



Faculty of Computer Science and Information Technology

***MOBILE EVENT MANAGEMENT APPLICATION FOR THE
SAMARAHAN COMMUNITY***

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Bachelor of Computer Science with Honours
(Software Engineering)

2023

**MOBILE EVENT MANAGEMENT APPLICATION FOR THE SAMARAHAN
COMMUNITY**

RABANIAH BINTI AMRAN

This project is submitted in partial fulfilment of the
requirements for the degree of
Bachelor of Computer Science with
Honours
(Software Engineering)

Faculty of Computer Science and Information Technology
UNIVERSITI MALAYSIA SARAWAK

2023

**MOBILE EVENT MANAGEMENT APPLICATION FOR THE SAMARAHAN
COMMUNITY**

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Projek ini merupakan salah satu
keperluan untuk ijazah
Ijazah Sarjana Muda Sains Komputer dan Teknologi Maklumat dengan
Kepujian
(Kejuruteraan Perisian)

Fakulti Sains Komputer dan Teknologi Maklumat
UNIVERSITI MALAYSIA SARAWAK

2023

UNIVERSITI MALAYSIA SARAWAK

THESIS STATUS ENDORSEMENT FORM

TITLE MOBILE EVENT MANAGEMENT APPLICATION FOR
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ACADEMIC SESSION: 2022/2023

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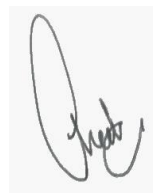
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ACKNOWLEDGEMENT

Alhamdulillah, all praise belongs to Allah, the Most Gracious and the Most Merciful, for giving the strength and blessing essential to finish the Final Year Project 1 as the programme requirement to graduate.

My first and most excellent thanks go to Dr Cheah Wai Shiang, my academic supervisor, for his superb oversight, direction, and encouragement. I sincerely appreciate his thoughtful assistance, constructive criticism, encouragement, and guidance. Thank you very much, Dr Cheah.

I also want to thank all of my lecturers and classmates at Universiti Malaysia Sarawak for their ongoing support and encouragement and my friends and acquaintances outside the university for their time, advice, and moral support. Last but not least, I want to express my sincere gratitude to my family for their unwavering support and encouragement. This Final Year Project 1 could not have been done without such hope. For the courage you all have given me, I sincerely thank you.

RABANIAH BINTI AMRAN

ABSTRACT

This project is about a mobile event management application named Samarahan4u. It aims to deliver the event information to the local community, while for the event organisers to digitalise and manage their event in the system. The Samarahan district is home to a variety of ethnic groups that speak a variety of languages, including English, Malay, Mandarin, Iban, etc. However, it can be observed that most of the mobile event management application language is used in English. This may cater to something other than the linguistic needs of the community. Additionally, most event management applications do not provide a messaging feature that local community users and event organisers can communicate. The users' ability to participate in the events is hampered by a lack of clear communication. Hence, it is proposed to have a multilingual mobile event management application to promote or commercialise the events digitally. In this proposed application, the local community and event organisers can view the available events in more detail. Besides that, both entities are able to send or receive messages from each other. This allows direct communication between them which creates engagement. The local community and event organisers can also register and login into their accounts in the system. Moreover, the event organisers will also allow to manage the event on the system along with the features of updating the event and cancelling the event. The local community can also register the event on the system that allows them to obtain QR code to be scanned during the event day by the event organisers. The local community and event organisers can also share the event to external platform for a wider reach. Overall, the Samarahan4u aims to have a significant impact to the local community and event organiser in the Samarahan district.

