CTHM MOCK HOTEL SERVICE SYSTEM WITH DATA ANALYTICS

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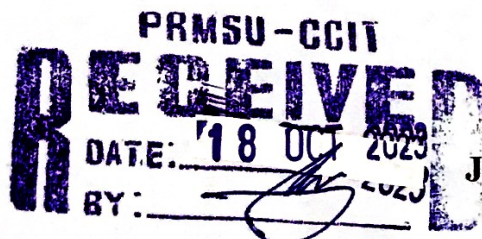
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A Thesis

In partial Fulfillment of the Requirements

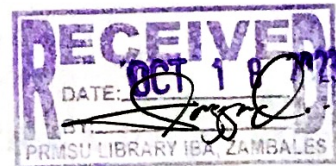**for the degree of Bachelor of Science in Computer Science**

College of Communication and Information Technology

President Ramon Magsaysay State University

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Republic of the Philippines
PRESIDENT RAMON MAGSAYSAY STATE UNIVERSITY
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APPROVAL SHEET

This, study entitled **"CTHM MOCK HOTEL SERVICE SYSTEM WITH DATA ANALYTICS"** prepared and submitted by Allain Glenn G. Ebalobor, Erick John G. Facunla, Kimberly B. Mejala, Jeric V. Tasane, Aaron Vincent E. Porto in partial fulfilment of the requirements for the degree of **BACHELOR OF SCIENCE IN COMPUTER SCIENCE** are hereby recommended for oral examination.

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Approved by the Panel of the Oral Examiners on July 17, 2023 with a grade of _____.
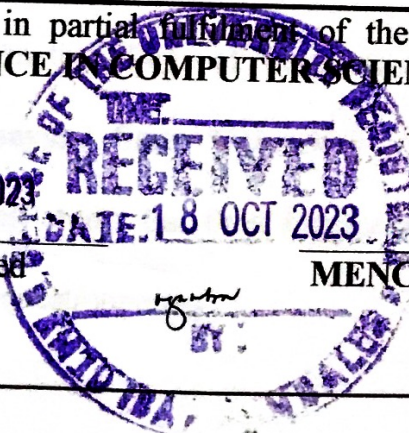
JOSEPH J. JULIANO, MSCS
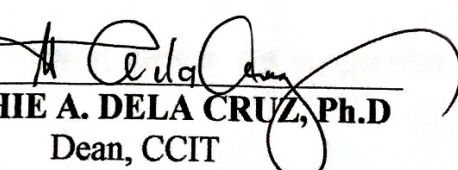Chairman

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Accepted and approved in partial fulfilment of the requirements for the degree of **BACHELOR OF SCIENCE IN COMPUTER SCIENCE.**

18 OCT 2023
Date Signed

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EXECUTIVE SUMMARY

The CTHM Mock Hotel Service System with Data Analytics introduces a groundbreaking approach to hotel reservations by leveraging the power of cloud computing, mobile applications, and data analytics. This innovative system brings convenience, real-time information, and enhanced security to both guests and hotel operators.

One of the key features of this system is its seamless and convenient booking options. Guests can make reservations effortlessly through online platforms and mobile apps, eliminating the need for lengthy phone calls or in-person visits. This streamlines the booking process, saving time and providing a hassle-free experience for guests.

Real-time availability and pricing information is another valuable aspect of the system. Guests can access up-to-the-minute details on room availability, pricing, and special offers. This empowers them to make informed decisions and ensures transparency in the booking process. This real-time feature enhances guest satisfaction and trust, fostering a positive booking experience for all.

The CTHM Mock Hotel Service System with Data Analytics includes a visitor log management system that captures essential visitor details, such as identification information and check-in/check-out times. This feature not only enhances security measures but also enables hotels to monitor and track visitor movements within the premises. By keeping a close eye on visitor activities, hotels can ensure compliance with safety protocols and regulations, providing a safer environment for both guests and staff.

The system's data analytics capabilities play a crucial role in optimizing hotel operations. By analyzing guest preferences, booking patterns, and feedback, hotels can tailor their services to meet individual needs and enhance the overall guest experience. This data-driven approach enables hotels to make informed decisions and improve their efficiency and profitability.

This study aimed to developed a hotel reservation and log visitor management aims to address the challenges faced by hotels in efficiently managing their reservations and tracking visitor information. In today's competitive hospitality industry, it is crucial for hotels to streamline their reservation processes and ensure effective visitor management for enhanced guest experiences and improved security measures. It is sought to determine the quality of the application using ISO/IEC 25010:2011 Software Quality Metrics in terms of functional suitability, performance efficiency, compatibility, usability, reliability maintainability, and portability.

The researchers adopted a quantitative methodology. Each respondent was surveyed by the researchers using the Slovin's Formula as a tool. Due to the type of research strategy employed, the researchers were able to observed and collect data for analysis and use in developing surveys that they later implemented. A total of three hundred two (302) students and seventeen (17) staff/instructor from the College of Tourism and Hospitality Management and three (3) IT expert from College of Communication and Information Technology at President Ramon Magsaysay State University's Iba campus participated in the study.