



SYSTEM PARKING TECHNOLOGY IN WEB-BASED

UNDERGRADUATE THESIS

**Submitted as one of the requirements to obtain
Sarjana Komputer**

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ABSTRACT

Parking management systems play a crucial role in optimizing the utilization of parking spaces and enhancing overall efficiency. This project presents the development of a web-based parking management application using the Flask framework. The system encompasses features for operator authentication, administration, operator functions, and transaction history tracking. The operator authentication module incorporates secure password handling practices, ensuring the protection of operator credentials. Administrators can manage accounts, while operators handle vehicle entry and exit transactions. The application utilizes QR code technology for seamless and efficient vehicle identification during entry and exit processes.

Furthermore, the system offers a comprehensive transaction history feature, allowing administrators to track and manage parking transactions. The integration of data visualization tools enhances the operator experience, providing insightful reports and summaries. The use of Flask-Bcrypt ensures password security, while robust input validation measures are implemented to fortify the application against potential vulnerabilities. The system is designed with a focus on operator-friendly interfaces and efficient data processing

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