

Expert Search

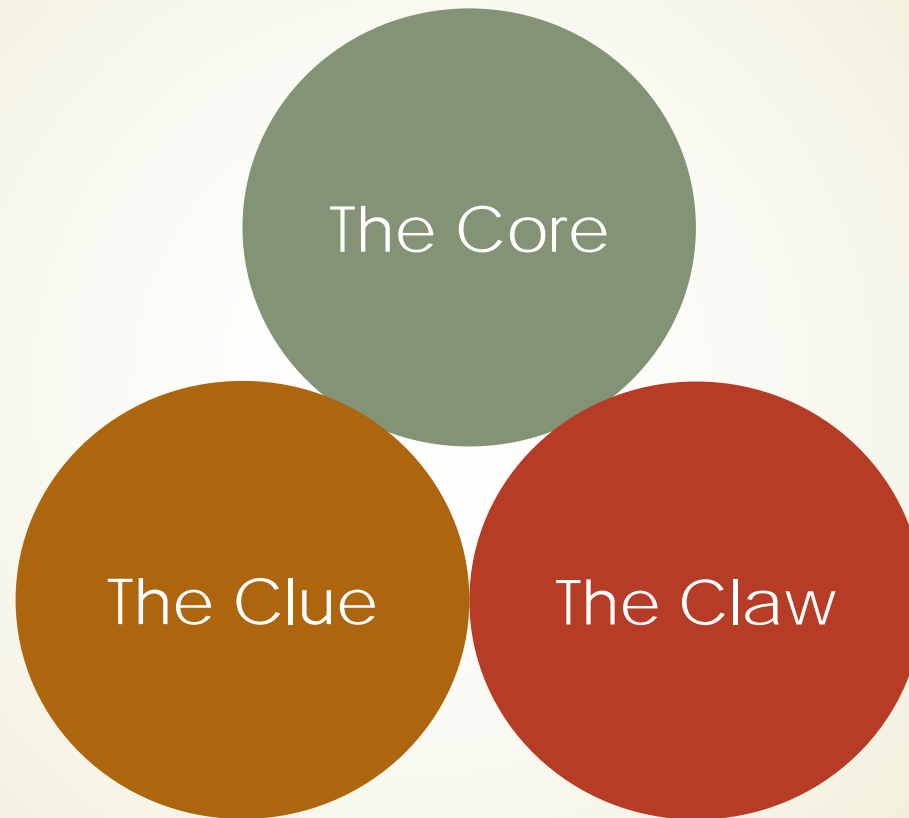
The Clue

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Expert Search

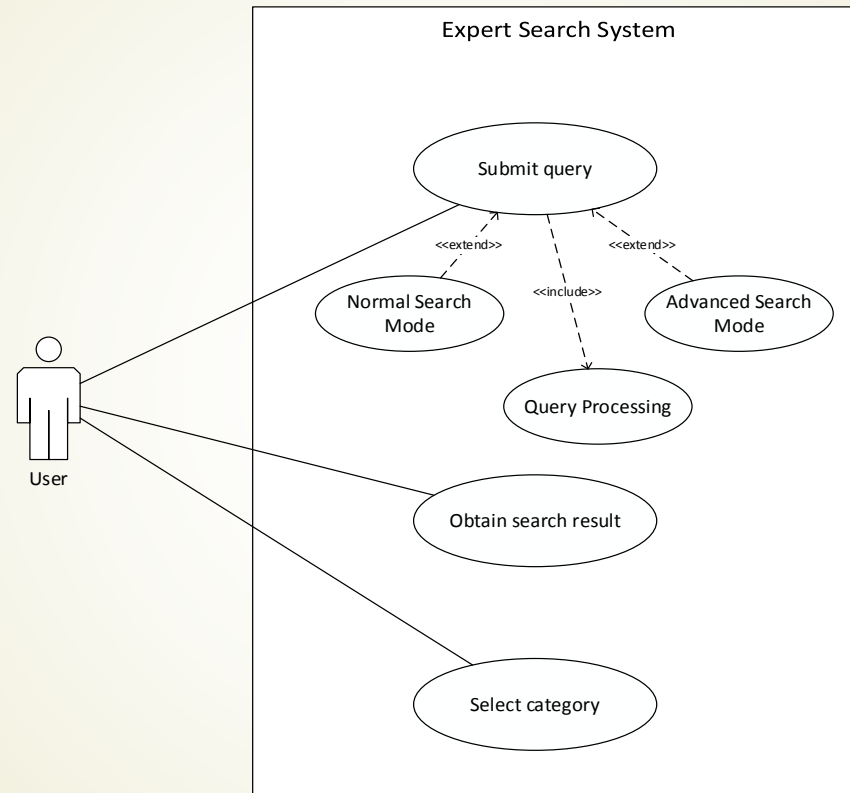




What is The Clue?

