Keynote Speech VIII:

The Role of Modelling in Business Software Development: Case Study of Teaching and Industrial Practice in Zrenjanin, Serbia

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Abstract:

This paper describes the role of modelling and visualization in artefacts of software development, in the context of diversity in modelling methods, languages and tools, different software development processes and architectures. It particularly addresses issues in reverse engineering, reengineering and modelling with agile software development, which leads to the need for adaptable and adaptive modelling. This paper contributes with the description of the previously presented methodology of integrated modelling approaches in business software development and empirical research with two case studies. First case study shows experiences of modelling business-oriented software in educational process at University of Novi Sad, Technical faculty "Mihajlo Pupin", Zrenjanin, Serbia, while second case study analyses experiences of IT companies in Zrenjanin region, Serbia. Conclusion of the paper is that educational process in teaching modelling gives mental models to students to use them in industrial practice. Agile software development with constant changes in software products leave companies out of modelling or minimize their use. Adaptive and adaptable modelling and visualization is needed in industrial practice, since it brings lower software development costs.

Short biography:

LjubicaKazi was born in Zrenjanin, Serbia . She graduated at bachelor studies in Teaching informatics in 1998, studies in Master of IT Science finished in 2005 and Master of IT Engineering in 2009. She defended PhD thesis entitled "Development of an adaptable distributed information system as a support to software projects management", in 2016. All degrees earned at University of Novi Sad, Technical Faculty „Mihajlo Pupin" in Zrenjanin, Serbia.

LjubicaKazi was employed at the same University after graduation, since 1998, first at the position of teaching associate. She was promoted to a university professor (assistant professor) in 2016. After 20 years of working at the same University, she was engaged at the position of a vice-dean for education during 2018-19 school year. She received many awards, such as "Best student in class", "Best final exam work" and "Best teaching staff member for practical lessons".

LjubicaKazi organized many professional and scientific events and was engaged in professional and scientific projects, related to software development. She co-authored more than 10 books and 90 papers, which were published in national and international conference proceedings and journals. She is member of Association for Computing Machinery (ACM) and chairman of International conference on Applied Internet and Information Technologies. Her research interests are related to business information systems development, software modelling, software architecture, software quality, adaptive and adaptable systems, distributed information systems and software project management.