InterCons – INTELLIGENT INTERNET BASED CONSULTATIVE SYSTEM

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Abstract – INTERNET is offering the mechanism for a global information and knowledge transfer. Effective use of this potential, in the field of consultative knowledge transfer, is the subject of this paper. We have developed adaptive, general purpose, INTERNET based, consultative system. System supports consultative learning over the INTERNET. We are now in the phase of INTERNET implementation and testing the various aspects of system performance. One of the application fields is the first Virtual University in Yugoslavia. We named our system InterCons(c).

Key words **– InterCons, InterTrans, MultiMentor, Virtual University, AI, CAL**

INTRODUCTION

Basic idea in the core of **InterCons**, is to simulate consultative process of learning, and to offer it over the INTERNET.

Therefore, **InterCons** - Intelligent Internet Virtual Consultant, fully supports consultative learning. Consultations are based on freely formulated user questions, answers from the **InterCons** knowledge base, and the capability of the Virtual Consultant for a further knowledge acquisition[Spasiæ, 2000b].

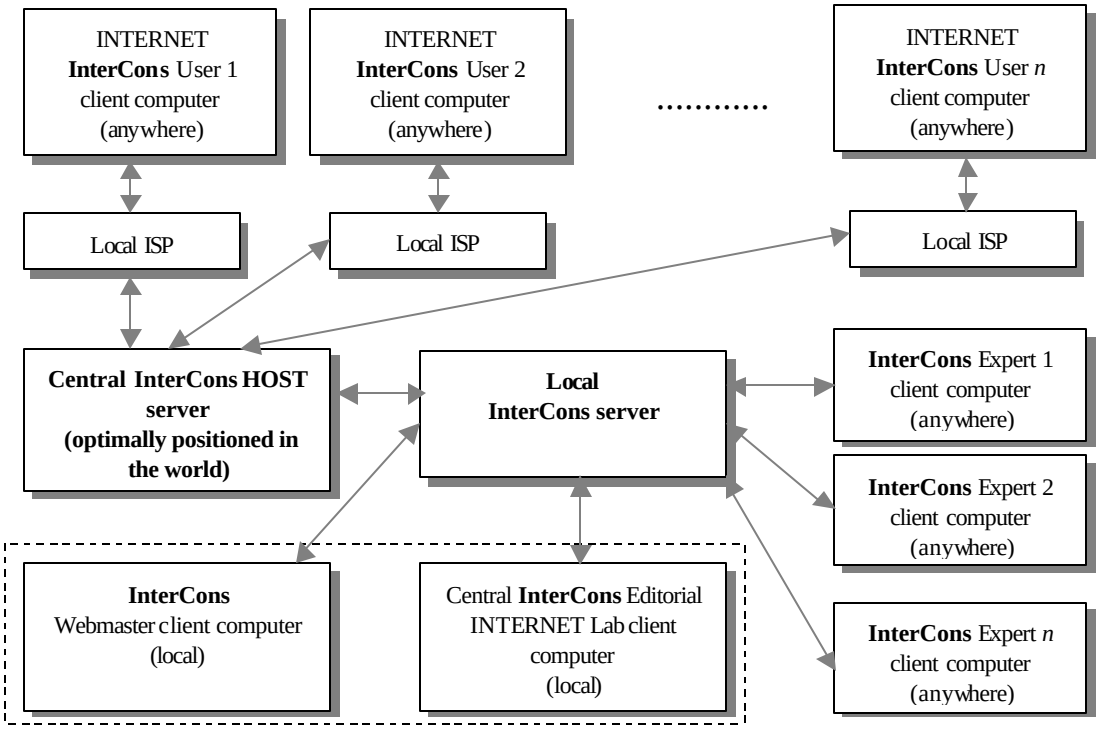

Figure 1. – InterCons system structure and information flow

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InterCons(c)

In development phase of the **InterCons** for the particular subject, college course, etc., there are three main steps:

- initial construction of the **InterCons** subject knowledge base, using knowledge engineering techniques;
- *entrainment* phase, where simulated users and the real expert(s) use the system which acquires the knowledge during the entrainment communication;
- continuos "convergent" **InterCons** learning according to the user requirements.

