# First Announcement Workshop on Software Engineering Education and Reverse Engineering Plovdiv, Bulgaria, September 15 - 21, 2002

# Organizer

Dept. of Mathematics and Informatics, University of Plovdiv, Plovdiv, Bulgaria

# Contact persons

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## Web sites

http://www.informatik.hu-berlin.de/swt/intkoop/index.html http://www.informatik.hu-berlin.de/swt/intkoop/se/index.htm

# Background

The workshop is being supported by the German organization DAAD (German academic exchange services) with participants from universities of Berlin, Novi Sad, Skopje, Plovdiv, Kragujevac, Niš, and Belgrade.

This meeting is conducted under the auspices of 'Stability Pact for South Eastern Europe' aimed at the improvement of educational and scientific conditions of countries in that region.

# **Program Committee**

- Klaus Bothe, Humboldt University, Berlin, Germany
- Zoran Budimac, University of Novi Sad, Novi Sad, Yugoslavia
- Stanimir Stojanov, University of Plovdiv, Plovdiv, Bulgaria
- Katerina Zdravkova, University 'Cyril and Methodius', Skopje, Macedonia

### Goals

The aim of the workshop is an exchange of ideas in the field of SE (software engineering) education in a general computer science (informatics) curriculum.

In particular, the introduction of compatible SE courses at each of the universities is a special goal.

In addition, cooperative and distributed software engineering and reverse engineering project activities will be discussed.

The XCTL system shall be used as a case study to be accessed by different parties. This system is a real-life software system used in experimental physics which is being renovated in students' projects at Humboldt University.

A vision should be a cooperation in the research subjects of "joint software development / software reengineering over the internet" and "virtual university / multilingual virtual classroom network".

# Workshop program

# Changes in CS curricula since last year - impact to SE

- M. Ivanović, Novi Sad: New CS curricula at Dept. of Mathematics and Informatics, Novi Sad
- Z. Konjović, Novi Sad: CS Curriculum and migration from classical engineering disciplines to IT engineering at Faculty of Technical Sciences, Novi Sad

- B. Jošanov, Novi Sad: New curriculum for software engineers in new High Business School, Novi Sad
- N. Grujović, R. Slavković, Kragujevac: An overview of Tempus project for designing and improving of CS curricula at University of Kragujevac
- P. Stanimirović, Niš: An overview of Tempus project for designing and improving of some subjects in CS curriculum at Faculty of Science, Niš

# Joint course on SE - selected topics

## General overview

- *K. Bothe, Berlin:* A joint course on software engineering: a challenge for cooperation, education and research
- *K. Zdravkova, Skopje*: Concept of a multilingual virtual classroom network for a software engineering module
- Z. Budimac, Novi Sad: The Structure of the SE Course Web Sites
- K. Bothe, Berlin: Five years of SE course at HU experience, conclusions, didactic principles
- *K. Zdravkova, Skopje*: SE curriculum in CC2001 made by IEEE and ACM: Overview and Ideas for Our Work

## Special chapters on ppt-slides of SE course: presentation and remarks

- *K. Bothe, Berlin*: 1. What is software engineering?
- K. Zdravkova, Skopje: 3. Software process models introduction
- K. Bothe, Berlin: 4. Basic concepts and software development documents
- K. Bothe, Berlin: 5. Results of the phase 'analysis and design'
- N. Ibrajter, Novi Sad: Case study 'Seminar organization': Requirements Specification (part of 5.)
- K. Schützler, Berlin: 6. Cost estimation
- A. Stoyanova-Doycheva, Plovdiv: 11. Basic concepts for the state-oriented view
- A. Stoyanova-Doycheva, Plovdiv: 12. Basic concepts for the scenario-based view
- M. Ivanović, Novi Sad: 19. Systematic testing
- V. Ajanovski, Skopje: 20. Functional testing
- Z. Putnik, Novi Sad: 21. Software Metrics
- Z. Budimac, Novi Sad: 22. Maintenance
- D. Bojić, Belgrade: 23. Reverse Engineering
- Z. Budimac, Novi Sad: 24. Quality of software development and its standardization

## Organizational environment:

- K. Bothe, Berlin & Z. Budimac, Novi Sad: Assignments (practical exercises) in a SE course
- K. Bothe, Berlin & Z. Budimac, Novi Sad: Other topics and discussion
- M. Kresojević, I. Pribela, Novi Sad: Implementation of a case study (Seminar organization)

### General SE topics: Projects

*D. Bojić, Belgrade*: Experience from the maintenance phase in international projects *S. Stojanov, Plovdiv*: ECL Activities and Projects

- D. Tošić, Belgrade: From simple games to multi-layer applicatiohns in Java
- N. Mitić, Belgrade: Experience in the project of creating multi-modal textbook in analitical geometry
- N. Grujović, Kragujevac: An overview of the project on water-flow simulation for a system of hydro-power stations "Trebisnjica"

## XCTL and distributed SE over the internet

- K. Bothe, K. Schützler, U. Sacklowski, Berlin: Progression of the XCTL system
- D. Bojić, Belgrade: Porting XCTL from Borland C++ to Visual C++
- A. Stoyanova-Doycheva, B. Botev, R. Gospodinov, Plovdiv: Experiments with the XCTL system
- Z. Budimac, Novi Sad: New version of the requirements specification 'Manual adjustment'
- U. Sacklowski, Berlin: On the (new) structure of XCTL Web sites
- K. Schützler, Berlin: Improvements of XCTL header file structure
- D. Bojić. Belgrade: Architecture recovery of XCTL application by means of the URCA method
- N. Grujović, Kragujevac: Visualisation in the XCTL system
- K. Zdravkova, A. Misev, Skopje: Workshops on "SE over the internet" ideas for our project organization a personal view