

## Experience with the Course in Novi Sad

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## History

- One semester course 'Designing software'
- 20 students of business informatics, old curriculum
- Decision: present shorter version of the SE course
- All students moved to the new curriculum, where SE is in 7<sup>th</sup> semester (two-semester course)
- However, announcements drove significant attention among students and in the industry (mainly friends and colleagues of friends)
- Decision to give lectures

## Outcome

### **Saturdays, Nov., Dec. 4 – 5 hours:**

- 1 student regularly
- Several more students occasionally
- 7 people from industry
  - With different experiences

### **Motivation:**

- Professionals were better motivated
  - And they also acted as ‘critics’
- Fun for students

## Topics presented

- Part I – Introduction (t. 1 – 4)
- Part II - Requirements engineering (t. 5 – 6)
- Project Management (Part V – advanced...)
- Quality of software process... (Part V)
- Part II – Rest, except “Formal methods”

## Topics, not presented

- Part III (Design)
- Part IV (Implementation and Testing)
- Part V (Advanced topic, except
  - Project management
  - Quality of Software process...

## Assignment 1

- Analysis of Requirement document
  - Of 5 inaccuracies, 3 discovered by 'us', 3 by students in Germany (1 in intersection)
  - Of 10 errors, 5 discovered by 'us', 5 by students in Germany (0 in intersection)
  - Of 14 'missing information', 12 discovered by 'us', 3 by students in Germany (1 in intersection)
  - Of 4 'complaints on documents structure', 3 discovered by 'us', 1 by students in Germany (0 in intersection)
- Remarks:
  - 'our' results fresh and more detailed vs. general(ized) results from German students (collected by Kay)
  - Not everything of those errors are real errors, but comments.

## Assignment 2 (!)

- Cost estimation
  - Presented: Preliminary specifications v 2.3
  - Assignment: Preliminary specifications v 3.0
  - Results very similar, but still not checked (use it in improvements of Topic 6)

## Assignment 3

- Check and finish Structured Analysis for Seminar Organization
  - Not finished yet ☹️

## Assignments ... (!)

- Given to 'old' students wanting to move to the new curriculum
  - Transform requirements specification of SemOrg to the one conforming to the IEEE standard
  - Results: of 5 solved assignments, only one good enough.
  - More 'moving' students expected – ideas for new 'useful' assignments??? (e.g. translation, 3<sup>rd</sup> case study,...)

## NS experiences - conclusions

- Industry people more motivated (needed to solve their own problems ☺)
- More interested in:
  - Project management
  - Software process models
  - 'logical sequence' of the course, i.e. the one that follow activities in practice
- Better understood requirements spec. after first examples in 'notational topics' (language problem)
- Where confused about requirements document, they wanted to convert requirements immediately to product model
- Complained about the usage of use-case before it was formally introduced in the course ☺

## NS experiences – conclusions II

- Complained about topics on OO notation: 'coarse', without details, 'sudden and fast', ...
- Noted that SA notations and OO notations are practically the same (or at least very similar). ["yeah, yeah, yesterday everything around us was an entity, and nowadays everything is an object"]
- Found SA 'more natural'
- Asked many questions about the order of slides (all resolved later after consultations with Klaus)
- Asked for 'recipes': when should we stop analyzing and start designing, how do we know what we are doing, how 'big' should be iterations (turns),...
- Discovered many errors and inconsistencies
- Proposed many additions (now part of 'todo' lists for many topics)
- Valuable feedback

## My own experience

- Some lectures without lecture notes (☺)
  - With additional literature and references
- For many complaints, I agreed with the audience
- Many thanks to Klaus and Kay for their constant support, and 'last minute' preparations of topics and/or lecture notes (hot line)

## The second part?

- Autumn?