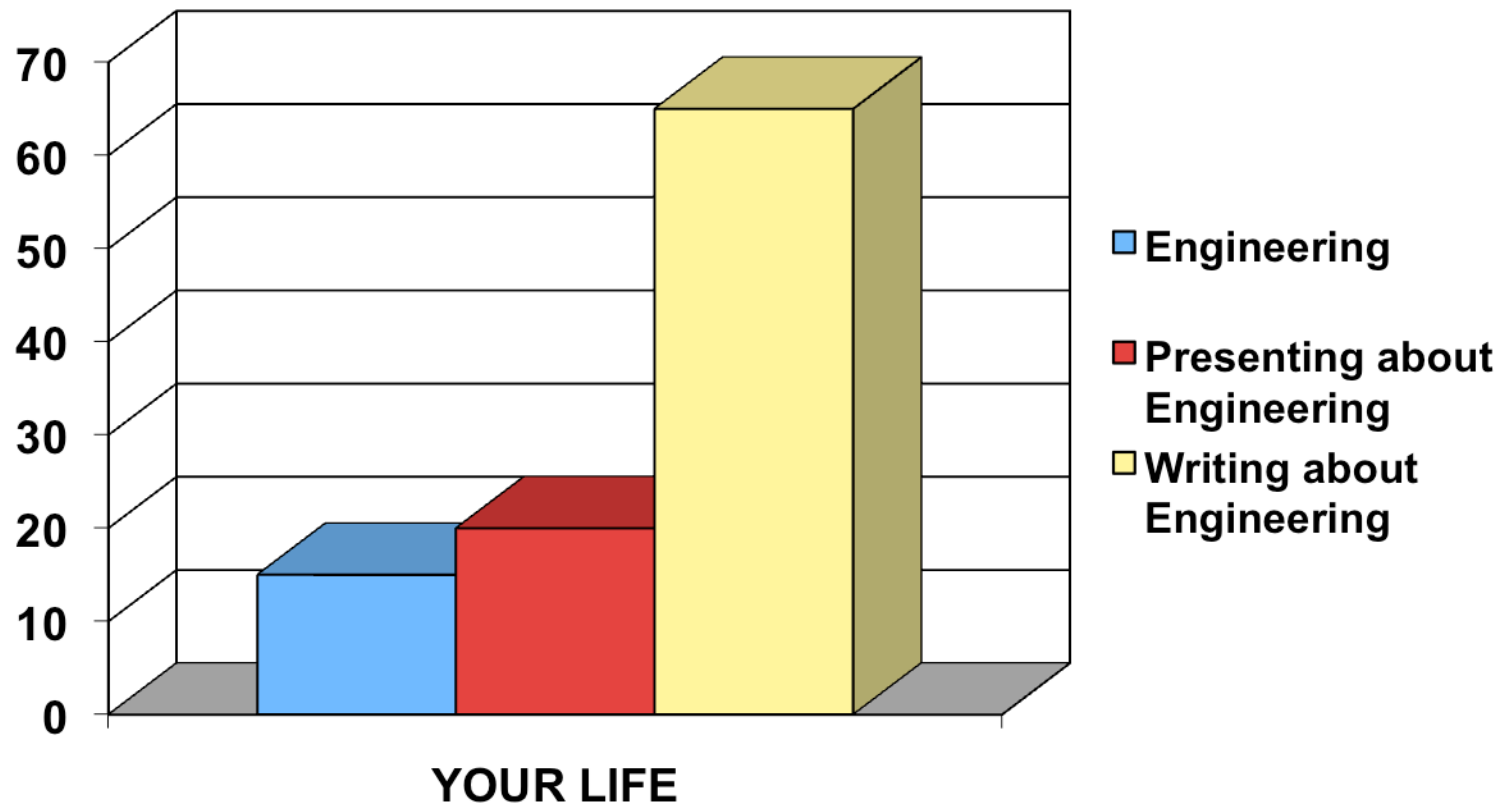# RSS

The Project Architecture Report

Why CI?

Why CI?

So that you present your ideas with the same __professionalism__ and __excellence__ with which you develop them.

Why CI?

First, some context.

First, some context.

