

DESIGNING A PROTOTYPE SYSTEM FOR SALES TRANSACTION RECONCILIATION AND GUEST DATA MANAGEMENT

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Abstract

This research focuses on the design and development of a prototype information system for transaction recap and guest data management at PT. XYZ. The research addresses the challenges of data inaccuracies and inefficiencies observed in the current system. The methodology includes a comprehensive literature review, followed by interviews, observations, and the application of the waterfall model for system design. The proposed prototype features a web-based interface designed to streamline transaction recording, data management, and reporting processes. The system aims to enhance operational efficiency and data accuracy. Initial evaluations of the prototype indicate improvements in data management, although further refinements are needed before the system can be fully implemented. This research provides valuable insights into the development of effective information systems tailored to organizational needs.

Keywords— Information System, Transaction Recap, Data Management, Prototype, Web-Based System

INTRODUCTION

In the advancing digital era, the role of information systems in the business world has become increasingly crucial. The effective use of information technology can significantly impact customer service and operational efficiency within a company. Consumers can experience faster and more satisfying service, while businesses benefit from easier data management, quicker report generation, and reduced errors in transactions. Therefore, many companies are striving to adopt the latest technologies to enhance their competitiveness and ensure business continuity.

One sector that continues to grow is the tourism industry, where PT. XYZ operates in the Tour and Travel Services field. This company, located at Kepri Mall Number 53 A, Kepulauan Riau, Batam, focuses on providing travel packages, both B2B and B2C. In their daily operations, PT. XYZ manages guest data and daily sales transactions using Microsoft Excel. This process involves recording up to 50 transactions daily and managing over 1,000 transactions per month. However, this method has its drawbacks, particularly in terms of efficiency and accuracy, as the data reconciliation process is still manual, and data storage remains in physical form.

The challenges faced highlight the need for a web-based information system that can help expedite and improve the administration and data management processes at PT. XYZ. Therefore, this research aims to design and implement a prototype of a sales transaction reconciliation and guest data management information system for PT. XYZ. The system is expected to not only enhance efficiency and accuracy in the reconciliation process but also facilitate easier access to information for all stakeholders within the company. This research is expected to make a tangible contribution to the development of information technology in the tourism industry and serve as a reference for similar studies in the future.

RESEARCH METHOD

This research methodology encompasses several key approaches for designing and developing an efficient information system for PT. XYZ. Firstly, a literature review is conducted to understand the best theories and practices in information systems and data management. This involves reviewing academic references such as books and scientific journals, as well as relevant technology documentation like guides for PHP, CodeIgniter, and MySQL. The literature review helps establish a strong theoretical foundation and provides insights from previous research that can be applied in this study's context.

The research subjects involve various stakeholders at PT. XYZ who will use or influence the information system. This includes administrative staff who manage transaction and guest data, company management responsible for strategic decisions, and sales and marketing staff who need data for their activities. Engaging these different subjects is crucial to ensure that the designed system meets the needs and expectations of all involved parties.

The data collection methods used include interviews, observations, document reviews, and questionnaires. Interviews are conducted to gather in-depth information about existing processes and challenges, while direct observations help identify inefficiencies in data management. Document reviews are performed to understand the current data structure and procedures. Additionally, if necessary, questionnaires can be used to collect quantitative data on user needs and expectations for the new system. These approaches are designed to gather comprehensive information to support the design of an effective system that meets user needs.

RESULTS AND DISCUSSION

The user interface design for the system at PT. XYZ is tailored to meet the needs of different user types, specifically administrators and end-users. The design process involves creating distinct interfaces for these user categories to ensure functionality and usability.

For administrators, the interface is designed with a focus on efficiency and comprehensive data management. This includes features such as detailed dashboards for transaction overviews, data entry forms for updating guest information, and advanced reporting tools for generating sales summaries. The layout is organized to facilitate quick access to critical functionalities, minimizing the time required for data entry and report generation. Navigation elements are designed to be intuitive, with clearly labeled menus and buttons that streamline administrative tasks.

In contrast, the end-user interface emphasizes simplicity and ease of use. This design includes user-friendly screens for viewing transaction histories and guest details, with a focus on accessibility and straightforward navigation. Key features for end-users include search functionality, basic filtering options, and summary views that provide relevant information without overwhelming the user. The interface is crafted to be responsive and visually appealing, ensuring a positive user experience.

