



UNIVERSITI
TEKNOLOGI
MARA

Cawangan Melaka

i-JaMCSIIX 2022

International Jasin Multimedia & Computer Science Invention and Innovation Exhibition

EXTENDED ABSTRACT BOOK

Publication Date: 31 October 2022

ISBN: 978-967-15337-0-3

In Partnership:



Tadulako University

<https://jamcsiix.wixsite.com/2022>

i-JaMCSIIX **2022**

International Jasin Multimedia & Computer Science Invention and Innovation Exhibition

Extended abstract

COPYRIGHT © 2022

ISBN: 978-967-15337-0-3

i-JaMCSIIX

Universiti Teknologi MARA Cawangan Melaka Kampus Jasin

77300, Merlimau, Melaka

Web: <https://jamcsiix.wixsite.com/2022>

In Partnership:

Tadulako University



ORGANIZING COMMITTEE

PATRON	ASSOC. PROF. DR. ISMADI MD BADARUDIN
ADVISOR 1	Ts. DR. JAMALUDDIN JASMIS
ADVISOR 2	DATO' Ts. DR. MOHD NOR HAJAR HASROL JONO
PROJECT LEADER	DR. RAIHAH AMINUDDIN
SECRETARY 1	Ts. DR. NOR AFIRDAUS ZAINAL ABIDIN
SECRETARY 2	PUAN NOR AIMUNI MD RASHID
TREASURER 1	CIK UMMU MARDHIAH ABDUL JALIL
TREASURER 2	CIK SITI MAISARAH MD ZAIN
PUBLICATION	DR. RAIHAH AMINUDDIN DR. SITI FEIRUSZ AHMAD FESOL
JURY	Ts. RAIHANA MD SAIDI PUAN NOR FADILAH TAHAR @ YUSOFF PUAN NORDIANAH JUSOH @ HUSSAIN PUAN BUSHRA ABDUL HALIM
REGISTRATION	CIK SITI AISYAH ABDUL KADIR PUAN ANIS SHOBIRIN ABDULLAH SANI DR. SURYAEFIZA KARJANTO
SYSTEM PROMOTION	CIK FADZLIN AHMADON PUAN ZUHRI ARAFAH ZULKIFLI ENCIK MOHAMAD ASROL ARSHAD CIK NORZATUL BAZAMAH AZMAN SHAH Ts. NURUL NAJWA ABDUL RAHID@ABDUL RASHID
MULTIMEDIA	CIK FADILAH EZLINA SHAHBUDIN ENCIK MOHD TAUFIQ MISHAN Ts. DR. CHEW CHIOU SHENG ENCIK MOHD AMIRUL ATAN (APB)
AWARD	PUAN HAJAR IZZATI MOHD GHAZALLI PUAN NURUL EMYZA ZAHIDI PUAN FATIMAH HASHIM PUAN SITI RAMIZAH JAMA
CERTIFICATE	PUAN FAIQAH HAFIDZAH HALIM PUAN NUR NABILAH ABU MANGSHOR PUAN NUR SYUHADA MUHAMMAT PAZIL PUAN NUR SUHAILAYANI SUHAIMI
TECHNICAL & PROTOCOL	DR. AHMAD FIRDAUS AHMAD FADZIL Ts. ALBIN LEMUEL KUSHAN ENCIK MOHD NABIL ZULHEMAY CIK ANIS AFIQAH SHARIP
SPONSOR	PUAN SITI NURAMALINA JOHARI PUAN ANIS AMILAH SHARI
INTERNATIONAL RELATIONS	PUAN SYAFNIDAR ABDUL HALIM Ts. FARIDAH SAPPAR PROF. DR. IR. MAHFUDZ, M.P PROF. DR. IR. AMAR, S.T., M.T. PROF. IR. MARSETYO, M.Sc.Ag., Ph.D. ELISA SESA, S.Si., M.Si., Ph.D. PROF. IR. DARMAWATI DARWIS, Ph.D. DR. LIF.SC I NENGAW SWASTIKA, M.Sc., M.Lif.Sc. ABDUL RAHMAN, S.Si., M.Si. SELVI MUSDALIFAH, S.Si., M.Si DR. I WAYAN SUDARSANA, M.Si.