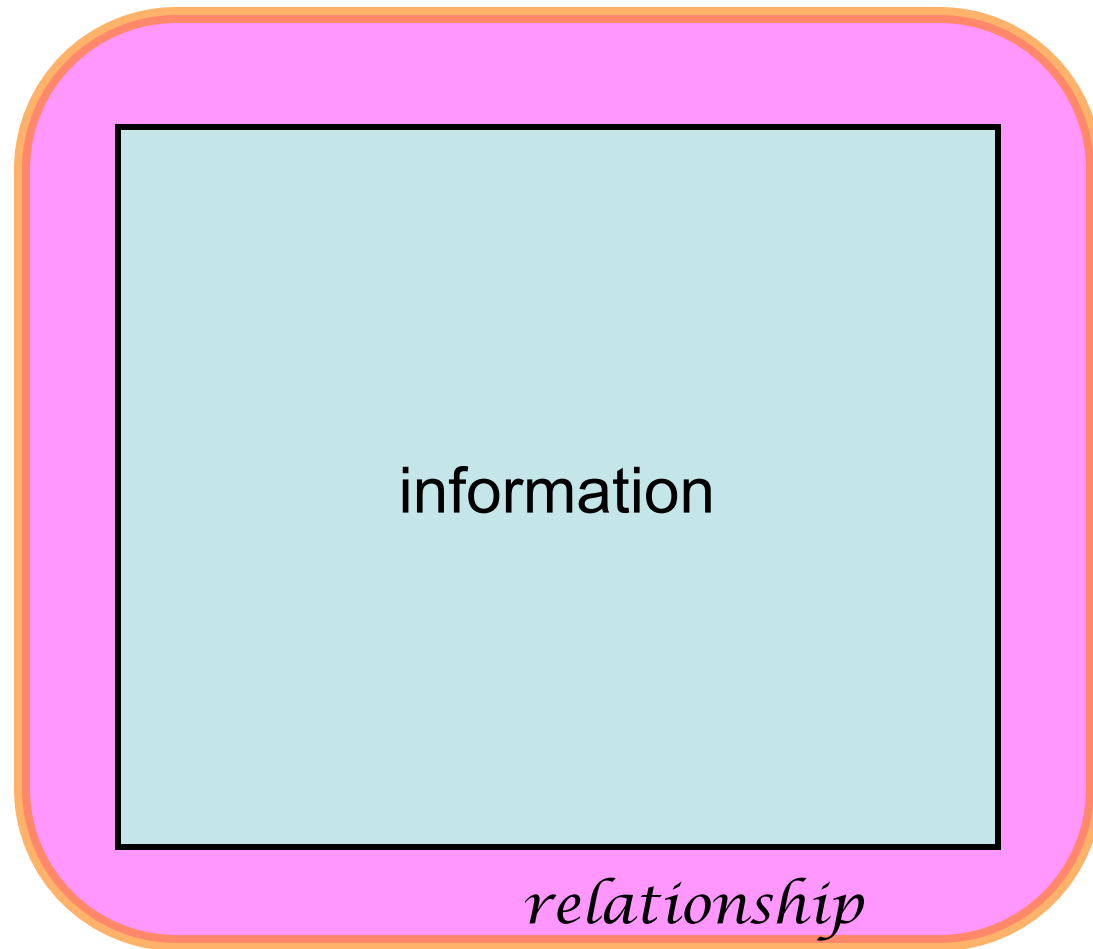communication

First, some context.

First, some context.

