



TMF4913 Final Year Project

Semester 1 & 2 2019/2020

Title Project:

**College Event Management System with Cumulative Grade Point
Average-based Volunteer Application**

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UNIVERSITI MALAYSIA SARAWAK

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ACADEMIC SESSION: 2/2019-2020

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Acknowledgement

I would like to express my gratitude and appreciation to Universiti Malaysia Sarawak and the Faculty of Computer Science and Information Technology for giving me the opportunity to express my idea on this project. A special gratitude to my supervisor, Mr. Muhammad Asyraf bin Khairuddin whose contribution in stimulating suggestions and encouragement, helped me to coordinate and review my project especially in writing this report. I also would like to acknowledge with much appreciation the crucial role of all the lecturers throughout my studies since my first year, who contribute in equipping me with all the skill set and knowledge to execute this project. Not forget to mention my dearest family and friends that always being by my side and always give me the moral supports.

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Abstract

Nowadays, online system is a trend that is swiftly ever-growing and now represents countless of coordinator/organizer in charge of planning, organizing and assessing a broad variety of activities throughout the year. **College Event Management System with Cumulative Grade Point Average-based Volunteer Application** is an online based (web) management system. This system will be introduced as a digital solution for the current manual system. This system will be implemented to mainly improve the process of joining event as participant or volunteer in the current manual system which require the potential participant/volunteer to physically go to event notice board to be notified with the latest event then called the event manager to join the event. Additionally, the system will surely minimize the use of paper to promote green lifestyle. Based on the current software capability, it is possible to create a system that will features all the needed functions in an event management task. This system will be developed using Rapid Application Development which emphasizes on iterative implementation and prototyping, rather than planning and requirements recording. This project will be implemented in web-based technology which will ensure the system responsive capability can adapt to both desktop and mobile interfaces for an easier access and high availability.

Abstrak

Pada zaman sekarang, sistem dalam talian adalah satu trend yang terus berkembang dan kini membantu banyak penyelaras / penganjur yang bertanggungjawab merancang, mengatur dan menilai pelbagai aktiviti sepanjang tahun. **College Event Management System with Cumulative Grade Point Average-based Volunteer Application** adalah sistem pengurusan berasaskan dalam talian. Sistem ini akan diperkenalkan sebagai penyelesaian digital untuk sistem manual semasa. Sistem ini dilaksanakan untuk menambahbaik proses penyertaan acara sebagai peserta atau sukarelawan dalam sistem manual semasa yang memerlukan peserta / sukarelawan untuk pergi secara fizikal ke papan kenyataan acara untuk diberitahu tentang acara terkini kemudian menghubungi pengurus acara untuk menyertai salah satu acara. Selain itu, sistem ini pasti akan mengurangkan penggunaan kertas untuk mempromosikan gaya hidup hijau. Berdasarkan kemampuan perisian semasa, tidak mustahil untuk membuat sistem yang akan menampilkan semua fungsi yang diperlukan dalam tugas pengurusan acara. Sistem ini akan dibangunkan dengan menggunakan Rapid Application Development yang menekankan pada pelaksanaan iteratif dan prototaip, daripada perancangan dan rakaman keperluan. Projek ini akan dilaksanakan dalam teknologi berasaskan web yang akan memastikan keupayaan responsif sistem dapat menyesuaikan diri dengan kedua-dua antara muka desktop dan mudah alih untuk akses yang lebih mudah dan kebolehsediaan yang tinggi.

Chapter 1: Introduction

1.1: Title

College Event Management System with Cumulative Grade Point Average-based Volunteer Application

1.2: Introduction

The new system will benefit all three type of user, which are administrator, organizer and student. Using the current/existing system, the administrator will surely deal with a lot of data in the physical form which can be too much. Using the new system, the administrator will still probably deal with a lot of data, but in a digital form. The system will introduce a database to deal with the big data compared to an orthodox filing system which can be a headache if it's not done properly. The system will also provide a dashboard for the administrator for an easy report documentation task.

In the organizer perspective, the system will speed up the event organizing task significantly. In the current/existing system, the organizer can only do the event registering work. But in the new system, the organizer not only can register their events but also use it to promote, recruit and manage participants. Since the organizer will likely deal with a lot of big data too, the report generating capabilities will be also be implemented for the organizer.

Finally, in the residents/student perspective, in the current/existing system, they can only stay updated on any new events only if they are willing to walk to the event noticeboard or receive any broadcast message in their social media. However, in the new system, the students can be notified about any new events with the help of an announcement page in the system. The student can also participate the events either as a participant or volunteer. In the volunteer application, the student will be judged based on their Grade Point Average for them to be accepted as a volunteer.

