Universiti Teknologi MARA

Web-based University Association Management System

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ABSTRACT

University associations are essential to the growth of students yet frequently face the issue of inefficient management because of the use of informal tools such as messaging applications, resulting in chaotic communication, document management, and workload distribution. The project will solve these challenges by creating a web-based University Association Management System (UAMS) that will centralize and smooth out the operations of the associations. This system has role-based access control (RBAC), document approvals workflows, event management, member tracking and analytics dashboards, which are formalized and replace the ad-hoc approach. The project was developed using the Kanban Agile approach, and iterative development was used, including analysis, design, development, and testing, to make it consistent with user requirements. Dynamic event management interfaces, document version management, and real-time notifications are some of the main characteristics, which are incorporated into a responsive web application developed in PHP, JavaScript, and MySQL. Association members were used in usability testing, and the System Usability Scale (SUS) produced an average result of 4.83/5, which is a sign of intuitive navigation and strong functionality. The participants expressed a strong preference to UAMS compared to traditional tools due to its structured workflows, transparency of tasks, and less reliance on disjointed communication tools. The fact that the system has been successful in improving efficiency, professionalism, and data-driven decision making portrays the potential of institutional adoption. Weaknesses were also found, including mobile access and scalability, and suggestions were made to improve them in the future, including responsive design and advanced analytics.

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

This chapter discusses the background of study while describing the problem statement. It also discusses about the research questions, research objectives, scope, project significance and the expected outcomes of the study.

1.1 Background of Study

Student clubs and university associations are the necessary sources of leadership training, social interaction, and skill-building among students (Ibrahim et al., 2018). Although they play a very crucial role, these organizations are usually challenged in their operation due to inefficient management practices and lack of adequate technological support. The contemporary student organizations need the systems that will enable effective teamwork, transparent communication, and simplified administrative work to maintain active involvement and effective event delivery.

According to the previous studies and practice, most of the current association management strategies are based on informal communication tools and disjointed digital resources to organize the work (Chaturvedi et al., 2024; Kent, 2024). Although these tools are popular, they are not customized to academic or organizational settings, which makes it challenging to manage workloads, maintain data consistency, and formalize approval processes (Chaturvedi et al., 2024). In addition, recent research points to the potential benefits of integrated digital platforms to overcome these deficiencies by consolidating event management, document control, communication and analytics in one interface (Rahmat & Hanifiah, 2020).

Different universities and student organizations have considered the development or implementation of custom association management systems to