Optimalisasi Waktu Muat Halaman Web Kuisioner Evaluasi Kinerja

Di Jurusan Teknologi Informasi

(Web Page Load Time Optimization Performance Evaluation Questionnaire

In Information Technology Department).

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ABSTRACT

The Information Technology Department uses a performance evaluation questionnaire website to evaluate lecturer with students as respondent. Evaluation of lecturer performance is carried out at the end of the semester, so that the process of teaching evaluation and learning activities becomes balanced. Lecturers assess students and students fill out lecturer performance evaluation questionnaires. However, the performance evaluation questionnaire website has a drawback, namely the page load time is very long, reaching 3,225 seconds to presenting the evaluation report. This is caused by the number of records, rows of data, in the database storage. The number of records will increase along with the number of evaluations that carried out. Therefore, researchers used the redis, in-memory database tool, to optimize the page load time for presenting the evaluation report. Redis processes data and stores it in server's memory. So that the web questionnaire will immediately retrieve data from Redis when there is a request to display an evaluation report. The analysis was carried out in two stages with different number of data rows. The first stage uses 267,525 data and the second stage uses 510,000 data. Redis managed to save 1,758 seconds in the first stage and 3,210 seconds in the second.

Key: *Optimization, Page Load Time, Database, in-memory database, Redis*