

**CONCORDIA UNIVERSITY**  
**DEPARTMENT OF**  
**COMPUTER SCIENCE AND SOFTWARE ENGINEERING**

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**SOLUTIONS TO QUIZ 2**

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***Answer All Questions***

Consider a Search interface to achieve the goal of finding all files of one of the following categories:

- *Document files* (one or more file types of PDFs, word processor files, spreadsheets, or presentations), containing the user-specified keyword(s) in their names; or, optionally, in their contents, or
- *Media files* (one or more file types of pictures, audio, or video) containing the user-specified keyword(s) in their names.

This is typically achieved by performing the following in an appropriate order:

- Select the file category (Document/Media),
- Enter the keyword(s),
- Enter/select the search criteria: all desired file types (PDFs, word processor files, spreadsheets, presentations, pictures, audio, video) and whether to optionally search in the file contents (if possible), and
- Perform the search to display the result.

(a) [1 mark] Give the profile of typical users for this interface and justify your choice.

*They know how to enter information using an input device and select options and perform tasks using a pointing device. They also have a vague idea of what they want to search for (Document files, Media files, and key words) and familiar with various file types.*

(b) [1 mark] Would you use personas to document the user characteristics for this interface? Why or why not?

*Since a typical user is an average computer user without any distinguishing characteristics, there will be a large number of such user personas possible. Hence, it is not practical to document the user characteristics for this interface using personas.*

(c) To establish each of the following requirements, state which technique (questionnaire, interview, direct observation, analyzing existing documentation) is the most appropriate and why.

(i) [1 mark] How does the user like to specify the keywords and the search criteria?

*Interview, as there are many possibilities (not practical to list all of them in a questionnaire) that need to be explained and discussed with (may not be observable).*

(ii) [1 mark] When does the user like to search for keywords within the file contents?

*Interview, since this requirement is based on the user's thought process (not observable) and could be very vague (not suitable for a questionnaire).*

- (iii) [1 mark] How the user would prefer the result to be presented (grouped by date, grouped by file type, show only file name, show file name and the lines containing the keyword, ...)?

Interview, as there are many possibilities and users may need further information/explanation to understand the different presentation styles.

- (d) [1 mark] Should the user enter the keywords first and the search criteria next, or enter them in any order? Why?

Even though both orders are acceptable, entering the keyword(s) first helps avoid memory overload for the user. Users typically have some keyword(s) in mind when they start the search and entering them first helps offloading their short-term memory and helps focus/direct the search effectively.

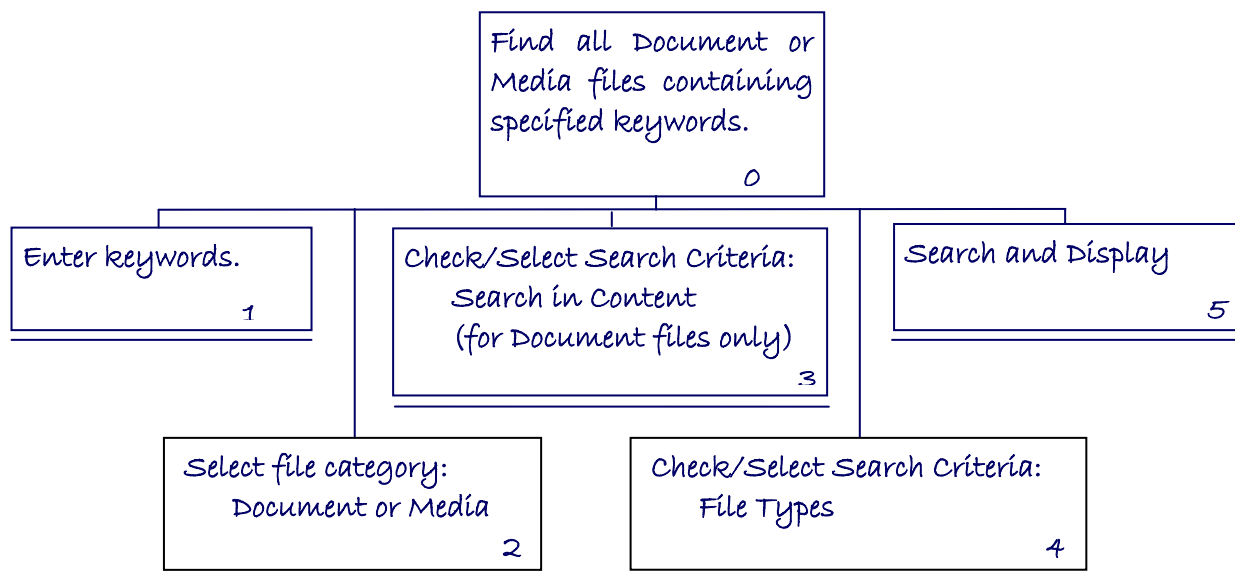
- (e) [1 mark] One of requirements from the users is “the search result should be shown within 5 seconds”. Why is this requirement necessary for this Search interface?

As there could be a large number of files to search through (especially when searching in content), this search can potentially take a long time. This requirement is to guarantee that the user gets proper feedback within a reasonable amount of time.

- (f) [1 mark] Would you use an use case or a hierarchical task diagram to document the requirements of this Search interface? Why?

A hierarchical task diagram is most appropriate to document this task since search is a simple, well-understood, already existing/familiar task that does not require any further interaction between the user and the system.

- (g) [2 mark] Draw the hierarchical task diagram for this Search interface clearly indicating all the subtasks and the order in which they should be performed.



Plan:

To Search For Document Files, do 1, 2, 3, 4, 5.

To Search For Media Files, do 1, 2, 4, 5

\*\*\* END OF QUIZ \*\*\*