NURENI, s.Si., M.Si.
DR. ENG. IR. ANDI RUSDIN, S.T.m M.T. , M.Sc.
IR. ANDI ARHAM ADAM, S.T., M.Sc(Eng)., Ph.D.
DR. IR. MOH. YAZDI PUSADAN, M.T.
WIRDAYANTI, S.T., M.Eng.
IR. SAIFUL HENDRA, M.I.Kom.
MUKRIM, S.Pd., M.Ed., Ph.D.
ZARKIANI HASYIM, S.Pd., M.Pd.
AHMAD RIFALDI DJAHIR, S.Pd.
MARIANI, A.Md. Kom.
HAPPY PUSPITASARI, S.S.
JUNAIDI, S.Si., M.Si., Ph.D
Dr. Ir. RUSTAN EFENDI M.T.
PUAN SITI FAIRUS FUZI
PUAN SITI NURSYAHIRA ZAINUDIN

SPECIAL TASK

BRONZE SPONSOR

PUAN AZLIN DAHLAN
PUAN BUSHRA ABDUL HALIM
PUAN FARAH NADZIRAH JAMRUS
Ts. FARIDAH SAPPAR
PUAN HAZRATI ZAINI
DR. NOOR HASIMAH IBRAHIM TEO
PUAN NOR ADILA KEDIN
PUAN NURUL EMYZA ZAHIDI
Ts. NURULHUDA GHAZALI
DR. RAIHAH AMINUDDIN
PUAN SHAHITUL BADARIAH SULAIMAN
PUAN SITI NURAMALINA JOHARI
PUAN SITI NURSYAHIRA BT ZAINUDIN
PUAN SITI RAMIZAH JAMA
DR. SURYAEFIZA KARJANTO
CIK UMMU MARDHIAH ABDUL JALIL
PUAN YUSARIMA MUHAMAD

LIST OF REVIEWERS

DR. AZLAN BIN ABDUL AZIZ
DR. NOOR SURIANA BINTI ABU BAKAR
DR. NOR HANIM ABD RAHMAN
DR. RAIHAH BINTI AMINUDDIN
DR. SAIDATUL IZYANIE BINTI KAMARUDIN
DR. UNG LING LING
MR. JIWA NORIS BIN HAMID
MR. MOHD. IKHSAN MD. RAUS
MR. SULAIMAN BIN MAHZAN
MRS. ASMA HANEE BINTI ARIFFIN
MRS. FARAH NADZIRAH BT JAMRUS
MRS. MAHFUDZAH OTHMAN
MRS. NOOREZATTY MOHD YUSOP
MRS. NOR AINI BINTI HASSANUDDIN
MRS. NOR HASNUL AZIRAH ABDUL HAMID
MRS. NORAINI BINTI HASAN
MRS. NUR HIDAYAH MD NOH
MRS. NUR IDALISA NORDDIN
MRS. NURSYAZNI MOHAMAD SUKRI
MRS. RAUDZATUL FATHIYAH BT MOHD SAID
MRS. ROZIANIWATI BINTI YUSOF
MRS. SAMSI AH ABDUL RAZAK
MRS. SITI NURUL FITRIAH MOHAMAD
MRS. TAMMIE CHRISTY SAIBIN
MRS. UMMU FATIHAH BINTI MOHD BAHRIN
MS. FADILAH EZLINA BINTI SHAHBUDIN
MS. FADZILAH BINTI ABDOL RAZAK
MS. NOR ALWANI BINTI OMAR
MS. NUR NABILAH ABU MANGSHOR
MS. SITI FATIMAH BINTI MOHD RUM
MS. ZUHRI ARAFAH BINTI ZULKIFLI
TS. DR. ISMASSABAH ISMAIL
TS. DR. SHAF AF IBRAHIM
TS. HAWA BINTI MOHD EKHSAN
TS. NURULHUDA GHAZALI