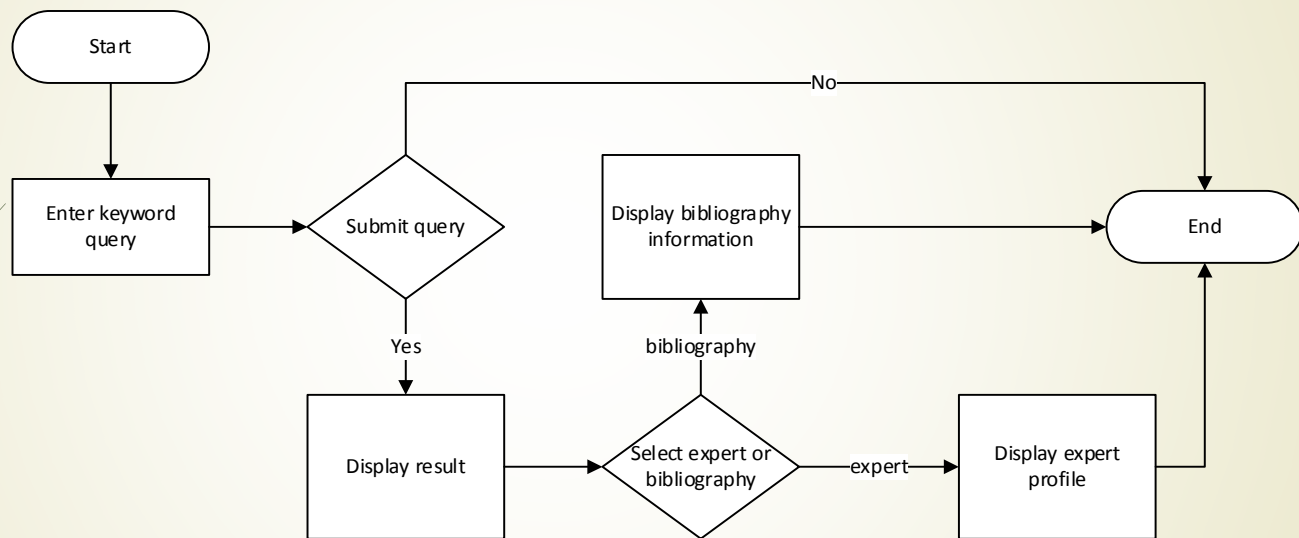
- ▶ User interaction and visualization tool of Expert Search
 - ▶ Manage all the **query processing** in Expert Search
 - ▶ Guide and assist user search for expert and relevant bibliography
- 

