

Organised by :



RICAEN
Research Industry Community
Alumni Entrepreneurship Network

Programme by :

INSPIRED 2024
IPOH INTERNATIONAL SUMMIT ON
PROFESSIONALISM, RESEARCH & EDUCATION

In Collaboration With :

BITCOM
BUSINESS INNOVATION & TECHNOLOGY COMMERCIALIZATION CENTRE

MRM
MAJLIS REKABENTUK MALAYSIA

MDEC™



13TH INDES 2024

ENVIRONMENTAL • SOCIAL • GOVERNANCE

THE 13TH INTERNATIONAL INNOVATION, INVENTION & DESIGN COMPETITION 2024

EXTENDED ABSTRACTS

e-BOOK

EXTENDED ABSTRACTS e-BOOK

THE 13th INTERNATIONAL
INNOVATION, INVENTION &
DESIGN COMPETITION 2024



Organized by:
Office Of Research, Industry,
Community & Alumni Network
UiTM Perak Branch

© Unit Penerbitan UiTM Perak, 2024

All rights reserved. No part of this publication may be reproduced, copied, stored in any retrieval system or transmitted in any form or by any means; electronic, mechanical, photocopying, recording or otherwise; without permission on writing from the director of Unit Penerbitan UiTM Perak, Universiti Teknologi MARA, Perak Branch, 32610 Seri Iskandar Perak, Malaysia.

Perpustakaan Negara Malaysia

Cataloguing in Publication Data

No e- ISBN: 978-967-2776-31-4

Cover Design: Dr. Mohd Khairulnizam Ramlie
Typesetting : Zarinatun Ilyani Abdul Rahman

EDITORIAL BOARD

Editor-in-Chief

ZARINATUN ILYANI ABDUL RAHMAN

Managing Editors

NUR FATIMA WAHIDA MOHD NASIR

SYAZA KAMARUDIN

Copy Editors

ZARLINA MOHD ZAMARI

DR NURAMIRA ANUAR

NORLINDA ALANG

DHAYAPARI PERUMAL

WAN FARIDATUL AKMA WAN MOHD RASHIDI

HALIMATUSSAADIAH IKSAN

NURDIYANA MOHAMAD YUSOF

ONG ELLY

NURSHAHIRAH AZMAN

MUHD SYAHIR ABDUL RANI

DR PAUL GNANASELVAM A/L PAKIRNATHAN

AMIRUL FARHAN AHMAD TARMIZI

SYAREIN NAZRIQ MARIZAM SHAHRULNIZAM

NAZIRUL MUBIN MOHD NOOR

NOR NAJIHAH NORAFAND

INTAN NOORAZLINA ABDUL RAHIM

AZIE AZLINA AZMI

NOORAILEEN IBRAHIM

IZA FARADIBA MOHD PATEL

KANDARKRAZE MOBILE APPLICATION

Muhammad Azamuddin Bin Mohamad Asrul¹, Mohamad Hafiy Dinie Bin Mohd Hidzir²,
Aina Soraya Binti Nizarulikram³, Norarysha Athira Binti Abdul Rahman⁴, Nadhra
Shaqina Binti Norman Shah⁵

^{1,2,3,4,5}University Technology MARA (UiTM) Perak Branch, Campus Seri
Iskandar, 32610, Seri Iskandar, Perak Darul Ridzuan, Malaysia

2022497724@student.uitm.edu.my 2022866052@student.uitm.edu.my 2022614588@student.uitm.edu.my
2022845364@student.uitm.edu.my 2022472112@student.uitm.edu.my

ABSTRACT

Many foreign tourists who come to Penang Island often face the challenge of locating a place to savor the renowned Nasi Kandar due to the overwhelming number of restaurant options available. Therefore, we have created an application to help those who want to find Nasi Kandar restaurants on Penang Island. In this application, we have provided locations, ratings, and reviews of Nasi Kandar restaurants on the island. This application also increases user convenience by providing a user-friendly mobile platform, such as the "Kandar Kraze" app, to help them find the best Nasi Kandar in Penang for tourism. It provides specific locations for Nasi Kandar restaurants that are close to residential areas in Penang and includes a feature that allows the user to view the rating, operating hours, and images of the Nasi Kandar restaurants simply by clicking on the shops in the dashboard.

