

Call for Participation

IT 2011 Industrial Tutorials

Friday, April 29, 2011

Studentu 48a-337, Kaunas, Lithuania

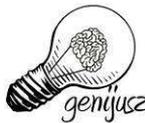
<http://isd.ktu.lt/it2011/>



Industrial Tutorials is a special day at annual IT conference, which aims to bring practitioners from well-known Baltic IT companies for sharing their experience in applying modern information technologies and software development methods and tools. It is organized in a close collaboration between *Kaunas University of Technology* and *No Magic Europe*, which is located in Kaunas, Lithuania and is known as a vendor of worldwide popular UML modeling tool MagicDraw, developer of high quality custom software solutions, and provider of training and consultancy in model-based software engineering and business process management.



IT 2011 Industrial Tutorials Partners



Microsoft

infobalt
L I E T U V A

The first edition of Industrial Tutorials at IT 2010 was very successful – it attracted a number of speakers from IBM, Microsoft, Oracle, Alna and other companies and was highly rated by the participants.

"I am very glad to have participated in this practical and to-the-point IT 2010 Industrial Tutorials event. If you're looking to measure your business practices against the other ones from you sector and for further development directions for your company, this is the place to be. I will be looking forward to the next one."

Ramūnas Klimavičius, Development Department Manager, UAB "Būtenta"

We are looking forward to even better IT 2011 Industrial Tutorials with highly pragmatic sessions sharing valuable experience in world-class software product development, advanced requirements analysis, virtual project management, Agile practices with particular focus on Scrum, value of modeling in Scrum context, and modern tools and techniques for debugging live systems and building custom teamwork solutions.

Registration

Register online at <http://isd.ktu.lt/it2011/>

Early bird registration fee is 100 € (before April 18).

Late registration fee is 150 € (after April 18).

Contact for Information

Tomas Skersys

Kaunas University of Technology

Studentu str. 50-309, Kaunas, Lithuania

Phone: +37068624695, +37037300382; Fax: +37037300352

e-mail: it2011@ktu.lt

PROGRAM¹

| Opening | |
|-------------------------------------|---|
| 08:30-09:00 | Registration |
| 09:00-09:20 | <i>Modern Trends in Software Development Practice</i> Dr. Darius Šilingas, <i>No Magic Europe</i> , Chair of IT 2011 Industrial Tutorials |
| Keynote | |
| 09:20-10:20 | <i>How to Produce Successful Software Products: MagicDraw Story</i> Dr. Andrius Armonas, <i>No Magic Europe</i> |
| 10:20-10:40 | Coffee Break |
| Requirements and Project Management | |
| 10:40-11:20 | <i>Capturing Requirements of a Regulated Medical Product: Case Study</i> Linus Vaitulevičius, <i>Rubedo sistemas</i> |
| 11:20-12:00 | <i>Virtual Project Management</i> Valdas Šimas, <i>CSC Baltic</i> |
| 12:00-12:20 | <i>Activity Model of IT Research Centre in the National Open Access Centre (Valley) SANTAKA</i> Dr. Tomas Blažauskas, <i>KTU, Software Engineering Department</i> |
| 12:20-13:00 | Lunch Break |
| Agile | |
| 13:00-13:40 | <i>Agile Brings Value: Two Scrum Implementation Success Stories and Lessons Learned</i> Vaidas Adomaskas, <i>Adform</i> |
| 13:40-14:20 | <i>Smart Modeling in Scrum Context</i> Rokas Bartkevičius, <i>No Magic Europe</i> |
| 14:20-14:40 | Coffee Break |
| Tools and Techniques | |
| 14:40-15:20 | <i>Debugging Live Systems Using HedgeLog</i> Raymond Elferink, <i>RayCom BV</i> |
| 15:20-16:00 | <i>Extending Rational Team Concert with Timesheets for ERP Customers</i> Dominik Zalewski, <i>genijusz</i> |
| 16:00-16:20 | Coffee Break |
| Discussion Panel | |
| 16:20-17:20 | Discussion Panel: <i>What Are Essential Skills of Software Professionals Today?</i> Moderator: Dr. Darius Šilingas, <i>No Magic Europe</i> |
| 17:20-18:00 | <i>Informal Discussions with wine, coffee, and snacks</i> |

¹ Organizers maintain the right to change the program due to unexpected circumstances such as speaker's inability to participate because of illness or traveling problems causing a late arrival of a speaker.