Use Case



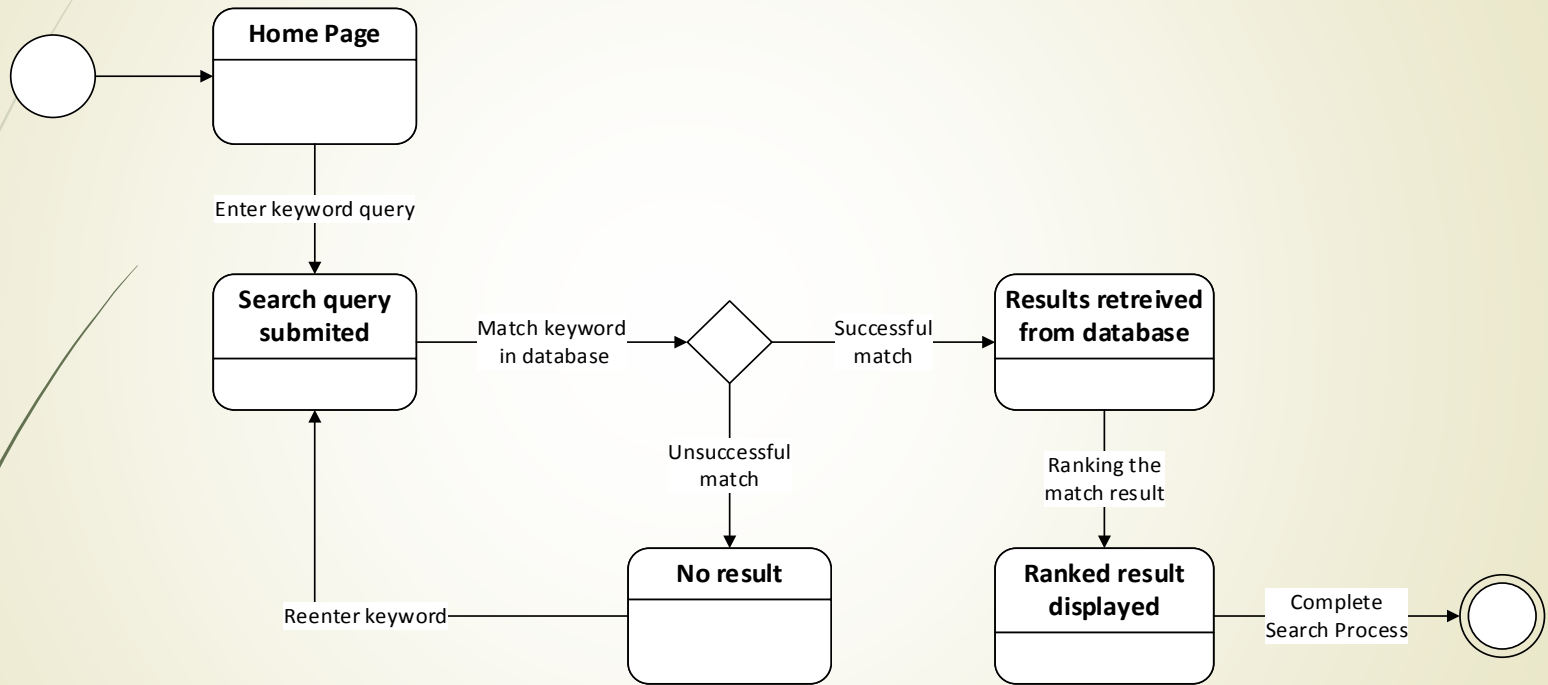
The Use Case diagram of "The Clue" Expert Search System

Flow Chart



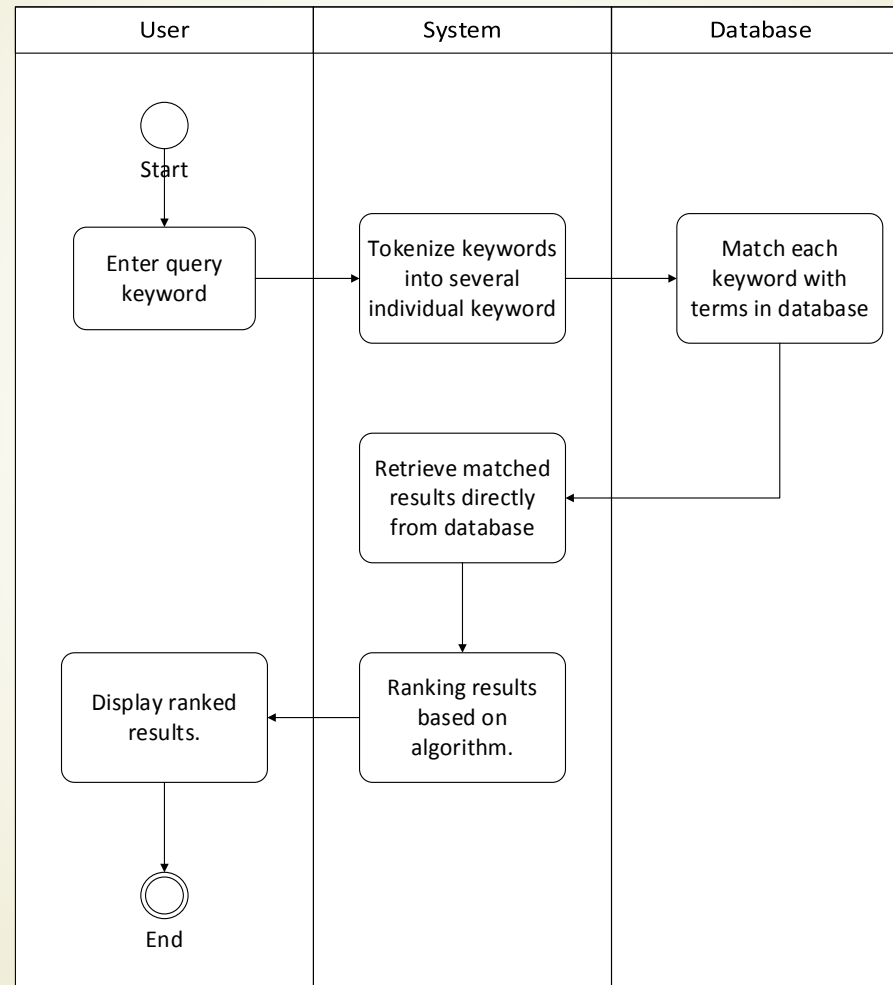
The Flow Chart of query processing in Expert Search System