The overall design strategy ensures that both administrators and end-users can effectively interact with the system. By addressing the specific needs and tasks of each user type, the system aims to enhance operational efficiency and user satisfaction. This approach ensures that the information system at PT. XYZ is both functional and user-friendly, supporting the company's data management and operational goals.

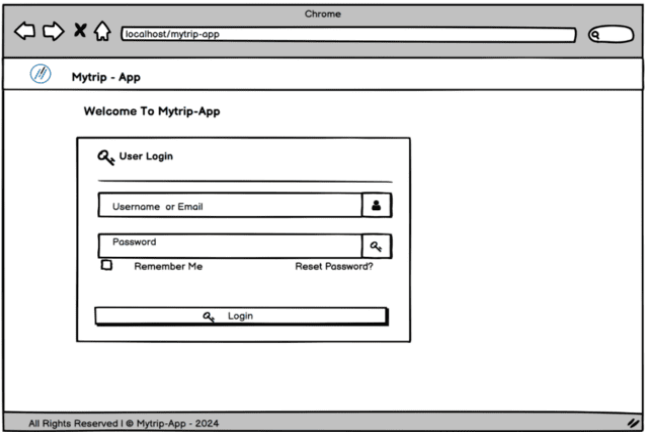


Figure 1. Login Page Design

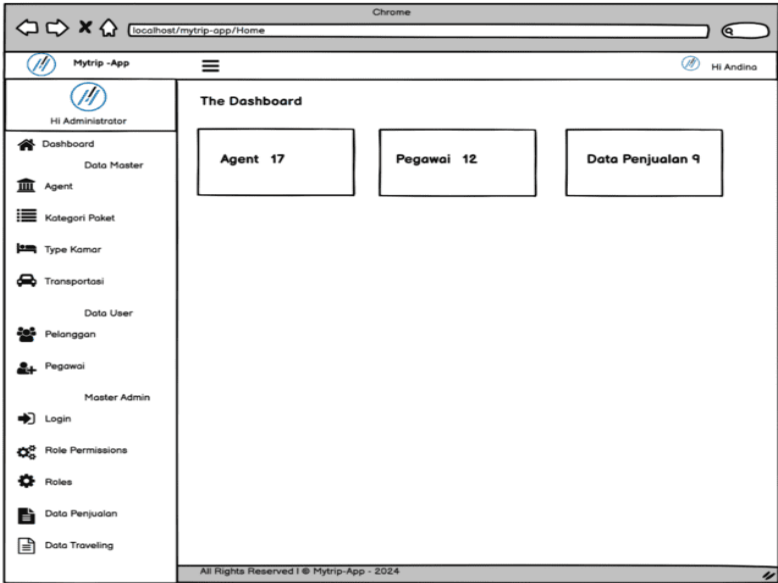


Figure 2. Admin Dashboard Page Design

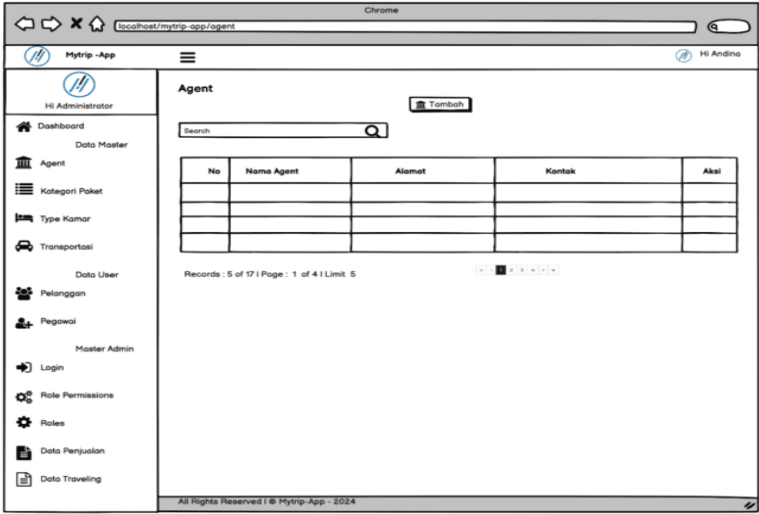


