

# UNIVERSITY OF OSLO

## Faculty of Mathematics and Natural Sciences

**Exam in INF3280 - Development of IT competence in organisations**

**Day of exam: 5 June 2012 at 09:00**

**Exam hours: 4 hours**

**This examination paper consists of 6 pages.**

**Permitted materials: All written and printed**

*Make sure that your copy of this examination paper is complete before answering.*

**The percentages in this exam paper add up to 60. Assignment 4 counts 40%.**

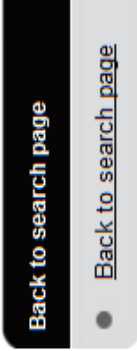
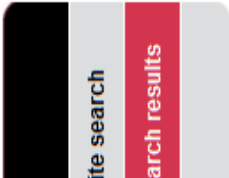
### **Task 1. Instruction - 10%**

Read the instructions on the next page, which is copied from [www.lancashire.gov.uk](http://www.lancashire.gov.uk).

- a. Principles for design of instructions are sequence, recognisability, brevity, completeness and feedback to reinforce learning. If some of these principles do not apply to the kind of instructions on the next page, tell why they do not apply.
- b. Review the instructions according to those principles which do apply.

## How to read search results

1. The first bar shows the number of searches that have been found and how many are displayed on the page (e.g. Results 1-10 of 5370 for manager)
2. If available, the next box displays some recommended links we have added to help you find the information more quickly.
3. The grey boxes display each search result found.
4. The bold underlined text is the page title and should give a short description of the page.
5. The text below is a snippet of the text which appears on the actual page itself. These features are important in determining whether the page is what you need.
6. At the bottom of the page you have an option to widen your search. Clicking on this will widen your search to include additional documents on our website.



## Task 2. IT concepts – 25%

Below is a list of pairs of concepts. Choose **one** of these pairs for this task.

- a. Which mistakes could a user do if mixing up the two concepts in the pair?
- b. Write a plain text and draw a graphical illustration, such that the combination of these presents the two concepts, including similarities and distinctions between the two of them. An example could be included.
- c. Pick one of the concepts in the pair and modify your presentation such that it fits a tool-tip help (bubble help, balloon help).
- d. Find a third concept which is related to the two. In which sequence should these three concepts be taught, and why is this teaching sequence appropriate?

Checkboxes – Choose from list (Google forms)

Crop – Resize (a picture)

Discard Silently – Move message into Trash (mail filters)

Gmail – POP3 accounts

Heading style – style (related to table of contents)

Joint Photographic Experts Group (jpeg) – Portable Network Graphics (png) (picture formats)

MPEG Audio Layer III (mp3) – Waveform Audio File Format (wav or wave) (sound formats)

Pivot table – table in a spreadsheet

Program instructions – actions (MS macros)

Publish – Save (Adobe Captivate)

Search operators – Filters (Google)

Shortcut – Hotkey (PowerPoint)

Synchronize time – Synchronize calendars (Doodle)

Tags – Category (YouTube)

## Task 3. Problem solving – 15%

Read the conversations i-iii below between a user and a support person helping out. For each of the conversations, answer questions a-c.

- a. Which learning processes (basic and combined) did the user and the supporter go through? Which subject matter areas (information, IT, task) did these processes concern?

- b. Which types of processes for learning problem solving (basic or combined) did the supporter try to trigger?
- c. Could the supporter have provided other training for problem solving?

**i. Co-located – Formatting**

- Jan: Katie, could you please look here for a minute. I try to format this report according to the standard, but I can't get the text further to the left even if I push Decrease Indent many times. How can I do this?
- Katie: That is not how you set margins. They belong in the page formatting. Look under Format, select Page; there you will find the place to set margins.
- Jan: OK ... Format ... Page ... Margins ... Alright, I see it now.  
Since you are here, can you also tell me how I get the table of contents lined up in an orderly fashion?
- Katie: You see, when you are wondering about such things, you should rather search Google. There you will find instructions for nearly every common function. Just type Table of Contents Open Office, and you will probably find help in the first hit.
- Jan: So you won't help me any longer. But OK, I'll try your way this time.

**ii. Co-located – Files**

- Lill: Mark, I managed to open this word file which was corrupted, but I cannot write in it. The computer does not seem to accept my typing. Do you know what to do?
- Mark: Oh, how did you manage to open a corrupted file? I have never seen that before.
- Lill: Simple. Just go here under options, open, special, repair, and the program does it for you.
- Mark: Where did you find the options?
- Lill: Here, upper left corner.
- Mark: Oh.  
Well writing in the file ... I have seen this before. I found out that I had to copy all the contents, open a new file and paste it there. Then I could write in the new file.
- Lill: Hm, a new file. ... Can I use the same file name?
- Mark: No, the computer requires unique file names.

Lill: No, that's not right. Look here. I have the file Addresses both there and there.

Mark: Right, but they are located in different folders. If you save the new file in a different folder, you can keep the file name.

Lill: That's what I meant. The old one was a draft, and now I'm going to finalise it. I always keep the drafts in a separate folder.

### **iii. Phone conversation – default settings**

Nana: Hi. I wonder about the setting of defaults in CustList. Is it possible to change the setting such that default city is Athens and credit is 100?

Olli: Why would you want that? Customers are spread around and they always start out without any credit. Numbers always have zero as the opening value.

Nana: Yes, but you see, we have a campaign now, hoping to get several hundred new customers through giving them an initial credit. And it is a bit tiresome to repeat the same data again and again.

Olli: Oh, I didn't know that we had such campaigns. ... It should be possible to change these settings, but I have to check around a bit to find out exactly how. I'll call you up again.

...

Olli: Hi again, Nana. Well, there is a way of changing city to Athens for all new customers. It has to be done through an add-on program which was made once, but which nobody has asked for before. I have e-mailed it to you. Just double-click on the file, and it installs. Then you will see a window where you can change the defaults of text fields. So you can type Athens under City.

Nana: Thanks a lot!. And I can change credit also?

Olli: No, sorry, that's not possible. Monetary fields cannot be changed in that way. Corporate regulations. I don't even know whether you are allowed to enter 100 as an opening value there.

Nana: OK. Will check out with the boss. Thanks for finding out for me.

## **Task 4. Transfer from course – 10%**

One trainer is teaching an introduction course to spreadsheets during one day. There are 20 participants in the class, and they come from a variety of organisations. All participants fulfil the course prerequisites, which are some skills with computers and text processors.

For hands-on exercises, the trainer has prepared a spreadsheet book for accounting with several sheets. The trainer has also prepared a long list of exercises, and all of them are supposed to be carried out on the spreadsheet book which the teacher has prepared.

The day starts by the trainer carrying out the first exercise, which includes entering some numbers and summarising columns and rows. The trainer uses a projector, and the participants are looking at what's going on on the screen.

The rest of the day the learners are working in pairs on computers with the remaining exercises. The exercises concern a range of spreadsheet features, including formulas of various types, graphs, referencing across sheets, formatting for printing, calculation of dates, sorting, protection of cells and data validation.

- a. Which aspects of this course would facilitate transfer of learning to the participants' work and which ones would inhibit the transfer?
- b. How can the transfer of this course be evaluated?