



UNDERGRADUATE THESIS

INTEGRATED WEB-BASED PLAYSTATION RENTAL MANAGEMENT INFORMATION SYSTEM WITH RESERVATION MANAGEMENT, POINT OF SALES (POS), AND ANALYTICS DASHBOARD

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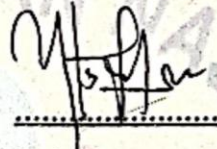
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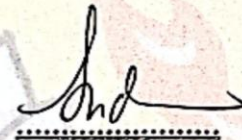
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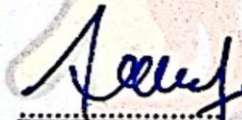
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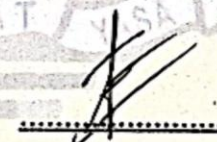
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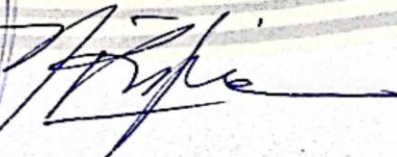
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MANAGEMENT, POINT OF SALES (POS), AND
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INFORMATION SYSTEM WITH RESERVATION MANAGEMENT,
POINT OF SALES (POS), AND ANALYTICS DASHBOARD"**

is the work of one's own work, is original, and is written following the rules of scientific writing. If in the future there is a discrepancy with this statement, then I am willing to accept sanctions in accordance with the applicable provisions at the East Java Veterans National Development University.



Surabaya, July 10, 2026, Student,

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ABSTRACT

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Thesis Title : Integrated Web-Based Playstation Rental Management Information System With Reservation Management, Point of Sales (POS), and Analytics Dashboard
Tester : 1. Yisti Vita Via, S.ST., M. Kom.
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The development of information technology has driven digital transformation across various business sectors, including the PlayStation rental business, which still largely relies on manual operational processes. This condition creates various problems, such as customers' difficulty in knowing unit availability in real time, the risk of booking schedule conflicts, ineffective transaction recording, and inventory management prone to errors.

This research aims to design and build a web-based PlayStation rental management information system integrated with reservation features, Point of Sales (POS), inventory management, and an analytics dashboard in order to improve operational efficiency and service quality.

The research method used is Research and Development (R&D) with a Mixed Methods approach. The research stages include needs analysis through observation and interviews, system design, application development, functional testing, and evaluation using User Acceptance Testing (UAT).

The research results consist of an integrated system prototype that is able to provide real-time unit availability information, manage rental transactions and product sales, automatically update stock, and generate operational reports that support decision-making.

Keywords: Information Systems, PlayStation Rental, Reservations, Point of Sales (POS), Inventory Management, Analytics Dashboard.

PREFACE

Praise be to Allah SWT for His endless blessings, mercy, guidance, and grace, which have enabled the author to complete this thesis entitled "**WEB-BASED INTEGRATED PLAYSTATION RENTAL MANAGEMENT INFORMATION SYSTEM WITH RESERVATION MANAGEMENT, POINT OF SALES (POS), AND ANALYTICS DASHBOARD**" successfully and on time. Without His permission and blessings, this thesis would not have been completed.

This thesis was prepared as one of the academic requirements for obtaining a Bachelor's Degree in the Informatics Engineering Study Program, Faculty of Computer Science, Universitas Pembangunan Nasional "Veteran" East Java. The research presented in this thesis focuses on the design and implementation of an integrated web-based information system for PlayStation rental businesses. The system integrates reservation management, point of sales (POS), customer management, inventory monitoring, and an analytics dashboard into a single platform. It is expected that the proposed system can improve operational efficiency, reduce manual administrative processes, minimize recording errors, and provide comprehensive business insights to support more effective decision-making.

The author realizes that the completion of this thesis would not have been possible without the guidance, encouragement, assistance, and prayers from many individuals. Throughout the research process, various challenges and obstacles were encountered, ranging from literature review, system design, implementation, testing, to the preparation of this thesis report. However, with determination, continuous learning, and the support of many parties, these challenges were successfully overcome.

On this occasion, the author would like to express sincere appreciation and gratitude to everyone who has contributed directly or indirectly to the completion of this thesis, especially to:

1. Allah SWT, who has granted health, strength, patience, wisdom, and countless blessings throughout the completion of this thesis.

2. The author's beloved parents and family, whose unconditional love, endless prayers, moral support, encouragement, and sacrifices have always been the greatest source of motivation.
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6. Friends, classmates, and colleagues who have shared knowledge, ideas, experiences, encouragement, and memorable moments throughout the academic journey.
7. All parties who cannot be mentioned individually but have contributed in various ways to the successful completion of this thesis.

Finally, the author sincerely hopes that this thesis will provide useful knowledge and practical contributions to the development of information systems, particularly in the implementation of integrated web-based management information systems for rental businesses. Furthermore, it is expected that this research can serve as a useful reference for future researchers, students, and practitioners who are interested in business information systems, digital transformation, reservation management, point of sales applications, and business analytics. The author also hopes that the developed system can contribute to improving operational efficiency, service quality, and data-driven decision-making in PlayStation rental businesses and other similar small and medium-sized enterprises.

Surabaya, July 10, 2026

Muhammad Norman Hakam Aufar

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