EE/CpE 423

Senior Design

Fall 2005

Class 7 – 11/1/05
Agenda

- Task schedule
- Web sites
- Fall presentations
Senior Design Tasks – Fall ‘05

- Identify project
- Form group
- Select advisor
- Develop project proposal
  - Publish project proposal
- Develop final design report
  - Submit parts list, final design report
  - Oral/slide presentations
- Effectiveness surveys
- Weekly status reports

9/1/04 10/1 11/1 12/1
9/13 10/18 11/1 12/1 12/6 1/1/05
Today
Senior Design Web Sites

• Every group must develop a web site

• The web site \textbf{MUST} be hosted on panda.ece.stevens-tech.edu.
  – You may put optional content on an external site, but only what is on panda
    and can be archived for future years will be graded.

• Logins/passwords have been sent to all Senior Design group leaders. Please
  change password to something better than a trivial modification of the login
  name…

• Web sites will be graded monthly on the 15\textsuperscript{th} of the month, starting 11/15/04
  – Content must include:
    • All weekly reports (NOT Effectiveness Surveys)
    • Proposals, project reports, presentations
    • Links to relevant sites are encouraged
  – Everything on your web site must be in one of two formats: .pdf or .html
    – No Word, PowerPoint, MSProject, etc. files

• Web site design must be \textit{your} group’s original work. You can mimic format if you
  see something you like, but generate your own html.

• Consider readability of your site:
  \textbf{Is this very readable?}
## Fall Presentation ‘05 Schedule

- Email me with your #1, #2 and #3 choices for time/date

### Group Time

<table>
<thead>
<tr>
<th>Tuesday, November 29</th>
<th>Thursday, December 1</th>
<th>Tuesday, December 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Group</td>
<td>Time</td>
</tr>
<tr>
<td>3:00 – 3:15</td>
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<td>3:00 – 3:15</td>
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<td>3:30 – 3:45</td>
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<td>5:30 – 5:45</td>
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<td>5:30 – 5:45</td>
</tr>
</tbody>
</table>

These slots are available only after all groups with EE/CpE-423B students have signed up (Groups #1, 4, 7, 8, 9, 24)

These slots will probably not be used

**PLAN AHEAD**
Presentation Logistics

• There are 25 groups presenting - time is tight!
  – 15 minute time slot
  – Includes ~5 minutes for questions, discussion, change over

• You should create your presentation with PowerPoint.
  • **Save it in PowerPoint2000 format (or earlier).**
  • **DO NOT SAVE IN POWERPOINT-XP or Office2003+ VERSION – I CAN’T OPEN IT.**

• To simplify logistics, **email me your presentation before noon** the day of your presentation
  – there will be no time for setting up/switching multiple PCs, switching between PCs, slide projector
  – I’ll put the presentation on my laptop
  – I WILL NOT HAVE CD-ROM or FLOPPY AVAILABLE
  – DON’T MISS YOUR TIME SLOT – While I would like everyone to see every presentation, as a minimum, arrive at least 20 minutes early. If you miss your assigned time slot, there may not be time for a makeup of this required presentation

• Your presentation should fit on ~5-8 slides

• Diagrams, tables, charts are preferred. Word only slides (like this one) are not!
Generic Guidelines For A Good Proposal or Presentation

• Consider addressing the following questions:
  – What are you trying to do?
  – How is it done now?
  – What are the limits of current approaches?
  – How will your efforts influence the current limits?
  – If you succeeded beyond your wildest dreams, what would the impact be?
  – How will you be measuring progress to your end goals? How will you know if you are moving ahead or are stuck?
  – What is this effort likely to cost? What is the schedule?
Presentation Suggestions - 1A

• Many psychological studies have shown that the right and left halves of the human brain process information differently
  – The Left Brain processes text, speech and symbolic communications
  – The Right Brain processes images, diagrams

• If your slide consists only of text, like this one, your slide and oral presentation are only engaging half of the audience member’s attention. Some people do not process written or spoken information well - you are missing them altogether

• Text-only slides are:
  – boring – especially if you read the entire slide
  – easy to forget
  – hard to skim through if you are pressed for time

• If you write everything, why are you needed for the presentation in the first place? Just send a memo
Presentation Suggestions - 1B

• Graphics slides are more:
  – engaging
  – memorable
  – flexible

\[ \Phi(x) = \int_{-\infty}^{x} \frac{1}{\sqrt{2\pi}} e^{-\frac{t^2}{2}} dt \]

...turn left at the third street, then turn right onto ...
Presentation Suggestions - 2

• The standard instructions to a journalist:

<table>
<thead>
<tr>
<th>Who</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>What</td>
<td></td>
</tr>
<tr>
<td>Where</td>
<td></td>
</tr>
<tr>
<td>When</td>
<td></td>
</tr>
<tr>
<td>Why</td>
<td></td>
</tr>
<tr>
<td>How</td>
<td></td>
</tr>
</tbody>
</table>
Presentation Suggestions - 2

• The standard instructions to a journalist:

<table>
<thead>
<tr>
<th>Who</th>
<th>List group members and advisor on Title Slide</th>
</tr>
</thead>
<tbody>
<tr>
<td>What</td>
<td>Describe the problem you are trying to solve</td>
</tr>
<tr>
<td>Where</td>
<td>Indicate the course number on Title Slide</td>
</tr>
<tr>
<td>When</td>
<td>Indicate the date, semester on Title Slide</td>
</tr>
<tr>
<td>Why</td>
<td>Describe the background of the problem - why is it interesting?</td>
</tr>
<tr>
<td>How</td>
<td>Describe your approach</td>
</tr>
</tbody>
</table>
Presentation Suggestions - 3

- Structure of any good presentation:

| Tell them what you’re going to tell them |
| Tell them                                      |
| Tell them what you told them                  |
Presentation Suggestions - 3

- Structure of any good presentation:

| Tell them what you’re going to tell them | The outline |
| Tell them                               | The body    |
| Tell them what you told them            | The summary |
Your Presentation

- Some items to consider in your presentation:
  - A top-down presentation is usually the easiest to follow
    - It is also the easiest to adapt to the time available and the level of understanding of the audience
    - Back-up material is good, but you don’t have to use it all.
  - Besides the Who, What, Where, When, Why, How, some specific questions to consider:
    - What is the problem you are trying solve?
    - Who is the customer?
    - How has the problem been approached in the past?
    - What are the current limits?
    - What are you proposing to do to remove the limits?
    - What impact will your solution have?
    - What challenges do you envision and how will you get around them?
Summary

• Schedule your presentation with the advisor’s calendar in mind. They need to grade your work, to avoid duplicating your presentation, find when they may be available and invite them.

• Structure the presentation to be effective

• Emphasize graphics to maximize impact

• Anticipate questions/issues and plan to address them

• Rehearse!
Summary

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• Structure the presentation to be effective

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• Anticipate questions/issues and plan to address them

• Rehearse!

This is 16 point Arial (~ Tahoma, Helvetica, Lucida Sans)

Avoid anything smaller (this is 14 point)

Serif fonts (this is 16 point Times Roman) are harder to read than sans-serif fonts