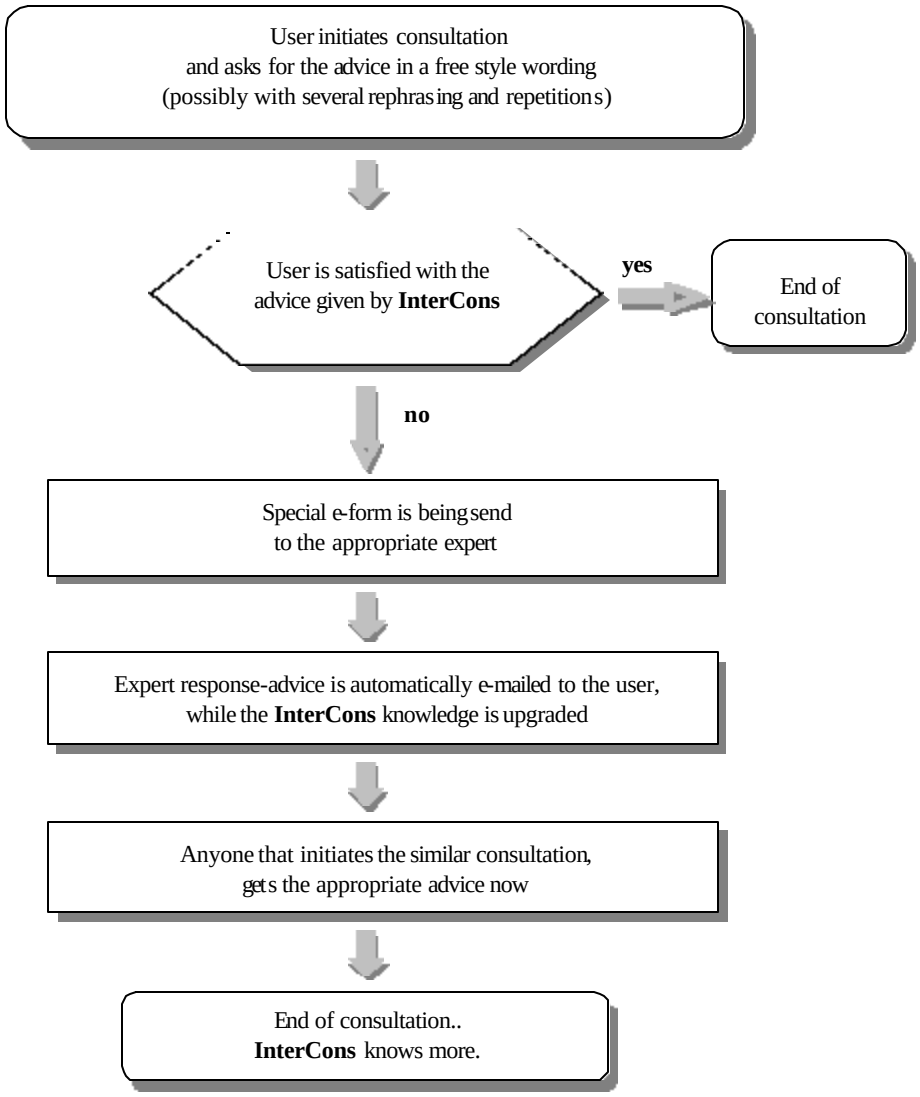

Figure 2. – Consultation flow, user view

During the application phase, users consult **InterCons** via typing questions in natural language sentences, or some more simplified form, like phrase, keyword, etc. **InterCons** then gives advice. If the user is satisfied with the advice, he can finish, or continue with the new question. If not, the student will send the question via special screen form, then receive the expert advice, while the **InterCons** will learn and extend the knowledge. **InterCons** will gradually become better virtual expert,

following exactly the knowledge demand from the users-recipients, not only by the expert-professor design.

InterCons(c) MAIN CHARACTERISTICS

InterCons system has several important characteristics that make him suitable for various implementations. Main chracteristics are:

- open fields of application;
- adaptive knowledge growth (based on the "convergent" learning).
- instantly available for anyone connected to the INTERNET;
- immediate, clear use, based on friendly user interface;

Figure 1. presents **InterCons** system structure and information flow.

InterCons(c) INTERNET APPLICATIONS

InterCons main application is INTERNET knowledge transfer. Also, it can be used for simple INTERNET information transfer, professional consultation services, etc. One of the most promising use of the **InterCons** is the integration in the complex system **InterTrans** - *General Purpose Intelligent INTERNET Based Knowledge Transfer,* system made to be the core of INTERNET Virtual Universities [Spasiæ 1989, 1991b, 1993a, 1998b, 2000a, 2000b].

CONCLUSION

We are now in the phase of INTERNET implementation and testing of the various **InterCons** performance aspects. One of the fields of application is the first Virtual University in Yugoslavia.

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