information

communication
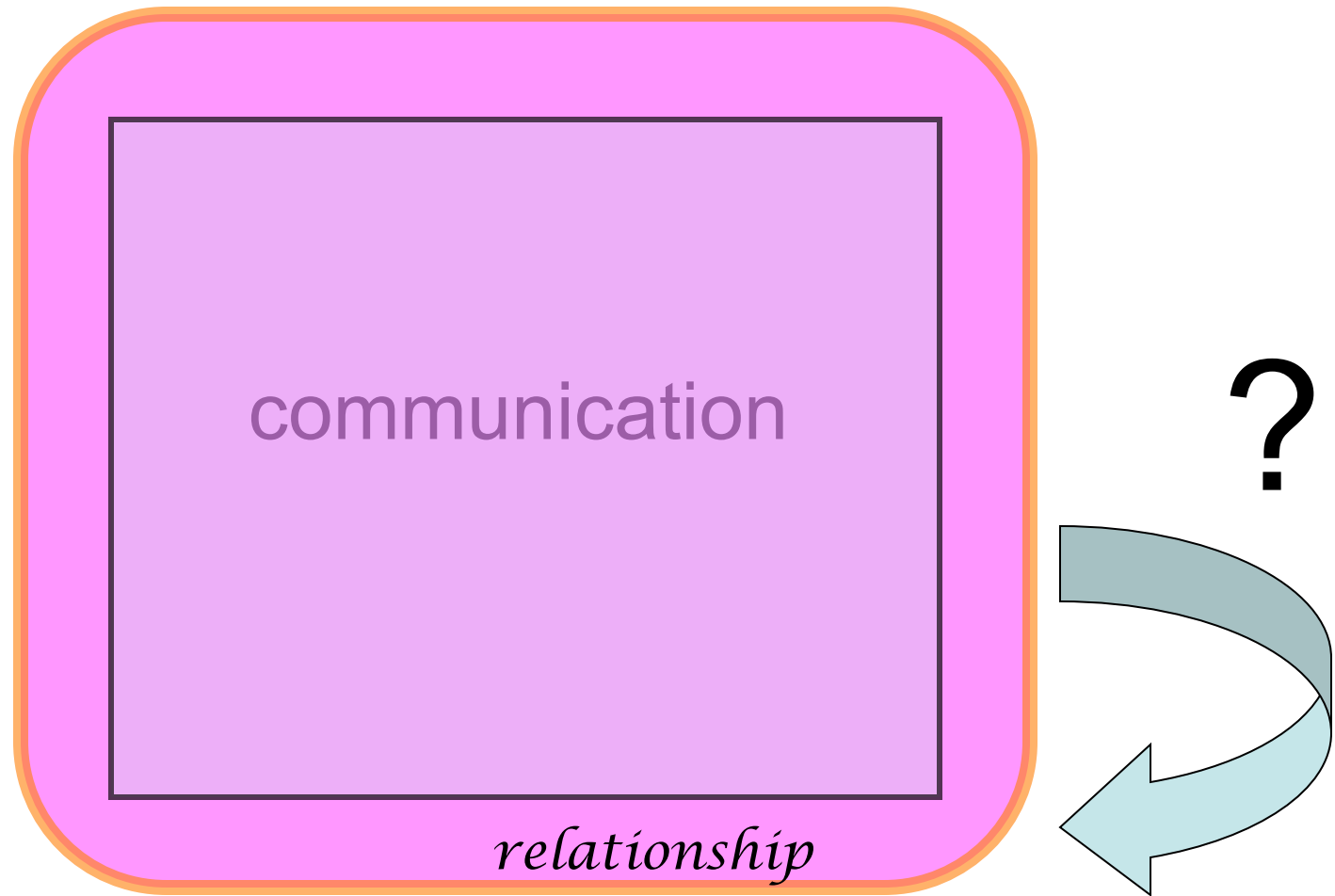
relationship

First, some context.

information

relationship

First, some context.

communication

relationship

?

First, some context.

Respect

Credibility

Professionalism

communication

Enthusiasm

Work ethic

relationship

Next, the content.

