



# Tempus Kisek project

Kisek team at FER



# Tempus Kisek project



Collaborative Internationalisation of  
Software Engineering in Croatia

# Project goal

- Development of Competence Centers for Software Development in Croatia



# Specific goals I

- advancement of cooperation among
  - universities
  - state institutions
  - industry



# Specific goals II

- additional support for internationalization of Croatian universities



# Specific goals III

- ❑ training of teaching staff by European partners
- ❑ cooperation on
  - undergraduate, graduate and postgraduate level
  - life-long learning



# Project consortium

## □ University of Paderborn

- Grant holder
- Prof.dr.sc. Wilhelm Schäfer



## □ Mälardalen University

- EU-partner
- Prof.dr.sc. Ivica Crnković



## □ University of Zagreb

- Coordinator
- Prof.dr.sc. Mario Žagar



# Croatian universities

## □ University of Zagreb

- Faculty of Electrical Engineering and Computing



## □ University of Split

- Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture



## □ University of Osijek

- Faculty of Electrical Engineering





# Societies and government offices

- ❑ The Central State Administrative Office for e-Croatia
- ❑ HrOpen - Croatian society for Open Systems and Internet



# Companies

- Ericsson Nikola Tesla
- RING datacom
- Končar
- Siemens



# Groups of interest



Institutions and  
State offices



Industry



Faculty staff



Students

# Activities - education

- doctoral and diploma thesis development in the cooperation with
  - the industry
  - the foreign universities - partners
- international exchange of
  - graduate students
  - PhD students
  - faculty professors



# Activities - education

- ❑ creation of educational materials for academic and professional audience in SE field
- ❑ analysis of European IT/SE curricula



# Current project activities



# Activities - University of Zagreb

- ❑ Software engineering education competence center in Open systems field
- ❑ partners:
  - Faculty of Electrical Engineering and Computing, Zagreb
  - HrOpen - Croatian Society for Open Systems and Internet
  - The Central State Administrative Office for e-Croatia
  - ...?

# Open systems keywords



Portability



Interoperability



User portability



Choice of vendor



# Center's objectives

- ❑ best practice transfer from EU
  - standards
  - open concepts and technologies
- ❑ raising awareness of the open systems importance
- ❑ spreading of open systems knowledge in Croatia



# Activities I

- ❑ Lectures and discussions on topics of software engineering in open systems
- ❑ Collecting, creation and localization of information and educational resources for open systems
- ❑ Classes and workshops focused on specific knowledge and skills in the field of software engineering, with special emphasis on open systems and technologies



# Activities II

- ❑ Building students' experience in real-life software engineering projects
- ❑ Distributed Software Development course
  - collaboration of two KISEK partners: MdH and FER
  - in cooperation with partners from industry, within KISEK project and others



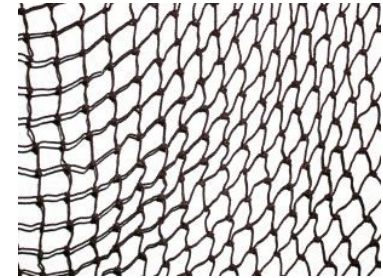
# Activities - University of Osijek

- ❑ Software Competence Center Osijek
- ❑ partners:
  - Siemens Osijek
  - Factory of electrical equipment, Belišće
  - HEP
  - The city of Osijek
  - The bank of Slavonia
  - ...



# Center's objectives

- regional development in:
  - Slavonia and Baranja
  - potentially in wider region (Hungary - Serbia - BiH)
- support for internationalization of University of Osijek
  - courses in English language
- enhancing regional cooperation between university - industry - state



# Activities

- ❑ database of partners and their portfolios
- ❑ lectures and workshops in SE field held by
  - industry partners
  - other universities involved
- ❑ involvement with youth
  - primary/secondary education
  - specialized societies or centers



# Topics

- ❑ software product quality
- ❑ real-time systems
- ❑ multimedia
- ❑ embedded systems
- ❑ artificial intelligence
- ❑ ...

# Activities - University of Split

- Plan of the Competence Center - work in progress
- 1 engineer to work full-time for 5 months





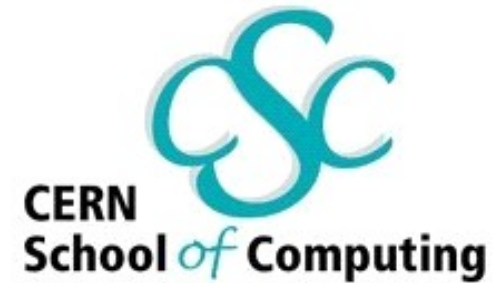
# Activities

- collaboration in Ericsson Summer Camp
  - 3 students
  - 2 mentors from FESB
  - SE project



# Activities

- ❑ CERN School of Computing
- ❑ main organizer 2007 - FESB
- ❑ topics:
  - GRID Technologies
  - Software Technologies
  - Physics Computing



# Activities - Ericsson Nikola Tesla

- "Software engineering practice and expectations in software industry environment"

ICSE 2008, SEESE workshop

- organizers of Summer Camp

- students from FER: 33
- students from FESB: 5
- SE projects
  - application development according to industrial standards
  - SE methods and procedures



# Activities - Ericsson Nikola Tesla

- prototype activities
  - component-based software development
  - "open source" development paradigm
- interconnection in other SE projects



# Activities - Ring datacom

- collaboration with FER on:
  - "Distributed Software Development" course
  - Tutoring students
  - Sponsoring annual award for the best diploma thesis
- willingness to cooperate by including students in complex projects (managed by Ring)

# How to proceed?

- ❑ issues with international collaboration
- ❑ issues with legal acts concerning the centers
- ❑ does industry actually need the universities?
  - are we far-sighted enough?



# More information

<http://www.fer.hr/kisek>

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