ABSTRAK

Projek ini adalah mengenai aplikasi pengurusan acara mudah alih yang dinamakan sebagai Samarahan4u. Ia bertujuan untuk menyampaikan maklumat acara kepada komuniti Samarahan, manakala penganjur acara mendigitalkan dan menguruskan acara mereka dalam sistem. Daerah Samarahan mempunyai pelbagai etnik yang menggunakan pelbagai bahasa seperti Inggeris, Melayu, Mandarin, Iban dan sebagainya. Walau bagaimanapun, majoriti bahasa aplikasi pengurusan acara mudah alih yang digunakan adalah bahasa Inggeris. Ini mungkin tidak dapat memenuhi linguistik komuniti Samarahan. Selain itu, kebanyakan aplikasi pengurusan acara tidak menyediakan ciri pemesejan yang boleh membenarkan komunikasi antara komuniti Samarahan dan penganjur acara. Kekurangan komunikasi yang jelas menghalang pengguna daripada mengambil bahagian dalam acara tersebut. Oleh itu, adalah dicadangkan untuk mempunyai aplikasi pengurusan acara mudah alih berbilang bahasa untuk mempromosikan atau mengkomersialkan acara secara digital. Dalam aplikasi yang dicadangkan ini, komuniti Samarahan dan penganjur acara boleh melihat acara yang ada dengan lebih terperinci. Seterusnya, kedua-dua komuniti Samarahan dan penganjur acara boleh menghantar atau menerima mesej antara satu sama lain. Ini membolehkan komunikasi langsung antara mereka yang boleh mewujudkan penglibatan secara tidak langsung. Komuniti Samarahan dan penganjur acara juga boleh mendaftar dan log masuk ke akaun mereka dalam sistem. Bukan itu sahaja malah penganjur acara juga boleh menguruskan acara dalam sistem tersebut dan mengemas kini acara serta membatalkan acara. Komuniti Samarahan juga boleh mendaftarkan acara diminati dalam sistem ini. Selepas mendaftar, komuniti Samarahan akan mendapat kod QR untuk diimbas semasa hari acara oleh penganjur acara. Komuniti Samarahan dan penganjur acara juga boleh berkongsi acara tersebut ke platform luar untuk mendapatkan jangkauan yang lebih luas. Secara keseluruhannya, Samarahan4u bertujuan

untuk memberi dampak yang besar kepada komunitas Samarahan dan penganjur acara di daerah Samarahan.

Table of Contents

ACKNOWLEDGEMENT	i
ABSTRACT.....	ii
ABSTRAK.....	iii
LIST OF TABLES.....	viii
LIST OF FIGURES	x
CHAPTER 1	1
1.1 Introduction	1
1.2 Problem Statement	2
1.3 Objectives	3
1.4 Scope	3
1.5 Methodology	3
1.5.1 Pre-Project Phase	4
1.5.2 The Project Lifecycle	5
1.5.3 The Post-Project Phase	6
1.6 Significance of Project	6
1.7 Expected Outcome	6
1.8 Summary	7
CHAPTER 2	8
2.1 Introduction	8
2.2 Review of Similar Existing Systems	8
2.2.1 Klook	9
2.2.2 All Events	16
2.2.3 Ticket2u	23
2.3 Summarisation of Reviewed System and Proposed System	28
2.4 Summary	30
CHAPTER 3	31
3.1 Introduction	31
3.2 Agile Methodology with Dynamic Systems Development Method (DSDM) Framework	32
3.2.1 Pre-Project Phase	32
3.2.2 The Project Lifecycle	33
3.2.3 The Post-Project Phase	48
3.3 Proposed System Design	48
3.3.1 Architectural Design	49
3.3.2 Use Case Diagram	50
3.3.3 Class Diagram	69