information

relationship
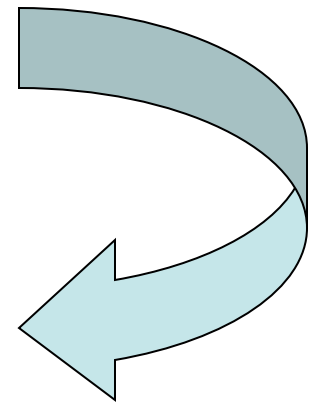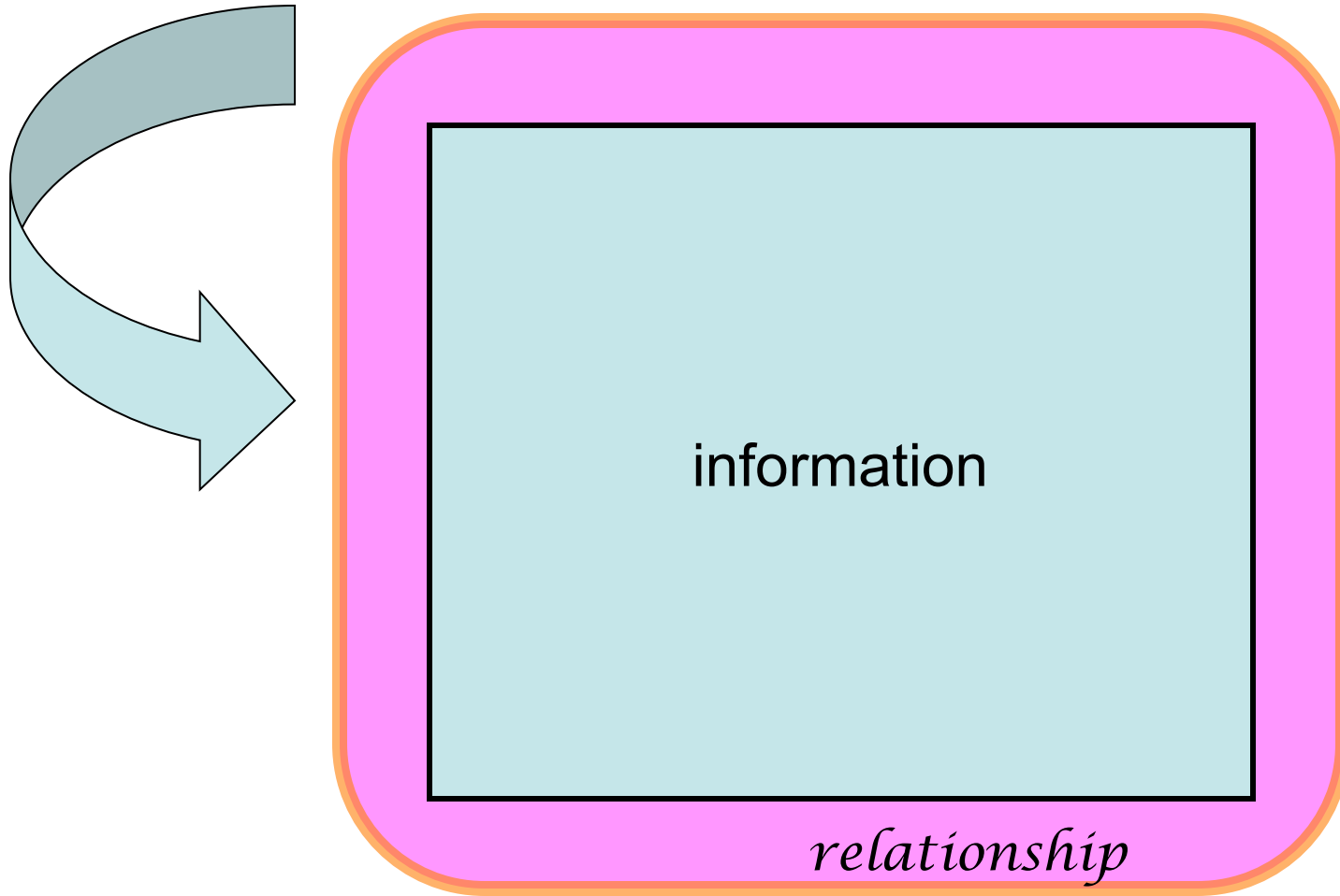
Next, the content.
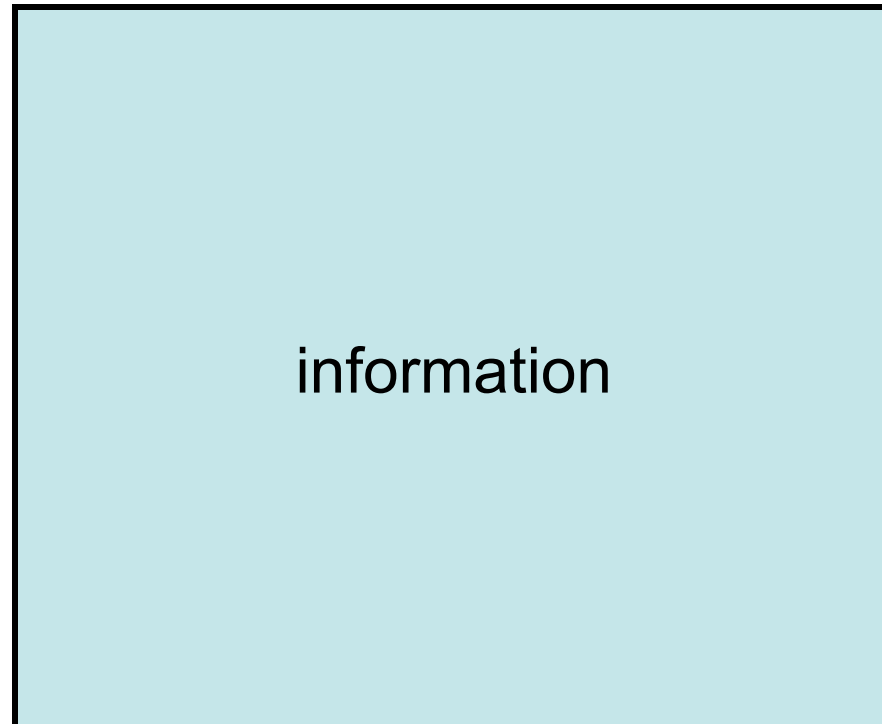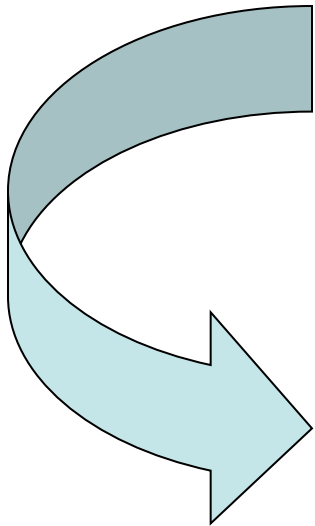
information