SESSION DESCRIPTIONS

Modern Trends in Software Development Practice

In this opening session, we will quickly review the modern trends in software industry and how the sessions of IT 2011 Industrial Tutorials program address them.



Speaker: Dr. Darius Šilingas, *No Magic Europe, Chair of IT 2011 Industrial Tutorials*

Darius Šilingas is a Head of Solutions Department at No Magic Europe, which develops modeling product MagicDraw. Darius participated in multiple large-scale international software development projects in various roles. Recently he has been working as a consultant helping organizations to adopt MagicDraw for efficient software and business modeling. He has run over 150 professional training and consultancy sessions in 20 countries and spoke at premier software conferences such as Architecture and Design World, OOP, JAX, Code Generation, and EuroSTAR. Darius holds Ph.D. in Computer Science and is OMG Certified UML Professional and Expert in BPM.

How to Create Successful Software Product: MagicDraw Story

There are essentially two business models chosen by software companies. Most of the companies choose developing custom software solutions for specific customers while others choose a much harder path – creating software suitable for multiple customers, in other words – creating a software product. Going this path requires focusing much more on marketing and product development strategy, which is not so evident in one-time customer projects. Another difference is that it is harder to gather requirements for products as there is no single user who can tell them. The product is created to satisfy the majority of existing and potential user needs. For those who do not find the needed functionality out-of-the-box, extension mechanisms or customization capabilities should be provided. Creating a product allows for accessing a much broader auditory of customers which in turn implies a bigger revenue stream. No Magic has been developing a product called MagicDraw for software, systems, and business management professionals for the last 13 years. Currently MagicDraw is one of the most popular modeling tools in the market, which is used by over 100.000 users in over 80 countries including major companies such as NASA, Lockheed Martin, e-bay, Yahoo, Schenker, etc. In this session, I will share our experience gathered during years of creating MagicDraw and will share the lessons learned when going down the path of creating a successful product.



Speaker: Dr. Andrius Armonas, *No Magic Europe*

Andrius he has been working as a programmer and senior programmer for companies specializing in business software solutions since 2000. Andrius currently holds the position of MagicDraw product manager and MagicDraw analyst team manager. As an analyst team manager, he is responsible for planning work for MagicDraw R&D team, ensuring requirements quality and completeness, healthy requirements gathering and specification processes and their contents. As a product manager, he is responsible for settings targets for the product, its roadmap and vision, and selecting features for each version of MagicDraw. His responsibilities also include understanding the market and the competitors.

Capturing Requirements of a Regulated Medical Product: Case Study

Capturing requirements of a medical product brings out unique set of challenges. Not only does it imply focusing on risk mitigation and domain-specific clinical application of the product (including clinical misuse), but also strict adherence to health industry-specific quality regulations throughout the whole period of analysis and design activity (such as EU MDD, FDA QSR 820, ISO 13485, etc.). In this case study I will present my experience and techniques I used, when modelling requirements for Elekta's FDA-certified medical product – HexaPOD™ evo RT system. The system is successfully used worldwide in image-guided radiation therapy to bridge the gap in tumour localization and targeting chain. It is implemented as a robotic patient positioning platform with six degrees of freedom driven by iGUIDE® software. The latter was designed and built by the dedicated team of 6 professionals at Rubedo sistemas.



Speaker: Linas Vaitulevičius, *Rubedo sistemas*

Master of computer science and accomplished professional with 15+ years of experience in analysis, design and implementation of business and enterprise systems featuring diverse technology and application areas including internet services, logistics and healthcare, with strong emphasis on formal processes, modeling, parallel computing and, more recently, motion management and kinematics. Years of on-site experience collected in Europe, USA and Australia.

Virtual Project Management

Virtual Project Management (VPM) is so different from Project Management, one of the difference is that all or part of project team members are located in different countries. It is the art of bringing together different types of people to work on a shared goal. It is difficult to organize and lead the meeting then you can not see people reaction to one or another statement. Project team members have different schedules, cultures and expectation - it is a challenge for Project Manager. During the presentation Valdas will present the main Virtual Project Management aspects, the tools and technologies to manage such project, also will talk not only about the projects but also how to manage international teams.



