



In-Class Discussion to Critique the 1st Round of Power Point Presentations

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OVERVIEW

- **THE GOOD & NOT SO GOOD – OBSERVATIONS**
- **AREAS FOR IMPROVEMENT – GOING FORWARD**
- **CONCLUSIONS**



THE GOOD & NOT SO GOOD

■ **PRESENTATION DEMEANOR**

- Teams appeared excited about their projects & enthusiastic about their presentations.
- There were generally positive interactions among the co-presenters that created the impression of a unified team.
- There were some awkwardnesses occurred during presentations.
- Some presenters did not meet professional dress code (business casual).



THE GOOD & NOT SO GOOD

■ PRESENTATION QUALITY

- Presenters well prepared and practiced.
- Number of slides appropriate for 12-15 minute presentation.
- Content of presentations described the project concept & goals.
- Presentations tended to improve as Round 1 progressed.
- Often key details omitted – too high level.
- Unclear what the project deliverable will be.
- Goals were largely vague and unmeasurable.
- Important technical issues not addressed, e.g. physical design & model verification.



THE GOOD & NOT SO GOOD

■ **POWERPOINT SLIDES**

- Good level of creativity in design: e.g. color scheme, graphics & composition.
- Details of the required slide format were ignored.
- Too much text & insufficient art-work.
- Occasional unreadable text due to font size or color schemes.
- Some slides contained too much information and some others too much white space.
- Sequence of slides sometimes did not make sense, e.g. “Problem” came after “Approach”.



THE GOOD & NOT SO GOOD

■ Q&A

- Excellent participation by audience, offering thoughtful - sometimes challenging questions & comments.
- The answers from the teams were generally informed and straightforward.
- Both presentations and questions improved as Round 1 progressed.
- Questions were too often asked because presentation lacked sufficient detail.



AREAS FOR IMPROVEMENT

1. MAKE EASY IMPROVEMENTS.

- Insure PowerPoint slides abide by required course format.
 - Review ESE Sr. Design website resources
 - “PowerPoint Tips” by Mary Westervelt.
 - “Sample View Graph Presentation”.
- Proof read slides for errors and presentation order.
- View slides in venue ahead of the presentation.
 - To verify font size
 - To verify color schemes
- Practice as a team & critique each others presentations.
 - Use TCP Fellows
- Dress for success.



AREAS FOR IMPROVEMENT

2. DEFINE & ESTABLISH THE PROBLEM TO BE SOLVED.

- In some project presentations the solution seems to have been defined ahead of the problem.
- Challenge your assumptions and address obvious questions.
- Effective project presentations are persuasive rather than narrative.



AREAS FOR IMPROVEMENT

3. DO NOT SHORT-CIRCUIT DESIGN PROCESS.

- Specific solutions need to arise from considerations of the problem.
- Some teams appeared to have committed to a pre-conceived solution and then tried to design the problem to match the solution.
- The details of the solution need to connect with the requirements of the problem.
- Requirements of the problem were not addressed by many teams.
- Define the users and other stakeholders.
- Define requirements from perspective of the stakeholders.



AREAS FOR IMPROVEMENT

4. ACCURATELY DEFINE STATE-OF-THE- ART.

- Relatively little was presented from the literature or other sources about existing approaches, solutions, methods & why they needed to be improved.
- This lack of information may have arisen from not asking sufficient questions or not challenging research results.
- In some cases it seemed to be assumed that when one example was found it represented the state-of-the art.
- Conduct a robust research of the relevant literature.
 - Use your subject matter resources.
 - Library will help.
 - Back up claims with references from viable sources.



AREAS FOR IMPROVEMENT

5. QUANTIFY THE PROBLEM.

- Teams seemed hesitant to use estimation - a hallmark of engineering - to provide ballpark values to quantify their problems and the potential value of their solutions.
- Use defensible estimates to quantify the problem, e.g.
 - How big;
 - How much;
 - How many;
 - How often, etc.
- Use defensible estimates to quantify expected improvement , e.g.
 - Improvement in efficiency;
 - Savings in dollars;
 - Increase in ridership;
 - User satisfaction;
 - Health stats, etc.



AREAS FOR IMPROVEMENT

6. DEFINE MEASURABLE SUCCESS CRITERIA

- Criteria for success were often undefined or vague.
- For hardware projects, delivering a “working” system is necessary but not sufficient.
 - Quantify success with measurable features and specifications.
 - Specifications and features driven by the problem and needs of stake-holders.
- For modeling projects, capturing phenomena under investigation is necessary but not sufficient.
 - Define specific purpose of the model from stake-holders' perspective.
 - Quantify success with measurable features and specifications
 - Define how model results will be delivered to users
 - Validation is critical.



CONCLUSIONS

- We observed many positives in Round 1 Presentations – you have done a good job.
- The critiques and areas for improvement are typical for this stage of the ESE Senior Design project cycle.
- There is work to be done.
 - Recall from “Intro to ESE Senior Design, 2009-2010” slide 9 “Work-load per student: 1 CU => 9 hours/week (excluding in-class time)”.
 - Take ownership of your project.
 - Teams who are proud of their projects will have a terrific experience at Demo Day.