

A Dashboard-based System to Manage and Monitor the Progression of Undergraduate IT Degree Final Year Projects

ABSTRACT

Having a system to process and store information securely is crucial for an e-learning environment in a higher learning institute. Data recorded manually is deemed unsuitable as it may lead to mishandling of documents, poor record of documents movements, and even missing documents. A final year project (FYP) subject for a particular university's course would need a specific management system to alleviate the work processes of supervision and monitor student progress. This system would reduce cost, paperwork, staffing and even simplify the workflow process. Therefore, introducing a student dashboard-based system for the FYP course is proposed in this study. This paper presents a smart system utilizing data analytics and a dashboard that enables the students to self-monitor, track progress and manage important information related to their FYP. The system development followed stepwise Rapid Application Development (RAD) methodology in developing the system. The developed system has been designed, developed, and tested by university students taking FYP courses. A Technology Acceptance Model (TAM) was adopted in the testing phase to examine the system acceptance and user behavior intention in using the proposed system. The results showed a significant effect on a positive implementation in the faculty's course management and monitoring the student's FYP progress. For the dashboard based system to reach its full potential, it is highly recommended to implement the system in its course management fully.