FLIGHT SCHEDULING SYSTEM FOR AAA USING FIRST COME FIRST SERVE ALGORITHM
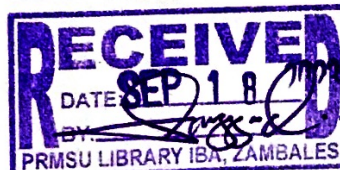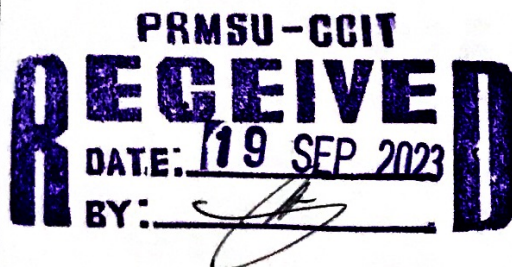
Abiva, Jonathan C.
Dela Cruz, Roselle M.
Labrador, Patrick O.
Macadaan, Kaila Mae B.
Reyes, Lesly Ann D.

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
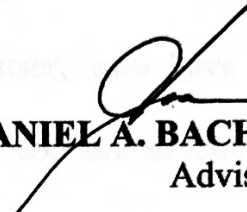**Iba, Zambales**

JULY 2023

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College of Communication and Information Technology
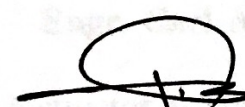Iba, Zambales

APPROVAL SHEET

This study entitled **"FLIGHT SCHEDULING SYSTEM FOR AAA USING FIRST COME FIRST SERVE ALGORITHM"** prepared and submitted by **Jonathan C. Abiva, Roselle M. Dela Cruz, Patrick Mark O. Labrador, Kaila Mae B. Macadaan, and Lesly Ann D. Reyes** in partial fulfilment of the requirements for the degree of **BACHELOR OF SCIENCE IN COMPUTER SCIENCE** are hereby recommended for oral examination.
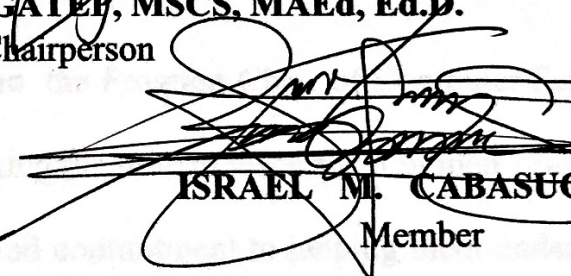
CARL ANGELO S. PAMPLONA, MSCS
Thesis Instructor

DANIEL A. BACHILLAR, MSCS
Adviser

Approved by the Panel of the Oral Examiners on June 2023 with a grade of _____.
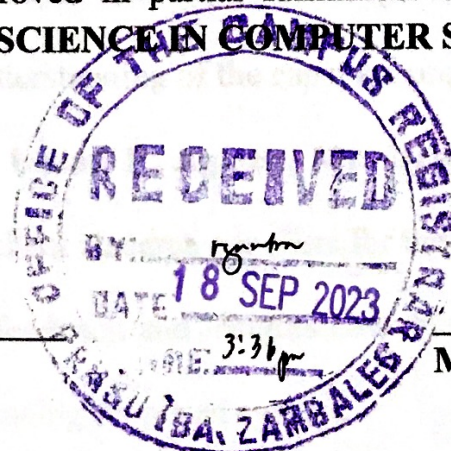
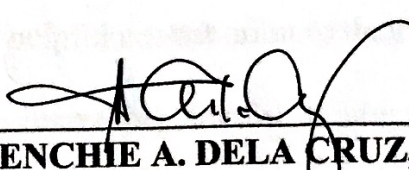**JOHN LENON E. AGATEP, MSCS, MAEd, Ed.D.**
Chairperson

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ISRAEL M. CABASUG, MSCS
Member

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

18 SEP 2023
Date Signed

RECEIVED
BY: _____
DATE 18 SEP 2023
TIME: 3:36 pm

MENCHIE A. DELA CRUZ, Ph.D.
Dean, CCIT

EXECUTIVE SUMMARY

The Flight Scheduling System for All Asia Aviation (AAA) is a comprehensive software solution designed to streamline and optimize flight scheduling operations for the aviation industry. This executive summary provides a clear and easy-to-understand overview of the system's key features, benefits, and potential impacts.

The Flight Scheduling System for AAA using First Come First Serve Algorithm is a user-friendly web-based application that simplifies and automates the flight scheduling process. It aims to enhance operational efficiency, improve resource allocation, and provide real-time visibility into flight schedules. By replacing manual scheduling with an automated system, the AAA can save time, reduce errors, and improve overall productivity.

Key features of the Flight Scheduling System for AAA include schedule management, resource allocation, notifications and reminders, reporting and analytics, and integration capabilities. The system allows for easy creation, modification, and cancellation of flight schedules, minimizing conflicts and maximizing resource utilization. Automated notifications and reminders keep stakeholders informed about flight updates, ensuring effective communication. The system also provides valuable insights through reporting and analytics, enabling data-driven decision-making. Integration capabilities ensure seamless data flow with existing systems.

The researchers recommended Automatic Cancellation, Enhanced Security and Virus Protection, System Improvements, Addition of New Features, and AI Support and Data Analysis. These improvements can be made to enhance the overall functionality and usefulness of the system.

With 71 respondents, the employees and students of AAA assessed the system quality, level of acceptance, and level of readiness of the Flight Scheduling System, and their significant difference using the ISO/IEC 25010:2011 measure. According to the overall results, employees of AAA rated the system's web application quality as "Excellent," with a grand mean of 3.50, its level of acceptability as "Highly Accepted," with a grand mean of 3.46, and its level of readiness as "Very Ready" with a grand mean of 3.55. Students of AAA rated the system's web application quality as "Excellent", with a grand mean of 3.51, its level of acceptability as "Highly Accepted," with a grand mean of 3.39, and its level of readiness as "Very Ready" with a grand mean of 3.51. There is no significant difference between the employee and student's evaluation on the Functionality, Level of Acceptability and Level of Readiness, however, there is a significant difference between the employee and student's evaluation in terms of Functionality and Performance between Compatibility and Usability.

In summary, the Flight Scheduling System for All Asia Aviation is a user-friendly software solution that automates and simplifies flight scheduling operations. With its features such as schedule management, resource allocation, notifications, reporting, and integration capabilities, the system brings numerous benefits to the aviation industry. These benefits include improved efficiency, enhanced communication, increased transparency, cost savings, improved productivity, and scalability. By implementing this system, All Asia Aviation can optimize their flight scheduling operations, leading to a more streamlined and efficient aviation industry.