

# MUSETTE: a Framework for Knowledge Capture from Experience

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**Résumé.** Nous présentons dans cet article une nouvelle approche de modélisation de l'expérience d'utilisation d'un système informatique, avec pour objectif de réutiliser cette expérience en contexte pour assister l'utilisateur à effectuer sa tâche. Quatre scénarios illustrent cette approche.

## 1. Introduction

It is a triteness to say that computers are widely used, for more and more various and numerous tasks, which mainly rely on “information management”: information organization, storage, communication, retrieval, sharing... Furthermore, information management environments get increasingly customisable, in order to get closer to users' practices, usages and, more generally, to their needs of handling information whatever its form. For example, we could consider that an environment composed of a/ the web as a resource provider (documents, data) and b/ a tool for viewing and editing HTML documents, is adapted to any task involving information gathering and publication. The spectrum of computer-mediated tasks becomes wider, and tools for performing these tasks become more versatile and customisable. Since, on the other hand, they have more and more (often inexperienced) users, there is a increasing need for assisting the latter in their tasks while using tools or sets of tools. As a consequence, there is a need to design software agents as *assistants*, which would take advantage of knowledge describing the task at hand. Indeed it becomes necessary to take into account user's *tasks* in order to be able to interpret, in their context, the traces left by the use of the computer environment. Of course, in many situations of user assistance, there can be a wide variety of questions that can be formulated, depending on the context of use. Let us stress the fact that this notion of “context” has nothing to do with what is commonly addressed in the so-called “contextual help”: the latter is exclusively considering the computer environment context (e.g., selected item, current menu) while we are focusing on the user's context, in particular the task he or she is willing to perform.

More precisely, we do consider *two* kinds of tasks. First, we consider tasks that are well identified, for which assistance would rely on knowledge described in carefully designed ontologies. But it is also important to consider a second kind of tasks, which are hard to anticipate, and should be recognized from their manifestations and defined on the fly, considering actual experience of use of the system. We would like to address these tasks, so our main question is: how is it possible to model and capture experience in using a system, so that it can be reused as *knowledge* for user assistance? Moreover, how could it be that the assistance itself could evolve with concrete experience?