Title: Mobile Test Bank: A WLAN-Based MCQ Test Bank App with Item Analysis based on Serlin-Kaiser Algorithm

Authors: Jennylou T. Cavada, Enrico J. Flores, Nerie Jane T. Parame

EXECUTIVE SUMMARY

Examinations, or educational assessment, has always been a part of a student's scholastic activities. It is a way for the instructors to measure the progress of a student. Other than the purpose of evaluation, it identifies gaps in the student's knowledge which in turn, may serve as a tool to improve the student's performance.

Mobile Test Bank: A WLAN-Based MCQ Test Bank App with Item Analysis based on Serlin-Kaiser Algorithm, is a way for the professors to create MCQ or Multiple-Choice Question examinations and students to take it offline using the Android as the client platform and Windows as the server and using WLAN technology as a medium to connect Android and Windows devices for offline MCQ examinations.

For the Mobile Test Bank: A WLAN-Based MCQ Test Bank App with Item Analysis based on Serlin-Kaiser Algorithm to run smoothly, for the client app device running at least version 4.0 or Ice Cream Sandwich, a minimum RAM of 512 MB and enough free space (at least 100 MB) for the application and its data. For the server application, it should best perform on a device running at least Windows 7, 2GB of RAM and 200MB of free space for the installation and data. The WLAN/AP Router/Mobile Hotspot should be able to cater all students. It should be able to cover the examination area and has stable connection available. Exceeding the specifications outlined above is an advantage.

Keywords: Item Analysis, MCQ test, Mobile Exam, Serlin-Kaiser Algorithm