CSE571S
Project Guidelines

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These slides are available on-line at:

http://www.cse.wustl.edu/~jain/cse571-11/

Overview

- Project Requirements, End-Goal
- Literature Search
- Outline: Preparation Process, Mind Maps
- Writing: Organization, List of Acronyms, References
- HTML Style Guidelines
- Draft Submission
- Final Submission

Project Requirements

❑ Comprehensive Survey:
Technical Papers, Industry Standards, Products

❑ Will be published on my website,
Better ones may be submitted to magazines or journals

Project Requirements (Cont)

❑ No copyright violations:
- ⟹ You need to re-draw all figures
- ⟹ You need to summarize all ideas in your *own* words
- ⟹ Cannot copy any part of text or figure unmodified
- ⟹ Short quotes ok
- ⟹ Any unmodified figures need permissions

Any infringement will result in forfeiture of grades even after graduation.

❑ See papers in previous offering of this course, e.g.,
http://www.cse.wustl.edu/~jain/cse571-07/index.html
http://www.cse.wustl.edu/~jain/cse571-09/index.html

End-Goal

❑ Paper that can be published as a survey paper in any magazine, journal, conference

Project Schedule

Mon 10/10/11 Topic Selection/Proposal

Mon 10/17/11 References Due

Mon 10/24/11 Outline Due

Mon 11/14/11 Final Report/Demo Due

Mon 11/21/11 Reviews/comments Returned

Mon 11/28/11 Revised Report Due

Literature Search

❑ Finding references: Use Google advanced search options

  ➢ Location 802.11 +filetype:pdf +site:.com

❑ Library.wustl.edu -> Databases -> Multisearch -> Subject, Engineering: search 10 journal databases for the topic

❑ Conduct searches in two phases. In the first phase, use the title words of your project. After reading these, conduct another more comprehensive search.

❑ Remove articles that are not useful

❑ No limit to the number of references

❑ Follow the references in references

Google Search Modifiers

- filetype:pdf, doc, ppt, pptx
- site:wustl.com
- intitle:trend
- inurl:trend
- allintitle:Networking Trends
- Allinurl:
- " " $\Rightarrow$ Exact Phrase
- OR
- AND
- + $\Rightarrow$ Must include
- - $\Rightarrow$ Not include
- ~X $\Rightarrow$ X or similar
- * $\Rightarrow$ Wildcard

Google Search (Cont)

❑ Google search, http://en.wikipedia.org/wiki/Google_Search

❑ How to search Google, http://www.wikihow.com/Search-Google

❑ Google Guide Quick reference: Google advance operators cheat sheet, http://www.googleguide.com/advanced_operators_reference.html

❑ 12 Quick tips to search Google like an expert, http://blog.hubspot.com/blog/tabid/6307/bid/1264/12-Quick-Tips-To-Search-Google-Like-An-Expert.aspx

❑ Basic search help - web search help, http://www.google.com/support/websearch/bin/answer.py?hl=en&answer=134479&rd=1

❑ More search help - web search help, http://www.google.com/support/websearch/bin/answer.py?hl=en&answer=136861&topic=1221265

❑ Search results options, http://www.google.com/support/websearch/bin/answer.py?hl=en&answer=142143&topic=1221265

❑ Search preferences, http://www.google.com/support/websearch/bin/answer.py?hl=en&answer=35892&rd=1

Project Homework 1

❑ Search web pages, books, and journal articles from ACM Digital Library, Applied Science, Compendex, ABI/INFORM Complete, and Knovel databases at Olin Library for topics of your project

❑ On the web try the following search points:
  ➢ http://library.wustl.edu/findart.html
  ➢ http://library.wustl.edu/fulltext/
  ➢ http://scholar.google.com
  ➢ http://books.google.com
  ➢ http://a9.com/
  ➢ http://citeseer.ist.psu.edu/
  ➢ http://www.scirus.com/srsapp/
  ➢ http://worldcat.org/
  ➢ See also http://www.searchengineguide.com/pages/Science/

Project Homework 1 (Cont)

❑ Ignore all entries dated 2005 or before. List others in the following format:
  ➢ Author, "Title," publisher, year, ISBN. (for books)
  ➢ "Title," URL [One line description] (for web pages)
  ➢ Author, "Title," complete bibliographic data including vol., no., year, pp. (for technical/magazine articles)
  ➢ Title, publisher, URL (for journals/magazines/periodicals)
❑ For Books (1st item above) and Journals (4th item above) find items that are devoted primarily to your topic and not any item that have the topic as a subset.
❑ Serially number the references and submit
❑ Make a list of other interesting search points and share with the class.

