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Bu Murni Restaurant Sales Information System Based on Website

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ABSTRACT

Purpose: *The purpose of the research on the sales information system of Bu Murni's restaurant based on the website is to increase the efficiency of the sales process, facilitate data management, provide easy access for customers and expand marketing reach.*

Subjects and Methods: *Qualitative Method is a research approach used to understand the phenomenon, perspective, or meaning of a social event in depth. This method usually focuses on collecting non-numerical data such as interviews, observations, or documents to obtain a richer and more complex picture of a problem or situation. UML (Unified Modeling Language) is a standard modeling language designed to document the description of software systems. UML also helps analysts and other stakeholders understand, design and communicate the structure and behavior of the system. UML consists of system requirements analysis, activity diagrams, usecase diagrams, databases, creating a Database Using MySQL, Table Design, Determining Relationships Between Tables and Using Normalization*

Results: *This information system provides features for managing food menu data, sales transactions, and financial reports that can be accessed in real-time through a MySQL-based web interface. The system successfully meets the needs of restaurants by automating the ordering and reporting process, which was previously done manually. With this system, the time needed to process orders and errors in recording raw material stock are successfully minimized. The test results show that the system can process orders with accuracy and effective time.*

Conclusions: *The website-based sales information system for Rumah Makan Bu Murni was successfully designed with the aim of increasing efficiency and accuracy in managing sales data. This system provides features that support integrated management of menus, orders, customers, and employees. With this website, customers can easily place orders, either directly on the spot or online, thus providing more flexibility in service.*

INTRODUCTION

The rapid development of the culinary industry in the era of globalization has brought significant changes to business patterns and consumer behavior (Hanus, 2018). Culinary businesses are now required to not only focus on food quality but also provide unique, efficient, and memorable experiences for customers. As competition becomes increasingly dynamic, restaurants must

continuously innovate in terms of service, concept, and management systems to maintain their competitive advantage.

Modern consumers tend to be more critical, selective, and technology-oriented in choosing dining places. They expect fast service, clear information, and convenience when interacting with a restaurant, whether for reservations, ordering, or accessing menus. This shift in expectations forces restaurants to adapt by utilizing technological advancements, particularly information systems, to enhance service quality.

Restaurant management involves various strategic aspects, including human resource management, menu development, interior concept, stock control, and effective marketing strategies. Without an integrated approach, these processes often lead to inefficiencies that negatively affect operational performance. The use of digital systems has therefore become essential to ensure smoother and more accurate management.

Align with research from Kim et al. (2016), The presence of information technology and social media significantly shapes consumers' perceptions and evaluations of restaurants. Customer feedback, online reviews, and digital engagement influence consumer decisions more than ever. Thus, restaurants need a system that not only supports internal operations but also aligns with digital consumer expectations.

Bu Murni Restaurant, as one of the businesses in the culinary sector, faces several operational challenges that affect its service quality and efficiency. The restaurant still uses manual processes to record transactions and manage its operations, which leads to various problems, particularly during peak hours. These constraints highlight the need for an integrated technological solution.

One of the main issues faced by Bu Murni Restaurant is frequent manual record-keeping errors. The use of handwritten order notes often results in mistakes in recording customer orders, especially when the restaurant is crowded. These errors not only disrupt workflow but also decrease customer satisfaction due to inaccurate service.

In addition, slow service processes become a major obstacle. Customers often have to wait in long queues just to place orders, which creates inconvenience and increases the risk of losing potential customers who expect faster service. These delays reflect the need for a more structured and responsive ordering system.

Another problem is inefficient stock management. Without an integrated system, monitoring raw material availability becomes difficult, making the restaurant vulnerable to sudden shortages or excessive stock of unused ingredients. This inefficiency can lead to financial losses and disrupt the consistency of menu availability.

Considering these issues, the development of a website-based sales information system is essential for Bu Murni Restaurant. Such a system is expected to streamline order processing, minimize human errors, accelerate service delivery, and optimize stock management. The implementation of this system not only supports operational improvements but also enhances customer experience, enabling the restaurant to remain competitive in the rapidly evolving culinary industry.

LITERATURE REVIEW

Lack of structured sales reports, Sales recording is done manually, which takes a long time to generate reports. This delays the restaurant owner's ability to analyze business performance in a timely manner. Limited digital access, In the modern era, many customers expect the convenience of online ordering, but Bu Murni Restaurant has yet to offer this service. This makes the business less competitive compared to competitors who have already embraced digital technology. The restaurant business is an organization that could potentially benefit from integrating IT into its operations.