Speaker: Valdas Šimas, *CSC Baltic*

More than 3 years as a programmer, 3 years as a lecturer and 5 years as a Project Manager & Program Manager in software engineering and infrastructure projects. I was involved in analysis and validation of customer needs, design of business process requirements – financials, customer relationship management, service, manufacturing, warehouse management, banking, coordination of software programming, application relocation and upgrade, setting-up new infrastructure environments. Project management/Risk Management/Scheduling/Human resource managing (Stamford Global Institute/2005 – 2006), ITIL (2005), Project Management Professional (PMI/ 2008), PMQS, E&S, GPM.

Activity Model of IT Research Centre in the National Open Access Centre (Valley) SANTAKA

The development and strengthening of R&D processes, closing the gap between the results of R&D and the needs of society is a major factor in increasing the competition in global markets. In order to create the conditions for the development of research, studies and business centres (valleys), to develop R&D departments of business entities, Lithuanian Government has approved the idea of founding Integrated Research, Studies and Business Centre (Valley) SANTAKA. Kaunas University of Technology being a co-founder of this Valley, is seeking to consolidate the potential in one geographical area the possibilities for the integration of research, studies and business activities, the appropriate open access infrastructure for such activities. The structure of the Information and Telecommunication Technologies division activities in the Valley, the areas of R&D in it, as well as integration of research and business activities there, will be introduced in the report. The models of joint operation of different entities in such open access centre, effective cooperation of these entities and other relevant topics will be discussed.



Speaker: Dr. Tomas Blažauskas, *KTU, Software Engineering Department*

Tomas Blažauskas is an associate professor at Kaunas University of Technology. Since 2003 he has been working as a lecturer at KUT as well as project manager and senior programmer at "Optitecha" company, which develops software for industrial companies. While working at the university he also participated in a process of development of various startup teams. Since 2011 he has been designated as a coordinator of research group in the IT area of the *Santaka Valley*. He is responsible for a development of Open Access Centre vision for successful operation and collaboration of business and research entities.

Agile Brings Value: Two Scrum Implementation Success Stories and Lessons Learned

Agile is becoming a mainstream software development ideology worldwide. Agile has proven record of value it brings as well as pitfalls companies should be aware of. Nevertheless, in Baltic countries, Agile is taking the first baby steps. Very small percent of all companies have implemented Agile methods like Scrum, Kanban, or XP and started seeing the value it creates. I believe that sharing practical examples is a key to speed up this process. This presentation will summarize my experience and lessons learned from two Scrum implementations. First company where I drove Scrum implementation was Lavasoft in Sweden (~25 people involved; 4 cross-functional Scrum teams; 1 outsourced Scrum team in Sri Lanka; product: computer security applications). In 2010 we implemented Scrum in Adform in Lithuania (~50 people involved; 8 cross-functional Scrum teams; product: Ad Serving and Measurements System handling around half a billion requests per day). The success stories will answer these questions: what key benefits Agile can bring for your company; what issues you can expect when you decide to go Agile and how to overcome them.



Speaker: Vaidas Adomuskas, *Adform*

Vaidas Adomuskas is working as a Product Manager and Scrum Coach in Adform. He is Product Owner (Product Manager) of one of the key company products as well as coaching Scrum teams with every day improvements. Before Adform, Vaidas had implemented Scrum in Lavasoft in Sweden. Vaidas is the author of the blog <http://scrum.agile.lt>, initiator of Agile and Scrum Users Group in Lithuania, Certified Scrum Master (CSM), Certified Scrum Product Owner (CSPO), participant/speaker of international and national IT/Agile conferences, lecturer at Vilnius University ("Agile Project Management with Scrum" course), and member of Lithuanian Project Management Association.

Smart Modeling in Scrum Context

Scrum teams do planning around epics, features, and stories. The overall problem domain and solution architecture is typically not maintained, as the Scrum practitioners usually focus on coding, verbal communications inside a team, and rather unstructured information captured in product backlog. In this session, we will explain how to do smart modeling, which uses very small subset of UML to capture essential knowledge that is not available from code or product backlog and use it for improving communications. We will go through a case study and demonstrate how to capture problem domain concepts and processes, and a high-level solution domain architecture including uses cases, components and their interactions. The case study will reflect our experience consulting a large organization with hundreds of software developers working on a product line solution in geographically distributed Scrum teams.

