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*Find a Social informatics problem and indicate 3 different aspects of it to be analysed with SI tools.*

Some ideas:

* ~~Welchen Einfluss hat die Rot-Grün-Sehschwäche (oder vergleichbare) auf das Nutzverhalten von Software? Wie muss die Software angepasst werden?~~
* ~~Disabled people and IT – Does IT help them?~~
* How to construct a user interface, which is equally usable for professionals and beginners (parents vs. digital natives / MS Paint vs. Adobe Photoshop, …). Is it possible at all?
  + Current developments like Office Ribbons
  + Expert switch: simple / expert view -> users miss features
  + Do we need multiple software versions for different target groups? New questions arise: How to design the transition from hobby to power user software?
* How do new technologies (touchscreens, touchfloors, …) influence the development of user interfaces? How is finger-usage (touch) different from mouse-usage?
  + Touch
    - space between buttons must be bigger
    - buttons need to be bigger
    - view angle has to be considered
    - do gestures matter?
  + Even contrast feet-usage
* Does the arrival of computers and, especially, internet for the masses make the people more intelligent or dumb?
* Does the constant availability of information via internet-ready smartphones make the people more efficient and informed?

Is it possible to create a user interface, which is equally usable for professionals and beginners? How should it look like? Today’s software products get more and more complex because a feature, which is introduced once, will hardly ever be removed in later versions. On the other hand does a clear demand for beginner-level software exist. These huge differences in complexity can be seen in many areas, e.g. image editing (Microsoft Paint vs. Adobe Photoshop) or document editing tools (Microsoft Notepad vs. Microsoft Word).

A social informatics problem is, whether it is possible to design a user interface that may be used by beginners as well as professionals. Whereas professional users do not want to miss features, do beginners want to reach simple goals like *Write a letter* or *Rotate an image*.

Several strategies to face this contradict expectations are common nowadays.

Some software products provide switches for enabling an expert mode, but this approach has a major flaw: most people rarely ever visit the program’s option menu and, thus, will not figure out that there are more features or a cleaner UI available. Additionally it is not clear which option should be provided at first start. Asking the user could be an option, but does he really understand the implications?

Another approach is to create heavily wizard-based user interfaces, which allow introducing rather complex features even to totally unskilled computer users, but makes live hard for professionals, because it makes the UI slow.

Some recent developments include Microsoft’s UI system *Ribbon* [1] [2]. Its major goal was to achieve *discoverability* of features, because user studies showed that the most commonly requested features for Microsoft Word and Excel already existed in those products.

Finally different versions for hobby and expert use can be provided. Implications of this approach are the question, how to support the transition from hobby to power user software and how to discover the point, when the hobby software gets to complicated (which feature to add, which to kick, …).

[1] <http://blogs.msdn.com/b/jensenh/archive/2008/03/12/the-story-of-the-ribbon.aspx>

[2] <http://en.wikipedia.org/wiki/Ribbon_(computing)>

In good assignment - you will need to define the problem in 3-5 sentences. What is the problem, where it can be seen and what is the state of things in your defined problematic area.

Then take the problem appart - try to get to the roots of things and find 3 aspects of that problem worth investigating. Good outlining of the 3 aspects are critical, analytical and cover a range rather than take a very narrow approach.

Problem needs to be a SOCIAL INFORMATICS problem and the definitions of the problem need to highlight both the social and the technical aspect of it.

\*\*\*LAUR'S EDIT\*\*\* On the basis of above instructions last year most points were awarded to assignments that:

1) clearly identified general problem (research puzzle);

2) then added three more specific questions/aspects about the problem;

3) while being interrelated (constituting a logical whole);

4) indicated possible research methods by which the questions could be answered;

5) were logically and clearly structured.

Bonus part included discussion of background (sometimes with relevant references) or wording of hypotheses (in case they were indeed worded that way not stated as matters of fact).

Worst case: long and ambiguous essay-like writing which provided a lot of author's opinions on various matters but did not enable to get clear answers to virtually any of the points mentioned above.