Providing quick and accurate data to customers for reserving tables and ordering food from the available menu ensures that orders are served promptly and in the correct quantity, guaranteeing service satisfaction. This makes customers happy and satisfied, thereby enhancing the restaurant's reputation (Yusran & Herwanto, 2023). A website is a collection of interconnected

web pages that can be accessed via the internet using a browser. Websites typically contain information, services, or specific features designed to meet users' needs, such as news, e-commerce, entertainment, education, or communication (Huang & Fu, 2009).

Technically, a website consists of elements such as text, images, videos, and other interactive components, organized using programming languages like HTML, CSS, and JavaScript. Websites can be accessed through a unique address known as a URL (Uniform Resource Locator) and are usually hosted on a server to be available online. Hsu & Walter (2015) said that, a website is a collection of pages within a domain that contains information that can be read and viewed by internet users through search engines. The information on a website may include images, text, and videos (Costa, 2022).

Advancements in technology and information are progressing rapidly. The development of communication technology is currently leaning towards mobile-based or portable devices (Martin & Ertzberger, 2013; Alam & Aljohani, 2020). These technologies are not only used for communication via phone calls and SMS but also as a medium for direct communication through the internet in a client-server model, particularly for sending and receiving data related to orders or reservations in the restaurant business (Meiniarti et al., 2022). Without adequate technological support, the operations of culinary businesses or restaurants can face challenges such as order recording errors, service delays, and difficulties in monitoring raw material inventory.

Bu Murni Restaurant, as one of the culinary business players, experiences these issues, particularly during peak hours. As technology evolves, web-based systems have become a popular solution to support business operations management. These systems not only make it easier for customers to place orders but also assist business owners in managing operational processes more efficiently. This research aims to design and implement a web-based sales system for Bu Murni Restaurant, which is expected to improve efficiency and customer satisfaction.

METHODOLOGY

The system development method used by the author is using a prototype system development method where this system development uses an approach to create a system program quickly and gradually so that it is immediately evaluated by users. There are steps in this system development method: (1) Identify Needs, this stage is the initial stage in building a system where development and users meet each other. At this stage the author analyzes a system by collecting data, namely by using observations of the company; (2) Make a prototype, after analyzing the system, the system to be developed and the needs of the system to be built, the author then makes a prototype; (3) Testing the Prototype, in this third stage, the author will test the system that has been created and designed to ensure that the system that has been created is running well; (4) Improving the Prototype, at this stage the author will improve the system, if the system has been tested and received suggestions from users; (5) Developing Product Versions, at this stage the author completes the system that has been created according to what was suggested by the user (Ahmad & Hasti, 2018). Unified Software Development Process (USDP) is one of the object-oriented software engineering methods that consistently tries to adapt to the increasingly large and complex systems/software developed by software vendors around the world. The USDP models are as follows: (1) Analysis Model. The analysis model has 2 uses, namely expanding and detailing the definitions of each use case; (2) Design Model. The design model defines the static structure of the system such as subsystems, classes, and interfaces and their respective relationships within the framework of the system/software being developed; (3) Deployment Model. The deployment model defines the physical computer nodes and maps each component to each existing computer node; (4) Implementation Model. The implementation model contains components (representing codes in a particular programming language chosen) and maps classes to components; (5) Testing Model Testing Model describes the cases and testing procedures whose purpose is to verify the software produced; (6) by viewing and ensuring whether each Use Case has been implemented in a manner that is in accordance with the main functionality included in it. At this stage, testing is carried out using the Black Box Testing method (Muthohari & Rahayu, 2016).

