



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>



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

ADVISOR 1

ADVISOR 2

PROJECT LEADER

SECRETARY 1

SECRETARY 2

TREASURER 1

TREASURER 2

PUBLICATION

JURY

REGISTRATION

SYSTEM

PROMOTION

MULTIMEDIA

AWARD

CERTIFICATE

TECHNICAL & PROTOCOL

SPONSOR

INTERNATIONAL RELATIONS

ASSOC. PROF. DR. ISMADI MD BADARUDIN

Ts. DR. JAMALUDDIN JASMIS

DATO' Ts. DR. MOHD NOR HAJAR HASROL JONO

DR. RAIHAH AMINUDDIN

Ts. DR. NOR AFIRDAUS ZAINAL ABIDIN

PUAN NOR AIMUNI MD RASHID

CIK UMMU MARDHIAH ABDUL JALIL

CIK SITI MAISARAH MD ZAIN

DR. RAIHAH AMINUDDIN

DR. SITI FEIRUSZ AHMAD FESOL

Ts. RAIHANA MD SAIDI

PUAN NOR FADILAH TAHAR @ YUSOFF

PUAN NORDIANAH JUSOH @ HUSSAIN

PUAN BUSHRA ABDUL HALIM

CIK SITI AISYAH ABDUL KADIR

PUAN ANIS SHOBIRIN ABDULLAH SANI

DR. SURYAEFIZA KARJANTO

CIK FADZLIN AHMADON

PUAN ZUHRI ARAFAH ZULKIFLI

ENCIK MOHAMAD ASROL ARSHAD

CIK NORZATUL BAZAMAH AZMAN SHAH

Ts. NURUL NAJWA ABDUL RAHID@ABDUL

RASHID

CIK FADILAH EZLINA SHAHBUDIN

ENCIK MOHD TAUFIQ MISHAN

Ts. DR. CHEW CHIOU SHENG

ENCIK MOHD AMIRUL ATAN (APB)

PUAN HAJAR IZZATI MOHD GHAZALLI

PUAN NURUL EMYZA ZAHIDI

PUAN FATIMAH HASHIM

PUAN SITI RAMIZAH JAMA

PUAN FAIQAH HAFIDZAH HALIM

PUAN NUR NABILAH ABU MANGSHOR

PUAN NUR SYUHADA MUHAMMAT PAZIL

PUAN NUR SUHAILAYANI SUHAIMI

DR. AHMAD FIRDAUS AHMAD FADZIL

Ts. ALBIN LEMUEL KUSHAN

ENCIK MOHD NABIL ZULHEMAY

CIK ANIS AFIQAH SHARIP

PUAN SITI NURAMALINA JOHARI

PUAN ANIS AMILAH SHARI

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

Visnis Apps

Nickolen Bin Robot¹, Steve Minsuan², Viviana Nelynda Binti Madinus³, Mohd Syahyrl Bin Jackline⁴, and Ahmad Fareez Bin Yahya⁵

^{1,2,3,4,5}Faculty of Hotel and Tourism Management, Universiti Teknologi MARA (UiTM) Sabah Branch, Kota Kinabalu Campus.

nickolenrobot@gmail.com, 2020449758@student.uitm.edu.my, 2020449646@student.uitm.edu.my, 2020836678@student.uitm.edu.my, ahmadfareez@uitm.edu.my

Abstract— In 2019, Sabah Tourism Board stated that 54 percent of the tourist arrivals in Sabah were free-independent travelers. This type of traveler does not rely on travel agents, yet the problem of getting lost in a foreign place persists. Therefore, we developed an application to assist it, to assist independent travelers in managing their trip arrangements. This application is a smart travel planner that will automatically build a comprehensive travel itinerary, give a route, and a map so that they will have direction and prevent getting lost, as well as promote the government's industrial digital transformation in the tourist industry. The novelty of our application is that users will only need to key in data such as budgets, areas, or districts they want to visit, including the type of attraction. Then the application will sort out their itinerary based on the suitability of the route. After the itinerary generated, the user can download and use it offline. It may also can be used as a tourist guide by displaying the routes that will take them to the destination of their choice or the suggested tourist attractions in the region or district of their choice. The benefit of our application is that it immediately connects to the local community and local suppliers in the chosen location when the itinerary generated. Furthermore, it can generate employment for the local people by engaging them as guides if the visitor just needs a guide for a certain location.

Keywords—*free independent traveler, industrial digital transformation, smart travel planner, local community*

I. INTRODUCTION

The Visnis Apps is a mobile application that acts as smart planners or travel planners that will help all independent travelers who do not want to use a travel agency and tour guide service. This application will help them to manage their travel itinerary and guide them while traveling. The idea of this innovation came from the statement from the Sabah Tourism Board, which is the increase of free-independent travelers (Miwil, 2019) and common problems that happen among the free-independent traveler who is getting lost while traveling (Adam, 2022). Therefore, we took this opportunity to innovate an application that will help them survive while traveling alone without any proper guidance. Besides that, this application also gives benefits to the local community which helps them to acknowledge the local product produced by them and they can also be hired as a travel guide in only certain places if the traveler needs them. In the meantime, this is also can be part of our contribution to supporting the industrial digital transformation for Malaysian economic recovery whereby the government encourages the citizen to involve in technology in their daily economic activities (Lee, 2021).

