Ontology Modeling for Provision of Semantic based Open API Information

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Abstract—**As According as the web technology rapidly advances, web services are taking a step further up to the era of Web 2.0 which goes beyond the existing closed web services and enables ones to open and share information freely. In addition, with the rapid distribution of mobile terminals such as smart phone, web services are available in various environments such as while on the move, not only at a certain place, which arouses more interests on web services. Web services are usually provided in the form of Open APIs (Application Programming Interface). Since the current Open API search is performed only by key words, numerous unnecessary Open APIs are retrieved along with the desired Open API, which makes it difficult for users to find desired Open APIs readily and swiftly. It is necessary, therefore, to provide the right information that users need so that they can readily and promptly use the collected Open API information. Thus, this study presents the semantic annotation methods on acquired Open API data from target web-sites, home and abroad, based on the data-mining technology. And, the annotated information is built into the OWL-based ontology, and the interface is embodied by means of the Jena ontology inference engine. Unlike the existing information searching methods, proposed method helps users acquire Open API information readily and promptly.**

Keyword—**Ontology, Semantic, Open API, Semantic Web Service, OWL**

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