Common Mistakes in Project Homework #1

❑ Listing older books

❑ Listing books/Magazines/journals that have little to do with the topic – may show up in search engines because of a minor mention of the topic or words

❑ Web Pages – No one line descriptions

❑ Incomplete bibliographic data for journal articles. Need volume, issue, year, pages.

❑ Missing journals. Need names of journals dealing with the topic chosen.

Project Homework 2

❑ Prepare a short webpage (written manually) using most of the header tags indicated in this handout

❑ Include one image/photo in the page

❑ Validate the page using validator.w3.org

❑ Submit the html source file printout, web page printout, and the URL

❑ Remember:

  ➢ To add all meta tags specified in slide 36 of this handout

  ➢ Validate the page

  ➢ Load it in on a site so that there are no ads added to your site

WUSTL Engineering Student Webpages

❑ Web page creation in WUSTL:
   http://eit.engineering.wustl.edu/help/Create_webpage.asp

❑ There are two servers that students can use:
   ➢ shell.cec.wustl.edu (CEC)
   ➢ ssh.seas.wustl.edu (SEAS)

Common Mistakes in Homework 2

❑ Not using parameters for meta tags

❑ Not validating

Outline Preparation Process

- ❑ Read abstract and stop if irrelevant
- ❑ Underline the key points in the paper
- ❑ Write the key summary on the first page of the paper
- ❑ Prepare a text document with the key ideas
- ❑ Keep adding to this text document document from different papers with [refs, page, paragraph]
- ❑ Import the text document in PowerPoint
- ❑ Add figures and clean up the outline
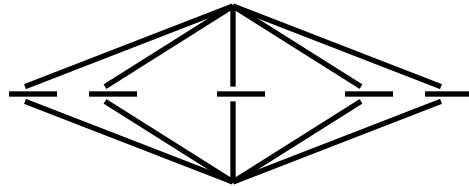- ❑ Like getting ready to make a presentation to the class

