DESIGN MOBILE LEARNING SYSTEM WITH PUSH NOTIFICATION UDP PROTOCOL BASED on BLACKBERRY DEVICES

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Learning management system is a system that supports the implementation of electronic learning (e-learning). In the development of e-learning will evolve into a mobile learning. This is because with increasingly sophisticated mobile devices. So that learning can be done "anywhere" and "anytime". The absence of a notice to the learners, on the content or a new course on m-learning server, causing the process of learning to be inhibited. Therefore, to allow a user to monitor the latest information you have available, push notification system became a bridge between the mobile learning server with the user directly. The protocol uses UDP which is unreliable and stateful. So that is simpler and does not need congestion control connections. Testing is done by making observations on network performance of the system implementation and then performed the analysis. Observations made on the server log file contained e-learning on the hosting.

The results of testing obtained an average time of 1.47 seconds for observation on a user with setting of Cron in 60 seconds. On testing with 2 users on average travel time for user 1 is 1.2 seconds for the second user obtained an average time of 1.27 seconds. While the observation of three users, the average time it takes the user 1 is 1.21 seconds. In user 2 takes an average of 1.29 seconds. While the user 3 takes an average of 1.31 seconds. And at the end of the test, it was concluded that the push notification system between the server and Blackberry Mobile Learning can well integrated.
Key words: Learning management system, push notification system.