Figure 3. Admin Agent Page Design

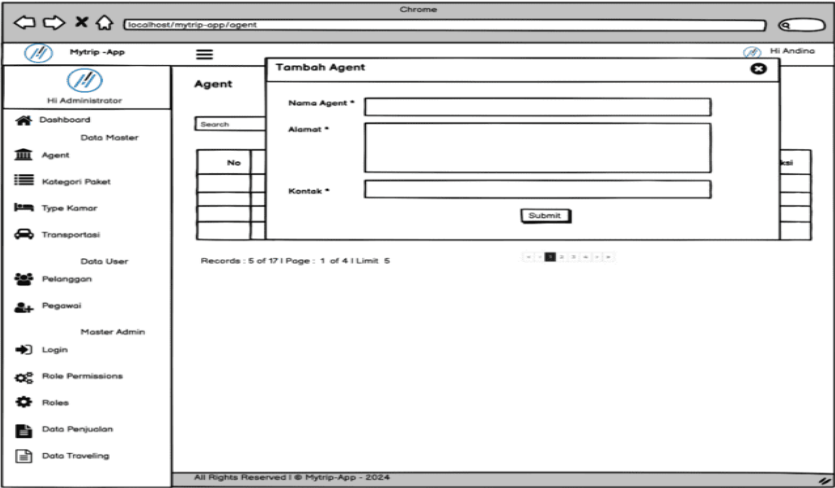


Figure 5. Add Agent Admin Page Design

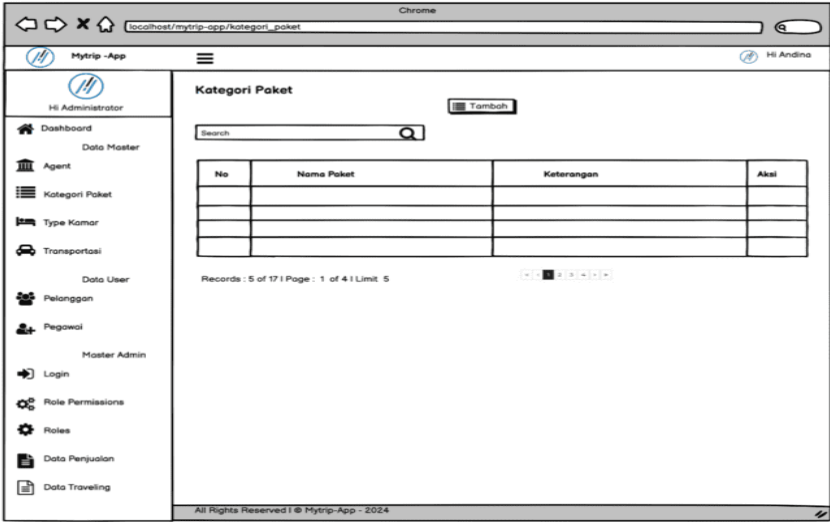


Figure 5. Package Category Admin Page Design

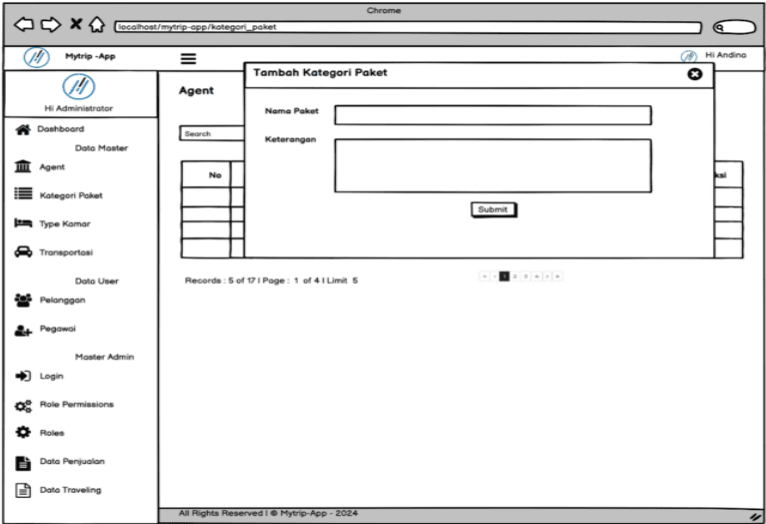


Figure 6. Admin Page Design Add Package Category

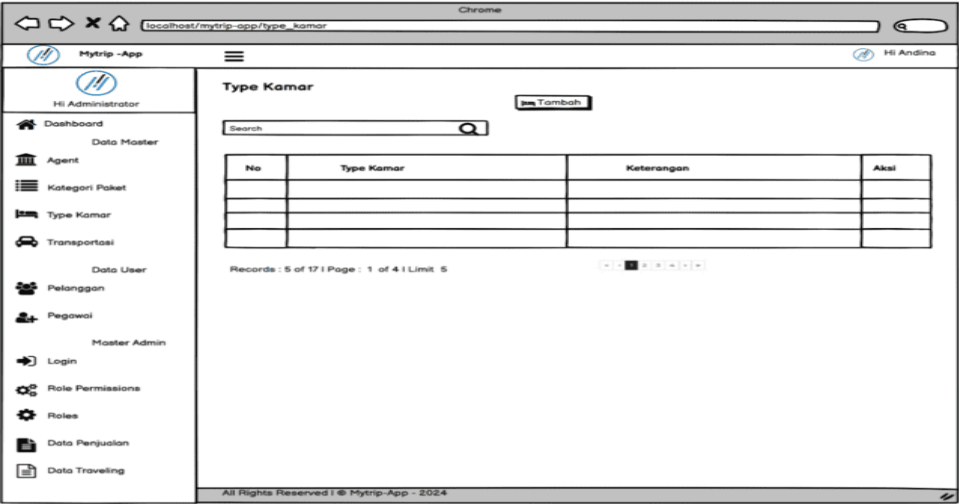


Figure 7. Room Type Admin Page Design

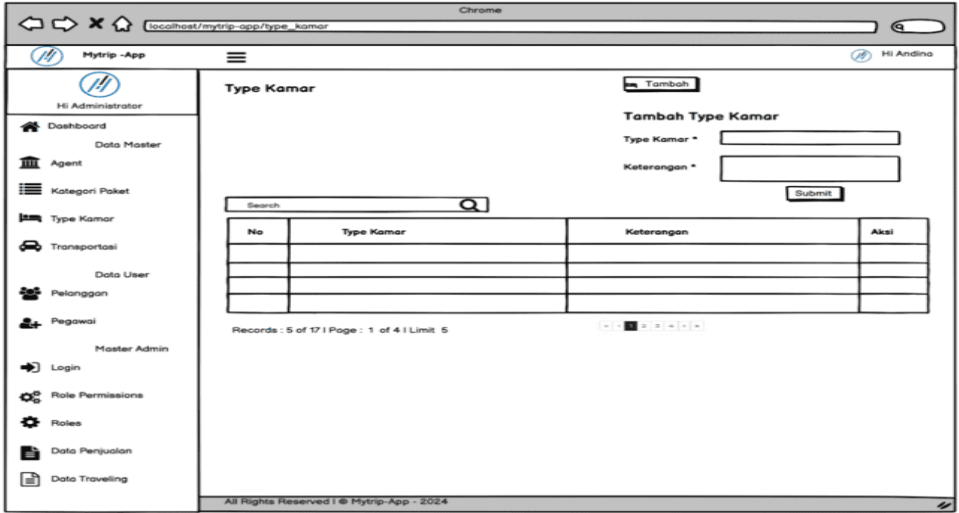


Figure 8. Admin Page Design Add Room Type

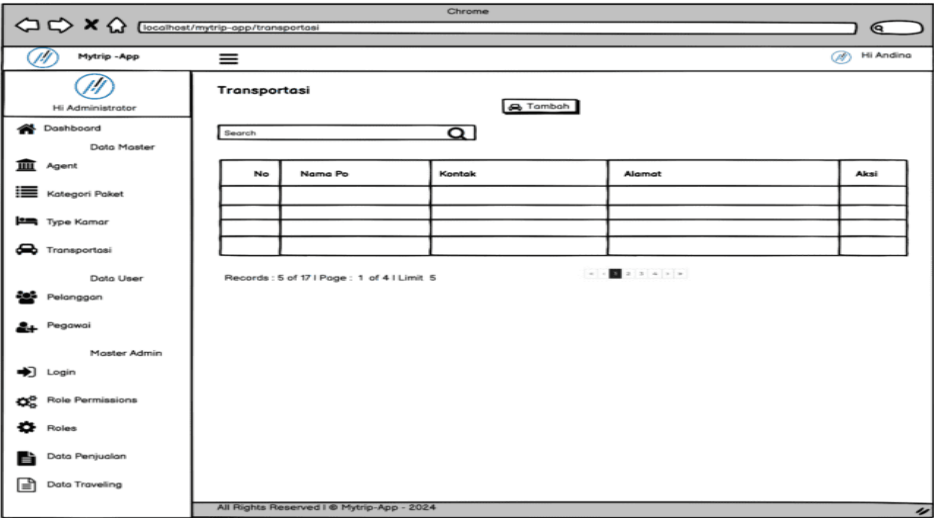


Figure 9. Transportation Admin Page Design

