Editorial

We are proud to present to you our first newsletter for the UsiXML project. Our aim in this project is to provide a new way to design user interfaces with the new version of our language. This newsletter gives us the opportunity to distribute knowledge about the project, its status and the partners. Additionally, we will use this newsletter to announce events related to UsiXML such as workshops or fairs. We will keep you informed about the future of the UsiXML project and look forward to the possibility of your progression through the levels of the End User Club categories!

D. Faure, Project Manager and J. Vanderdonckt, Scientific Coordinator.

Status of the project

Following the kick off of the project at the end of 2009, the project is going through its second year. During this period, the efforts of the consortium have been concentrated on the definition of the meta models of the UsiXML language and on the methodology definition. We have passed our first milestone "End of modelling activities and first version of methodology". At the end of this period, we have started the work package on software tools (WP3) and in parallel the work package on validators (WP4).

Meta models are defined!

Most effort has been devoted to define the semantics of the UsiXML V2.0 language in UML V2.0 class diagrams, all stored in ProDevelop's Moskitt environment. A huge effort has been devoted to the definition of a common semantics to ensure it will be appropriate to the largest amount of partners. This has generated a very large amount of effort but it is the price one must pay for having a consensus within the project that provides strength in utility outside the project. Deliverable 1.3 now contains the following meta-models that have all received positive votes, thus implying that the entire consortium has officially adopted this definition.

- Domain meta-model: defines the semantics of a model characterizing the domain of discourse;
- Task meta-model: defines the semantics of a model expressing the end user's task independently of any technology;
- Abstract user interface meta-model: defines the semantics of a user interface independently of any interaction modality and of any computing platform;
- Concrete user interface meta-model: defines the semantics of a user interface independently of the computing platform;
- Context meta-model: defines the semantics of a context of use through the notion of situations;
- Transformation meta-model: defines the semantics of how transformations between models are ensured.
First tools defined!

Project partners have expressed their intention in developing any particular UsiXML-compatible software by describing it through a template regarding the aims and goals of any software, along with requirements and potential technological constraints and environments that need to be considered for their future development. Such software is described in a consistent manner according to this template, thus providing a detailed view of any software, both in terms of coverage and functionalities, but also in terms of maturity and development progress. Each template for a piece of software application will be updated on a regular basis. Once they have matured, all templates will be assembled together in order to form a catalogue of products and services.

Publications / Press release

The UsiXML project has been the subject of an article about “Standardization for the service of the user” in the magazine of the University of Namur, one of the partners of the project.

Future Events

A workshop on “Software Support for User Interface Description Language” will be organized during the Interact’2011 conference. Don’t hesitate to register and participate to this event!

Who’s who? Focus on Alfonso Garcia’s work

Are there perfect user interfaces (UIs) or does there always exist one user at least who encounters difficulties when interacting with a UI in a given context of use? For sure, quality is a dream but it is far from being reality. Alfonso Garcia’s PhD explores to what extent models at runtime can be an opportunity to provide the end-user with explanations about the UI: What is the purpose of the UI? Why is it structured into this set of workspaces? What’s the purpose of this button? Why is it disabled? How can I enable this feature? The claim of the thesis is to bridge the gap between the expected and perceived qualities through self-explanatory UIs. Alfonso Garcia studies both the abstraction and presentation of explanations. He is supervised by Gaelle Calvary and Sophie Dupuy.

More information at http://iihm.imag.fr/member/agarcia/
UsiXML Vision

Advanced user interface development made easy with model-based approaches. The UsiXML project develops the open UsiXML language along with the tool suite that will simplify and improve the development of user interfaces for complex dynamic environments. This includes multi-device, multi-modal, multi-user, multi-culture/language, multi-organisation, multi-context, and multi-platform user interfaces. It will provide particular benefits for industry in terms of productivity, usability and accessibility. The overall goal is to promote UsiXML as a standard that will guarantee user interface usability and accessibility while improving developers’ productivity.

Project presentation

The UsiXML project develops an innovative model driven language to improve the UI design, for the benefit of both industrial and academic end-users in terms of productivity & reusability; usability & accessibility by supporting the “µ7” concept: multi-device, multi-user multi-culture/language, multi-organisation, multi-context, multi-modality and multi-platform. The approach is ensured by a relevant consortium involving the main contributors of the UsiXML community, industrial partners and academic partners that are able to put it through a challenging design and development process to enable the production of realistic and complex industrial applications. There will be significant impact on European markets in the following decades. It will apply to multiple segments where there will be a real gain for European industries, employees and citizens.

Consortium

The UsiXML consortium was carefully selected in order to achieve the project objective of extending, validating and standardizing a user interface definition language (UIDL) and methodological framework that should dramatically increase productivity, reuse and time to market of a wide range of applications critical for the European software industry. To extend the UIDL and methodological framework, scientific expertise is required in the following disciplines: software engineering, usability engineering, context information provision and processing, multi-modality, content adaptation, development platforms and mobile devices. Next, to validate the UIDL and methodological framework, partners whose day-to-day business is dependent upon high software productivity, reuse and timeliness to market are required to provide suitable piloting environments for the evaluation. All these talents, experience and social/business networks have been united under the UsiXML flag.
Focus on partners

Prodevelop

The mission of Prodevelop is to provide to our clients and Partners advanced solutions in the area of Information Technologies and Communications. The company aims to provide differentiation value to its clients in a collaboration environment to become trusted technological partners. Prodevelop has more than 60 employees, most of them computing, telecommunication and cartography engineers. They build a team with a wide experience on successfully developing projects and solutions. The company has more than 16 years of experience on the IT area.

Defimedia

DefiMedia is a Small and Medium Enterprise (SME) that develops multi-platform interactive systems. Since 1992, Defimedia has occupied a prominent place in the Belgian Internet landscape as a full service web agency with an expertise in all areas of a Web project: e-commerce and e-marketing strategic consultancy, operational production (graphics, infographics, web and applicative developments, programming, R & D), implementation, training and project management. Defimedia sells AToms® Framework, a multi-platform enterprise management system available in an open source mode. With this framework, DefiMedia has already deployed more than 80 professional interactive systems. Defimedia is integrating UsiXML in its framework in order to offer advanced services to its customers such as personalized interfaces, mobile solutions, and exchange tools.

PY Automation

PYAutomation was founded in 1998 in order to establish a R&D structure, independent of the Major Companies, for the benefit of the Armed Forces. PYA focuses its development in the areas of Service Delivery in the field of scientific studies and operational simulation training and development of prototypes. Since 2005, PYA activities are vested in the design, development and commercialisation of products in the field of Robotics and Complex Systems engineering and Security (human / system interfaces, aided decision tools).

UsiXML End User Club Flyer can be accessed at [http://www.usixml.fr/end_user_club](http://www.usixml.fr/end_user_club)