Semantic Wiki Where Human and Agents Collaborate

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A wiki is a collaborative Web page authoring system. Users collaborate to build a Web site by creating and updating Wiki pages through Web browsers. However, conventional Wikis easily lose the consistency of the contents because a number of anonymous users can participate in authoring them.

By introducing information agents that understand the Wiki contents, we can keep the consistency. The agents can automatically update Wiki contents, integrate other Web contents to them, and keep them consistent cooperating with the human users. We propose KawaWiki, which is a Semantic Wiki system where human users and information agents can collaborate by utilizing the Semantic Web technology.

To make agents and users collaborate in authoring Wiki contents, we adopt the RDF as the common representation. It is not easy for novice users to author RDF data, and we introduce KawaWiki templates to generate a Wiki page with RDF data at one time. We also introduce KawaWiki queries to make agents retrieve information efficiently from the Wiki contents. Finally, we introduce an agent description language to specify agent's behavior on the Wiki.