information

Who?

information

Who?

Profs
CI team
Teammates
Classmates
Yourself

information

Who?

Profs
CI team
Teammates
Classmates
Yourself

information

Why?

Who?

Profs
CI team
Teammates
Classmates
Yourself

information

Why?

To get you thinking critically
To scope out the problem
To discover assumptions
To tease out unknowns

Who?

Profs
CI team
Teammates
Classmates
Yourself

What information ?

Why?

To get you thinking
To scope out the problem
To discover assumptions
To discover unknowns

And now…

And now…

…the part you've all been waiting for!

What the heck goes into this Report??

Brief introduction: What's the point? What's the value?

Brief conclusion: What do you want to leave us with?

Brief introduction: What's the point? What's the value?

Statement of the problem: requirements specification

Brief conclusion: What do you want to leave us with?

Brief introduction: What's the point? What's the value?

Statement of the problem: requirements specification

Graphics: useful, explained, captioned, and labeled

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nope

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Brief introduction: What's the point? What's the value?

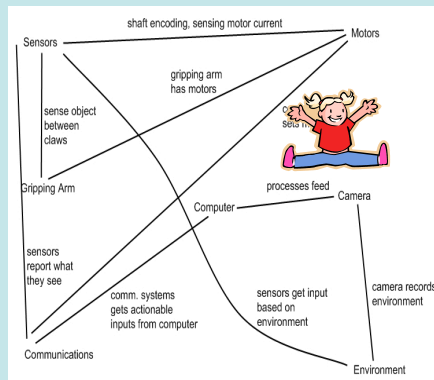**Statement of the problem**: requirements specification

Graphics: useful, explained, captioned, and labeled

Fig. 2. How a ladar works.

Brief conclusion: What do you want to leave us with?

Brief introduction: What's the point? What's the value?

Statement of the problem: requirements specification

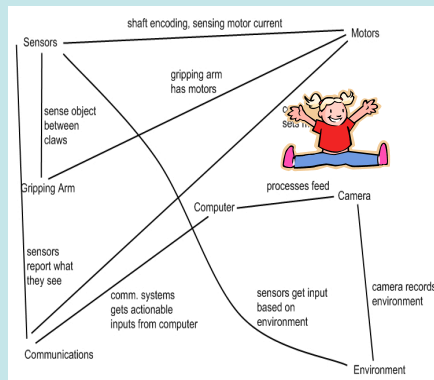**Graphics:** useful, explained, captioned, and labeled

yep

Fig. 2. How a ladar works.

Brief conclusion: What do you want to leave us with?

Brief introduction: What's the point? What's the value?

Statement of the Problem: requirements specification

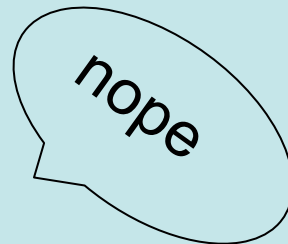**Graphics:** useful, explained, captioned, and labeled

System Block Diagram: What pieces do you expect?

Brief conclusion: What do you want to leave us with?

Brief introduction: What's the point? What's the value?

