

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