

Dynamic Query Forms for Database Queries

OBJECTIVE:

We propose DQF, a novel database query form interface, which is able to dynamically generate query forms.

DOMAIN: Data mining

SYNOPSIS:

Query form is one of the most widely used user interfaces for querying databases. Traditional query forms are designed and pre-defined by developers or DBA in various information management systems. With the rapid development of web information and scientific databases, modern databases become very large and complex. Therefore, it is difficult to design a set of static query forms to satisfy various ad-hoc database queries on those complex databases. In this paper, we propose a Dynamic Query Form system: DQF, a query interface which is capable of dynamically generating query forms for users.

Different from traditional document retrieval, users in database retrieval are often willing to perform many rounds of actions before identifying the final candidates. The essence of DQF is to capture user interests during user interactions and to adapt the query form iteratively. Each iteration consists of two types of user interactions: Query Form Enrichment and Query Execution. The basic query form is then enriched iteratively via the interactions between the user and our system until the user is satisfied with the query results. In this paper, we mainly study the ranking of query form components and the dynamic generation of query forms.

EXISTING SYSTEM:

Traditional query forms are designed and pre-defined by developers or DBA in various information management systems. With the rapid development of web information and scientific

databases, modern databases become very large and complex. Therefore, it is difficult to design a set of static query forms to satisfy various ad-hoc database queries on those complex databases.

LIMITATIONS:

- Query forms are designed and pre-defined by developers in information management systems.
- Difficult to design a set of static query forms to satisfy various ad-hoc database queries on complex databases.

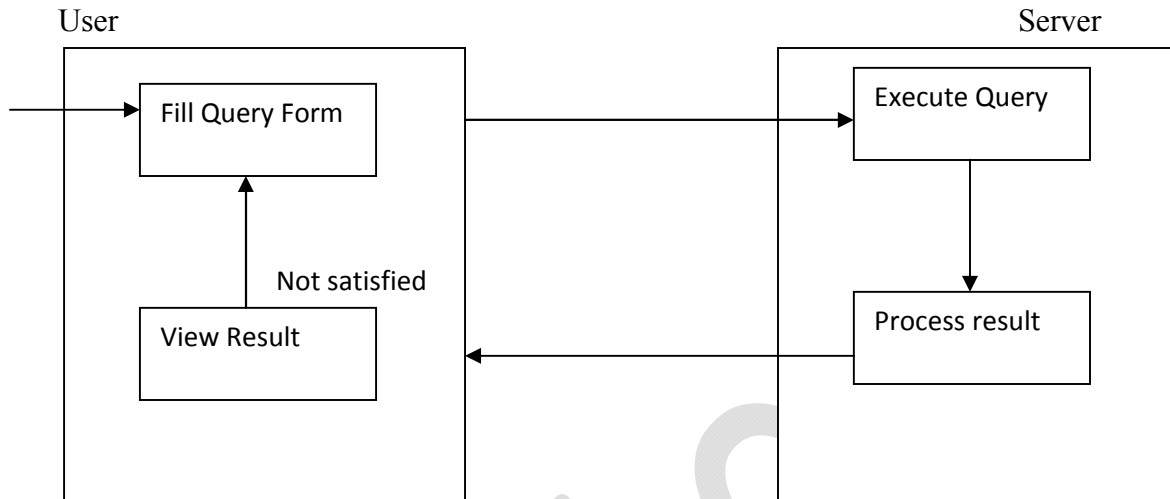
PROPOSED SYSTEM:

We propose a dynamic query form system which generates the query forms according to the user's desire at run time. The system provides a solution for the query interface in large and complex databases. This paper proposes DQF, a novel database query form interface, which is able to dynamically generate query forms. The essence of DQF is to capture a user's preference and rank query form components, assisting him/her to make decisions. The generation of a query form is an iterative process and is guided by the user. At each iteration, the system automatically generates ranking lists of form components and the user then adds the desired form components into the query form. The ranking of form components is based on the captured user preference. A user can also fill the query form and submit queries to view the query result at each iteration. In this way, a query form could be dynamically refined till the user satisfies with the query results.

ADVANTAGES:

- We propose a dynamic query form generation approach which helps users dynamically generate query forms.
- The dynamic approach often leads to higher success rate and simpler query forms compared with a static approach.
- The ranking of form components also makes it easier for users to customize query forms.

SYSTEM ARCHITECTURE:



SOFTWARE REQUIREMENTS:

- Windows OS
- JDK 1.7
- Apache Tomcat
- NetBeans 7

HARDWARE REQUIREMENTS:

- Main Processor : > 2GHz
- Ram : 1 GB
- Hard Disk : 80GB