ABSTRACT

Web video conference is a web-based internet service which is used for real-time

communication meeting where the participants don't need to be in a same room. One of the

web video conference application is webinar or called web-based seminar. Webinar is used

for doing presentation, meeting, and training. This webinar application is very good to

implemented for a teaching-and-learning activity, where this application added with video

conference feature for a more effective teaching-and-learning activity.

This final project discuss about design and implementation process of webinar

application system for a teaching-and-learning activity. To build a teaching-and-learning

web-based system, the first thing to make is a system server which is contain of database,

web, and media server. The three server needs specific hardware and software. After build

the server, continue to the process of design and webinar application realization. Webinar

Application is made from ActionScript 3 language which is same with Adobe Flex

language. This application has an interface than can be accessed by web. After the server

and application is finish, we need to create an information system to make the application

usage is easier.

Webinar application and system testing separated into two kinds, a functional

testing and a system performance testing. A functional testing is doing by testing the

application functions and the system performance testing is measure the throughput, delay,

packet loss, MOS, and the maximum server ability to serve users. After doing the

functional testing, we got that all of the application functions is running well. For the result

of system performance testing, we got that the value of throughput, delay, packet loss,

MOS for this application is 'good', and the system performance testing which using

Webstress Tool that simulate a loaded server by virtual user got the result that the server

maximum can only serve 400 users.

Keywords

: Webinar, ActionScript, Video Conference

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