Statement of the Problem: requirements specification

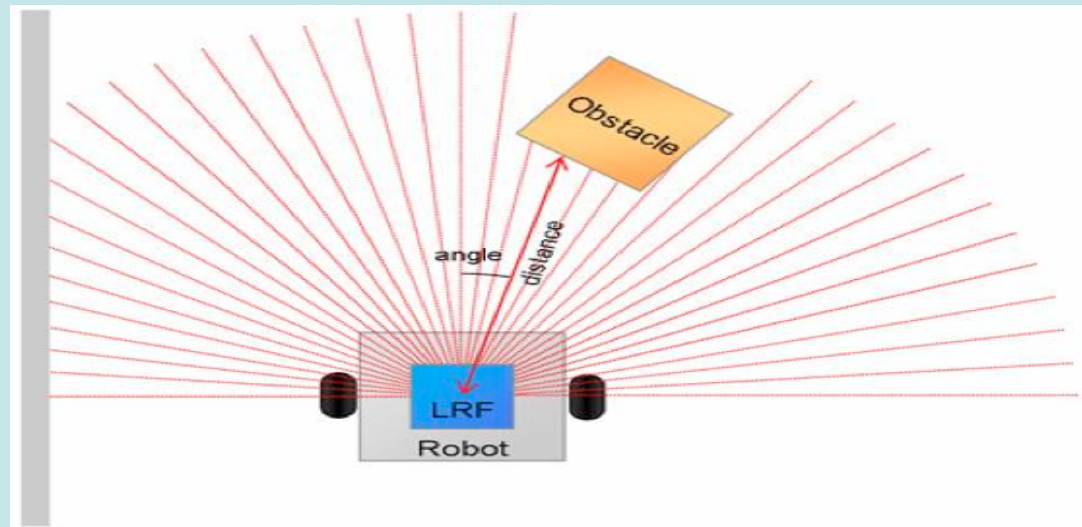**Graphics:** useful, explained, captioned, and labeled

System Block Diagram: What pieces do you expect?

Components:

Inputs

Outputs

Internal Operation

Brief conclusion: What do you want to leave us with?

Brief introduction: What's the point? What's the value?

Statement of the Problem: requirements specification

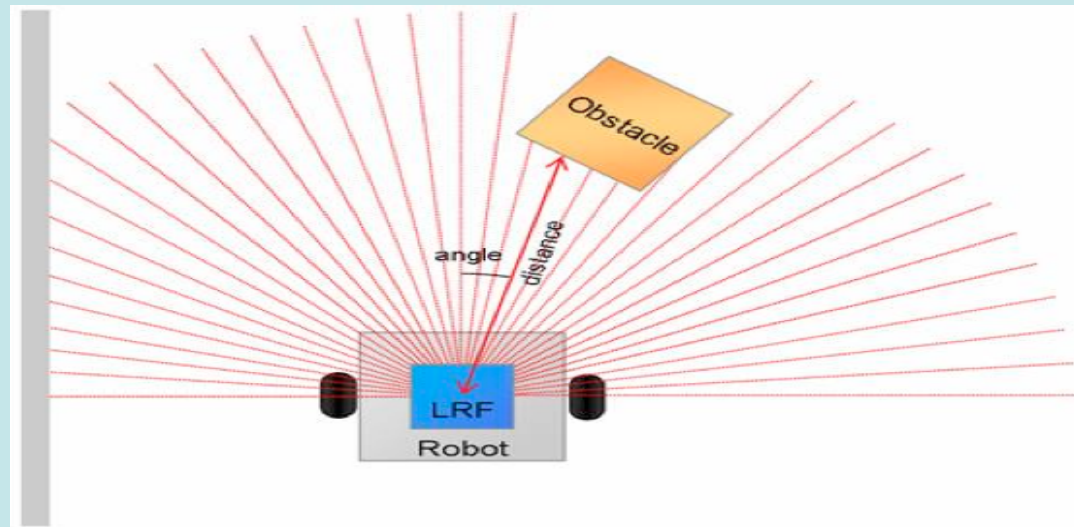**Graphics:** useful, explained, captioned, and labeled

System Block Diagram: What pieces do you expect?

Components:
- Inputs
- Outputs
- Internal Operation

Issues: Representation / data structure

Brief conclusion: What do you want to leave us with?

Brief introduction: What's the point? What's the value?

Statement of the Problem: requirements specification

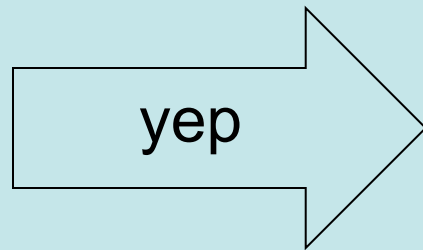**Graphics:** useful, explained, captioned, and labeled

System Block Diagram: What pieces do you expect?

