Medical Informatics, Autumn 2013

Instructions for group assignment

The group assignment consists of a small project to be performed in groups of 5 persons. There are two main types of projects possible:

1. To analyse an existing system (IT system for use in a professional healthcare setting), to describe it and to evaluate its usability and to suggest preliminary solutions to existing usability problems.

2. To analyse and discuss a more theoretical aspects of use of IT in healthcare, by literature studies, material found on Internet etc. The purpose of the study should be to describe and discuss aspects related to technology, usability, efficiency, benefits etc. of IT in healthcare environments. It could also be relevant to study, describe and analyse some larger IT project in health care, and to evaluate this with regard to usability, benefits etc.

In both types of assignments, the focus should be on usability, design of the user interface and the benefit for the healthcare professionals and/or for the patients. You are required to spend one week working time per person for the assignment (~40 hours).

If you have any special interests it is also possible to perform other types of assignments connected to the objectives of the course. If you have your own ideas, please contact the teachers.

The purpose of the assignment is:

- to get a feeling for how professionals in healthcare use IT as a tool in their everyday work,
- to understand problems that are associated with use of IT in healthcare,
- to understand problems related to development and deployment of IT in healthcare,
- to see which positive effects that potentially could be reached, if everything was made in an optimal way.

You are supposed to study, analyse and understand a specific application area and a specific (small) problem in more detail. You should in the first type of assignment visit a healthcare work place and observe and discuss with professional users, health informaticians/developers or patients. In the second type you must search for relevant information on your own.

Process

Step 1: Form groups of 5 persons. This should be done at the latest Monday Nov 4. Each group should send an (one) email to Bengt Göransson (Bengt.Goransson@it.uu.se) and Isabella Scandurra (Isabella.Scandurra@it.uu.se), with a list of the group members’ names. Write “Medical Informatics” on the subject line.
Step 2: You must specify your assignment and get an approval before starting the assignment work. Also here, write an email to Bengt.Goransson@it.uu.se, Isabella.Scandurra@it.uu.se and specify your assignment, the application area, contact persons and a short outline about how you plan to perform your assignment project. You will get a reply with an OK or some advice on how to proceed. This should be done latest Monday Nov 11.

As the time for the assignment is rather short you should especially consider that:

- It takes time to specify the objectives, to establish contacts, to book meetings etc. So start as early as possible!
- It is much better to study a very small application/system/problem and have time to analyse it in more detail. Do not try to look at larger systems. In that case, it is better to study a (very) small isolated part of a larger application or system.
- Focus on users, usability and benefits.

Supervision takes place during the lectures or after contacts with the teachers via visits, email or telephone. Contact Bengt Göransson or Isabella Scandurra (Isabella.Scandurra@it.uu.se) if you have problems or questions.

The written report - outline suggestions

1. Abstract – a short summary of your project. Ca 300 words.
2. Background – Describe the application area and the system you study.
3. Problem description – Describe the problem you find outgoing from the users’ perspective.
4. Describe the system under study in more detail.
5. Analysis - Describe the method, the analysis and the results. This should be related to usability issues.
6. Describe your ideas for improvements of the system, how the usability problems could be solved. Give some preliminary descriptions of what the solution could look like. Motivate and try to evaluate your ideas.
7. Discussion – For instance: Potential different solutions or things you could have done alternatively. Knowledge you gained during the work that is worth bringing forward.
8. Conclusion – a short section describing your most important findings
9. References – interviews as well as other sources should be stated.

The outline must be made in accordance with the nature of the assignment.

Assignment reports

The presentation of your assignment work must be made both orally and in written form. The oral presentation is specified in the course schedule.

Send the written report no later than Monday December 9, 13.00 to Bengt Göransson (Bengt.Goransson@it.uu.se)

The written report will normally be approx. 6-10 pages.