1.3: Problem statement

Firstly, organizing events using the current/existing system can be a hassle and time consuming since everything is done manually. Generally, using the current/existing system, user will clearly need to deal with a lot of paperwork to be done just to organize an event. Doing the paperwork will surely consume a great amount of time to complete. Plus, having to wait for an approval will surely add more time needed to finish your job.

Next, the current event organizing events does not comes with event promotion features. Meaning that the current/existing system only dealt with the event organizing work part. Promoting the event will be the next important step to do to ensure the event can be done successfully. After using current/existing system, the users need to prepare a lot of poster printing to promote their event. This will surely require the users to spend a lot of money.

Lastly, using current/existing system, it is hard to reach out to volunteer for some events. Looking for volunteer is probably the essential part in event organizing. The current/existing system does not assist the user on how to reach out to the possible volunteer. Generally, the user sometime uses their own connection with some people to ask for some volunteer, which can be a hassle.

1.4: Objectives

1. Creating an online platform for event organizing job.
2. Providing an online medium that allow volunteer (residents/student) to apply as the event staff/facilitator.
3. Provide report generating capability for an easy documentation.

1.5: Scope

Table 1.1: Project Scope

System Features	Administrator	<ul style="list-style-type: none"> • Event management • Approve/Reject registrants • Approve/Reject proposed events • Report generating
	Organizer	<ul style="list-style-type: none"> • Event proposal • Event management • Event Report
	Students/Residence	<ul style="list-style-type: none"> • Events Browsing • Join an event (Facilitator/Participant) • Event participation record
Target User		Event organizer and college residences (potential volunteer/participant) in UNIMAS

1.6: Software Methodology

The methodology that being chose for this project is RAD (Rapid Application Development) Methodology. It consists of several phases such as:

Table 1.2: RAD Phase

Phase	Tasks
Requirements Planning	<ul style="list-style-type: none"> • Users, student and supervisor agree upon the project being proposed • Obtain approval form the examiner to continue project
User Design & Development	<ul style="list-style-type: none"> • Interaction with users gain data • Build models and prototype for the dashboard system • JAD session
	<ul style="list-style-type: none"> • Program development • Coding the system • Unit testing, integration and system testing
Cutover	<ul style="list-style-type: none"> • Data conversion • Full-scale testing of the system • System changeover • User training

1.7: Project Significance

Having an online event management system is a must nowadays as we are dealing with a lot of data. From this data, we can generate the big data that can be used in the report. This will benefit a lot to the administrator of the system. At the same time, the database management capability will be greatly enhanced from the orthodox paperwork method.

For the organizer, an online system will significantly improve the timeframe needed to organize an event. Instead of waiting for the approval on paper, the system can provide a platform between the organizer and the administrator which will speed up the approval waiting time. The system can also be the bridge between the organizer and the residences in the promotion parts, recruitment and participant management. The system also gives the organizer the capability to generate a report based on the event for various uses.

In terms of the significance for the residents, the system provides a shortcut for them to browse through the upcoming events instead of walking to the notice board at the college offices. Then, they can proceed to join any event either as a facilitator or participant. This will save the student/residence a lot of time.