II. OBJECTIVES

The objectives of these Visnis Travel Apps are to help the independent traveler organize their itinerary. This is where the Visnis Travel Apps have provided several types of items to the independent traveler, such as the type of attraction

they want to visit, budget, and location. For example, a traveler can search for any kind of attraction that they want to visit, including its budget, easily by using this app. Therefore, this will help them organize their itinerary. Moving on, another objective of these Visnis Travel Apps is to provide a proper route for the independent traveler. This is because the Visnis Travel Apps can help independent travelers by giving them a suitable route based on their itinerary. For example, when the independent traveler has already organized their itinerary, it will directly give them a suitable route to travel. Giving a job opportunity to the local community is also another objective of Visnis Travel Apps. This is where these apps will engage with the local communities, including the local supplier in choosing a location when the itinerary generated. For example, the local communities can be a guide for independent travelers in certain places when they want to. Therefore, this can directly give a job opportunity to the local people by using the Visnis Travel Apps.

III. NOVELTY

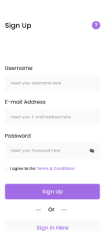
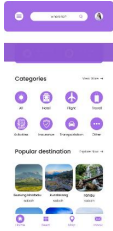
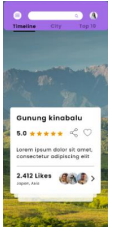

The novelty of this application is that it provides the user with its budget, areas, or districts travelers want to visit, including the type of attraction. This is where the user can easily get the information that they want. Secondly, this application can sort out the traveler's itinerary based on the suitability of the route. Moving on, this application can also be use in offline after the itinerary generated, so that travelers do not need to worry about losing their connection. Other than that, this application can also provide benefits to the local people, whereby it connects immediately to the local people and local suppliers in the chosen location when the itinerary generated. Finally, it can also generate employment for the local people by engaging them as guides if the visitor just needs a guide for a certain location.

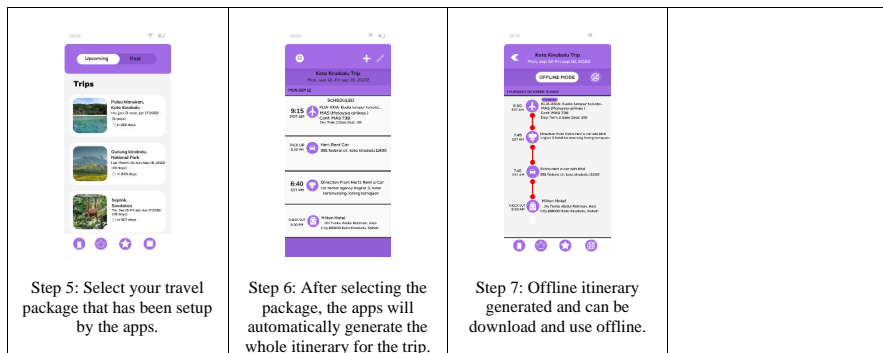
IV. SPECIAL CRITERIA

The feature that can be seen clearly from the Visnis app is that it has a Travel itinerary generator. This efficient itinerary generator only asks the user to mention the budgets, locations, or districts they want to visit, including the type of attraction that they want to visit and Visnis apps automatically creates a travel itinerary from it. Other than that, these apps also have a language translator. The Visnis app provides accurate translations for foreign languages. Thus, Visnis apps can make it easier for tourists to communicate with the local communities at the location they visit. Besides that, Visnis App is also free to use, travelers simply need to download it and register as a user without any payment to do. Lastly, it is easy to use. This follows, after registering this application, the usage guide will be displayed on the screen of the user's smartphone. Furthermore, all the elements like text and graphics on this app are artfully arranged and easy to understand.

V. METHODOLOGY

The methodology that involved for the VISNIS APPS is the process of generating itinerary using the VISNIS APPS which is the guideline on how to use the application for first time user.

 <p>Step 1: Register or sign up to the apps using Gmail or any email address.</p>	 <p>Step 2: Setup profile.</p>	 <p>Step 3: Browse or search your preferred attraction to visit and then select the chosen attraction of place to visit.</p>	 <p>Step 4: Select your preferred date and time for your visitation.</p>
---	--	--	--



VI. CONCLUSIONS

In conclusion, tourist that comes to Sabah is mostly independent travelers. Sabah tourism board recorded that there is 54 percent of independent travelers come to Sabah every year. With the help of our application, we can help assist them during their tour in Sabah by allowing them to manage their travel itinerary and guide them while traveling. Apart from that, This application also supports the local community by helping them acknowledge for the local products they make. They can also be hire as tour guides in only certain areas if the traveler needs them. Finally, we hoped that our application would be beneficial to its users, local community, and tourism suppliers and it can go exceed our expectations.

ACKNOWLEDGMENT

First and foremost, I would like to thank our HTT567 lecturer sir Alvin Gatu and our supervisor sir Ahmad Fareez Bin Yahya who guided us in doing these projects. He provided us with invaluable advice and helped us in difficult periods. His motivation and help contributed tremendously to the successful completion of the project. Besides, we would also like to thank all the lectures of Faculty of Hotel and Tourism Management who helped us by giving us advice and providing the equipment which we needed. Also, I would like to thank my family and friends for their support. Without that support we could not have succeeded in completing this project. Finally, we would like to thank everyone who helped and motivated us to work on this project.

REFERENCES

- [1] A. Fraiel, "10 common travel problems and how to deal with them," *Worldpackers*, 2022. [Online]. Available: <https://www.worldpackers.com/articles/common-travel-problems-and-how-to-deal-with-them>. [Accessed: 20-Jul-2022].
- [2] C. Lee, "Digital Transformation Key for Malaysia's economic recovery," *HRM Asia*, 25-Oct-2021. [Online]. Available: <https://hrmasia.com/digital-transformation-key-for-malaysia-economic-recovery-says-minister/>. [Accessed: 23-Jul-2022].
- [3] O. Miwil, "Change of trend affects Sabah hotels' occupancy, tour bookings," *New Straits Times*, 24-Feb-2019.