3.3.4	Activity Diagram.....	70
3.3.5	User Interface Prototypes.....	72
3.4	Prototypes Testing.....	91
3.5	Summary.....	92
CHAPTER 4	93
4.1	Introduction.....	93
4.2	System Components Used.....	93
4.2.1	Visual Studio Code.....	94
4.2.2	Google Firebase.....	95
4.2.3	Android Emulator.....	97
4.3	Local Community and Event Organiser’s Screens Implementation.....	98
4.3.1	Registration and Login Authentication Modules.....	99
4.3.2	Homepage Module.....	101
4.3.3	Share Event Module.....	102
4.3.4	Discover Event Module.....	103
4.3.5	Messaging Module.....	104
4.3.6	Notification Module.....	106
4.3.7	Trilingual Module.....	107
4.4	Local Community’s Screens Implementation.....	108
4.4.1	Event Registration Module.....	108
4.4.2	Saved Event Module.....	110
4.5	Event Organiser’s Screens Implementation.....	111
4.5.1	CRUD Event Module.....	111
4.5.2	Event Attendance Management Module.....	115
4.6	Summary.....	116
CHAPTER 5	117
5.1	Introduction.....	117
5.2	Functionality Testing.....	117
5.2.1	Registration and Login Authentication Module.....	119
5.2.2	Homepage Module.....	122
5.2.3	Share Event Module.....	123
5.2.4	Discover Event Module.....	124
5.2.5	Messaging Module.....	125
5.2.6	Notification Module.....	126
5.2.7	Trilingual Module.....	127
5.2.8	Event Registration Module.....	128
5.2.9	Saved Event Module.....	130

5.2.10	CRUD Event Module	131
5.2.11	Event Attendance Management Module	137
5.3	Usability Testing	139
5.3.1	Summary Responses from Local Community and Event Organiser	139
5.3.2	Summary Responses from Local Community	144
5.3.3	Summary Responses from Event Organiser	146
5.4	Summary	150
CHAPTER 6		151
6.1	Introduction	151
6.2	Project Objective Achievements	151
6.3	Project Limitations	152
6.4	Future Works	153
6.5	Conclusion	153
REFERENCES		155
APPENDIX A		157
APPENDIX B		163

LIST OF TABLES

Table 2.1	Features Comparison of Reviewed Systems and Proposed System	28
Table 3.1	Hardware Requirements for Developers	35
Table 3.2	Hardware Requirements for Users	36
Table 3.3	Software Requirements for Developers	36
Table 3.4	Software Requirements for Users	37
Table 3.5	Functional Requirements of the Proposed System	37
Table 3.6	Non-Functional Requirements of the Proposed System	40
Table 3.7	Register Account Use Case Specification	52
Table 3.8	Login Account Use Case Specification	53
Table 3.9	View Available Events Use Case Specification	54
Table 3.10	View Event Details Use Case Specification	55
Table 3.11	Search Event Use Case Specification	56
Table 3.12	Share Event Use Case Specification	57
Table 3.13	Change Language Use Case Specification	58
Table 3.14	Send Message Use Case Specification	59
Table 3.15	Receive Message Use Case Specification	60
Table 3.16	Receive Notification Use Case Specification	61
Table 3.17	Register Event Use Case Specification	62
Table 3.18	Obtain QR Code Use Case Specification	63
Table 3.19	Save Event Use Case Specification	64
Table 3.20	Manage Event Use Case Specification	67
Table 3.21	Manage Attendance Use Case Specification	67
Table 5.1	Test Case of the Registration Module	119

Table 5.2	Test Case of the Login Authentication Module	120
Table 5.3	Test Case of the Login Authentication Module via Google	121
Table 5.4	Test Case of the Homepage Module	122
Table 5.5	Test Case of the Share Event Module	123
Table 5.6	Test Case of the Discover Event Module	124
Table 5.7	Test Case of the Messaging Module	125
Table 5.8	Test Case of the Notification Module	126
Table 5.9	Test Case of the Trilingual Module	127
Table 5.10	Test Case of the Event Registration Module	128
Table 5.11	Test Case of the Saved Event Module	130
Table 5.12	Test Case of the Create New Event Submodule	131
Table 5.13	Test Case of the Read and Update Event Submodule	133
Table 5.14	Test Case of the Cancel Event Submodule	135
Table 5.15	Test Case of the Event Attendance Management Module	137
Table 6.1	Project Objectives and the Achievements of the Proposed System	152

