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2023

ABSTRACT BOOK 2023

(i - Ja M C S I I X)

INTERNATIONAL JASIN

MULTIMEDIA AND COMPUTER SCIENCE

INVENTION AND INNOVATION EXHIBITION

PUBLICATION DATE :8 NOV 2023

<https://jamcsiix.uitm.edu.my/>



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2023

INTERNATIONAL JASIN MULTIMEDIA & COMPUTER SCIENCE
INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIIX) 2023

Virtual Award Ceremony

8th November 2023
Wednesday

Platform: YouTube

https://www.youtube.com/channel/UCW3Mw4_ngn6tn8gyXIOpLlw





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INTERNATIONAL JASIN MULTIMEDIA & COMPUTER SCIENCE
INVENTION AND INNOVATION EXHIBITION (I-JaMCSIIIX) 2023

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International Jasin Multimedia & Computer Science Invention and Innovation Exhibition



Development of Mobile Application: Digital Mutawwif

Nur Afiqah Syuhada Abdul Kodir¹, Syafnidar Abdul Halim²

^{1,2} Universiti Teknologi MARA (UiTM), Malaysia

2020866096@student.uitm.edu.my, syafnidar@uitm.edu.my

Abstract—The Digital Mutawwif System is a mobile application designed to assist Muslim pilgrims during their pilgrimage in Makkah and Madinah. The main problem addressed by this application is the possibility of pilgrims getting lost during the Tawaf ritual, coupled with the inconvenience of carrying physical books and guides. To overcome these challenges, the objective of the project was to develop a user-friendly mobile application that provides essential guidance to pilgrims. The application's functionality was thoroughly tested, and the results demonstrated a successful outcome. Pilgrims can now rely on the Digital Mutawwif app for accurate Tawaf counting and timely guidance throughout their journey, alleviating their concerns and enhancing their overall pilgrimage experience. In developing the Digital Mutawwif app, a comprehensive approach was employed to ensure its effectiveness and efficiency. The app was carefully designed to offer intuitive navigation and valuable resources for users, making it an essential tool for their spiritual journey. In our project, we thoroughly tested the app's features to ensure they work correctly. For example, we checked that the emergency button triggers the right actions and that user profiles show accurate information. We also made sure that emergency alerts are quickly sent to Mutawwifs and that the user's location is displayed accurately on their interface. We tested each feature in different situations and fixed any issues we found to make sure the app works well for users. The outcome showed that all tests were passed, indicating the app's reliability and functionality in assisting pilgrims during their pilgrimage. Looking to the future, further improvements in network performance and security measures are recommended to enhance the app's capabilities and user experience. With these enhancements, the Digital Mutawwif System can continue to serve as a valuable companion for pilgrims, providing seamless guidance and support during their sacred journey.

Keywords—*Mobile Application, Mutawwif, Pilgrims*



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2023

PUBLISHED BY:

i-JaMCSIIX

Universiti Teknologi MARA Cawangan Melaka

Kampus Jasin

77300 Merlimau, Melaka

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Web: <https://jamcsiix.uitm.edu.my/>

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