Qualitative Method is a research approach used to understand the phenomena, perspectives, or meanings of a social event in depth. This method typically focuses on collecting non-numerical

data such as interviews, observations, or documents to obtain a richer and more complex picture of a problem or situation. There are several research approaches in qualitative research, including phenomenology, ethnography, hermeneutics, grounded theory, narrative/historical, and case study. Qualitative research has developed in fields such as anthropology, sociology, psychology, and later in political science, humanities, and education, based on several axioms (Haryono, 2023). The case study approach is preferred for qualitative research. As Patton stated, the depth and detail of a qualitative method stem from a small number of case studies. Therefore, case study research requires more time, which is different from other academic disciplines (Assyakurrohim et al., 2023). This research uses a qualitative approach to identify the system requirements and the issues faced by Bu Murni Restaurant. Data is collected through in-depth interviews with the restaurant owner and employees, as well as direct observation of operational processes. The interviews are conducted in both structured and semi-structured formats with stakeholders such as the restaurant owner and employees. The aim is to understand the vision and primary needs in the sales management system, including raw material stock management, sales transactions, and financial reporting. Additionally, the research seeks to gain insights into daily challenges in manual recording processes, such as order entry errors, service delays, and inventory management. The researcher must also conduct observations, which are carried out over a two-week period during the restaurant's operating hours to observe the order recording process by employees, raw material stock management, including when new supplies are received, and the preparation of daily sales reports. The results from the interviews and observations are used as a basis for designing an information system that aligns with the needs of Bu Murni Restaurant. This approach ensures that the system design can address the main issues and enhance operational efficiency.

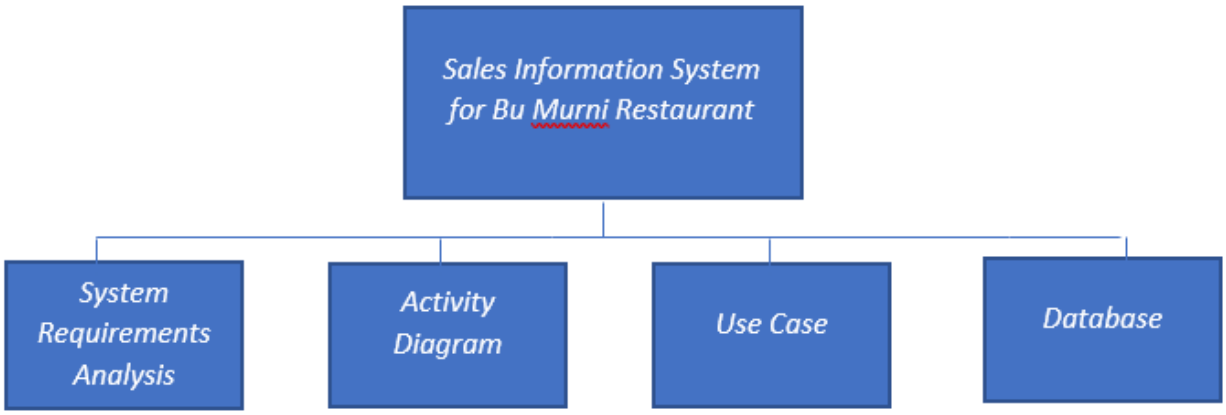

Figure 1. Method Diagram

UML (Unified Modeling Language) is a standard modeling language designed to document software systems. UML helps analysts and other stakeholders to understand, design, and communicate the structure and behavior of a system. UML in application design refers to a set of tools used for abstraction of an object-oriented system or software. It is one way to facilitate the ongoing development of applications. UML can also serve as a tool to share knowledge about a system or application being developed from one developer to another, or to people who can understand a system through UML (Pebriadi et al., 2023). In this research, the method used is system analysis and design based on models with a process visualization approach using UML (Unified Modeling Language) Diagrams. The UML diagrams used include Activity Diagrams, Use Case Diagrams, and database structure through MySQL.

System Requirements Analysis

This phase is conducted to identify the user requirements and the existing business processes at Bu Murni Restaurant. Interviews with the restaurant owner and direct observation of the manual ordering process are carried out to obtain accurate data.

Activity Diagram

The Activity Diagram is a depiction of the functional flow within a system. In the system modeling phase, the Activity Diagram serves as a means to illustrate the workflow of the system and may also be employed to depict the sequence of events (Dirgantara & Suryadarma, 2021; Wichmann et al., 2016). This diagram aids in illustrating the steps of a business process, system operations, or specific scenarios by showcasing the sequence of activities and how these activities are interconnected. Following the requirements analysis, the Activity Diagram is created to visualize the workflow of the new system. This diagram portrays an integrated food ordering process, beginning with the customer selecting a menu, placing an order, and culminating in the generation of sales reports. The components depicted include actors (customers and the system), activities performed, and decision points for decision-making processes. This diagram assists in designing the system's process flow to be more efficient and structured. As illustrated in the Activity Diagram below:

