How to Give a Good Research Talk

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Outline

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Introduction

- Hard to convince sleeping people that your work is brilliant!
- Avoid attendants fall a sleep or starting opening their laptops/PDAs
- All have an opinion on the topic "Giving a good talk"
- Brilliant work can be presented really boring!
- The good news: easy to be better than the average
- All can learn to give a good research talk

References

This paper is based on S.P. Jones on-line material, follow links below.

Go and see the on-line video!

- `http://research.microsoft.com/Users/simonpj/ papers/giving-a-talk/giving-a-talk.htm` How to write a good research paper
- `http://research.microsoft.com/Users/simonpj/ papers/giving-a-talk/giving-a-talk.htm` How to give a good research talk
- `http://perl.plover.com/yak/presentation/samples/ slide001.html` Conference Presentation Judo

Purpose of Talk

Yin and Yang: A research talk and a research paper.

Purpose of giving a talk is to

- make your idea more clear (audience you know, colleagues)
- get feedback (colleagues and existing partners)
- build a network
- communicate your great idea
- get a job

Purpose of Talk, cont.

Paper and talk have different purposes

- Paper = beef
- Talk = advertisement for the beef

The audience

- Present the intuition, can later go and read the paper
- To make them glad they came

Outline

What to Put In

- ▶ Motivation (20%)
- ▶ Key idea (one and only one key idea) (80%)

The Introduction

You have only a few minutes to catch the audience's interest

Answer the following two questions for the audience.

- ▶ What is the main problem?
- ▶ Why is it an interesting problem?

The Key Idea

If the audience only remember one think what should it be?

- ► Explain the key idea
- ► Be specific, tell "this is the key idea"
- ► Structure of talk should support the key idea

What to Leave Out?

- ▶ Detailed outlines (but some outline)
- ▶ The details, for example
  - ▶ Proofs
  - ▶ Long algorithms
  - ▶ Long code snips
- ▶ Apologies
  - ▶ I did not have time to prepare this talk
  - ▶ I do not have time to tell you about this
  - ▶ I do not feel qualified to address this audience
  - ▶ I have problems with my computer

Overview or details?

- ▶ Avoid entire talk is an overview (shallow)
- ▶ Avoid presenting all the details
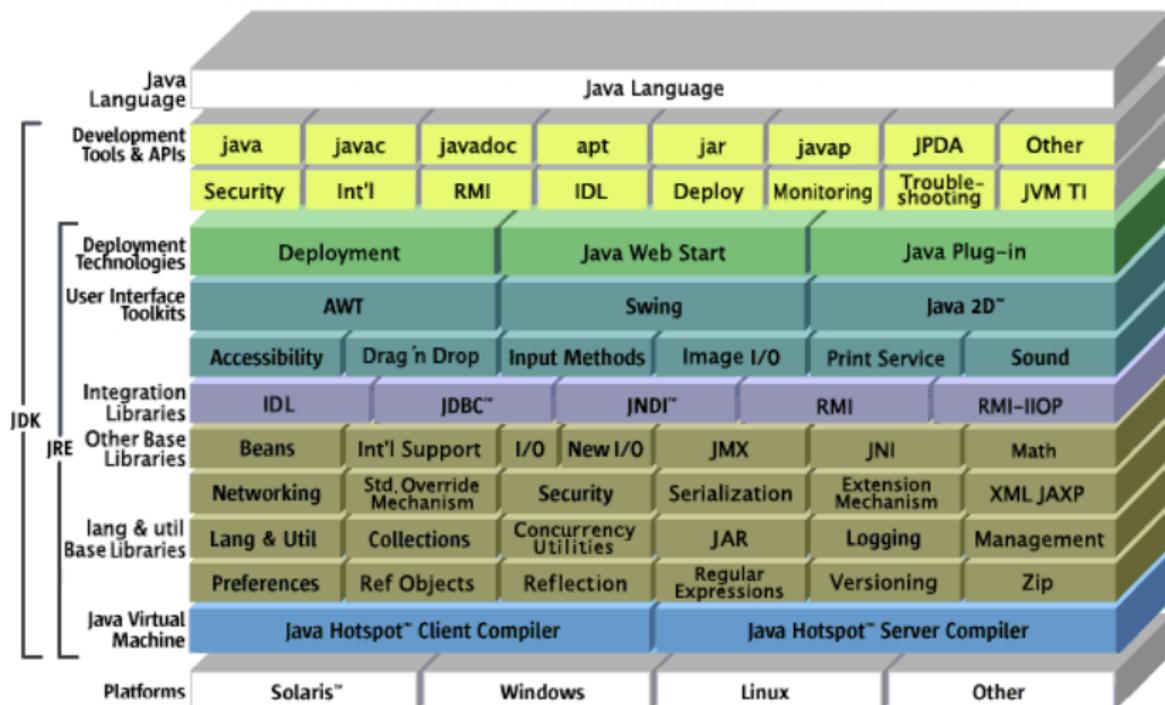 - ▶ Explain key idea in details