LIST OF FIGURES

Figure 1.1	DSDM Phases	4
Figure 2.1	Klook Available Events Page	10
Figure 2.2	Klook Available Activities in Sarawak Page	11
Figure 2.3	Klook Event Details Page	11
Figure 2.4	Klook Event Details Page	12
Figure 2.5	Upcoming Trip on Klook Page	12
Figure 2.6	Saved Trips on Klook Page	13
Figure 2.7	Klook Language Selection Page	13
Figure 2.8	Create Event on Klook Merchant Website	14
Figure 2.9	Confirmed Event Page on Klook Partner	15
Figure 2.10	Homepage of Klook Partner	15
Figure 2.11	Scan Code on Klook Partner	16
Figure 2.12	Events Suggestion (Event for Me) on All Events in City	17
Figure 2.13	Explore Events on All Events in City	18
Figure 2.14	Search Events on All Events in City	18
Figure 2.15	Event Details on All Events in City	19
Figure 2.16	Messaging Features on All Events in City	19
Figure 2.17	Create Event on AE Organizer	21
Figure 2.18	Created Event on AE Organizer	21
Figure 2.19	Scan User's Ticket on AE Organizer	22
Figure 2.20	Event Manager for Upcoming Event on AE Organizer	22
Figure 2.21	List of Sold Ticket on AE Organizer	23
Figure 2.22	Events Resulted from the Search on Ticket2u	24

Figure 2.23	Event Details on Ticket2u	25
Figure 2.24	Event Organiser Contact Method on Ticket2u	25
Figure 2.25	Customer Support on Ticket2u	26
Figure 2.26	Active Events on Ticket2U Organiser	27
Figure 2.27	Event Management Features on Ticket2U Organiser	27
Figure 2.28	User's Ticket Details on Ticket2U Organiser	28
Figure 3.1	Summary Responses on Preferable Method to Receive Event Information and Promote Event	41
Figure 3.2	Summary Responses on Doubt the Events Information Authenticity from Social Media Platforms, Friends, and Relatives	42
Figure 3.3	Summary Response Flyers as a Medium to Receive or Convey Event Information	43
Figure 3.4	Summary Responses on Communicate with Event Organisers Before the Events	44
Figure 3.5	Summary Responses on Messaging Medium Can Increase the Engagement Between Participants and Event Organisers	45
Figure 3.6	Summary Responses on Language Used in Daily Life and Mobile Application	46
Figure 3.7	Summary Responses on Most Used and Preferable Method to Record Event Attendance	47
Figure 3.8	Architectural Design of the Proposed System	49
Figure 3.9	Use Case Diagram	51
Figure 3.10	Samarahan4u Class Diagram	69
Figure 3.11	Samarahan4u Activity Diagram	71

Figure 3.12	Login Page of Samarahan4u	73
Figure 3.13	Register Page of Samarahan4u	74
Figure 3.14	Homepage of Samarahan4u	74
Figure 3.15	Account Details Page of Samarahan4u	75
Figure 3.16	Change Language Page of Samarahan4u	76
Figure 3.17	Message Page of Samarahan4u	76
Figure 3.18	Message Details Page of Samarahan4u	77
Figure 3.19	View Event Details Page (Local Community) of Samarahan4u	78
Figure 3.20	Register Event Page (Local Community) of Samarahan4u	79
Figure 3.21	Registration Confirmation Page of Samarahan4u	80
Figure 3.22	Search Event Page of Samarahan4u	81
Figure 3.23	Upcoming Event Page of Samarahan4u	82
Figure 3.24	Saved Event Page of Samarahan4u	83
Figure 3.25	Manage Events Page of Samarahan4u	84
Figure 3.26	Create Event Page of Samarahan4u	85
Figure 3.27	View Event Details Page (Event Organiser) of Samarahan4u	86
Figure 3.28	Update Event Page of Samarahan4u	87
Figure 3.29	Cancel Event Page of Samarahan4u	88
Figure 3.30	Manage Attendance Page of Samarahan4u	89
Figure 3.31	Scan Attendance Page of Samarahan4u	90
Figure 3.32	View Joiners List Page of Samarahan4u	91
Figure 4.1	Visual Studio Code's System Interface	94
Figure 4.2	Google Firebase Console	95
Figure 4.3	Cloud Firestore's Collections and Documents	96

