

Capstone Poster Session

Guidelines for Students

The capstone poster session is the culminating event for the capstone courses, which are designed to reflect all your knowledge and skills applied to developing a product for an industry, government, academic, or non-profit sponsor. As a culminating event, the capstone poster session is also a good place to assess the extent to which the CSE program helps students achieve some of the main intended outcomes of the program and to identify possible improvements.

The guidelines below are intended to help you effectively present the work your capstone team did over the course of the semester and to communicate your results to the other teams, your sponsor, faculty, and other people of interest. Six specific aspects of your project and team will be of particular interest during the poster session:

- Problem Formulation
- Design Approach
- Implementation Approach
- Communication Effectiveness
- Effectiveness as a Project Team
- Other Factors

The poster session contains three presentation modes: the physical poster itself, a team presentation summarizing the product, and an optional demonstration of the product. All three modes are covered, where applicable, in the discussion below of each of the six aspects.

1. General

Organize the poster so that the information flows from top to bottom. At the top, put the project team name, corporate sponsor, project name, project team members, and course instructor. Next, make sure the purpose of the project is clear and well-defined. Use graphics and charts to support your project, avoid large blocks of text, especially in small font. Describe the process and key steps you took while executing your project. The poster flow shows the problem, what you did to solve the problem to build an implementation, and what the future holds for it.

2. Problem Formulation

Make a clear statement of what problem the product was trying to solve, and why the sponsor wanted the product. How has your project attained the sponsor's goals for this problem? Show that you thought about your problem domain in a larger context, and your product is one implementation of that problem's solution. See "Other Factors".

3. Design Approach

What steps did you take to achieve your sponsor's goals? Your team's goals? What challenges occurred that your team had to overcome? What alternatives did your team examine to determine the best course of action and design? Were there better solutions that your team did not choose, and why?

4. Implementation Approach and Choices/Tradeoffs

How did you organize your resources to execute your project? What tools and technologies did your team use? Were there other tools/techniques that you could have instead used to solve the same problems? How did you choose among the alternatives? Consider at least one example tool/technique that you picked to solve a problem and discuss in some detail why you chose it over other tools that could have been used to address the same problem. More generally, were there other resources your team would have preferred but could not use? Why? What were the critical performance factors: response time, storage management, user friendliness, etc.? What trade-offs did you need to make to build your product? Why did you choose the trade-offs you did?

5. Communication Effectiveness

The poster should be as self-explanatory as possible. It is likely that most people will not get the opportunity to hear you explain it. If you do get to present your project: Be upbeat, clear, and concise. Make your point then stop a beat to allow the listener to process that information; then continue to your next point. Avoid a monotone voice, rambling, or frequent pauses. Refer to your poster periodically, such as by pointing to particular elements of it to highlight what you are saying. Be sensitive to the listener's time: different people will have different levels of interest. Try to draw them in, make them more interested in what you accomplished. Keep a constant watch on their body language as a way to judge their engagement level. What got you excited about working on the product? Try to get them to be as excited about your project as you are.

6. Effectiveness as a Project Team

If you are giving a short demonstration, do it interactively if possible. Engage not only the listener, but other team members in the demonstration. Take turns talking about aspects of your project. Use the above points about communication, but share the focus. Listeners are more engaged when the presentation alternates between speakers, especially if they alternate between male and female. It is ok to describe what each person contributed on the project, but better if each person explains their own part, instead of one person explaining everyone's part.

7. Other Factors

There are many other things that might be important, relevant, and interesting that happened on your project. Highlight at least one of the factors from the list below to show that you thought about your problem domain in a larger context, and that your product is one implementation of that problem solution. Showing that you thought about some of the following questions contributes to a more successful poster session. The exact answers are not as important as the fact that you thought about them.

- During the course of your project, did you have an especially challenging problem, as a team or individually? What did you do about it? What did you learn from it?
- Did you think about the future of your product? How would you extend it for future work? Is there a particularly interesting use for your product? Will it continue in other capstone courses, be used as part of another product, or be used on a larger scale?
- How does your product influence local concerns? Does your product have any ramifications globally? Economically? Politically? Culturally? Environmentally? Medically? Legally?
- How does your project stack up in the grander scheme of things? Does it have ramifications in the greater scope of the industry? Does it have ramifications in other industries, or across industries?