Once upon a time...
მოსახლეობის ფოთონური ფიზიკური უზრუნველყოფა

მოდელის სიმრავლები შეიძლება ჰქონოთ ფუნქციონალური და სტრატეგიული ერთგვარი სიმრავლები. ჩვენ უკვე იცით სიმრავლები.

მონაცემები უბრალოთ.
Distributed Software Development Course: Students’ Experience

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At the beginning …there was…

… classical education…
DSD – What, Why?

✓ Software development with people distributed in different locations

✓ Global software development
✓ Virtual organizations

For students like us I think it’s really important to do such a project with different cultures and countries.”
DSD - Who?

- University of Zagreb
- Zagreb, Croatia
- Traditional engineering and computer topics
- 4 parallel courses
- 2 semesters

Partners

- Mälardalen University
- Västerås, Sweden
- Emphasize computer related topics
- 2 parallel courses
- 4 periods
“The concept as a whole was great. A great experience, fun, lot of new stuff to learn, real life situations, simply great.”
How to run DSD?

Presentation of technological background

“At first there were some lectures to introduce us to the whole concept, and later ‘we came to the scene 😊’”
“It was very good, the best part of lectures are advices how to manage distance and this type of projects. I really liked that part.”
“The best way to learn something is to do it. Now that our project has failed we really understand what the guest lecturers were talking about.”
DSD Projects

“The idea of making one big project instead of more little exercises sounds much better to me.”
DSD Projects

Goals

- Experiences in DSD project management, communication and collaboration
- Producing software that helps DSD
- Producing high-quality project documentation
- Observe cultural differences
- Role-playing: real-life projects and responsibilities
“I didn’t expect such type of organization, but it was really great, and I must say that it was extremely good.”
“I liked to learn about different cultures, and experience how difficult it was to coordinate the work between the Swedish and Croatian side.”
“Solving ‘human’ problems in a team was a hard one, but is surely important for the future work.”
“Experience in ‘selling’ the project to the customers was a new one to me, and it was worth to try it.”
Project examples

“The idea looked better and better with time 😊 Not much at the beginning, but at the end...”
Project examples

✓ 2003/2004
  – CVS QQL
  – CVS Reporting
  – Project management
  – Chat sessions
  – Bluetooth

✓ 2004/2005
  – CVSQL2
  – CVSReport
  – Chat sessions

✓ 2005/2006
  – VLab
  – Project management
  – Component Composition
  – Software Merge

✓ 2006/2007
  – Virtual Museum
  – Course Builder
  – Student’s companion
Project examples

- Mission - enable access to the CVS repository using the SQL queries from JAVA
- 2004 - 7 participants (5 from Croatia, 2 from Sweden)
- 2005 - 7 participants (4 from Croatia, 3 from Sweden)
Mission - enable planning and tracking using the most popular project management techniques today

2003 - 5 participants (only from Croatia)

2005 – 8 participants (4 from Croatia, 4 from Sweden)

2005 – 6 participants (only from Sweden)
Interactive Museum

Project examples

- Mission – enhance exhibition experience with PDA’s and sensor network
- 2006 – 8 participants (4 from Croatia, 4 from Sweden)
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- **Documentation**
- **Project work**
- **Presentations**
- **Software product**
Communication

“Great. We really talked a lot, and then some more... 😊”
“Very useful, it was really cool to have them. It was really cool organization that we have one hour of meeting. I think that without that part our team would never make it.”
Asynchronous Web-based environment
"It is a great source of communication between the group members."
Communication

Software engineering tools for code control

“I found out that it takes a lot of work to make something work as you want it to work.”
Experiences

“I was scared at the beginning, but now I feel lucky what I had been a member of this course.”
Problems experienced

✓ New environment
✓ Building trust
✓ Abilities estimation
✓ Knowledge sharing
✓ Planning, responsibility
✓ Communication
✓ Cultural differences
✓ Milestones

“I was able to predict some of the problems, but others arose that I had not prepared to handle.”
Experiences

Benefits gained

✓ Quick cooperation
✓ Forming and maintaining virtual teams
✓ Maintaining small groups
✓ Working on abilities
✓ Improving knowledge
✓ Distant communication using Web tools
✓ Real-life simulation of work on distributed project

“A challenging but rewarding experience.”
Experiences

Course evaluation

✓ Anonymous survey
✓ Questionnaire

"I liked this course a lot, very different from the rest of the courses I have taken in the past. hot hot hot hot!"

2003: 4.23 2004: 4.53

Evaluation Summary  [Distributed Software development 2006 ]

Number of evaluations: 34

As whole the course was (bad=1, excellent=5)

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Average: 4.76

• [5] The Over course is excellent, we have learnt a lot about the distributed software development. Offshore development i.e. development from cheap countries is hot topic today. In this course we learnt how to organize the whole work, it is great.
• [5] The course is different from many others.
• [5] It was fantastic!
Typical DSD conclusion

“Quite hard but I guess that’s what the real life is like.”
• http://www.fer.hr/rasip/projekti/rpi/en
• http://www.fer.hr/rasip/dsd

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