Mind Maps
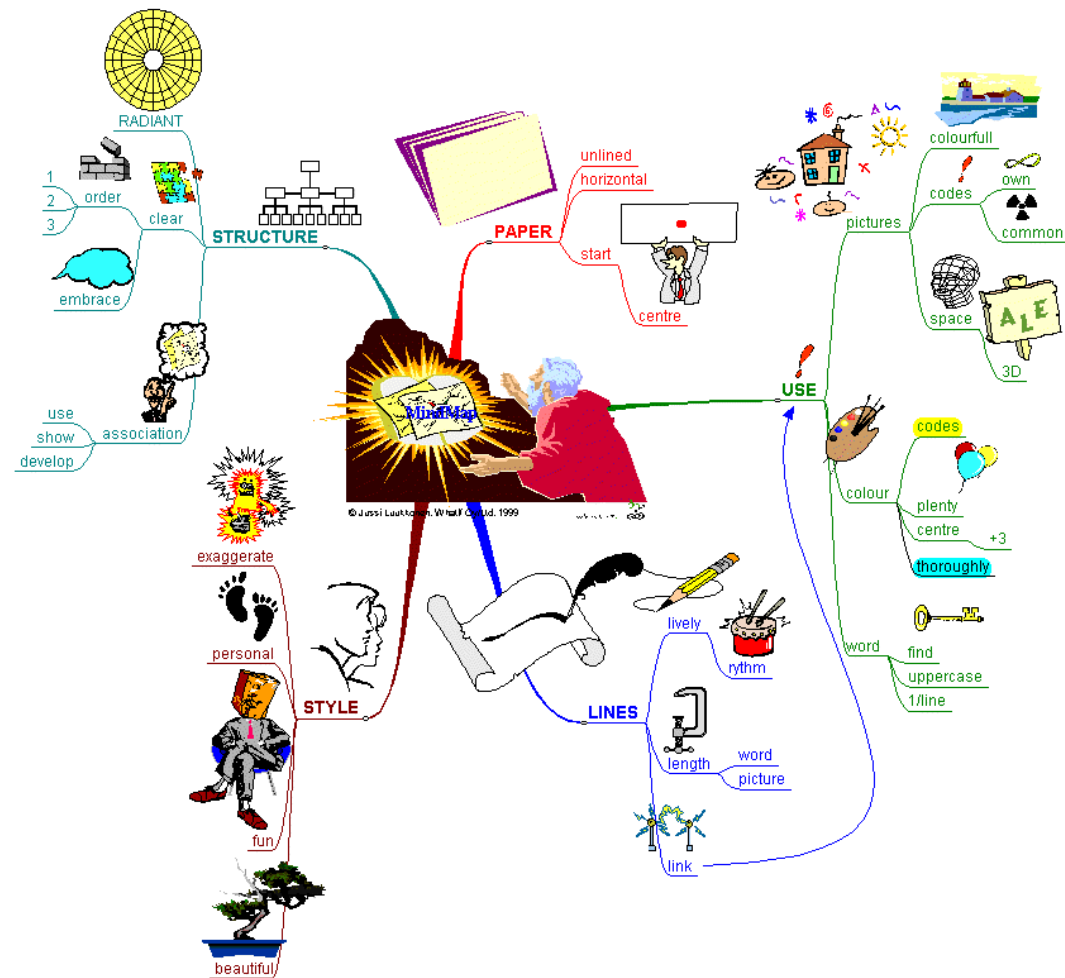
Mind Maps (cont)
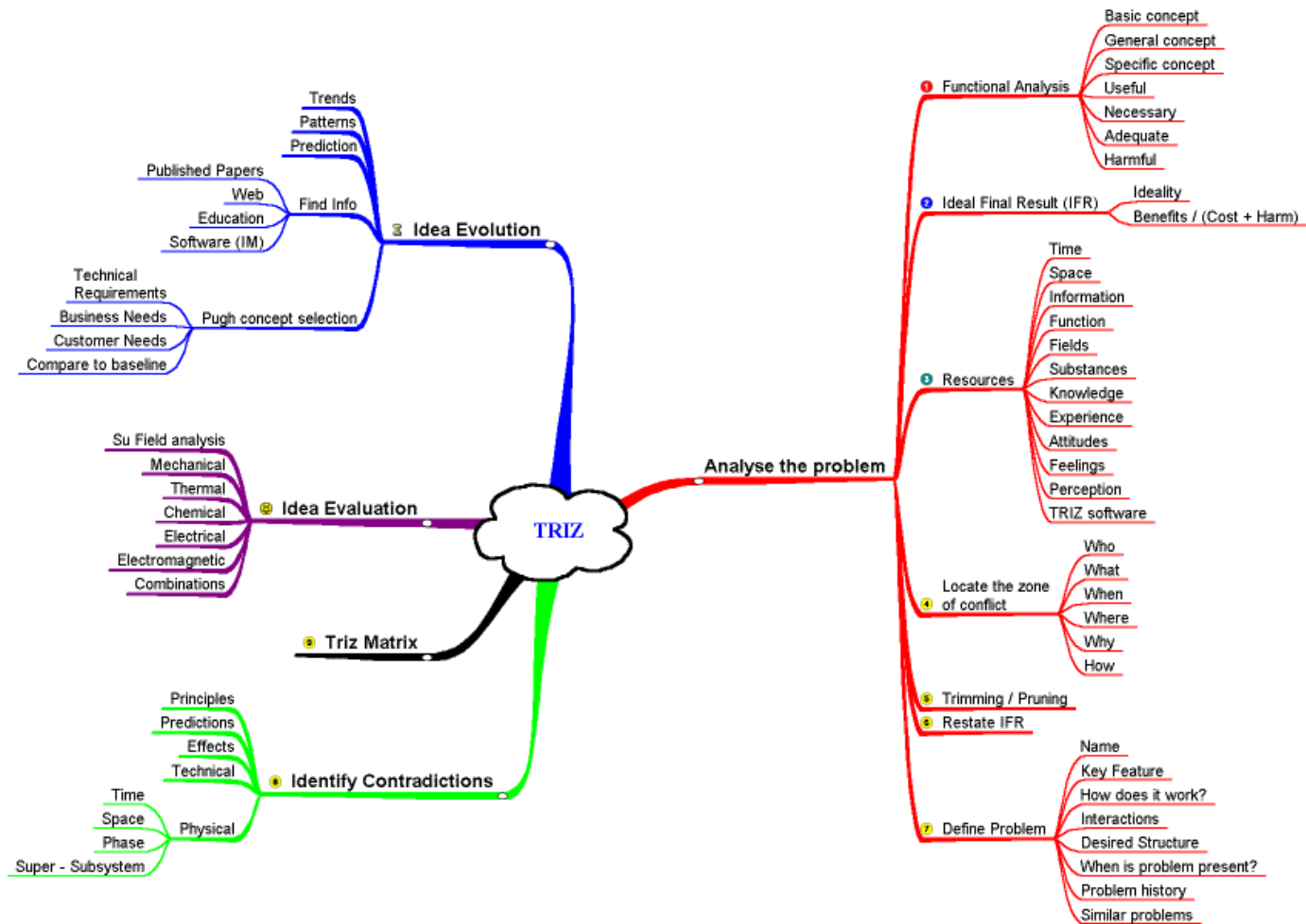
Diamond Writing Style