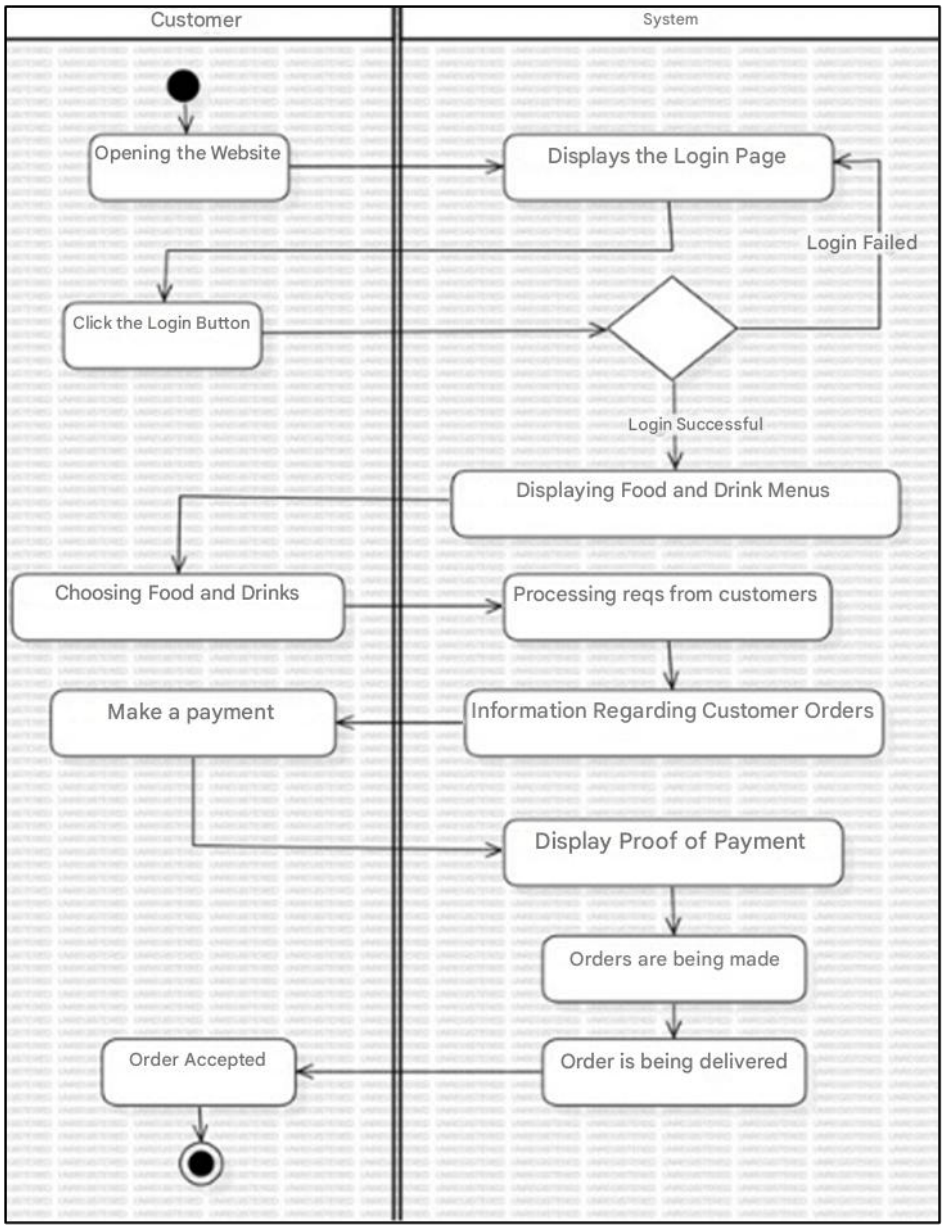

Figure 2. Activity Diagram

UseCase

A Use Case is a technique used to depict the interaction between users (actors) and the system to accomplish a specific task or process (Elallaoui et al., 2018). It serves as a critical tool in software system requirements modeling, helping to illustrate how the system will operate from the user's perspective. A Use Case is a description of a system's functionality from the perspective of its

users. It defines what will be processed by the system and its components. A Use Case operates through scenarios, which are descriptions of the sequences or steps detailing the interactions between the user and the system, as well as the system's responses (Setiyani, 2021). There are three actors in the use case of the sales system: the buyer, the admin, and the seller. The seller is defined as the person who owns the restaurant. The buyer's task is to select the menu and food, enter their complete address for order delivery, make the payment, and then the system will automatically display a message as shown in the use case diagram below. The admin's task is to manage the menu, stock, orders, payments, and finances, and later, the admin will generate reports, which will be reviewed by the seller.

