Mining Web Graphs for Recommendations

Abstract:

As the exponential explosion of various contents generated on the Web, *Recommendation* techniques have become increasingly indispensable. Innumerable different kinds of recommendations are made on the Web every day, including music, images, books recommendations, query suggestions, etc. No matter what types of data sources are used for the recommendations, essentially these data sources can be modeled in the form of graphs. In this paper, aiming at providing a general framework on mining Web graphs for recommendations, (1) we first propose a novel diffusion method which propagates similarities between different recommendations; (2) then we illustrate how to generalize different recommendation problems into our graph diffusion framework. The proposed framework can be utilized in many recommendation tasks on the World Wide Web, including query suggestions, image recommendations, etc. The experimental analysis on large datasets shows the promising future of our work.

Existing System:

The last challenge is that it is time-consuming and inefficient to design different recommendation algorithms for different recommendation tasks. Actually, most of these recommendation problems have some common features, where a general framework is needed to unify the recommendation tasks on the Web. Moreover, most of existing methods are complicated and require tuning a large number of parameters.

Disadvantages:

It is becoming increasingly harder to find relevant content and what user recommends the actual thing.

Proposed System:

In order to satisfy the information needs of Web users and improve the user experience in many Web applications, *Recommender Systems*. This is a technique that automatically predicts the interest of an active user by collecting rating information from other similar users or items. The underlying assumption of collaborative filtering is that the active user will prefer those items which other Similar users prefer the proposed method consists of two stages: generating candidate queries and determining "generalization/specialization" relations between these queries in a hierarchy. The method initially relies on a small set of linguistically motivated extraction patterns applied to each entry from the query logs, then employs a series of Web-based precision-enhancement filters to refine and rank the candidate attributes.

SYSTEM REQUIREMENTS:

HARDWARE REQUIREMENTS:

System: Pentium IV 2.4 GHz

Hard Disk: 40GB

Ram: 512 MB

SOFTWARE REQUIREMENTS:

Front end:Jsp,servlets

Back end:oracle 10G

Deployment server: Tomcat6.0