State Diagram



The State Diagram of the query processing

Activity Diagram



The Activity Diagram of query processing in Expert System.



Function, Feature & Algorithm



Keyword Tokenization's and Matching Function

Keyword tokenization

- ▶ A function to break down keywords query into a set of keywords

Matching Function

- ▶ Tokenized keywords match with a list of term's dictionary in database
- ▶ Select candidates which related to the keywords.



Ranking Algorithm

- ▶ Improve the accuracy of searching method by proposing an algorithm to process and rank the result

Factors affecting the ranking results

- ▶ Occurrence of keyword in title
- ▶ Occurrence of keyword in abstract
- ▶ Age of the bibliography
- ▶ Conference place

Implicit feedback (User Behavior Feedback)

- ▶ Search Result Relevant Feedback



Search Result Relevant Feedback (Relevance feedback)

- ▶ To improve the ranking algorithm of search keyword in term of user behavior feedback

Step

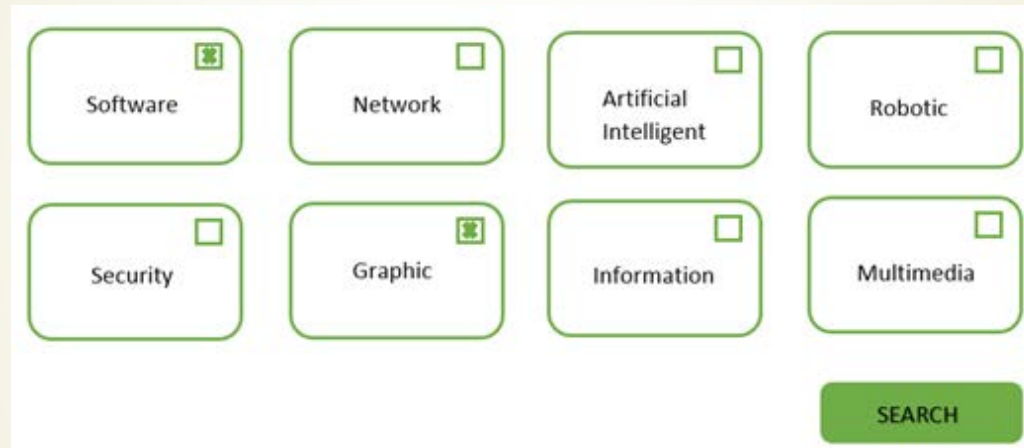
- ▶ 1. User enter a keyword query. E.g. software
- ▶ 2. Display a list of results.
- ▶ 3. User click one of the result (bibliography).
- ▶ 4. A function is triggered to increase the relevance score between selected result (bibliography) and keyword query in database.



Query Log

- ▶ `QueryTrackerFunction()`
- ▶ Track the query keywords inputted by user each time and store to database
- ▶ Analysis the frequency of keyword during query
- ▶ Use for most frequent search keywords chart
- ▶ To help admin improve the content/ bibliography in database

Navigation Optimization - Keywords Categories



Multi select function in Keyword Categories

Advanced Search Query

- ▶ Narrow down the search result
- ▶ Improve accuracy of the results using several parameter

Advanced Search

Title:

Abstract:

Author:

Date Range: to



Q & A