Appendix A   Enhanced log and program intervention: a functional specification

A.1   Introduction

The aim is to log a session with intervention according to the pattern of a search. Intervention is to ask questions both on user intention and search outcome. The following describes a feasible specification for an intervention front-end, somewhere between the ideal conception discussed in Chapter 4 and the system finally implemented. A typical session (case 6) is given below:

```
        start menu

chain 1         AU / HB / BR / CA / HB / BR / CA
                  restart
chain 2         AU / HB / BR / HB
                  restart
chain 3         SU / HB / BR


        end of session
```

This session consists of 3 chains (a chain ends with a restart). Each chain is in a particular mode (modes are Subject, Author, Title, Author-Title, Keyword, Shelf-mark - given to the user in the opening or start menu). A single search may include one or more chains. One session may represent several distinct searches.

A.2   Kinds of questions

There are at least 3 kinds of questions

1. On intentions - aim to get user declaration of intention

2. Criteria of choice - how does user judge what is relevant in selecting items for shelf retrieval.

3. Search formulation - choice of mode and movement between modes in the course of one search.

In the case of 1. questions relate to choice of mode and are prompted by conditions at the head of chain. With 2. selection conditions at the end of chain would form question conditions. For 3. search formulation relates to migration across modes, conditions of sequences of modes (between chains). Opening questions (before search starts) and closing questions (search end) have to be allowed for. The search start and end should be indicated by the user pressing a start and end key.

A.3   Kinds of conditions prompting questions

A.3.1   Single mode conditions—by options within a chain

1. Ending mode (moving to new chain with reset) before checking for items (e.g. Author mode ending before Brief Records).

2. Within chain sequences of: - Heading browse / Brief ref // Heading browse.

3. Single mode to search completion—special case of search end questions.

4. According to information displayed by opac, e.g. High posting display—say greater than 100—at Search history screen.

A.3.2   Between chain conditions—sequence of chains

This applies where the user selects from more than one menu option—mode—in a session or restarts on the same menu option.

1. Repetition of mode in consecutive chains, e.g. Author [reset key] Author.

2. Change of mode.

2.1 From ostensive item search to ostensive subject search. Ostensive item modes are Author, Title, Author/Title Ostensive search modes are Subject, Keyword. e.g. Author [reset key] Keyword.

2.2 Followed by a given sequence of modes—condition of matching a specific sequence of modes.

A.3.3   Combined conditions

The two sets of conditions—single mode and between chains—need to be considered as independent so that a condition from the single mode set can be combined with a condition from the between chain set.
For instance a session of

```
            start menu

Chain 1      AU / HB / BR / CA / HB / BR / HB
                 restart
Chain 2      KW / BR / CA / FR
                 restart
Chain 3      KW / BR /
                 restart
Chain 4      SU / HB / BR


            end of session
```

could potentially prompt questions as a result of the conditions: -

a. repetition HB / BR / HB (in chain 1)

b. ending mode before checking for items (in chains 1 & 3)

c. repetition of mode (chain 2 to chain 3)

d. ostensive item to subject modes (chain 1 to 2)

The actual question asked in each of a. to d. would depend on the mode the user was in when the condition arose or the modes moved between.

A.4 Intervention to ask questions—Interception points

At what point in the interaction with the catalogue system should the user be intercepted (interrupted) and asked questions? It is important that the interruption should not alter the course of the search and that any questions asked be perceived by the user as separate to the activity of searching the catalogue.

In the ideal case the user would be interrupted on the completion of some search sequence before starting a new sequence. For example at the point where a user requests a restart of the search at the opening menu *or* at the start or end of a session.

Some questions, for example, questions relating to what parts of a record displayed are used by the user in judging relevant material from less relevant may best be served by interrupting the user while a given screen is being displayed. Any conditions arising from information extracted from the screen display (e.g. number of hits giving rise to a question on what a user considers as high recall) may best be served by interruption of the user at the point where the screen is still displayed. However this has to be balanced against influencing the course of a search since questions themselves draw attention to aspects of the catalogue which the user may not be explicitly be aware of.

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