

CS491B Software Design Lab
Effective Presentations

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Presentations

- ◆ Good work is never enough – you'll still need to sell it
 - to managers, colleagues, customers
 - to professors, fellow students, other researcher
 - to venture capitalists
 - ...

Class Presentations

- ◆ 30 minutes
 - 25 minutes talk
 - 5 minutes Q&A
- ◆ One topic or one project
- ◆ To an audience who may or may not want to be there

Three Important Things About Presentations

- ◆ Organization of materials
- ◆ Use of PowerPoint
- ◆ Interaction with the audience

Who Are You Audience?

- ◆ Are they experts of field?
- ◆ Are they totally clueless?
- ◆ Are they smart people who may not have the background knowledge?

What Goals You Want to Achieve?

- ◆ I mean *realistic* goals
 - Nobody remembers everything you said in a presentation
 - Two or three key ideas in 30 minutes
- ◆ Repeat insights
 - Tell them what you're going to tell them
 - Tell them
 - Tell them what you told them

Outline of a Presentation

- ◆ Background and motivation
 - Examples
- ◆ Overview
- ◆ Details
 - Things to emphasize
 - Things to leave out
- ◆ Results
 - Experiments, benchmarks, comparisons, demos ...
- ◆ Conclusion or summary, and future work

PowerPoint is Your Friend

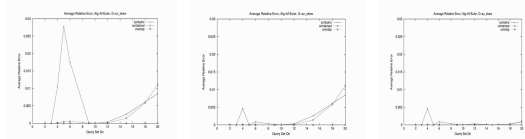
- ◆ Prepare your slides in PowerPoint
 - It's de facto standard
 - It's powerful and easy to use
- ◆ Things to remember when you prepare your slides
 - Keep it simple
 - Be professional
 - A picture worth one thousand words
 - Get familiar with PowerPoint features
 - Animation

PPT Example 1

- ◆ Why another build tool when there is already *make*, *gnumake*, *nmake*, *jam*, and others?
- ◆ Because all those tools have limitations that Ant's original author couldn't
 - live with when developing software across multiple platforms.
- ◆ Make-like tools are inherently shell-based
 - they evaluate a set of dependencies, then
 - execute commands not unlike what you would issue in a shell.
- ◆ This means that you can easily extend these tools by using or writing any program for the OS that you are working on. However, this also means that you limit yourself to the OS, or at least the OS type such as Unix, that you are working on.

PPT Example 2

- ◆ For ADL dataset with 2 histograms
 - Worst case ARE for contains queries is about 5%
- ◆ For SZ_SKEW dataset



(a) With 3 Histograms ARE peak at below 3% (b) With 4 Histograms ARE peak at around 1% (c) With 5 Histograms ARE peak at about 0.5%

PPT Example 3



PPT Example 4

$$\begin{matrix} N_{eq} & \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix} \\ \times & \end{matrix} + N_{cs} \begin{bmatrix} 1 & 1 \\ 0 & 1 \end{bmatrix} + N_{cd} \begin{bmatrix} 1 & 0 \\ 1 & 1 \end{bmatrix} + N_o \begin{bmatrix} 1 & 1 \\ 1 & 1 \end{bmatrix} + N_d \begin{bmatrix} 0 & 1 \\ 1 & 1 \end{bmatrix} = \begin{bmatrix} n_{ii} & n_{ie} \\ n_{ei} & |S| \end{bmatrix}$$

- ◆ $N_{eq} = 0$
- ◆ $n_{ee} = |S|$ is the size of the dataset
- ◆ n_{ii} is the number of intersecting objects

Face the Audience

- ◆ Speak LOUD
- ◆ Don't read the slides

Interact with the Audience

- ◆ Make eye contact
- ◆ Encourage interaction
 - ask for questions
 - give thoughtful pauses
- ◆ Pay attention to audience reactions
 - Are they bored?
 - Are they confused?

Be A Good Audience

- ◆ Be here
- ◆ Be on time
- ◆ Pay attention
- ◆ Participate in constructive discussions
 - There is no "stupid" question

References

- ◆ Mark Hill, *Oral Presentation Advice*,
<http://www.cs.wisc.edu/~markhill/conference-talk.html>