally equivalent product even if their internal design and implementation are completely different from yours

Design

Now describe your design

May need multiple sub-headings here (e.g. H/W and S/W, or multiple subsystems)

Describe design using appropriate methods (e.g. block diagrams, UML models, algorithms)

Discuss design alternatives, trade-offs, decisions made

Implementation

Details of implementation (major components, schematics, board layout, code)

Tools employed (e.g. simulation/modeling tool, PCB layout, IDE, cross-compilers)

Bill of materials (with costs, per unit cost)

IP and Prior Work

Briefly summarize what use you made of prior work or IP including but not limited to ideas, designs, schematics, board layouts, code.

Testing

What was the testing strategy and plan?

Results

What worked? How well? What didn't work? Why?

We're less interested in things like soldering problems and software bugs than the performance of the system – how did it measure up to expectations (e.g. speed, accuracy, cost, battery life, whatever relevant metrics apply)

Include data and graphics/charts/plots where appropriate.

Contributions

What were the contributions of each member (e.g. who did PCB, coding, testing, writing)?

Lessons Learned

What did each member of the team learn as a result of the project (technical, skill, personal)?

What would you do differently?