Figure 4.4	Android Emulator by Android Studio Integrated Development Environment (IDE)	97
Figure 4.5	Registration	99
Figure 4.6	Login	99
Figure 4.7	Google Sign In	99
Figure 4.8	Alert Dialogue for Failed Authentication	100
Figure 4.9	Local Community's Homepage	101
Figure 4.10	Event Organiser's Homepage	101
Figure 4.11	Event Details	102
Figure 4.12	Share Event	102
Figure 4.13	Local Community's Discover Screen	103
Figure 4.14	Event Organiser's Discover Screen	103
Figure 4.15	Local Community's Messsage Screen	104
Figure 4.16	Event Organiser's Message Screen	104
Figure 4.17	Local Community's Chat Screen	104
Figure 4.18	Event Organiser's Chat Screen	104
Figure 4.19	Local Community's Profile Screen	106
Figure 4.20	Notification Request Settings	106
Figure 4.21	Event Organiser's Profile Screen in English	107
Figure 4.22	Event Organiser's Profile Screen in Bahasa Melayu	107
Figure 4.23	Event Organiser's Profile Screen in Mandarin	107
Figure 4.24	Event Details on Local Community's Screen	108
Figure 4.25	Alert Dialogue for Event Registration	108
Figure 4.26	Registration Confirmiom Details	109
Figure 4.27	Registered Event on Upcoming Tab	109

Figure 4.28	Save Event from Event Details Screen	110
Figure 4.29	Saved Event on Saved Tab	110
Figure 4.30	Create New Event from Floating Button	112
Figure 4.31	Manage Event from Events Navigation Bar	113
Figure 4.32	Event Details on Event Organiser’s Screen	113
Figure 4.33	Update Event Details	113
Figure 4.34	Alert Dialogue for Event Cancellation	114
Figure 4.35	Manage Attendance from Events Navigation Bar	115
Figure 5.1	Summary Responses on the User Interface Design of the Proposed System	140
Figure 5.2	Summary Responses on the Experience in Using the Proposed System	140
Figure 5.3	Summary Responses on the Experience in Viewing Event Details	141
Figure 5.4	Summary Responses on the Experience in Sharing Events	142
Figure 5.5	Summary Responses on the Experience in Messaging between the Users	142
Figure 5.6	Summary Responses on the Experience in Searching for Events	143
Figure 5.7	Summary Responses on the Experience in using Trilingual Languages	144
Figure 5.8	Summary Responses on the Experience in Saving Events	145
Figure 5.9	Summary Responses on the Experience in Registering for Events	145
Figure 5.10	Summary Responses on the Experience in Viewing the QR Code	146
Figure 5.11	Summary Responses on the Experience in Creating Events	147
Figure 5.12	Summary Responses on the Experience in Updating Events	147

Figure 5.13 Summary Responses on the Experience in Cancelling Events 148

Figure 5.14 Summary Responses on the Experience in Scanning the QR Code 149

Figure 5.15 Summary Responses on the Experience in Viewing the Joiners List 149

CHAPTER 1

INTRODUCTION

1.1 Introduction

This project is about a mobile event management application named Samarahan4u. It aims to deliver the event information to the local community while the event organisers can digitalise and manage their events in the system. This application can cater to the needs of the local community and event organisers in event management.

In this digital era, functionalities such as creating an event, messaging, and scanning attendance have helped the process of handling event management more efficiently and organised. However, finding these features to be implemented in an application is uncommon. Besides that, a multilingual event management platform is challenging to find as not all event management provides this feature. If a mobile event management application includes all the features, it can help to create more engagement and reach a wider audience. This also makes managing the event effortless and hassle-free.

For the past few years, event management applications such as All Events and Ticket2U have become popular in the nation, receiving positive feedback from users, and reaching over 10,000 installs as presented on the Google Play Store. However, these applications have a limitation for the diverse ethnic groups in the Samarahan district, such as limited language

options. The local community in Samarahan also prefers to use Malay and Mandarin as the language for the application, as obtained from the survey data, but currently, both applications are only available in English. Therefore, this project aims to address the needs of the Samarahan community by offering language options in Malay and Mandarin.