Keywords: mobile application; nasi kandar; restaurants

1. INTRODUCTION

KandarKraze, an innovative mobile app, is created with the sole objective of improving the experience for Nasi Kandar enthusiasts. This iconic Malaysian cuisine, known for its savory rice dishes and varied curries, is now conveniently accessible via the app. KandarKraze achieves several major goals, including exploring the culinary environment by providing users with a platform to find a variety of Nasi Kandar outlets and highlighting unique flavors from various eateries. The software simplifies the ordering procedure by allowing consumers to customize their dishes and make secure online payments. Furthermore, it promotes an interactive gourmet community in which users can exchange opinions, recommendations, and culinary experiences while engaging with like-minded people. Geolocation services help users find nearby Nasi Kandar restaurants. KandarKraze caters to both seasoned connoisseurs and newcomers to Nasi Kandar, not only providing convenience but also fostering a thriving community, thereby enhancing the overall dining experience. Future additions may include augmented reality capabilities, additional restaurant partnerships, and expansion into new geographical locations, ensuring KandarKraze's continued leadership in revolutionizing how people discover, order, and enjoy the delightful world of Nasi Kandar.

2. METHODOLOGY

Android Studio is one of the software tools we use to design apps that contain a login registration page, dashboard, alert messages, and other features. We include a variety of items and information in our project, "Nasi Kandar in Penang Island," for users to utilize when they visit Penang Island. Below are the processes involved in creating KandarKraze application:

2.1 Project Planning

The development process begins with thorough project planning, including defining the app's objectives, target audience, and key features.

2.2 UI/UX Design

User interface (UI) and user experience (UX) designers created wireframes and mockups to visualize the app's layout and functionality.

2.3 Android Studio Setup

Set up Android Studio, the official IDE for Android app development, on their development machines. The necessary SDKs, tools, and dependencies for building Android apps was configured.

2.4 Project Setup

A new project was created in Android Studio, specifying project settings such as project name, package name, and target Android version. Project dependencies and settings were configured, including integrating any third-party libraries or APIs required for the app's functionality.

2.5 Coding

Using Java and Kotlin programming languages, developers wrote the code that powers the app's features and functionality. Algorithms for geolocation, route optimization, and user interaction based on the app's requirements were implemented.

2.6 UI Implementation

The UI/UX designs were translated into code, creating XML layout files for the app's user interface elements. Android's layout managers and views were used to structure and style the app's screens according to the design specifications.

2.7 Functionality Implementation

The app's core functionality was implemented, such as geolocation services, route calculation, and real-time navigation. APIs and services, such as the Google Maps API, were integrated to access location data and provide mapping functionality within the app.

2.8 Testing and Debugging

Thorough testing of the app was conducted to identify and address any bugs, errors, or usability issues. Real Android devices were used to simulate various usage scenarios and ensure the app performed reliably across different devices and OS versions.

3. CONCLUSION

In summary, we successfully addressed the problems that users often encountered. This issue was resolved by creating an application that simplifies the process of finding Nasi Kandar in Penang. Our application lists all Nasi Kandar shops in Penang, including their locations, ratings, and proximity to the user's current location. The problem users faced, particularly foreign tourists struggling to find Nasi Kandar eateries due to the multitude of restaurant options, inspired us to develop this solution. The application provides locations, ratings, and reviews of Nasi Kandar restaurants on Penang Island. Furthermore, we gained valuable insights into application development, including connecting to Firebase and integrating various pages into cohesive code to produce an app like KandarKraze. With the latitude and longitude information in the code, users can also determine their location.

REFERENCES

- Android Knowledge. (n.d.). Home [YouTube channel]. Retrieved December 16, from <https://www.youtube.com/channel/UCNRURRYFoTupfkmTmRKG71A>
- Mokhtar, E. S. (2023, October 17). Guided reading: Making the most of it [PowerPoint slides]. In Chapter 2 Programming Fundamentals and Chapter 4 Client Server Computing.

Surat kami : 700-KPK (PRP.UP.1/20/1)

Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim
Rektor
Universiti Teknologi MARA
Cawangan Perak



Tuan,

**PERMOHONAN KELULUSAN MEMUAT NAIK PENERBITAN UiTM CAWANGAN PERAK
MELALUI REPOSITORI INSTITUSI UiTM (IR)**

Perkara di atas adalah dirujuk.

2. Adalah dimaklumkan bahawa pihak kami ingin memohon kelulusan tuan untuk mengimbas (*digitize*) dan memuat naik semua jenis penerbitan di bawah UiTM Cawangan Perak melalui Repositori Institusi UiTM, PTAR.

3. Tujuan permohonan ini adalah bagi membolehkan akses yang lebih meluas oleh pengguna perpustakaan terhadap semua maklumat yang terkandung di dalam penerbitan melalui laman Web PTAR UiTM Cawangan Perak.

Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

“BERKHIDMAT UNTUK NEGARA”

Saya yang menjalankan amanah,

SITI BASRIYAH SHAIK BAHARUDIN
Timbalan Ketua Pustakawan

nar

Setuju.

27.1.2023

PROF. MADYA DR. NUR HISHAM IBRAHIM
REKTOR
UNIVERSITI TEKNOLOGI MARA
CAWANGAN PERAK
KAMPUS SERI ISKANDAR