Multi-Platform Application Toolkit - fast and easy creation of applications for interactive TVs and personal devices

Presentation abstract:

"The Smart TV market is growing rapidly in Europe and across the world, generating a huge demand for TV related applications. The development of those apps is costly in terms of money and time and requires special knowledge beyond creating web pages. Often, TV applications are developed to be available for a short period only to accompany specific TV events. Those apps do not justify long and costly implementation processes. Instead they require an intuitive user interface that can be easily integrated into existing editor's workflows at media houses, for example. In addition to developing dedicated editing tools for creating HbbTV applications, the distribution of the HbbTV applications to consumers is another challenge mainly caused by the variety of CE devices. In particular, device fragmentation with respect to HbbTV compliance and interpretation of the HbbTV standard by the different CE manufacturers and browser vendors is a barrier.

The Multi-Platform Application Toolkit (MPAT) solves this problem by providing an efficient and intuitive way to create and maintain TV related applications. The goal of MPAT is to open up the emerging possibilities of hybrid TV to content producers, by providing an easy-to-use authoring tool for the creation of interactive multimedia and multi-screen applications for programme-related interaction for TV, video on-demand and OTT content. The project is on the one hand focusing on delivering essential tools to create basic applications while on the other hand the system can be expanded with 3rd party plugins to enlarge the functional possibilities and also templates to enhance the visual and navigational experience. We see a great potential in the uptake of program-related TV apps creating new markets for developers, technology providers as well as Broadcasters, Content Providers and 3rd party Service Providers. MPAT is based on WordPress, open source and will be available on GitHub. Applications relating to the TV and video content should allow a seamless transition from the live TV experience to on-demand consumption. So whether the content is viewed in a live broadcast environment or as on-demand content, the user experience is always appropriately adapted to the context and to the device. MPAT creates the technical core as well as the business foundation for a new ecosystem focussing on the design and creation of attractive TV multiscreen applications.

The main advantage of MPAT is that it is extensible by plug-ins for building additional features and themes for designing the look and functionality of the application. The entire concept fully builds upon established standards like HTML, CSS, JavaScript, plus HbbTV as an extension for the TV domain. The presentation will provide an overview of the concept and the technical toolkit together with some modules that can be plugged into MPAT. Further on, typical workflow examples will be demonstrated as part of the presentation."

Presenter profile: Miggi Zwicklbauer - [Fraunhofer Fokus](#)

M.Sc. Miggi Zwicklbauer is Research Engineer and Project Manager at the Fraunhofer Institute for Open Communication Systems (FOKUS) and specializes in the R&D of topics dealing with Smart Cities, E-Learning and Connected TVs. She has been involved in multiple public founded national and international projects (e.g. MPAT, Mecanex, FI-Content 2, Open-i, SmartLearning im Handwerk). Miggi Zwicklbauer received her Master of Science in Media Informatics with the completion of her thesis "Conception and design of an interactive mobile nature trail application" at Beuth University of Applied Sciences in 2012.