

# Representing Knowledge using Ontologies: How Search, Browse and Recommendation Can Be Performed

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**Abstract.** Software development projects are rapidly increasing in size and complexity, with the developers becoming overloaded and overwhelmed with a growing amount of project information. Developers learn how to contextualize this information and how to navigate in the complex network of software code. The context information of the developer can be captured and processed in order to improve some of the tasks performed by developers during their work. Some of these tasks are basic retrieval of information like searching or browsing, but context knowledge can also be used for recommendation of knowledge, which in the end can lead to the reuse of software code and knowledge. This talk shows how software knowledge during IDE coding can be represented and used to help the developer navigate and find relevant code. The talk focuses on representing knowledge using ontologies and how search, browse and recommendation can be performed. Using this approach, the profiles of developers were studied, leaving interesting clues on how developers work.