1.2 Problem Statement

The targeted community in this project is Samarahan district. It has diverse ethnics group that uses different languages such as English, Malay, Sarawak Malay, Mandarin, Iban and etc. However, it can be observed that most of the mobile event management application language is used in English. This may not cater to the linguistic needs of the community. Raventós (2021) stated that the language limits in the platforms hinder the number of potential clients that can be reached. In addition, numerous event information is available on social media platforms, but this information may not be trustworthy for users due to fraud and scams. This can be proven by a record of nearly \$117 million in scams on social media in the first half of 2020 (Small, 2020). Moreover, data ownership issues arise when an event management company uses the user's information to conduct research and analysis. According to Antwonne (2021), the user information is passed to the third party, which is the event organisers. This has caused the users to feel wary when using the event management application, as their personal information has been shared without them knowing. Furthermore, most event management applications, such as Ticket2u, do not provide a messaging feature that allows users and event organisers to communicate. The lack of clear communication hinders the users from participating in the events. Robinson (2021) supported that the messaging feature allows for direct communication between the event organisers and the community can lead to a successful

event. Hence, is it effective and secure to have a multilingual designated event management platform to promote or commercialise the events digitally.

1.3 Objectives

1. To design and develop a mobile event management application for the event organiser and the Samarahan community.
2. To evaluate the functionality and usability of the mobile event management application.
 - 2.1 To implement a multilingual feature in the event management application that comprised English, Bahasa Melayu, and Mandarin.
 - 2.2 To implement the messaging feature in the event management application that allows the local community and event organiser to communicate.

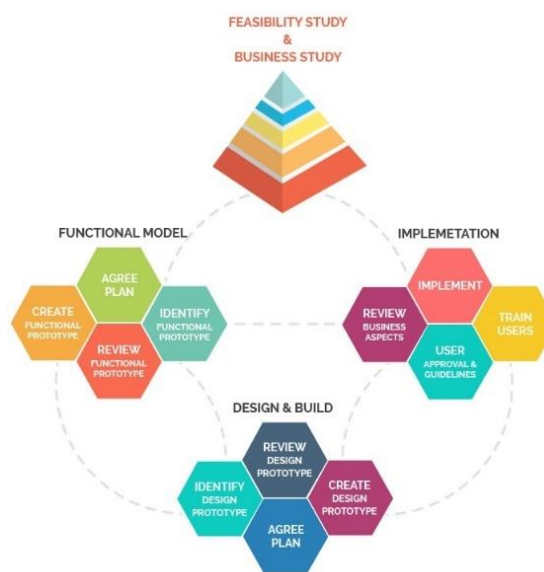
1.4 Scope

The scope of this project focuses on the Samarahan community, particularly the locals and the event organisers. The mobile application will be exclusively designed for Android and include all the necessary features. The goal is to publish it on the Google Play Store once the project is completed.

1.5 Methodology

The selected methodology to carry out the project to achieve the solution is the agile methodology with Dynamic Systems Development Method (DSDM) framework. Agile methodology is required as this project involves iterative and incremental approaches when

developing the application. Additionally, this project is subject to a strict deadline for completion. The benefits of this framework include predictable project completion within a set timeframe and clear communication between developers and clients, as stated by Intellectsoft (2019). According to Agile Business Consortium (n.d.), the DSDM framework has eight principles to deliver the best value business solutions. This framework guarantees that the project is scheduled on time, focuses on fulfilling deadlines, and enables the production of a quality application with a strict time limit and a defined scope. This framework is divided into three phases, comprising of a pre-project stage, a project lifecycle phase, and a post-project phase. The project lifecycle phase has five stages as shown in Figure 1.1. The following section are the phases that emphasise this methodology:



Source: Sharma (2021)

Figure 1.1: DSDM Phases

1.5.1 Pre-Project Phase

According to Simplilearn (n.d.), determining a suitable project that offers significant benefits is vital throughout the DSDM pre-project phase. The project was referred to as having