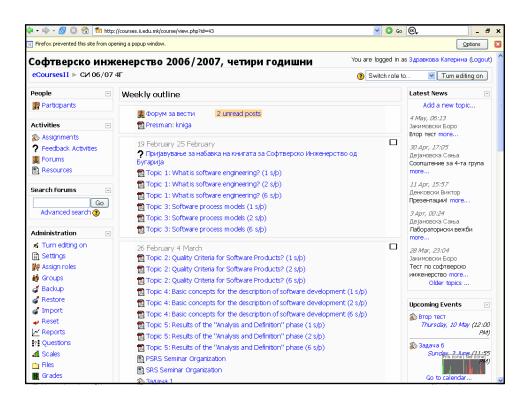
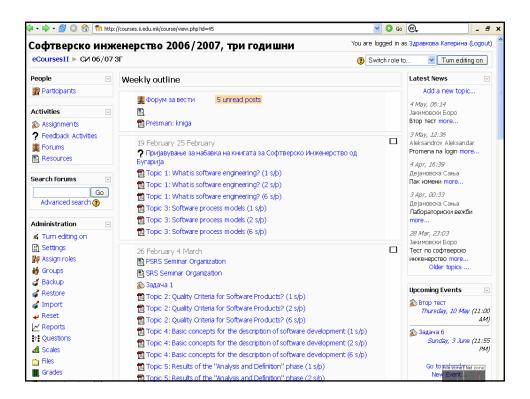
# Experience with the delivery of JCSE in Skopje in 2007/08

Katerina Zdravkova keti@ii.edu.mk

#### Experience from last year

- Module attended by\*:
  - 75 students from 4-year studies
  - 46 students from 3-year studies
- □ Delivered 21 topics (all the lectures from 1 to 21)
- \* Number of students is probably smaller, because:
  - some students enrolled the module on Moodle at a wrong place
  - some students simply enrol a module on Moodle just to see what is inside

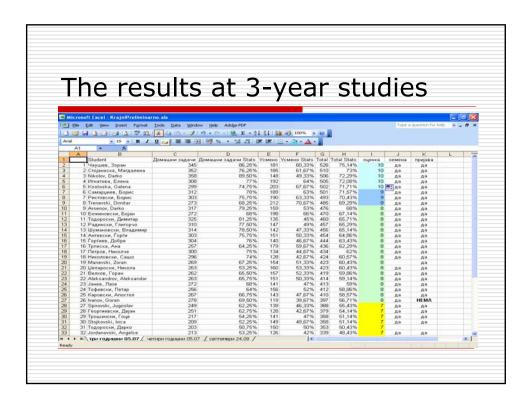




#### Results

- □ June (officially 5 July) 2007:
  - 59 students (78,67%\*) from the 4-year studies
  - 36 students (78,26%\*) from the 3-year studies
- □ September 2007:
  - only 3 students
- ☐ Failed ⊗: 8\* at 3-year and 10\* at 4-year studies
- □ 3 students from 3-year studies are missing (probably they enrolled the course to see it)
- □ Very realistic grading scale using Gaussian curve
- \* Percentage is according to number of students in Moodle, so it is possible that some student passed, and their grade is at the wrong place

# 



#### Final remarks about last generation

- ☐ Delivery of the module for part-time students was through Moodle, but they were obliged to have the tests at the Faculty
- ☐ Students from 3-year studies had worse average results:
  - sometimes due to their professional obligations
  - but, also because students who enrol 3-year are not as good as those who enrol 4-year studies

#### Student's feedback

Very happy with the :

- ... slides
- ... books:
  - "Our" book, although they are not very familiar with Bulgarian
  - Presman 6<sup>th</sup> edition
- □ ... team who delivered the module (Boro Jakimovski, Sanja Dejanovska and me)
- ☐ They objected that the assignments and the tests were not promptly graded
- □ But, they were very happy to successfully finish the module on time ©
- ☐ Consequently, we were very happy ☺☺☺

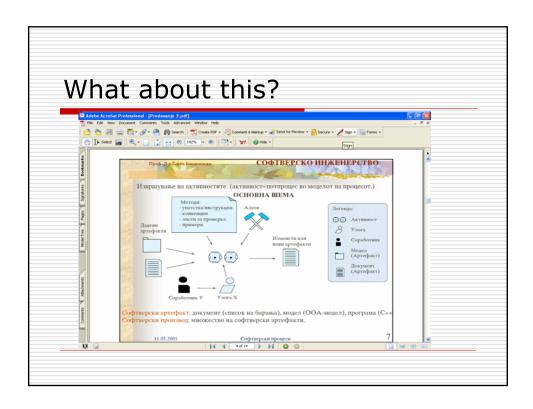
#### New school year

- ☐ Same structure of the module as in 2006/07:
  - 15 weeks \* 2 lectures + 2 theoretical exercises + 1 practical exercise
  - 6 credits
- □ Team slightly changed
  - Professor: Katerina Zdravkova
  - Assistant: Boro Jakimovski
  - Part time assistant Ana Dimitrijević (instead of Sanja Dejanovska)
- Novelty: Two generations

