

UNIVERSITI TEKNOLOGI MARA

**FACULTY OF INFORMATION TECHNOLOGY AND
QUANTITATIVE SCIENCE**

**THE INTEGRATION OF VOIP AND E-LEARNING SYSTEM IN A
COLLABORATIVE LEARNING ENVIRONMENT**

BY

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B. Sc (HONS) DATA COMMUNICATION AND NETWORK

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A final project submitted in partial fulfillment of the requirement for the

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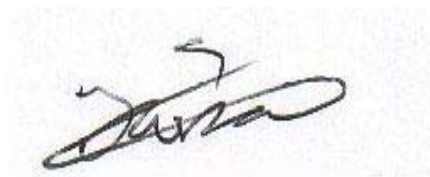
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ABSTRACT

A reliable and fast communication is really crucial nowadays to support the rapid development of technologies. Communication service providers are racing each other in providing the best services to all their customers. Instead of having the best services given by the service provider, the services that we used are actually costing. A new technology which named as Voice over Internet Protocol brings a new dimension in the communication technology. This new technology offers cheaper rate of making a call compared to the traditional circuit switched technology especially for a long distance call. Derived from this ability, the idea to make an Integration of VoIP and E-Learning System in a Collaborative Learning Environment appears. The integration is purposely to help NBPL's user to communicate with each other more practically and conveniently. To accommodate the integration, a new module named as "Skype" has been created and assigned into the NBPL's main page. Through the new assigned module, NBPL's users can view all the online NBPL's Skype user and also can click at the username to contact the user via VoIP call managed by the Skype application. Instead of developing the integration module, this project also run an analysis on the effect of VoIP based on UDP protocol and also proposed an algorithm to search an online NBPL's Skype user.

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