Medical informatics, ht 2009

Instructions for group assignment

The group assignment consists of a small project to be performed in groups of 4-5 persons. There are two main different types of projects possible:

1. To analyse an existing system (IT system for use in a professional setting), to evaluate its usability and to suggest preliminary solutions to existing usability problems.
2. To design and develop, in prototype form e.g. in form of a ppt-presentation, a small system to be used in order to solve some information processing problem in a health care environment which you have analysed.

In both types of assignments, the focus should be on usability, design of the user interface and the benefit for the health care professionals. You are supposed to use one week working time per person for the assignment.

If you have any special interests it is also possible to perform other types of assignments connected to the objectives of the course. Examples could be more theoretical studies, literature search and reports etc. If you have your own ideas please contact responsible teacher.

The purpose of the assignment is to:

- to get a feeling for how professionals in health care use IT as a tool in their everyday work,
- to understand problems that are associated with use of IT in health care,
- to see which positive effects that can be reached, if really useful systems are used.

You are supposed to study, analyse and understand a specific application area and a specific (small) problem in more detail. You should visit a health care work place and observe and discuss with professional users. The assignment work must be documented in form of a written report.

It is a part of the assignment to find an application area and to contact professionals there. If you have problems to establish contact, we can assist you.

N.B!! You must specify your assignment and get an approval before starting the assignment work. Write an email to Rebecka.Janols@it.uu.se and specify the members of your group, describe your assignment, the application area, your contact person and a few lines about how you plan to perform your assignment project. You will get a reply with an OK or some advice how to proceed.
As the time for the assignment is rather short you should especially consider:

- 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 and have time to analyse it in more detail. Do not try to look at larger systems. It is better to study a (very) small isolated part of a larger application.
- Focus on users and usability aspects.

**The written report - outline suggestions**

*Assignment type 1:*

1. Background – Describe the application area and the system you study.
2. Problem description – Describe the problem you find outgoing from the users’ perspective.
3. Describe the system under study in more detail.
4. Analysis of the usability. Describe the method, the analysis and the conclusions.
5. 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.
6. Discussion.
7. References.

*Assignment type 2:*

1. Background – a short description of the application area.
2. Problem description – what are the information processing needs and problems that you intend to solve by introducing new IT systems?
3. Describe your method to analyse the work, to specify requirements and to design the solution.
4. Describe your preliminary solution, in form of a prototype. Motivate your ideas.
5. Evaluation of the solution.
6. Discussion
7. References.

**Supervision**

Supervision takes place during the lectures or after contacts with the teachers via visits, email or telephone. Contact e.g. Rebecka Janols if you have problems or questions.

**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. The written report, in paper or digital form, must be delivered at the same time as the oral presentation. The written report will normally be approx. 6-10 pages.