A Flexible Student Assessment System for Continuous Performance Monitoring

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Abstract

Students' continuous academic assessment over time and development of a general customizable computerized system framework for students' assessment are two interesting research areas that are given little attention in Uganda's secondary school institutions. Assessment of students particularly in Uganda starts right away from when the student joins education institutions. This assessment is normally done by grading students' performance in various assessment modules set by the institution such as beginning of term examinations, mid-term examinations, end of term examinations and various tests done along the term period. A quantitative research done using observation, interviews and studying existing systems revealed that though a number of schools/institutions have embraced the use of automated report card systems, the concentration has been only on termly assessment, report production and development of specialized systems for individual schools. Accurate and appropriate decision making by the school management and academic performance quality enhancement are both driven by accurate students' continuous assessment over time. This project aims at the analysis, design and development of a web based computerized decision support system that assists its users to track the performance of students over time, view students' performance statistics in form of graphs and numerical information for accurate decision-making process. Apart from that, this project looks at also developing a general customizable computerized system that can be used by a wider number of institutions. After this research, a suitable and effective web-based decision support system that can be fully customized and determine students' continuous assessment was developed. Though this system is not yet a stand-alone system since there is a number of schools have limitations in internet connectivity, efforts need to be made in order to make it fit the institutions that have poor or no internet connectivity. This paper also looks at related researches, the extensions that would result into more powerful systems, advantages, challenges and limitations of the web-based system developed arranged in fully explained six chapters which include Introduction, Literature review, Methodology, Results, Discussion and Conclusion. It is therefore visible that this project eases, fastens and simplifies the decision-making process by the institutions' management by availing reliable, timely and accurate statistical students' performance records.

Key words: *Performance Monitoring, Student Assessment*