

ABSTRACT

Title : Development of LAN-based Computerized Examination with RFID Registration for De La Salle University-Dasmariñas CEAT- Electronics and Communications Engineering Department

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An examination is an important tool to assess individual or to measure the test-takers knowledge that have been acquired during their study or stint in a university under the different subjects. The examination process is traditionally done with paper and pens and a computerized examination is seldom used nowadays. This study aimed to make the examination process convenient through a LAN-based computerized examination. Specifically, it aimed to determine and manage the student's profile such as name, student number and other important information instantly with the use of an RFID registration and to provide confidentiality for every student having a unique RFID card; it also aimed to provide an accurate and instant result of the examination for the replacement

of manual checking as well to provide an ease of encoding questions. With the use of a Local Area Network supported room, many students can take the examination simultaneously.

A combination of experimental, quantitative and qualitative research was used in the completion of the study. The experimentation involved the software created that contains all the programs for the design of examination as well as the RFID registration that is essential for the accomplishment of the project. Quantitative research involved the computation and tallying of scores on every examination for the accuracy of the examination software. Qualitative research involved the effectiveness of the computerized examination and achieved through evaluation and survey.

The testing result showed that the examination software is 100% accurate, and the speed is evident, specifically on the computation of scores which is the focal point of an examination. The reliability of the examination software together with RFID scanning device was attested that during power outage, scores and examinee's profile were instantly saved. For the acceptability, the evaluation showed that 100% of the respondents agreed to implement the examination device and software to replace the current examination process.

Overall, for this kind of study where data and results are the essential part of determining how effective an examination device and software, the computerized LAN- Based Examination acquired high ratings for its accuracy, reliability, speed and acceptability as attested from the results. It is indeed a perfect substitute for the current or traditional examination process in the College of Engineering, Architecture and Technology and as well be applied in the university.

