

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

### **Guidelines for the external examiner 2016**

#### **Task 1**

1a.

Skill: Ravi is able to carry out searches.

Understanding: Ravi understands that he can search for more than one keyword at the time. However, he seems to have misunderstood the meaning of AND, believing that combining two search terms with AND will produce the results of all documents including any of the search terms.

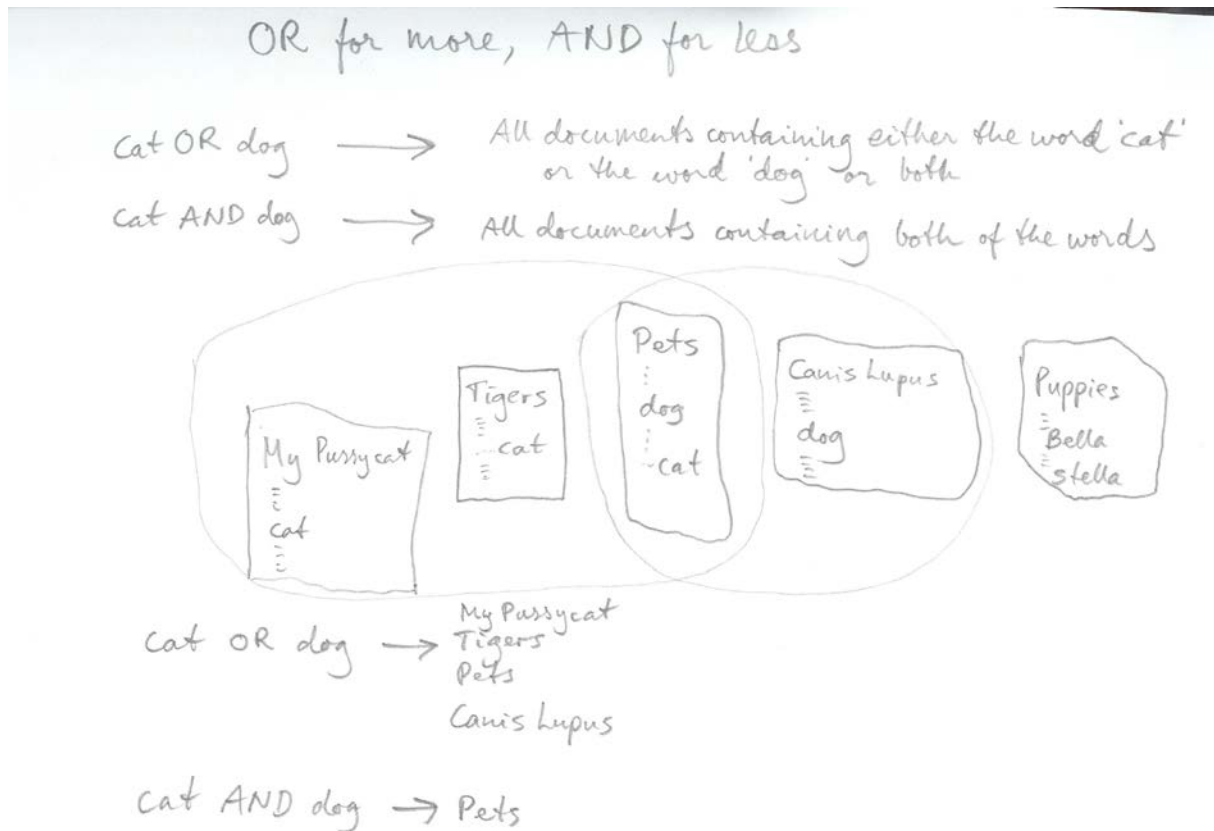
Problem solving: Ravi can look up in Help. He does not seem able to experiment with other search operators, however.

1b.

Nana: You see, when you search for reviews AND housefires, you only get the documents which include both of these terms. To get all the documents on reviews and those on housefires, you should search for reviews OR housefires. Then the result will be all documents that either include the term reviews or the term housefires or both of them.

This statement addresses Ravi's misunderstanding on AND and OR.

1c.



1d.

The help file includes functional and structural models of searches with the search operators AND and OR under the same headlines. Also it includes instructions on doing the searches under the Example headlines.

### Instructions:

The following criteria are relevant for all instructions: sequential, recognizable, short, providing directions, complete, feedback and user's terminology.

### Assessments

Sequence: Under the Example headlines, there are 3 steps, the two first with bullet points and the last one as a paragraph. These could be numbered.

Recognisability: Keyword box and Search button are mentioned, but no screenshot.

Brevity: Fine. Difficult to remove any text without distorting the contents.

Directions: Where to find the Keyword box is not included in the instructions.

Completeness: Under Note, search for 'love and hate' without using AND as a Boolean operator is described. Otherwise impossible to judge without trying.

Feedback: OK. The last step specifies what the result should be.

Understandable – user’s terminology: Does the user of this search service know what “works” are? Possibly, since it is a book site. “search term” not explained. Maybe done somewhere else in the help file preceding this one.

### **Functional and structural model:**

Criteria and applicability:

- personal motivation: important for understanding why using boolean operators
- the meaning of this operation for the business: for no specific business, of no relevance
- for functional models: input-process-output: Relevant, since there is an input (search expression + pool of documents) and output (list of documents)
- for structural models: relationships between data, diagram + text. Relevant, since the pool of documents is a structure
- example: relevant for any explanations.

Motivations are provided in the first paragraph and under the headlines AND and OR.

The help file explains both the structure of input and output in the same sentences, thus combining functional and structural models:

Under AND:

“The AND operator retrieves all works that contain the search terms it separates” The explanations are correct, but abstract and very condensed. No example is provided in these explanations. Examples are given in the instructions. The example under AND does not emphasize that each work appearing in the list of results have to contain both ‘war’ and ‘peace’. “all works containing the words 'war' and 'peace'.” Is not clear. It could also mean “all the works containing ‘war’ and all works containing ‘peace’.

The example under OR is clearer in specifying the results, but it does not specify the search terms.

In addition, it is stated that AND-searches provide fewer results than when searching for the individual terms. Correspondingly under OR. This may address the type of misunderstanding which Ravi has.

The structural model of the pool of documents where some contain one term, others contain other terms and some both terms is not presented. Venn diagrams as in the slide should have been added.

2a.

Facilitate transfer:

- Practical assignments
- Two from each department ease discussions after the course
- Pair working ease understanding and problem solving
- Pair working might boost self-efficacy

Inhibit:

- No motivation for the usefulness of the system.
- No training material to bring back to work.
- No teaching of concepts and principles.
- No problem solving exercises.

2b.

Count the number of user requests to IT support and to superusers.

A decreasing number of requests to IT support might indicate that users address superusers instead of IT support when needing help. A decreasing number of requests to superusers might indicate that the users are learning.