1.8: Project Planning

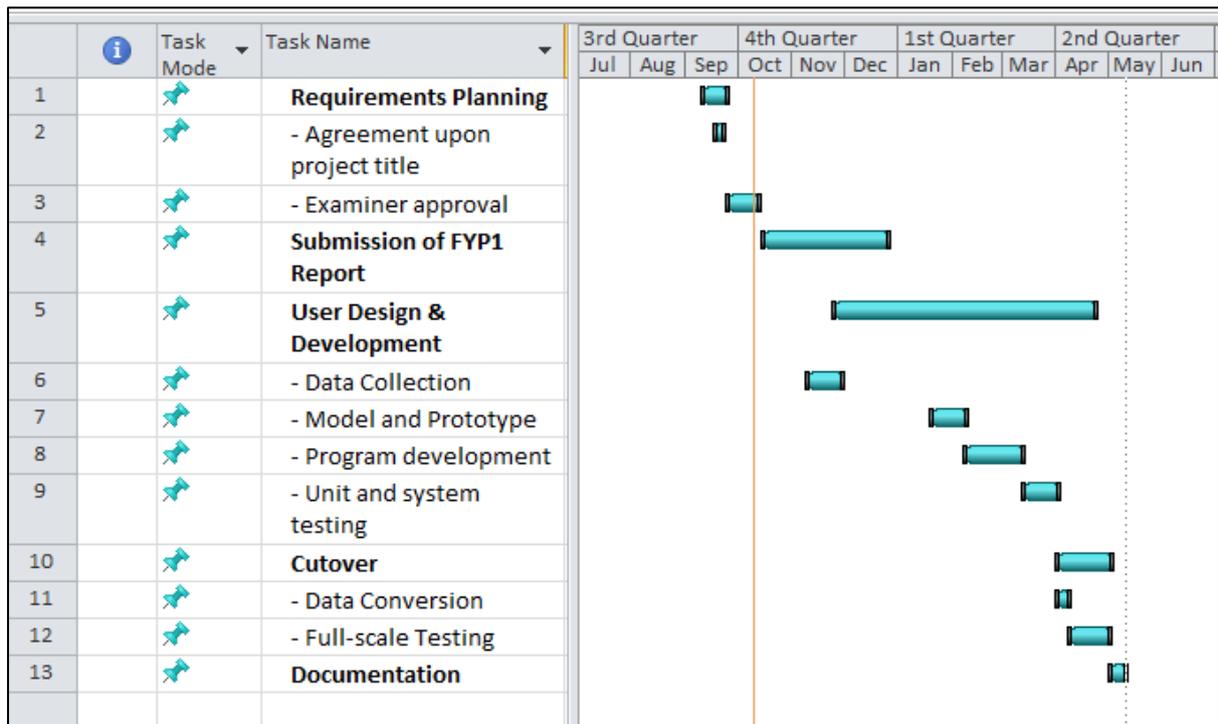


Figure 1.1: Project Schedule

1.9: Expected Outcome

A working prototype of College Event Management System with Grade Point Average-based Volunteer Application. The system will connect the event organizer and potential volunteer (residents/student). Moreover, the system will provide an organized database with a dashboard that will display the record.

Chapter 2: Literature Review

In the literature review, we will define the background of the systems, their provided features and their pros and cons which will be used to compare with the proposed system. From this information, some rough ideas can be obtained as possible features and technology that can be implemented into the proposed system. Additionally, identifying the existing system is a crucial step in order to create a more efficient and effective. From the pros and cons information of the existing systems, we can define what can be used to strengthen the proposed system and simultaneously avoid or fix any weaknesses the existing systems faced. There are two types of sources that have been referred in this project as to compare between the existing system and **College Event Management System with Cumulative Grade Point Average-based Volunteer Application**. There are few event management system journals that will be used in this review to properly differentiate them from the proposed system.

The journals are listed below: -

1. Smart Event Management System
 - By Assist. Prof. Khalil Pinjari & Khan Nur (Department of Information Technology Them College of Engineering, Mumbai University, India)
2. Generic Web-Based Event Management System (Gems)
 - By *Aizanadiah Binti Amrisal & Imran Ghani (Universiti Teknologi Malaysia, Johor, Malaysia)*
3. Event Management System
 - By Noman Aktar & M Tahseen Yousaf (University of Management and Technology, C-II Johar Town, Lahore, Pakistan)

2.1: Review of Existing System

2.1.1: Smart Event Management System



Figure 2.1: Interfaces of Event Management System

Background of the system

This journal was written by Assist. Prof. Khalil Pinjari & Khan Nur (2016) from Department of Information Technology Theem College of Engineering, Mumbai University, India. It describes an event management system that essentially deals with the execution and management of events through the various available software technologies. Their system is made up of five main function. The main functions are the management of the customer and employee information, events management, services management, e-card generator and status checking through the event management website.

The main users for this system are the administrator and the customers. This system only partially skips the old way since the customer will still need to submit the event application in a physical form (paper form) to the administrator. This means that the administrator will still need to do a lot of work to register an event for customers. While, the customer only needs to wait for the event approval status.

Feature of the system

The login function in this system only applies to the administrator. The administrator needs to login in order to operate the system. The administrator mainly handles the database manipulation, meaning add, modify, delete any details on the database. The administrator will input all the events detail that the customer submitted manually in a physical form. The details include the event venue, transportation, decoration, foods and the entertainment. The administrator can also generate reports for easy documentation. After completing the event registering by the administrator, the customer will be given the customer id and event id. This two information will be used by the customer to check the event status on the website.

Advantages and Disadvantages

This is an automated program where system gets the desired result from the server automatically without any input from the administrator. Moreover, with a simple interface, it also includes predefined search format for the user easy understanding. Thirdly, using secure authentication, it offers high level of security through SQL. Lastly, any transaction involved can be handled easily. The downsides are that it cannot be accessed through mobile phones which is the trend nowadays. Plus, its features are more useful to the administrator than the customer.

