Analyzing the usefulness of the user’s browser history and query history for query suggestions

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A query suggestion mechanism is an important feature of an information retrieval engine. It saves user’s keystrokes when performing a search and sometimes it offers query expressions more relevant to the user’s information need. Query suggestion and query auto-completion are very similar. Query suggestion is an enhanced, proposed query that the user might be looking for, whereas an auto-completion is the possible query term that the user might want to type immediately after he started typing the first letter. Basically, we can say that auto-completion is the first item from the query suggestions list. Query suggestions and query autocompletions are usually computed at the server-side by the search engine using a form of Most Popular Completion algorithm.

In this work, we want to use the personal user history and evaluate its usefulness for generating personal query suggestions at the client-side, in the browser. For the personal user history we consider the user’s browsing history (i.e. web pages visited by the user in the past) and the user’s query history (i.e. queries submitted by the user to the search engine in the past). We collect this history data using a browser plugin that we developed. We then evaluate what percent of the queries submitted by the user to the search engine can be predicted from this personal user history data.

References