❑ Each paper should start with an introduction and end with a summary.

❑ Each section should start with a short introduction and end with a summary with a lead in to the next section. The same applies to subsections.

❑ All subsections should be of comparable length.

❑ Add an appendix with all abbreviations

❑ Add a list or discussion of related products

Writing Style

- ❑ Readers want to get to the information fast. Keep the nonessential stuff at the end.
- ❑ Check thoroughly for grammar and spelling.
- ❑ Avoid excessive use of abbreviations.
- ❑ Be consistent in case and usage: MOBILE, Mobile, mobile

Organization

❑ Every paper should have an introduction and a summary.

❑ Divide paper in to sections.

❑ Every section should have a lead-in paragraph.

❑ Header level should correspond to the level in table of contents.

Organization (Cont)

- ❑ Title
- ❑ Author
- ❑ Abstract
- ❑ Table of Contents
- ❑ Introduction
- ❑ Other Sections
- ❑ Summary
- ❑ References
- ❑ List of Acronyms
- ❑ Date Last Modified:
- ❑ Note: This paper is available on-line at
  http://www.cse.wustl.edu/~jain/cse571-11/ftp/%directory%/index.html

Organization (Cont)

❑ Table of Contents

  ➢ Sections and subsections

  ➢ Numbering n.n

  ➢ 3-7 subsections per section

  ➢ 3-7 sections per paper

  ➢ Include one first and 2nd level headers n. and n.n

  ➢ Do not include 3rd and higher levels, e.g., n.n.n

Title/Keywords/Abstract

❑ Title

➤ Based on Table of contents

➤ Searchable

❑ Key Search words

➤ Based on Table of contents

➤ Acronyms and full names

❑ Abstract

➤ Based on Table of Contents

➤ 3-7 sentences

❑ Description:

➤ One line based on ToC and Abstract

Organization (Cont)

❑ Introduction

➢ Explain what the topic is about.

Other Sections

❑ Each section less than 3 pages.

❑ Each section needs at least one introductory paragraph. Do not start with a subsection.

❑ Each subsection at least 1 paragraph.

❑ All sections/subsections should be numbered n. n.n

❑ If you borrowed several sentences from some source, italicize the text and indicate the source.

Summary

❑ One or more sentences about the each issue.