Components:
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  Outputs
  Internal Operation

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Implementation plan: scope, assumptions, milestones

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  Inputs
  Outputs
  Internal Operation

Issues: Representation / data structure

Implementation plan: scope, assumptions, milestones

Brief conclusion: What do you want to leave us with?

That's the what.
Here's the how.

That's the what.
Here's the how.

What do you hate the most about reading?

That's the what.
Here's the how.

What do you hate the most about reading?

OK, then don't do that.

Help Your Reader

- Make them happy.
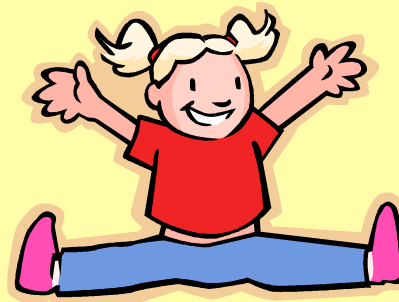- Make your document easy to read:

Efficiently!

Accurately!

Help Your Reader

- Make them happy.
- Make your document easy to read:

Efficiently!

Accurately!

Efficient and accurate?

- The Robotics Library offers you free professional advice from professional roboticists about all types of robotic engineering, as well as help with reports and presentations. Hours are Monday-Thursday 9:00 am - 9:00 pm Friday 9:00 am - 6:00 pm, Sunday 5:00 pm-9:00 pm. Check online for updates. To make an appointment go to http://web.mit.edu/roboticists and click on the yellow sunburst. Appointment times fill up quickly. Don't wait till the day before your assignment is due. If you can't find a convenient appointment time, there is an on-line Wait List, and 95% of clients who use the Wait List end up getting an appointment. To be placed on the Wait List, just click on the blue link that says, "Is the time that you want already reserved?" When a cancellation occurs, you will be notified by email. Claim an opening as soon as you can, because all Wait Listed clients are notified. If you can't find an appointment, try the Online Roboticist at http://web.mit.edu/onlineroboticists.html.

Efficient and accurate!!

- The **Robotics Library** offers you **free professional advice** from professional roboticists about all types of robotic engineering

- Hours (updates posted online)
  - Monday-Thursday 9:00 am - 9:00 pm
  - Friday 9:00 am - 6:00 pm
  - Sunday 5:00 pm-9:00 pm.

- To make an appointment, go to mit.edu/roboticists and click on the sunburst.

- Plan ahead: appointments fill up quickly. Don't wait.

- Can't find a time? 96% of clients who use the online Wait List get appointments.
  - To use the Wait List, click the link that says "*Is the time you want already reserved?*"
  - When a cancellation occurs, you will be notified by email.
  - Claim an opening as soon as you can, because eall Wait Listed clients are notified.

- Online help: If you can't find an appointment, try the Online Tutor at mit.edu/robociststutorial.

Rubric for a Happy Reader

- Reader Expectations
  - Clear introduction, context
  - Transitions throughout
  - Simple, precise language

Rubric for a Happy Reader

- Paragraphs
  - One idea per
  - Begin with main point
  - Include sufficient detail
  - Use explicit transitions
  - Arrange in a meaningful order

Rubric for a Happy Reader

- Citation
  - When in doubt, cite
  - Not to cite when needed is to plagiarize

Rubric for a Happy Reader

- **Intentional Redundancy** (a/k/a useful repetition)
  - Tie all parts to the main point
  - Reinforce main points with informative headings
  - Write explanatory captions
  - Make links explicit

Rubric for a Happy Reader

- Figures and Tables
  - Readable
  - Self-contained, with captions
  - Explained in detail in the text
  - Clearly and thoroughly labeled
  - Necessary and sufficient

Rubric for a Happy Reader

- Document Format
  - Make title and headings informative
  - Call out lists where helpful
  - Shorter rather than longer paragraphs
  - Plenty of white space
  - Center equations, label at right margin, white space above and below

Rubric for a Happy Reader

- These slides will be available online
- After you finish your draft, go back through and use these bullet points to revise it
- If you ask yourself, "Have I done this?" for each of these points, and can then answer "Yes," your chances of having a happy reader skyrocket
- And one more thing….

and don't forget…

Valentine's Day

♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