Outline

Java 5.0, an Example

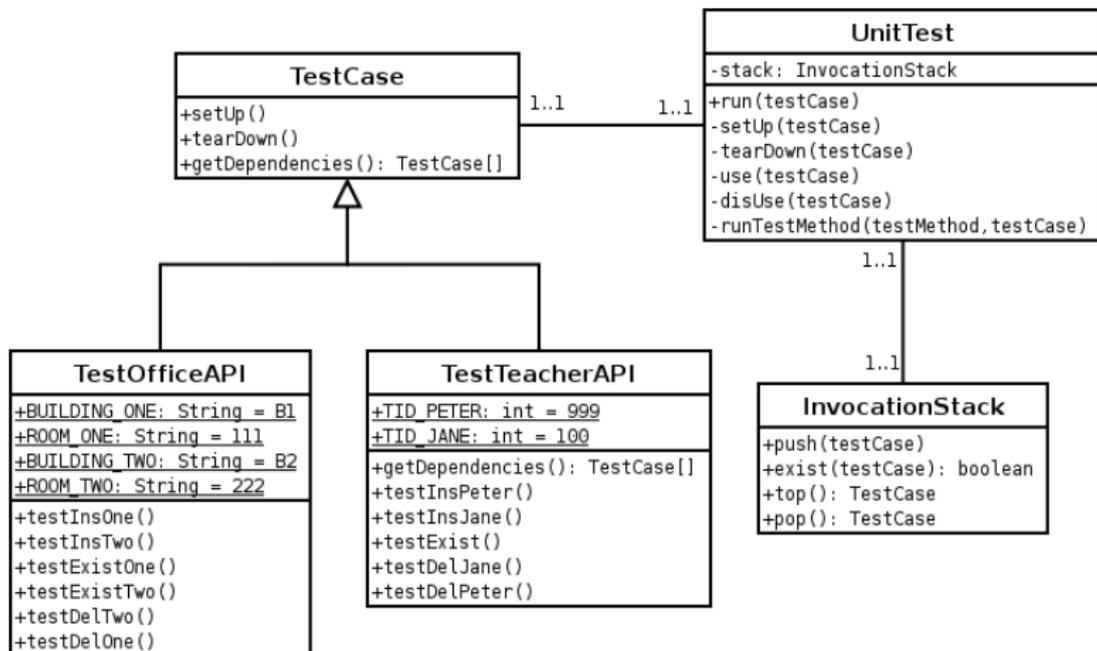Java™ 2 Platform Standard Edition 5.0

Examples

Many talks are far too abstract!

The Awful Trap is to present only the framework and the abstraction, leaving out the motivating examples.

- ▶ Very good for communicating an idea
- ▶ Very good way to provide an overview
- ▶ The best way to present the key idea
  - ▶ Make take a while to discuss a complicated example
- ▶ May not be the best way to present details.

Ask yourself again and again: "have I illustrated this idea/theorem/definition/technique/algorithm with an example?"

Unit-Test Framework—Another Example

Related Work

- Include most relevant related work
- Your own related work

Outline

PowerPoint et al

- ▶ Do not overuse the advanced features
- ▶ Use colors where it is meaningful
- ▶ Use animation where it makes sense
    - ▶ Example: Modification on R^+-tree, 65 slides in 10 minutes
    - ▶ Example: A figure with many parts

"Remember that time you spend fiddling with the typesetting is time you are not spending on the content."

Outline

Strong Points

- ▶ Author is a very good speaker
  - ▶ see the on-line material
- ▶ Very short and readable paper
- ▶ Focus on using examples
- ▶ Focus on the key idea of the paper
  - ▶ and leave everything else out
- ▶ Good points on the usage of advanced PowerPoint features

Weak Points

- Says prepare the talk the night before
  - I strongly disagree
- Parts of the paper is outdated
  - Section 3.1 Technology
- Does not discuss how to present performance graphs
  - typically used in a database paper
- Provide references (there are none)

Outline

"Best" Mistakes

- ▶ Problems talking into the microphone
- ▶ Constrained by the podium
- ▶ Laser pointers are from Hell
- ▶ Got an obvious question that we had not considered in the paper

Know Your Strong and and Weak Points

Strong Points

- ► Enthusiastic
- ► Like what I am doing a lot
- ► Well-prepared, always practice in front of mirror/dog/spouse

Weak points

- ► I talk too fast
- ► I move around too much
- ► I use my arms too much

Outline

Summary

- ▶ Good paper written by well-known author and speaker
- ▶ Offers good advise
- ▶ Paper and video can be downloaded from web site
- ▶ Covers both preparing and giving the talk

Future Work

How to write a good master thesis

- ▶ How to give a talk
    - ▶ Good specific to talks
- ▶ How to Organize your Thesis
    - ▶ More general on thesis work
- ▶ How to write a good research paper

Books

- ▶ William Strunk and E. B. White: The Elements of Style
- ▶ Anothony Weston: A Rulebook of Arguments.