❑ Based on Table of Contents

❑ Key lessons

References

- ❑ Style of References
  - ➢ Author(s), "Title," Source, date, pages, url
  - ➢ The URL should show up as well as have a link.
  - ➢ All references should be annotated and have links.
- ❑ Order in the most important first and indicate so
- ❑ In the text point to the end
- ❑ In the end point to actual URL. Provide URL.
- ❑ Find URL for published papers
- ❑ Remove references that are useless.
- ❑ [Authoryy] notation.
- ❑ Exception: Standards, company documents, RFCs.

List of Acronyms

❑ Search the text

❑ Define on first use

❑ Avoid multiple uses if used less than 5 times.

❑ Exception: Commonly used acronyms, e.g., CPU, I/O, IP, …

Figures/Tables

❑ All figures should be numbered 1, 2, ...

❑ All tables should be numbered 1, 2, ...

❑ All figures should have a title below the figure

❑ All tables should have a title above the table

❑ All figures/tables should be referenced in the text and explained.

❑ Should be placed close to their references.

❑ To prepare figures use blank slides in PowerPoint and save them as gif/jpg/png files. Use Microsoft image editor to crop the figures for correct white space around them.

Draft Submission

❑ Submit 4 hardcopies

❑ In the draft:

  ➢ For the review purposes, the author's name and email should be removed. Substitute last 3 digits of your student ID.

  ➢ Add keywords after abstract

❑ Spell check

❑ Grammar Check

Editorial

❑ Check all acronyms. All acronyms should be defined on first use.

❑ Check capitalization. No unnecessary capitalization. Headers are usually capitalized.

❑ Spell Check entire document.

❑ K=1024, k=1000. Disk storage is measured in KB, network link speeds are measured in kb. kbps not Kbps.

❑ Leave a space between numbers and units, e.g., 15 km not 15km.

Editorial (Cont)

❑ Look for special characters

❑ American English: Signaling, Synchronization

❑ Check for continuity

❑ Break long paragraphs.

❑ Single space between paragraphs.

❑ The paper should be 10-15 pages long

❑ If you copy any figures, give reference and credit

❑ Use the template supplied

Common Mistakes

- No Figures
- Figure/equations fonts too large
- Figures with no title or number or reference
- Figures/tables overflowing the margins
- References with no annotation
- References not cited
- Key pieces of information w/o references
- Tables w/o references
- Papers too short

Common Mistakes (Cont)

- ❑ No comparison of different alternatives
- ❑ No Acronyms
- ❑ No summary
- ❑ Incorrect reference style
- ❑ No keywords

HTML Style Guidelines

❑ See papers from previous classes on my website for details

❑ Use plain text editors with simple html

❑ No Java, flash, animation

❑ Do not use HTML generated by MS Word. It will not pass any HTML validation test. Save the word file as plain text and add HTML tags.

❑ Learn to use special characters in text and reference URLs. See http://tntluoma.com/sidebars/codes/

Header

<!DOCTYPE

<html>

<head>

<meta http-equiv="content-type"

<meta name="Author"

<meta http-equiv="content-language"

<meta name="robots"

<meta name="GENERATOR"

<meta name="Keywords"

<meta name="Classification"

<meta name="Description"

<title>

</head>

Body

<body>

<h1>Title</h1>

<B>Author</B>, Permanent-Email

<hr>

<h2>Abstract:</h2>

...

<hr>

See Also:

<hr>

Body (Cont)

```
<h2><a NAME="toc"></a>Table of Contents:</h2>
<ul>
<li><a href="#sec2">2. 10-Gigabit Ethernet Overview</a></li>
<ul>
<li><a href="#sec2.1">2.1 Benefits of 10-Gigabit
    Ethernet</a></li>
...
</ul>
</ul>
<hr WIDTH="100%">
```

Body (cont)

<h2><a NAME="intro">Introduction</h2>

...

<p>[Grow99]

<p>

...

HTML Guidelines (Cont)

❑ File name: index.html, fig1.gif, fig2.gif, ..., fig.ppt

❑ Keep PowerPoint figure source files in the same directory although these may not be referenced in the paper

❑ Keep all references relative.
Absolute: http://www.cse.wustl.edu/~jain/papers/x.ps
Relative: papers/x.ps

❑ Keep the whole paper in one file "index.html" with figures in fign.gif in the same directory. No Subdirectories.