Contents

No.	Registration ID	Project Title	Page
1	JM006	Hiding Information Digitally Under Picture (HIDUP) Using Image Steganography	1
2	JM009	Learning Shapes and Colours using JomLearn & Play Application for Children	5
3	JM010	A Novel Quality Grading Determination using Boxplot Analysis and Stepwise Regression for Agarwood Oil Significant Compounds.	9
4	JM011	A Novelty Classification Model for Varied Agarwood Oil Quality Using The K-Nearest Neighbor Algorithm	13
5	JM012	The Development of Web-Based Student Leadership Program Management System for 'Unit Kepimpinan Pelajar'	16
6	JM020	Jom Solat-iVAK: An Interactive Android Mobile Application in Learning Wudhu and Salah for Children with Learning Disabilities	20
7	JM024	Gold Price Forecasting by Using ARIMA	24
8	JM025	Recycle Now: Learning the 3R of Waste Management Through Game-Based Learning	28
9	JM031	Go Travel Application	32
10	JM032	SmartPark	36
11	JM033	iKEN 3D Environment Mobile Application	40
12	JM034	Click Car Services	44
13	JM035	Smart Vector Backpack	47
14	JM036	MY Ole-Ole Application	51
15	JM040	SH Jacket	55
16	JM041	FemaleSafe2Go	59
17	JM042	Avalyn	63
18	JM043	MyConvenient Travel Application	67
19	JM044	Visnis Apps	71
20	JM045	Cyclo Application	74
21	JM046	i-seeuWatch	78

22	JM047	ArenaSport Application	82
23	JM048	Melastomaceae species : A New Potential of Antioxidant Agent	86
24	JM049	Travesy	90
25	JM051	Borneo Food Hunter App	94
26	JM052	NIXON PACK	98
27	JM053	Ecoin Sustainable Smartwatch	102
28	JM054	SpaceBook	105
29	JM061	Nafas Face Mask	109
30	JM062	Handy Scrubby	113
31	JM064	POMCUT (PORTABLE MULTI-COOKING UTENSIL)	116
32	JM065	4 in 1 Tumbler	120
33	JM072	Understanding Social Media Influence In Reviving The Trishaw Or "Beca" As A Popular Tourism Attraction In Melaka.	124
34	JM074	First Aid Stick	127

SpaceBook

Farzana Sarifudin¹, Nur Emilia Umaira Mohd Nazawi², Nur Izzah Adeeba Rozlan³

^{1,2,3}MRSM Kuala Klawang, Jalan Titi Kampung Cempedak 71600 Negeri Sembilan

farzanas3108@gmail.com, nuremiliumairamohdnazawi@gmail.com, izzahadeebarozlan@gmail.com

Abstract — A good room booking system should be convenient for teachers to use and would require a minimum involvement of staff regarding managing bookings and classes.

Keywords — *efficiently, time savvy, book your venue now*

I. INTRODUCTION

This app is specially made for teachers that are having difficulties to reserve venue for learning and teaching process. This app has made it easier for teachers to reserve the venue that they want anywhere and anytime through their phone. It also will apprise other teachers that the certain venue has been booked. Whereas 2 classes having clash because they had class at same venue and the same time. And all you have to do is looking for other venue and it will drag the learning process. The internet dramatically change how we do book and reservation easier and more efficiently. Twenty-first-century technology should be seen as an opportunity to acquire more knowledge, not an excuse to know less [1].

II. LITERATURE REVIEW

Portable gadgets are a must have in the 21st century. It has become a necessity for everyone to have. A simple gadget which many people have and still use and wear to this very day is watches. The same goes for smartphones. It will keep evolving and be of service to the community. Thus, with this apps, the users can use smartphone daily in professional way. Mobile devices make it easy to type and save time.

What is usually happen in some organisation is having difficulty to book the venue for meeting, engagements or in education field, booking classes. In MRSM Kuala Klawang, we use an online OPAC library system to book space in a library which consist Bilik Tayangan, Dewan Seminar and Makmal Multimedia. Obviously, this system is not used for other places around the school like Dewan Semarak, Bilik SEM or others and specialized for library only. With this app, all places can be centralized in only one app which is SpaceBook. This will make it easier for the teachers to book the venue they want at anywhere and anytime. The increasing needs of rooms for teacher or students to use the spaces in library or other venue, a robust system is needed to save the time to managing room bookings manually [2].

III. METHODS

The Steps used in the production of the app is based on 4 simple principles: Plan, Design, Develop and Launch. These methods were used throughout all the processes to create the app. For planning principle, information and requirements about the project was searched on the internet. Examples of other mobile apps and tutorials were used as reference for the making of the project. Mobile and available textbooks were used to plan and design the layout and interface for the project. Software such as Adalo was downloaded to begin the making of the project.

For designing, icons, background, etc are downloaded and edited from Google. All pictures used were taken around the school. Next, developing. The system for app is made using Adalo. The last step is the launch principle where the app was tested using a smartphone connected to the laptop. Through the test, the performance of the app was able to be benchmarked. Whilst, the performance itself is reviewed and commented from users. These criticisms allowed the app to be improved and suit the needs of its user.