2.1.2: GENERIC WEB-BASED EVENT MANAGEMENT SYSTEM (GEMS)

#	Title	Organised By	Start Date	End Date	Duration days	Location	Status	Created by	Created at	Participant	Comment(s)
1	try user id	Organiser 7	05/27/2016 2:48 AM	05/28/2016 2:49 AM	2	UTM	APPROVED	Admin	2016-05-02 18:48:26	Participant	Comment(s)
2	Try select	Tryyy	05/27/2016 2:02 AM	05/28/2016 2:03 AM	2	DSI	APPROVED	Admin	2016-05-02 18:04:06	Participant	Comment(s)
3	Validate upload photo	Organiser	05/28/2016 10:07 PM	05/30/2016 10:08 PM	3	DSI	APPROVED	Admin	2016-05-02 14:45:34	Participant	Comment(s)
4	Try Demo edited by admin	Organiser	04/27/2016 10:53 AM	04/28/2016 11:54 AM	2	Utm	APPROVED	Tryyy	2016-04-24 03:54:57	NOT AVAILABLE	Comment(s)
5	try list	Tryyy	04/30/2016 1:02 AM	05/07/2016 1:03 AM	8	utm la	APPROVED	Tryyy	2016-04-23 17:04:21	Participant	Comment(s)
6	organiser event try	Trex	04/27/2016 12:54 AM	04/29/2016 12:55 AM	3	UTM	APPROVED	Tryyy	2016-04-23 16:54:57	Participant	Comment(s)

Figure 2.2: Mock interfaces of Generic Web-Based Event Management System (Gems)

Background of the system

This is a journal was written by *Aizanadiah Binti Amrisal and supervised by Imran Ghani from Universiti Teknologi Malaysia, Johor, Malaysia*. It describes an Online Event Handling application. This application was implemented through web programming and integrated with a system operated by the administrator to heighten the execution of the task on Event Management. By providing a digital user-friendly interface, it minimizes the administrator manual workload with an easy to operate database and total system access permissions.

It can be used by educational institutions or colleges to organise their college events swiftly. Overall, the system main goal was to assist both the students and the staff to minimize the manual workload by providing the all the needed information accessible to all by using the on-the-go approach.

Feature of the system

The features for the administrator are firstly, the administrator can organize any category of events and input all the related information of the events. In this system, the event organiser is not permitted to register on their own. The only way the event manager can register is through the administrator. Once registered by the administrator, the event manager can then submit their event proposal which will be evaluated by the administrator. Event manager can also view the participant for their event.

Meanwhile, features for the user/participant include the registration into the system by including all the requested information. With the registration, they will be permitted to view any scheduled events by the administrator. If they are interested on some of the events, they can view the event information provided by the event manager.

Advantages and Disadvantages

This program helps minimize the manual workload by providing the all the needed information accessible to all by using the on-the-go approach. With on-the-go approach in mind, the user can receive the updates/announcement wherever. The downside is that the event manager cannot register on their own, but through administrator. It also permitted user only register as participant, not as volunteer.

2.1.3: Event Management System

Mughal-e-Azam

Hall Name:

Area:

Address:

Owner's Name:

Contact No:

Email:

Password:

Confirm Password:

Package Name Per Head Maximum People

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Figure 2.3: Mock interfaces of Event Management System

Background of the system

This is a journal was written by Noman Aktar & M Tahseen Yousaf from University of Management and Technology, C-II Johar Town, Lahore, Pakistan. It describes an event management program to organize large-scale gatherings like festival, wedding occasion and formal gathering. Users can search for any venue by name and have total access to the related venue details. User will be provided with an online payment capability. If the user subscribes to the profile of any venue, they will receive any recent notifications regarding the venue.

With the system is fully computerized, it can store, modify and retrieves information from the database effectively which will be used for further review or evaluation. This helps the administrator in easy documentation.

Feature of the system

The features include registration which is critical in order to operate the system. After registration, login and logout will be logically included to keep a secure operation on the system. User can utilize event selection which will require the user to input the desired time, the venue and the suitable package. Manager profile features is provided to ease the event manager task in managing the event. Event manager can also add their predetermined volunteer as the workforce for the event. Online payment capability is included for an easy transaction between the administrator and the event manager.

Advantages and Disadvantages

This program gives the administrator minimal involvement in the event management process which can help ease the burden of the administrator. Next, if the user subscribes to the profile of any venue, they will receive any recent notifications regarding the venue. Lastly, online payment capability is included for an easy transaction. The downside is that volunteer that is registered for the event are predetermined by the event manager, not true volunteer which defeat the purposes volunteer searching of the proposed system.