#### Target group 1

- □ 86 students from the **eight** semester who attend JCSE instead of the module Theory of programming
- □ Reasons:
  - The professor who was assigned to deliver the module "Theory of programming" in 2004 decided to use our slides
  - 2. In 2005 he moved to Norway, and another professor inherited the module
  - 3. New professor made a horror of the module ⊗, and students couldn't pass it
  - 4. Furthermore, he stole our slides ⊗
  - 5. In 2007 he moved to a private University ©©©, so the module was assigned to us ©

## 



## Target group 2

- □ Compulsory module in the fourth semester for:
  - 126 students from 4-year studies
  - 57 students from 3-year studies

## Distribution of the obligations

- □ Bold topics are delivered by the teacher, regular by the assistant
- 1 What is Software engineering?
- 2 Quality criteria for software products
- 5 Results of the "Analysis and Definition" phase
- 7 Basic concepts of the function-oriented view
- 9 Basic concepts of the rule-oriented view
- 11 Basic concepts of state-oriented view
- 12 Basic concepts of scenario-based view
- 14 Formal Specifications
- 16 Structured design
- 17 Object-oriented design
- 20 Functional Testing
- 21 Software Metrics

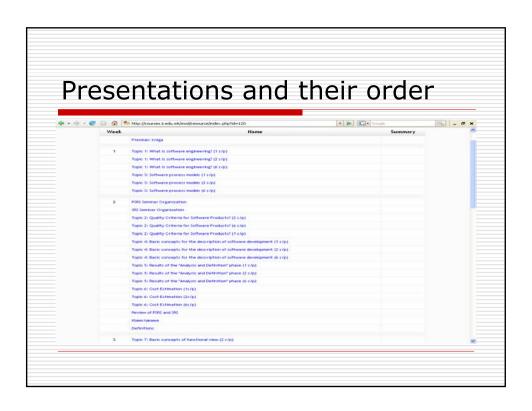
- 4 Basic concepts and software development documents
- 6 Cost Estimation
- 8 Basic concepts of the data-oriented view
- 10 Structured analysis

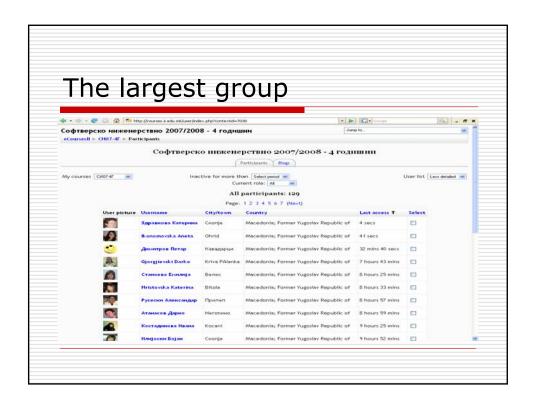
- 13 Object-Oriented analysis
- 15 Overview of design phase

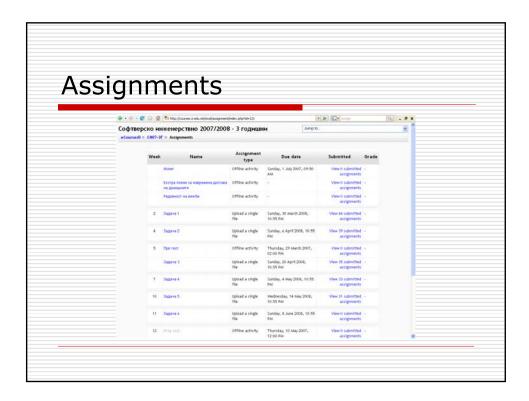
- 18 Implementation
- 19 Systematic Testing

#### Practical exercises

- □ Review the requirement document specification of "Seminar Organisation"
- Apply FP method for "Seminar Organisation"
- □ Review product model
- ☐ Derive use case diagram and class diagram from problem description
- □ Specify regression test using ATOS
- Software metrics







## Delivery of the module TP

- ☐ Students from the eight semester have already learned:
  - how to make a well structured and well documented source code
  - many secrets in database implementation
  - some of them have already become familiar with Use Cases and UML
- ☐ They find JCSE a fantastic compilation of everything they have already learned
- ☐ So, the lectures were not real lectures, but a discussion forum with many participants

#### Delivery of the module SE

- ☐ Students from the fourth semester:
  - attend basic module in databases in parallel
  - have a basic experience with OOP
  - have some basic idea about well documented source code
- □ They find JCSE interesting, but not very easy
- ☐ For some of them, this module is the first real computing and engineering module
- ☐ They find the tests more difficult than last generation

#### Conclusion

- ☐ We are more mature this year, so lectures are very smooth ☺
- ☐ The experience with older students was fantastic and very important to improve the lectures for younger students
- □ Their remarks and experience was fruitful
- □ Boro and Ana are nice, and our communication is great
- ☐ But, the number of students increased a lot, so it is difficult to grade them
- ☐ And, again, we could never been so successful without the JCSE slides and book