11

Comments on "A user-centered method for the development of data-intensive dialogue systems: An object-oriented approach" by B. Schewe, K.-D. Schewe

R. Studer
Institute AIFB

University of Karlsruhe, D-76128 Karlsruhe, Germany

Phone: +49-721-6083923, Fax: +49-721-693717

e-mail: studer@aifb.uni-karlsruhe.de,

The paper addresses an important issue: how to involve the users of a system into the development process of the system. Since different types of software systems impose different requirements on the system development process the paper confines itself to the development of one class of systems: data-intensive dialogue systems.

With respect to a user-centered approach, the paper discusses a lot of important *process* issues in section 1. Notable examples are "that the software development process has to be an evolutionary one ...", and "... the development process is a learning process. At the beginning of a project it is impossible to give a complete list of requirements.". From that analysis of the user's perspective and a corresponding analysis of data base requirements some consequences for a software engineering process model are derived. Among others the following characteristics are mentioned: "...start with an analysis of a typical working process", "used dialogue classes are sketched ...", "a prototype is constructed ...", and "from the dialogue classes we derive (data model) classes ...".

Although the paper first discusses such a process oriented view, the main part of the paper and its technical content emphasize only the description of a *formalism* which supports such a process model. Interesting aspects of the proposed object oriented formalism are a homogeneous description of the data base data model and the dialogue model. Thus a tight integration of both

aspects and a smooth transition from the description of dialogue objects to the specification of data base objects is achieved. This is the major technical contribution of the paper.

However, from my point of view, the process related issues are the most critical issues when considering a user-centered approach. Therefore, I would have appreciated to see a discussion of e.g. the following aspects in the paper:

- (i) How are initial requirements, i.e. new working processes to be supported by a dialogue system, captured and then used to derive a sketch of used dialogue classes?
- (ii) What are the methods for deriving the data base data model from the dialogue classes?
- (iii) Which methods are used to adapt a partial system design to changing and/or new requirements?
- (iv) In which way is the prototyping of the user interface supported?

The authors also claim that the resulting data model should not be limited to a specific application. However, it remains unclear how that goal is achieved since the data model is derived from the dialogue classes which are typically rather application dependent.

To summarize, the paper makes a valuable technical contribution by proposing the integrated object oriented data and dialogue model. On the other hand, since the title of the paper refers to a user-centered development method, there is a lack of contributions to these process oriented aspects.