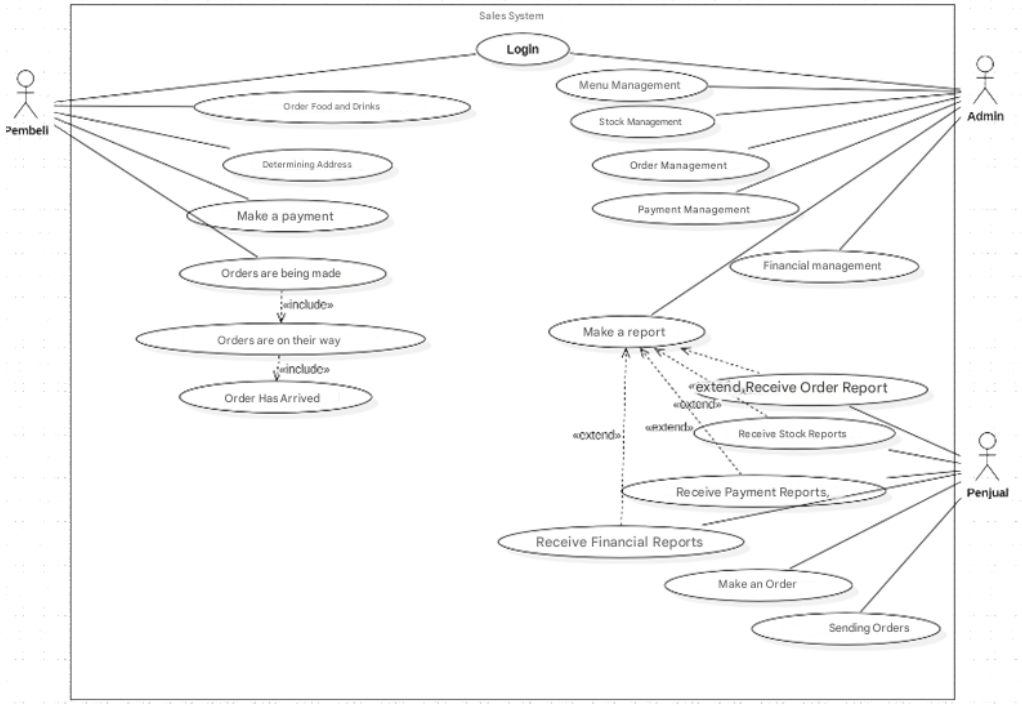

Figure 3. Use Case

Database

A database is a structured collection of data or information that is stored, managed, and accessed electronically using a Database Management System (DBMS). A database is designed to store, organize, and facilitate the management and retrieval of information efficiently and systematically. A database is a collection of related files, with the relationships between them indicated by the keys of each file. A database represents a collection of data used within a specific information scope. Each file contains similar records that are of the same size and form, representing a set of uniform entities. A record consists of fields that are related to each other, indicating that the fields represent a complete meaning and are recorded within a single record (Audita et al., 2022; Gallagher, 2015).

Data is a fact or value that is recorded or represents a description of an object. Data, which consists of recorded facts, is then processed into a form that is useful or beneficial for its users, forming what is called information. Complex and integrated forms of information, processed through a database with a computer, will be used for decision-making processes in management, resulting in a Management Information System (MIS). Data in a database represents the smallest and most crucial item for building a good and valid database (Ibna & Nasution, 2024).

Creating a Database Using MySQL

In the rapid development of information technology, websites have also undergone significant progress. The current development of the web focuses more on content management. Furthermore, the categorization of websites is increasingly directed based on their functions, characteristics, or style, as well as the programming languages used. Websites are categorized

based on style into two types: dynamic websites and static websites. A website is a collection of interconnected web pages that contain information in the form of text, images, animations, audio, and video, accessible through an internet connection. It is created for individuals, organizations, and companies. These documents are stored on a large number of computers (web servers), which are distributed across five continents, including Indonesia, and connected as one through the internet network (Noviana, 2022; Wiguna et al., 2025). A dynamic website requires a database to manage content that changes periodically, such as articles, user data, or product catalogs. An example of its application is an e-commerce site that uses a database to store information on product stock and customer transactions.

