Abstract

Computer Based Test System also referred to as e-examinations System, is a software that can be used to conduct examinations through the internet or in an intranet for a remote or in-house candidates. This paper identify the need for improving the current CBT software systems employed by tertiary institutions. The proposed features for improving the reviewed systems includes state persistency (in order to prevent data loss in case of any interruption or disruptions that may occur during examinations) and Question Categorization (in order to fairly evaluate candidates by posing questions with overall equal strength to each and every candidate taking an examination). This paper detailed the requirements, design and implementation of the proposed for the improvement of the CBT systems. The implementation of the system was done by the use of C# programming language, SQL Server 2005 express edition, Visual studio 2008 express edition as the IDE. The acceptability of the proposed system was evaluated by conducting a survey to sample opinions of users on the improvements in the proposed CBT system.

References
- Microsoft developer network, msdn 2008 version.

**Index Terms**

Computer Science

Information Systems

**Keywords**

Computer Based Test (CBT)  Question Categorization  State Persistency  e-examination  3-tier architecture