❑ All files names should have eight characters or less for name and 3 characters or less for extension (MS/DOS compatible). The only exception is index.html

HTML Guidelines (Cont)

- ❑ All filenames and extensions should be lowercase and contain no spaces.
- ❑ Ensure there is a link attached to
  - ➢ author@cse.wustl.edu
  - ➢ Every line in Table of contents
  - ➢ Back from the end of every section
- ❑ Spread references throughout the document. Use mnemonic references with link attached to them, e.g., [Cisco99]
- ❑ Keep all internal anchor names and ids lowercase without spaces or special characters, e.g., cisco99.
- ❑ Use only id or name not both:
  <A name="xx">
  <A id="xx">
- ❑ All img should have alt.
- ❑ Do not resize images in html. Resize them before using. Prepare figures so that there is no rescaling required. Use 12 point fonts in PowerPoint.
- ❑ Center all figures, tables, and equations
- ❑ Serially number all figures as 1, 2, … not 1.1 2.1 etc.
- ❑ Serially number all tables as 1, 2, …
- ❑ No font tags

Final Submission

❑ Validate your page on:

  ➢ W3C Markup Validation Service, http://validator.w3.org/

  ➢ HTML code check by Net Mechanic, http://www.netmechanic.com/toolbox/html-code.htm

  ➢ CSE HTML Validator , http://www.htmlvalidator.com/

❑ Check URLs. Check local anchors.

❑ Remember to submit copies of unusual references (not available in the library or the Internet) with the final paper.

Final Submission (Cont)

❑ No WinWord generated HTML

❑ You can use WinWord for spell checking the text

❑ Use plain text editor to insert HTML tags..

❑ Submit the final HTML version as a single zip file

❑ No Tar/tgz files (please submit only one zip file with all files)

❑ Filename: 8-or-less-letters-short-project-name.zpi
Rename zip file to .zpi for transmission through email.

❑ Email .zpi file to: jain@cse.wustl.edu with the subject field of "CSE571 Project Report"

Common Mistakes

❑ Used doc generated HTML file

❑ Did not validate HTML.

❑ Incorrect title.

❑ Images resized in HTML. Height and Width attribute in the images do not match those of the actual image.

Checklist

T F

1. ☐ ☐ Are Keywords appropriate?
2. ☐ ☐ Is the title satisfactory?
3. ☐ ☐ Does the abstract clearly summarize the topic discussed?
4. ☐ ☐ Table of Contents logically organized?
5. ☐ ☐ Does introduction entice you to read the rest of the paper?
6. ☐ ☐ Major ideas and topics received enough attention?
7. ☐ ☐ Are individual sections and subsections of uniform length?
8. ☐ ☐ Are references correctly formatted and spread throughout?
9. ☐ ☐ Include author, title, dates, pages, and URL?
10. ☐ ☐ Did the author follow the diamond explanation principle?
11. ☐ ☐ Acronyms used properly and listed?
12. ☐ ☐ Figures and Tables (Clearly labeled and professional looking, referenced in the text and explained)
13. ☐ ☐ Are paragraphs of right length (not too long or too short)?
14. ☐ ☐ Do the subheadings clarify the sections of the text?
15. ☐ ☐ Was the material ordered in a way that was logical, clear, and easy to follow?
16. ☐ ☐ Is there any portion of the text that could be omitted?
17. ☐ ☐ Does the summary point out the key results?
18. ☐ ☐ Copyright violations in text, figures, or tables?
19. ☐ ☐ Text checked for Grammar, Spelling, Punctuation errors
20. ☐ ☐ Is the quality good enough for publication in IEEE Magazine?

Project Assignment

LastName	Project
Barnes	
Caswell	Industrial Controllers
Gunatilaka	Social Networks
Jarvis	Cyber Terrorism
Julia	
Klein	Project
Le	Biometrics
Nelson	Cyber Warfare
Oujani	Federated Access
Sarfati	
Schultz	DNS
Spielman	Project
Wald	Project
Yang	Cyber Crime
B Yu	Watermarking
F Yu	Mobile Devices
Zhang	DRM
Zheng	SASL
Zigelbaum	Project