Table Design

The tables required for the Bu Murni Restaurant sales system website are designed, such as the Customer, Order, Menu, Table, Menu Category, Employee, and Order Details tables.

Determining Relationships Between Tables

Although an Entity Relationship Diagram (ERD) is not used, the relationships between tables are still established, for example, the relationship between orders and menus, where a single order can consist of several menu items.

Normalization

To avoid data redundancy, the database is normalized to ensure an efficient and consistent data structure. The following is the database created for designing the Bu Murni Restaurant website.

Here are the tables that have been created using MySQL:

Costumer Table

Table Name : Costumer

Primary Key : Costumer_id

Table 1. Table Costumer

Field	Type	Null	Key	Default	Extra
Costumer_id	Int (5)	No	Pri	0	-
Name	Varchar (30)	Yes	-	NULL	-
Email	Varchar (30)	Yes	-	NULL	-
Telephone	Int (12)	Yes	-	NULL	-

This table stores information about customers who come to Bu Murni Restaurant. Every customer who places an order will be recorded in this table.

Costumer id : A unique identifier for each customer.

Name : The full name of the customer.

Email : The customer's email, if required.

Telephone : The customer's phone number for communication.

Order Table

Table Name : Order

Primary Key : Order_id

Table 2. Order Table

Field	Type	Null	Key	Default	Extra
Order_id	Int (5)	No	Pri	0	-
Costumer_id	Int (5)	Yes	-	NULL	-
Tabel_id	Int (4)	Yes	-	NULL	-
Employee_id	Int (10)	Yes	-	NULL	-
Order_date	Date	Yes	-	NULL	-

Total_price	Int (20)	Yes	-	NULL	-
Status	Varchar (20)	Yes	-	NULL	-
Quantity	Int (11)	Yes	-	NULL	-

This table stores information about each order made by customers. Each order includes details such as the total price, order status, and the customer who placed the order.

Order_id : A unique identifier for each order

Costumer_id : Links the order to the customer who placed it

Tabel_id : Links the order to the table where it was placed.

Employee_id : Links the order to the employee who served it.

Order_date : The date the order was placed.

Total_price : The total amount to be paid.

Order_status : The status of the order, such as 'Pending', 'In Process', or 'Completed'.

Jumlah : The total quantity of the order.

Menu Table

Table Name : Menu

PrimaryKey : Menu_id

Table 3. Menu Table

Field	Type	Null	Key	Default	Extra
Menu_id	Int (5)	No	Pri	0	-
Category_id	Int (5)	Yes	-	NULL	-
Menu_name	Varchar (30)	Yes	-	NULL	-
Description	Varchar (30)	Yes	-	NULL	-
Price	Int (20)	Yes	-	NULL	-
Status	Varchar (30)	Yes	-	NULL	-

This table stores information about the various food and beverage menu items offered by Bu Murni Restaurant. Each menu item can be selected by customers to place an order.

Menu_id : A unique ID for each menu item.

Category_id : The category of the menu item (e.g., main course, beverage, or snack)

Menu_name : The name of the offered menu item.

Description : A description or additional information about the menu (optional).

Price : The price per serving of the menu item.

Status : The status of the menu item, such as 'Available', 'Unavailable', 'New', 'Discounted', 'Out of Stock', or 'Coming Soon.'

Table of Table

Table Name : Table

Primary Key : Table_id

Table 4. Table of Table

Field	**Type**	**Null**	**Key**	**Default**	**Extra**
Table_id	Int (4)	No	Pri	0	-
Table_number	Int (1)	Yes	-	Null	-
Capacity	Varchar (8)	Yes	-	Null	-
Status	Varchar (20)	Yes	-	Null	-

This table stores information about the tables available at Bu Murni Restaurant. This serves to record whether the table has been booked or is still empty.

Table_id : Unique id for each table.

Table_number : Table number that can be used for costumers.

Capacity : Table capacity that can be filled

Status : Table status, such as 'available', or 'reserved'.

Menu Category Table

Table Name : Menu Category

Primary Key : Category_id

Table 5. Table kategori_menu

Field	Type	Null	Key	Default	Extra
Category_id	Int (5)	No	Pri	0	-
Category_name	Varchar (50)	Yes	-	Null	-

This table stores that category of each menu offered at BU Murni Restaurant. This used to group menus by type such as 'mains', 'drinks', or 'desserts.