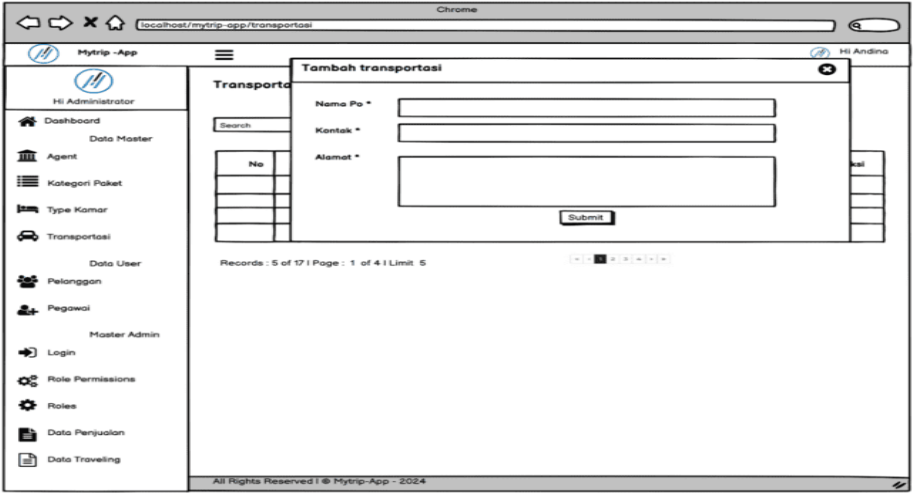


Figure 10. Admin Page Design Add Transportation

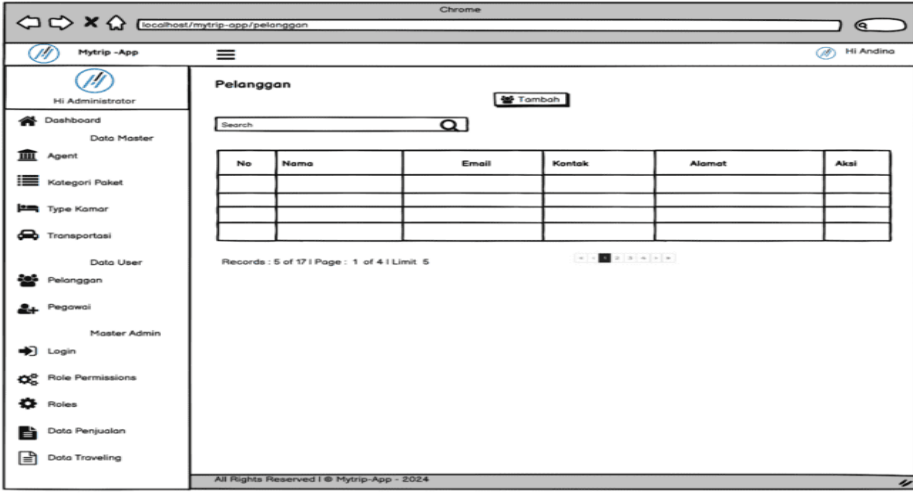


Figure 11. Customer Admin Page Design

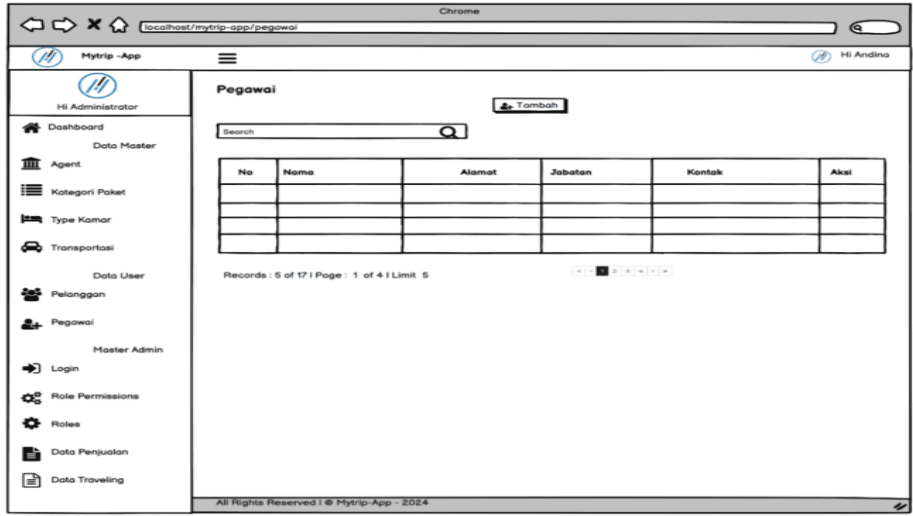


Figure 12. Employee Admin Page Design

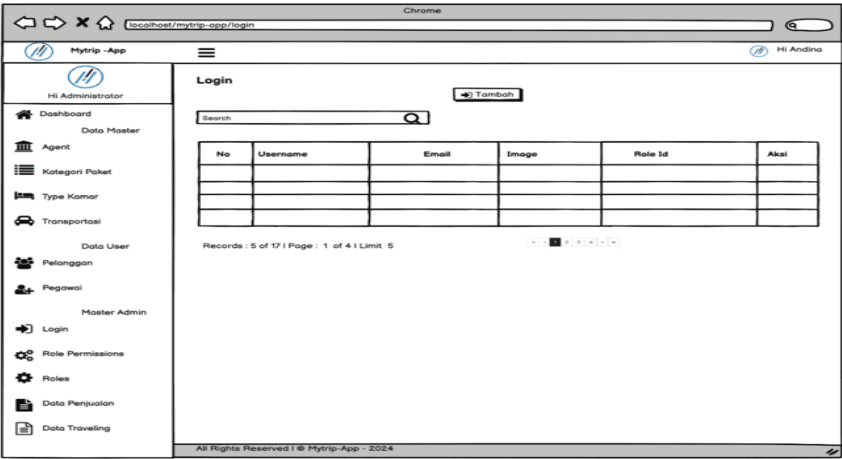


Figure 13. System User Login Admin Page Design

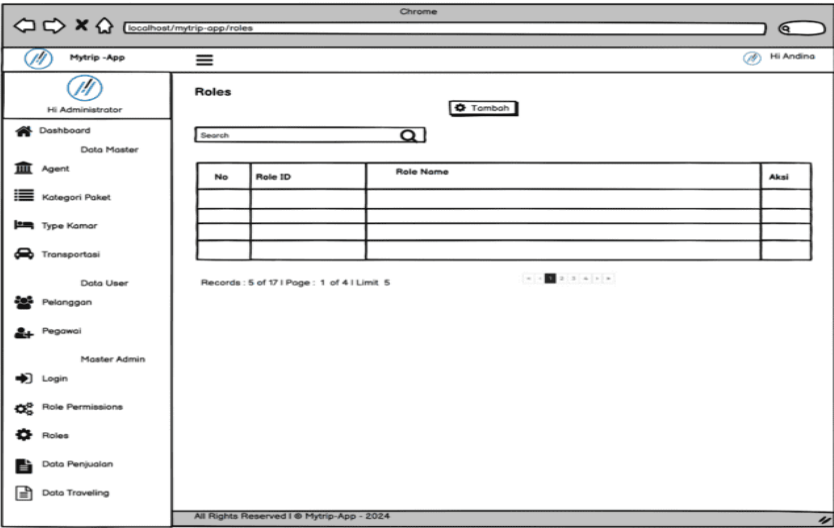


Figure 14. Admin Role Page Design

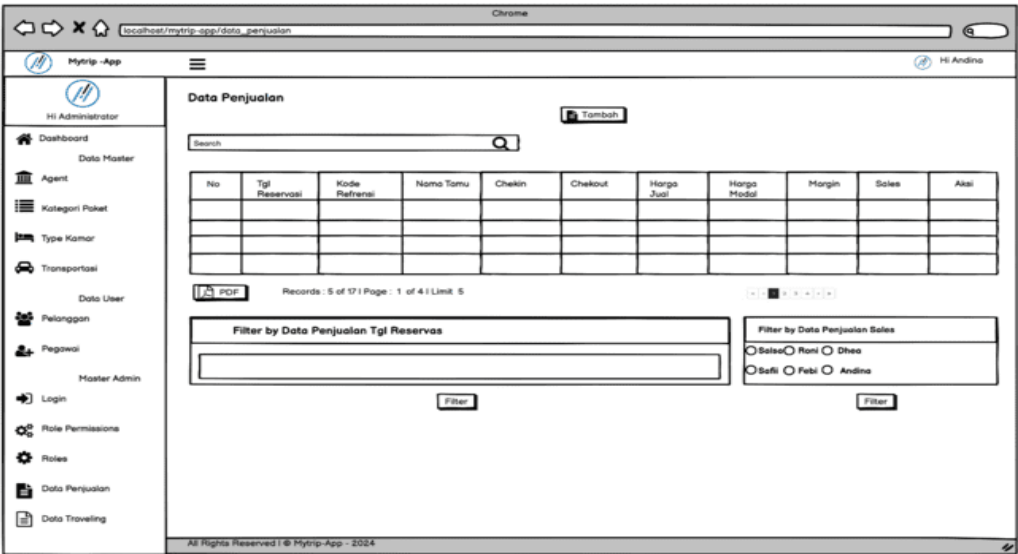


Figure 15. Sales Admin Page Design

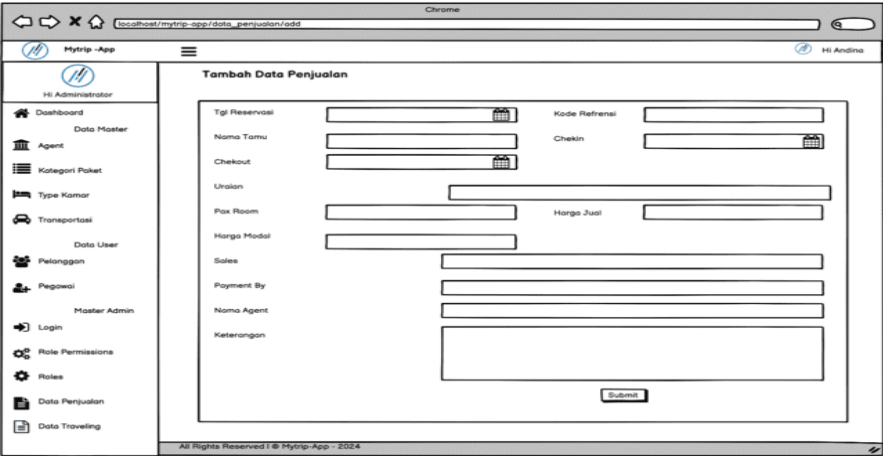


Figure 16. Add Sales Admin Page Design

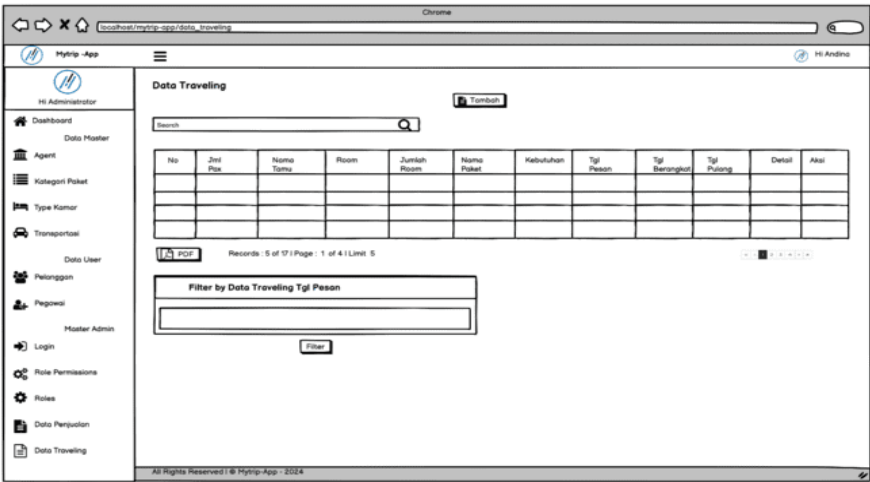


