TOPIC SPECIFIC CONCEPT MATCHING BASED WEB SEMANTIC SEARCH ENGINE

SHRUTI KOHLI<sup>1</sup> & SONAM ARORA<sup>2</sup>

<sup>1</sup>Professor, Department of Computer Science, BIT, Noida, Uttar Pradesh, India

<sup>2</sup>Assistant Professor, Department of Computer Science, ABES EC, Ghaziabad, Uttar Pradesh, India

**ABSTRACT** 

Keyword based search is useful especially to a user who knows what keywords are used to index the images or

documents and therefore can easily formulate queries. This approach is problematic, however, when the user does not have

a clear goal in mind, does not know what there is in the database, and what kind of semantic concepts are involved in the

domain. The Semantic Web is an extension of the current Web that allows the meaning of information to be precisely

described in terms of well-defined vocabularies that are understood by people and computers. Ontology is one of the most

important concepts used in the semantic web infrastructure. Concerning with the users online all over the world, before

planning any trip they look for various hotels available in their destination location and the facilities they provide.

But when the user sits online and searches for hotel images, they find it hard to select from images that which one

is relevant and which one is not relevant. As an initial step, this paper implements a tool which makes use of Semantic

Web for searching the images of hotels and displaying the results in ranked order based on user behaviour. Semantic web

refines the search in such a way that only relevant images are returned.

The soul idea is to define ONTOLOGIES for various hotels along with their locations and the facilities they

provide. To gather information from various hotel websites we can use EXTRACTURL tool. Ontologies can be build from

this gathered information using PROTEGE tool. User enters his query from an interface and corresponding SPARQL query

is generated. This query is searched in the Ontology using JENA API.

KEYWORDS: OWL, RDF, Search Entry, Search Refinement, SPARQL