Category_id : Unique id for menu category

Category_name : Category name, such as 'main_meals', 'drinks', or 'desserts'

Employee Table

Table Name : Employee

Primary Key : Employee_id

Table 6. Employee Table

Field	Type	Null	Key	Default	Extra
Employee_id	Int (10)	No	Pri	0	-
Name	Varchar (30)	Yes	-	NULL	-
Position	Varchar (30)	Yes	-	NULL	-
Telephone	Int (12)	Yes	-	NULL	-

This table stores information about employees who work at Bu Murni Restaurant. This could include cashiers, waiters, and the kitchen.

Employee_id : Unique id for each menu

Name : Full name of employee.

Position : Employee titles, such as 'waiter', 'supervisor', 'cashier', or 'chef'.

Telephone : Telephone number for communications purposes.

Order Detail Table

Table Name: Order Detail

Primary Key : Detail_id

Table 7. Order Detail Table

Field	Type	Null	Key	Default	Extra
Detail_id	Int (5)	No	Pri	0	-
Order_id	Int (5)	Yes	-	NULL	-
Menu_id	Int (3)	Yes	-	NULL	-
Amount	Int (100)	Yes	-	NULL	-
Unit_price	Int (20)	Yes	-	NULL	-

This table stores details about the menu items ordered by customers in each order. It functions to link orders with the selected menu items.

Detail_id : A unique ID for each order detail.

Order_id : Links the order details to the main order.

Menu_id : Links the order details to the ordered menu items.

Amount : The number of portions of the menu item ordered.

Unit_price : Unit price.

RESULTS AND DISCUSSION

The development of digital technology has brought about various innovations in service-based applications, including in terms of user account security. One essential feature that every platform must have is a password recovery or forgotten password mechanism. This feature is designed to allow users to easily and quickly regain access to their accounts when they no longer remember their passwords. With the right system, the recovery process can be carried out securely without compromising user experience.

In application development, the interface, including the forgotten password feature, serves not only as a means of data input but also as a reflection of the quality of the user experience. A clear, simple, and informative design helps guide users through the necessary steps without hassle. Therefore, visual elements and menu structures must be designed in such a way that they are easily understood by a wide range of users, both those familiar with technology and those who are still beginners.

Beyond aesthetics, clarity of the forgotten password feature process is also crucial. Users must understand what information is requested, how to complete it, and what happens after they submit a recovery request. Well-organized information will increase user trust in the application and minimize errors in the account recovery process.

Through a combination of an intuitive interface and a structured instruction flow, the application can provide a more convenient, secure, and user-friendly experience. In this way, the forgot password feature becomes not just a technical function, but a crucial part of the overall system design. With this context in mind, here's an explanation of the forgot password page displayed in the image above.

This information system provides features for managing food menu data, sales transactions, and financial reports, all accessible in real time through a MySQL-based web interface. The system successfully meets the restaurant's needs by automating the ordering and reporting processes, which were previously performed manually.

Figure 4. Proses Login, Registration and Password Change

To access the Bu Murni Restaurant website, users can visit www.rumahmakanbumurni.co.id They will then log in as shown in the image above. If the login fails, it means the user entered an incorrect username or password or does not have an account yet. If the user does not have an account, they can create one by clicking "Register," as shown in the image. Registration requires entering a username, password, and Gmail address. The Gmail address is necessary to send a verification code. Note that users cannot register multiple accounts with the same Gmail address. If a user forgets their password, they can click "Forgot Password?" to be directed to the password recovery menu. The user must enter their username, a new password, and the same Gmail address used during registration. Once completed, a verification code will be sent to the Gmail address. If an "ERROR" message appears, it indicates that the user entered the verification code incorrectly.

Figure 5. Beranda

Verification requires users to carefully input the verification code sent to their Gmail. Once users access the Bu Murni Restaurant website, they will land on the "Home" page. The "Home" page contains only the restaurant's name and a brief description of Bu Murni Restaurant. For more detailed information, users can navigate to the "About" page, where they can find the restaurant's address and a complete description of Bu Murni Restaurant. If users want to leave feedback about the food or any unpleasant service experience, they can go to the "Contact" page. Here, users can submit their name, Gmail address, and phone number. The page also provides links to Bu Murni Restaurant's social media accounts.