Speaker: Rokas Bartkevičius, *No Magic Europe*



Rokas Bartkevičius is a Solution Architect at No Magic Europe, which develops popular UML modeling product MagicDraw. Rokas is responsible for consulting various MagicDraw customers on how to get most value from modeling and adopting modeling practices to fit diverse customer contexts. Before joining No Magic, Rokas worked as a developer, analyst, and project manager in Agile culture based software development company working in GIS domain, where he actively contributed to process improvement activities and acted as a modeling evangelist. Rokas holds Master in Computer Science and is OMG Certified UML Professional.

Debugging Live Systems Using Hedgelog

Tricky bugs in live systems have a tendency to hide from carefully chosen tests during the staging period, only to show themselves to unsuspecting users when the system is live. These bugs can be particularly hard to reproduce and hunt down, especially since bug reports by end users are in general quite useless.

As Dr. Gregory House (House MD) so eloquently puts it: “I don’t ask why all patients lie. I just assume they do.” This may sound harsh and unfair at first, but thinking about it makes you realize that objectively this is the only way to approach a patient’s story without it clouding your judgment or tunneling your vision. Similarly the healthy approach to bug reports is that they are incomplete and that the user will never tell you exactly when the bug happened, what the error message was they saw on the screen and what they were trying to accomplish in the first place.

We have been using a PHP prototype of a new online logging service called Hedgelog in search for a more effective way to debug live online systems. Hedgelog effectively logs the state of the system at the moment the problem occurs. On top of that it proactively logs the users requests and actions even when nothing out of the ordinary occurs. This makes it possible to backtrace user’s actions and more effectively track down and repair a problem.

We also take a short look at other tracking possibilities that Hedgelog may provide: tracking user paths across multiple sites and finding hidden bugs by comparing different users action paths.



Speaker: Raymond Elferink, *RayCom BV*

Raymond Elferink has over 12 years experience as Project Manager and Software Engineer. Over the past 7 years he gained a lot of experience in International development and research projects, both as project leader and as participant. He has worked with companies, universities, developers and researchers from all over Europe with a main focus on Knowledge Exchange, Knowledge Development, Business Intelligence, Social Software and Web 2.0. Raymond has co-authored a number of publications in the field of online learning and educational technologies. Raymond Elferink is a multi-faceted programmer, with expert skills in PHP, Javascript, ColdFusion, Actionscript, C/C++ and SQL. As a senior application architect he has experience with OO, SAAS, RPC, XML, JSON, AJAX, IMS-LD, SCORM and relational database design using Oracle, SQL Server, MySQL and PostgreSQL. Raymond Elferink holds a Masters degree in Physics from the University of Utrecht in The Netherlands.

Extending Rational Team Concert with Timesheets for ERP Customers

Rational Team Concert (RTC) is a collaboration platform designed to support large software development groups with members possibly in different geographic locations. It allows project managers to track, estimate and make corrections to software development process. It also allows the developers to communicate efficiently on the work that needs to be done.

Based on our experiences, we will show how we used Scrum process with help of RTC to develop a piece of software for timesheets, i.e. recording effort spent on the project tasks. We will also show plans for Academic Initiative project developed by IBM Internship students. This project aims towards writing custom extensions for standard RTC.



Speaker: Dr. Dominik Zalewski, *genijusz*

Dominik Zalewski currently leads his micro-enterprise (*genijusz*). The company's goal is to integrate, integrate, and integrate systems of their customers. His company is built of highly qualified under 30 professionals that are not afraid of challenges like using the latest browser technologies to connect to systems like SAP or AS400. Dominik is also active in non-profit organizations. He is the head of education section in COMMON Poland (common.org.pl) and a CEAC (Common Europe Advisory Council) member. He also has a solid theoretical background, as he finished his Ph.D. in computer science on one of the Polish universities.

Discussion Panel: *What Are Essential Skills of Software Professionals Today?*

In this panel, we will propose what belongs to the skills portfolio of modern software professional. We will identify which are the mostly missing skills and discuss how they can be acquired by university education, professional training, coaching, learning by example in real projects and other approaches.

Moderator: Dr. Darius Šilingas, *No Magic Europe*

Invited Panelists:

- Mindaugas Glodas, *General Manager, Microsoft Baltics*
- Prof. Laimutis Telksnys, *Member of Lithuania Academy of Sciences*