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Clustering Semantically Related Classes in a Heterogeneous Multidatabase System

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Abstract: In this paper, we present an approach for detecting semantically related classes in an object-oriented multidatabase system. This process is a vital one in the realization of multidatabase systems, as the semantic contents of local databases must be exploited before the integration process takes place. Each class in the multidatabase is enriched with information extracted from the schema definitions and database designers before it is processed to determine its semantic relevance to other classes in the multidatabase. The proposed approach is scalable in the sense that it is possible to classify several classes, based on their semantic content, at once. This is a vital contribution when considering the explosion of information resources available for integration in the presence of the Internet and the Web.