ITSME: the next generation workstation

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Abstract. In the last 30 years, the desktop metaphor has become the standard user interface for workstations, with its pros (e.g., ease of learning) and cons (e.g., interaction constraints for skilled users, lack of context awareness). The ITSME workstation will instead embody the new metaphor of *stories and venues*, and support cooperation by providing individual users with a richer view of their work environment, allowing them to have all they need at the right place, at the right time. In the development of ITSME we are adopting a design approach based on participation, involving various communities in all the steps we are taking.

From the desktop to stories and venues

The desktop metaphor (Kay, 1977) is obsolete, as new paradigms for cooperation have been emerging all through its existence, – e.g., the Web, email, social networking platforms, mobile and ubiquitous computing, – and still it has not evolved significantly since 1984: the year the Apple Macintosh hit the market. We are developing a next generation workstation, around the metaphor of *stories and venues* (De Michelis et al., 2009). The idea is to move away from a purely spatial metaphor, as in the desktop, in favor of another that is closer to what working people experience today: a complex interleaving of events, conversations, actions et cetera. In practical terms, we are collecting all that is relevant to a specific *story* within a single space (called *venue*): for example conversations involving the user, documents being produced collaboratively, tools

or applications, contacts, resources and so on. Our aim is to help users in dealing with the natural complexity of work in the most natural way possible.

Today, users are continuously searching to collect what they need but, just like on the Web, this habit often leads to distraction for their real intentions, even with optimal search engines. Moreover, additional effort is required to put things in place when and after work is performed: e.g., saving files with a proper name and in a suitable folder. In ITSME, we are embodying our expertise on knowledge work by designing a new product for people who think that what they do holds value. Trying to reduce or avoid the dispersion of files in workspaces, we are designing a new user interface (for a standard GNU/Linux operating system) where all documents, URLs, people contact details, information sources, and tools that are (potentially) useful for what the user is doing are presented all together.

Among the various presentations available on the ITSME website[1], the concept can be interactively tested using the Web emulator. We developed some basic social computing features (private messaging, open posting, in-site bookmarking, making fans) and presented them both in a standard way and in a stories-and-venues fashion. The contents of our website (posts, community members) and RSS feeds from other sites can be conveniently organized, according to users preferences, in the two sample venues that we have created for everyone: one about the ITSME project, the other about the workstation market scenario in general. From within the emulator, community members can communicate with one another, create new contents (blog posts, that are in this sense similar to generic documents on a real workstation) or browse their existing posts, bookmarks and media, comment others' posts and also be informed on news (that can then be discussed within the community). We are currently testing the perception of the emulator from the community, and the feedback collected will help us improve the "real" producet, i.e., the ITSME operating system.

At the same time, we are preparing for the first public release of Guglielmo, our meta/data management system: a project in which we aim at involving the Open Source Software community (Di Massa et al., 2009).

References

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[1] http://itsme.it

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