Figure 17. Traveling Admin Page Design

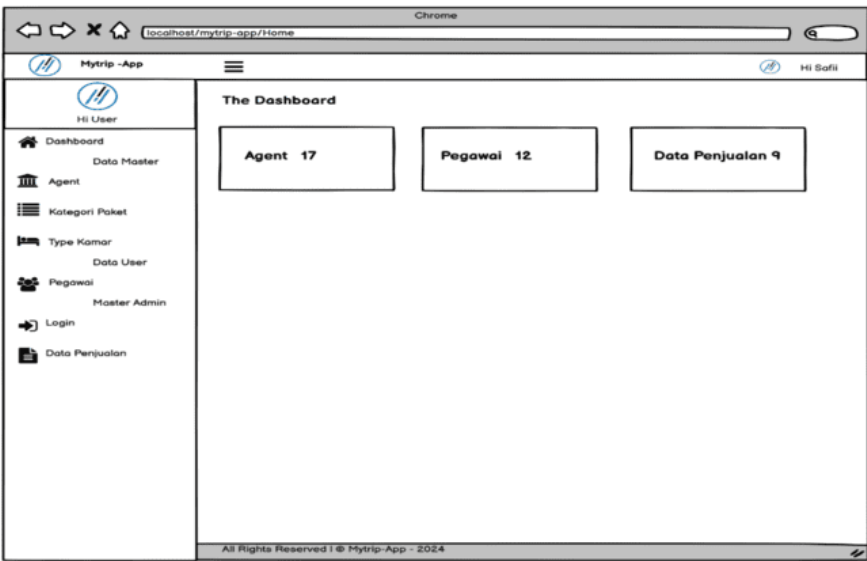


Figure 18. Dashboard Officer Page Design

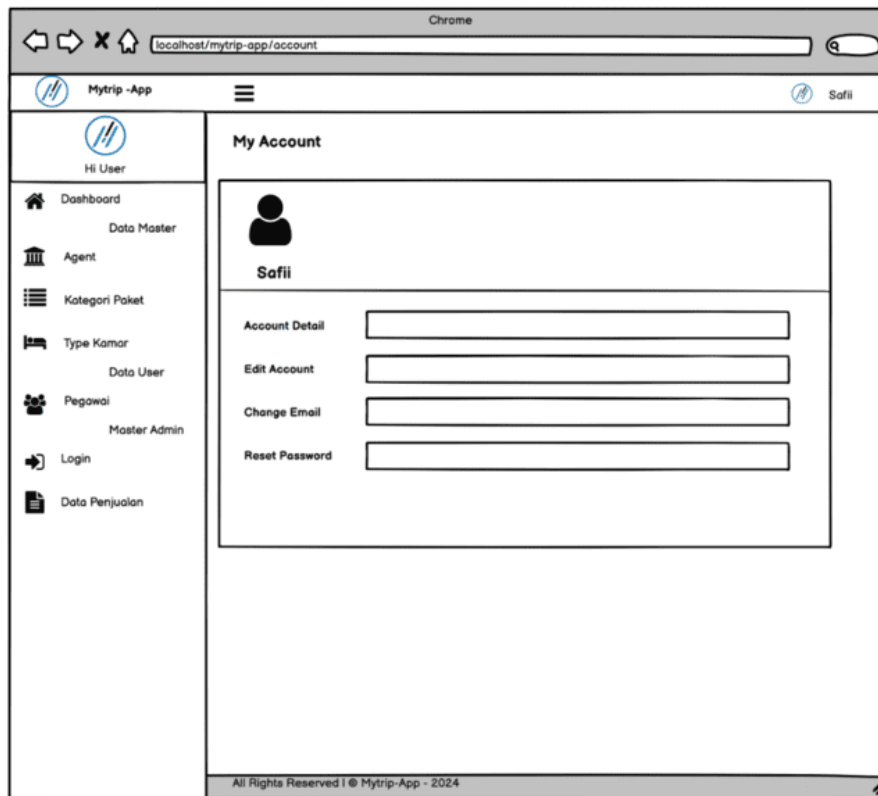


Figure 19. Officer Profile Page Design

CONCLUSION

The development of the information system prototype for transaction recap and guest management at PT. XYZ represents a significant advancement in the company's operational efficiency. The system's design, which distinguishes between the needs of administrators and end-users, ensures that both groups can effectively manage and access data. The administrator interface, with its focus on comprehensive data management and reporting, allows for streamlined operations and quick access to critical information. Meanwhile, the end-user interface is designed for simplicity and ease of use, facilitating efficient interactions with the system. By incorporating feedback from various stakeholders and employing best practices in interface design, the system is expected to improve accuracy, reduce processing time, and enhance overall user satisfaction. The successful implementation of this system will not only address current inefficiencies but also support PT. XYZ in achieving its business objectives through more effective data management.

SUGGESTIONS

1. **User Training:** To ensure a smooth transition to the new system, it is recommended to provide comprehensive training for both administrators and end-users. This will help users become familiar with the new interface and features, minimizing the learning curve and promoting efficient use of the system.
2. **Ongoing Support:** Establish a support system for addressing any issues or questions that arise post-implementation. This can include a helpdesk, user manuals, and online resources to assist users in troubleshooting and maximizing the benefits of the system.

3. Continuous Improvement: Regularly collect feedback from users to identify any areas for improvement. Periodic updates and enhancements based on user input will help keep the system aligned with evolving needs and technological advancements.
4. Data Security: Ensure that robust security measures are in place to protect sensitive data. Implement encryption, access controls, and regular security audits to safeguard information and maintain user trust.

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