Student Records Management System Using Smart Cards and Biometric Technology for Educational Institutions

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Abstract : In recent times, the rapid change in new technologies has spurred up the way and manner records are handled in educational institutions. Also, there is a need for reliable access and ease-of use to these records, resulting in increased productivity in organizations. In academic institutions, such benefits help in quality assessments, institutional performance, and assessments of teaching and evaluation methods. Students in educational institutions benefit the most when advanced technologies are deployed in accessing records. This research paper discusses the use of biometric technologies coupled with smartcard technologies to provide a unique way of identifying students and matching their data to financial records to grant them access to restricted areas such as examination halls. The system developed in this paper, has an identity verification component as part of its main functionalities. A systematic software development cycle of analysis, design, coding, testing and support was used. The system provides a secured way of verifying student's identity and real time verification of financial records. An advanced prototype version of the system has been developed for testing purposes.

Keywords : biometrics, smartcards, identity-verification, fingerprints

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