

Web Application for Evaluation of Database Performance

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The range of use of the database has extended from core systems of enterprises to general systems, and now it is an indispensable structure in the world. To manage huge data from satellites and lunar and planetary explorers various database applications are used. Because data which is treated in a satellite are very enormous quantity, a database which is used is large. System engineers tend to choose a database product only based on their own empirical knowledge. There is only little theoretical criterion. Thus, an objective criterion to evaluate performance of the database is required to be established. It is also needed to develop an application for database evaluation. The goal of this research is simultaneous performance evaluation of database products. A web application is adopted because it is the least platform-dependent. The application which is described in this thesis is the first step towards the goal of this research, and the latest technologies of Java development are introduced to reduce development time and warrant the quality. Seasar2 Framework is typical one. Seasar2 is a lightweight container which is attracted in Japan as latest technology, and it offers high productivity and the quality. By these technologies, additional development is made efficient. The standards of evaluation of this application are elapsed time from the beginning of a query to the database to getting the results.