

NEWSLETTER

SIMPLI-CITY - THE ROAD USER INFORMATION SYSTEM OF THE FUTURE



SIMPLI-CITY-Webinar “Business meets Science” on 18.09.14

We are happy to announce the SIMPLI-CITY webinar "Business meets Science". It will take place on the 18th of September, 2014 at 2.00 pm (CET). Experts from science and business will discuss future trends of Information Systems with a spe-

cial focus on Road User Information Apps and services. Besides featuring interesting presentations, the interactive webinar strongly encourages your active participation and provides plenty of room for discussion.

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Successful Hackathon

Precise integration of single parts is of paramount importance for the overall performance of the entire SIMPLI-CITY system. Thus, at the beginning of August consortium-technician members had the opportunity to put some pieces of the SIMPLI-CITY system together. Major integration decisions were made and important parts were implemented directly: (1) integration of the Service Marketplace with the Service Runt-

ime Environment and its Service Registry part, (2) interaction of the Context Database component with the Context Manager, (3) integration of the User Management web API with the actual users database and (4) Integration of the Application Design Studio with the core of the Personal Mobility Assistant allowing SIMPLI-CITY app developers to deploy their projects directly into the PMA.

[> Read more](#)

Dear Readers

Welcome to the third SIMPLI-CITY Newsletter. Within this newsletter, you will find information about the SIMPLI-CITY webinar taking place on the 18th of September 2014 at 2.00 pm (CET) as well as about the successful Hackathon in Valencia, which boosted the system integration within the project. Furthermore we want to inform you about the PMA – the future-safe user interface of SIMPLI-CITY, supporting the multi-modal, menu-based dialogue.

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simpli-city
The Road User Information System Of The Future

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The PMA – user interface of SIMPLI-CITY

SIMPLI-CITY aims at building "the road user information system of the future", and evidently such an information system requires a future-safe user interface, the PMA (Personal Mobility Assistant).

Wide Variety of Usage Contexts

The PMA is intended to be used by "road users". This means that the PMA will be used by pedestrians, cyclists, bus and train passengers as well as car drivers. Each one of these categories has its own set of requirements on the PMA, as each of the user contexts will be different from the others. The user interface must be easy and safe to use for all these groups.

Multimodality

The PMA is a generic user interface of SIMPLI-CITY, supporting multimodal, menu-based dialogue. This means that it supports spoken input and output, as well as input using touch and output using menus, text and images.

Research support for multimodality's superiority distraction

Research has shown that voice interaction reduces the visual distraction, something which is important in the car driving context. It has also

been shown that a combination of graphics and voice is perceived as more efficient and less distracting than a voice-only or graphics-only interface. To further reduce visual distraction in the driving situation, the PMA will implement a technology called "VoiceCursor", which solves the problem of browsing lists while driving, without needing to look at the screen. A user interface, which – unlike many other voice-based interfaces – does not restrict its users to one single modality, can be used in many contexts, and is suitable for pedestrians, cyclists and train passengers and drivers alike.

Multimodality and free dialogue built-in

The PMA is based on a dialogue management technology from Talkamatic, which makes it easy to rapidly create dialogue applications with a relatively small amount of code. The dialogue is flexible, and the multi-modality feature comes out of the box. There is, however, a trade-off between the freedom of the developer to create unique UI designs and the rapid development. In order to allow for the rapid development, the UI is restricted to menus and popups of text and images.

Lightweight apps

The apps in the PMA are very lightweight, since the majority of the UI code is encapsulated in the PMA itself. The UI code is more a collection of configuration files, defining the application/dialogue flow, the grammar and the domain of the application. The connections to the services are made in the Application Runtime Environment, where infrastructure for such connections is located.

One stop solution

The PMA is the one stop solution for road user apps, since all the installed apps are available in the same, unified, user interface – an interface that is safe, efficient and which allows for safe interaction for car drivers, pedestrians and other road users.

Find more information about PMA-User interface:

<http://www.talkamatic.se/>

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