IV. RESULTS

The apps consist of 7 screens (Refer Fig. 1 and Fig. 2). The first screen is the Signup page where first user can register their information in the screen. The second screen is Login page where the user has to fill in their login information. The third screen shows choices of the venues which are Dewan Semarak, Dewan Seminar, Anjung, Bilik Tayangan, Bilik SEM and Surau. Users will choose the venue they want. For Search screen, this screen is optional whether the user want to search the venue or choose it on the third screen. After that, it will directly go to the next screen which is Form Booking. On this form, users will fill in the requirement which are Name, Class, Subject, Booking Time and Time of Event End. Next, calendar will appear on the last screen. The date will be underlined for the time that has been booked. Each agenda will appear after click on the date. The agenda will show the user's name, class and time the class will be held.

1st screen - Signup

Signup

Email
Enter email...

Password
Enter password...

Full Name
Enter full name...

SIGNUP

ALREADY HAVE AN ACCOUNT?

2nd screen - Login

Login

Email
Enter email...

Password
Enter password...

LOGIN

FORGOT PASSWORD?

SIGNUP

3rd screen

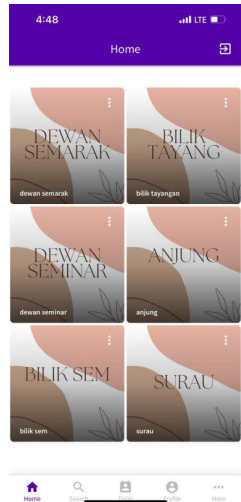
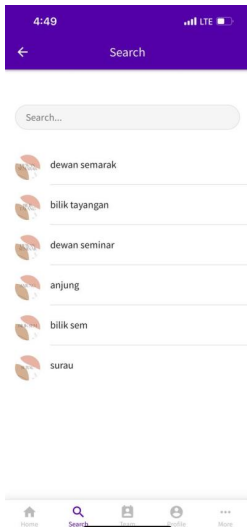
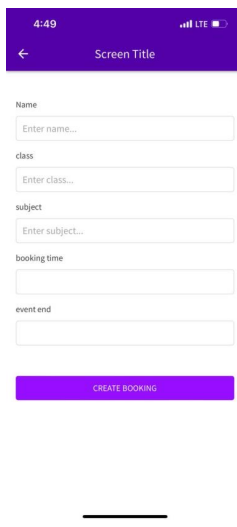


Fig. 1. Interface of the system

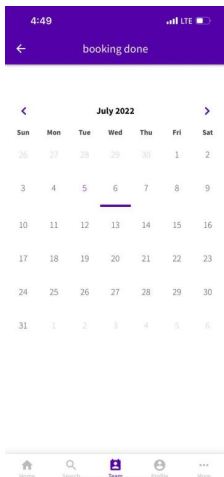
4th screen - 'Search' screen



5th screen – booking form



6th screen - Calendar



7th screen - Agenda

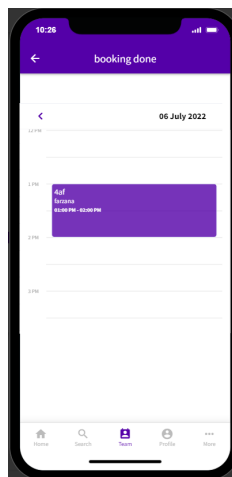


Fig. 2. Interface of the system

V. CONCLUSIONS

When two elements of technology combined; booking system and smartphones, we created a new app which make the process of booking venue for learning process easier. This app can be use by all teachers especially at secondary school , college and university. New system of booking management is created in parallel with technology development.

The development of Booking System will significantly improve the current manual process of booking venue for class especially in a university, college or school environment. This application not only improving the manual process but also reduce the amount of wasting paper and time. The developed system can be improved and upgraded further, e.g. by extending the system with new features and modules or by improving the booking system layout with new display style.

REFERENCES

- [1] Munson, L. (2010). *edweek*. Retrieved from How Do You Define 21st-Century Learning?: <http://www.edweek.org/tsb/articles/2010/10/12/01panel.h04.html>
- [2] Xuan, W.(2021). Implementation of a Secure Room Booking System at the University of Manitoba Libraries. *International Journal of Librarianship*, 6(2), 63-72. <https://doi.org/10.23974/ijol.2021.vol6.2.194>