2.2: Feature Comparison

In the table 2.1 below, abbreviation will be listed in the slot to represent the type of user can utilize the listed feature. Type of user involved:

- Administrator (A)
- User/Participant (U)
- Event Manager (EM)
- Volunteer (V)

Table 2.1: Features Comparison

System Features	Smart Event Management System (System 1)	Generic Web Based Event Management System (GEMS) (System 2)	Event Management System (System 3)	Proposed System
Registration	Not implemented	U	U, EM, V	U, EM
Login/Logout	A	A, EM, U	A, U, EM, V	A, U, EM
Data manipulation	A	A, EM, U	A, U, EM, V	A, U, EM
Event Creation	A	EM	EM	A, EM
Event Participation	Not Implemented	U	U, V	U (as volunteer or participant)
Event Notification or Announcement	No	Yes	Yes	Yes
Report (Generate/View/Print)	A	Not implemented	Not implemented	A, U, EM
Supported platform	Desktop	Desktop Mobile devices	Desktop Mobile devices	Desktop Mobile devices
Fully computerized	No	Yes	Yes	Yes

Feature 1: Registration

The table above shows that only System 1 that does not implement the registration features. While, the other system does feature the registration module. In System 2, the user registration only permitted the user to participate events. Meanwhile in System 3, registration module was implemented for user, event manager and volunteer. In the proposed system, the module was implemented for the user and event manager. The registration for user will permit them to participate or volunteer events. This is done to minimize the redundancy in database

Feature 2: Login/Logout

Table 2.1 shows that all system implements the features. Although, it differs by which users are permitted to login/logout the system. In System 1, only the administrator is permitted to login/logout. In System 2, login/logout is permitted to administrator, event manager and user. Meanwhile, in System 3, login/logout is permitted to administrator, event manager, volunteer, and user. Then, the proposed system allows the administrator, event manager and user to login/logout.

Feature 3: Data manipulation

In the Table 2.1, it shows that all system implements the features. Although, it differs by which users are permitted to access it in the system. In System 1, only the administrator is permitted to utilize the features. Next, in System 2, administrator, event manager and user can utilize the features. Meanwhile, in System 3, data manipulation is permitted to administrator, event manager, volunteer, and user. Then, the proposed system allows the administrator, event manager and user to utilize the features.

Feature 4: Event Creation

In the Table 2.1, it shows that all system implements the features. Although, it differs by which users are permitted to access it in the system. In System 1, only the administrator is permitted to utilize the features. In System 2, only the event manager is permitted to utilize the features. Meanwhile, in System 3 & proposed system, event creation is permitted to only administrator and event manager.

Feature 5: Event Participation

In the Table 2.1, it shows only System 1 that does not implement the registration features. While, the other system does feature the event participation. Although, it differs by which users are permitted to access it in the system. In System 3, only the user and volunteer are permitted to utilize the features. Meanwhile, in System 2 & proposed system, event participation is permitted to only user, though in proposed system, the user can either join as participant or as volunteer.

Feature 6: Event Notification/Announcement

In the Table 2.1, it shows that only System 1 that does not implement the features. While, the other system does feature the event notification/announcement module.

Feature 7: Report (Generate/View/Print)

In the Table 2.1, it shows System 2 & 3 does not implement the report generating features. While, the other system does include the feature. Although, it differs by which users are permitted to access it in the system. In System 1, only the administrator is permitted to utilize the features. Meanwhile, in proposed system, the feature is permitted to administrator, event manager and user.

Feature 8: Supported Platform

In the Table 2.1, it shows only System 1 that is limited to desktop. While, the other system does support desktop and mobile devices.

Feature 9: Fully Computerized

In the Table 2.1, it shows only System 1 that is partially computerized since the user still need to submit physical application form. While, the other systems are fully computerized.

2.3: Review on Grade Point Average Application Feature

As stated in the title of the project, the proposed system will be implemented with a grade point average (GPA). This implies that the user can only join as volunteer on any events, if their GPA is equal or above the predetermined mark. Comparatively, this feature is not present in all the compared system. Which means this is possibly a new area for event management system. The significance of this feature in the proposed system is that it encourages the user to balance their performance both in academic and extracurricular activity. For example, if there's a case of the user/student who had been active in extracurricular activity but facing a drop in their academical performance, this feature should motivate the user/student to improve their academic if they still want to join any event. This feature can also help the university/institution to produce a well-balanced graduate that excel both in academic and extracurricular.

2.4: Literature Review Summary

In conclusion, the comparison above was done in order to find all the strength and weakness in all the compared system. With all the information gathered above, we can find out what can be avoid or what can be further added/improved in the proposed system. Some of the features on all the compared system will be analyse thoroughly to see if it can be implemented into the proposed system.