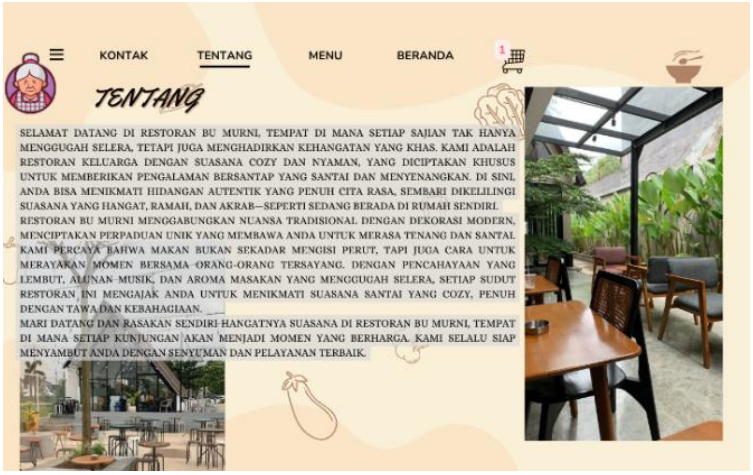

Figure 6. About

This page contains an introduction by the admin for using the Bu Marni restaurant sales information system. This about page also introduces how to use the sales information system.

Figure 6. Menu

Before placing an order, users are required to update their profile by providing their name, full address, and phone number. To do this, users can click on "Edit Profile" located in the hamburger menu on the left. By selecting "Edit Profile," users can fill out the provided form on that page. If users want to order food, they can go to the Menu page, where they will find a variety of food and drink options along with their respective prices. Users can click the plus icon, which will automatically add the item to their cart. A notification in the cart will show the total number of items ordered. To make a payment, users can go to the Cart page, where they can view the total amount of their order and select a payment option: GoPAY or COD. If users choose to pay via GoPAY, they will be redirected to the Gojek app to confirm the payment. If users select the COD (Cash on Delivery) option, the order will be confirmed immediately.

Discussion

System Overview and Functional Performance

The website-based sales information system developed for Bu Murni Restaurant has proven effective in supporting operational activities that were previously managed manually. Through the integration of a MySQL database and a responsive web interface, the system facilitates seamless data flow across menu management, transaction processing, and financial reporting. This digital transformation enhances accuracy, improves service speed, and ensures that decision-making is supported by real-time and reliable information.

User Authentication, Account Security, and Accessibility

The user authentication module ensures secure and personalized access for customers. Users can create accounts, log in, and perform account recovery through a verification mechanism sent to their registered Gmail address. This process increases system security and prevents unauthorized access or duplicate accounts. The verification flow also reinforces data validity, ensuring that only legitimate users gain system access. Overall, the authentication feature successfully provides convenience while maintaining robust security standards for users.

Home, About, and Contact Features as Public Information Channels

The system's static pages serve as an initial information gateway for customers. The Home page provides an overview of the restaurant's identity, while the About page offers background information and a description of the brand. Meanwhile, the Contact page becomes a communication medium through which users can provide feedback, inquire about services, or connect with the restaurant through linked social media accounts. Collectively, these pages strengthen the restaurant's digital presence and improve accessibility for new and returning customers.

User Profile Management and Data Personalization

Before conducting transactions, users are prompted to complete their personal information, including name, address, and phone number. This feature plays an essential role in ensuring accurate delivery, order validation, and communication. By enabling users to update their profiles at any time, the system supports personalized service experiences and helps streamline logistics, especially when coordinating delivery orders. This module also contributes to the restaurant's database integrity, supporting more efficient service operations.

Menu Presentation and Ordering Mechanism

The Menu page is designed to facilitate a smooth and intuitive ordering experience. Items are displayed with their names, categories, and prices, making it easier for customers to browse available options. The addition of products into the shopping cart is automated through a simple selection feature, allowing users to compile their orders efficiently. This approach eliminates common errors found in manual ordering systems, such as miscommunication or incomplete listings, thereby improving overall customer satisfaction.

Shopping Cart Integration and Payment Workflow

The cart functionality acts as the central component of the transaction process. Here, users can review their selected items, check total spending, and proceed to payment. The system accommodates two payment options: GoPAY for digital transactions and Cash on Delivery (COD) for customers who prefer offline payments. The integration with the Gojek platform for GoPAY ensures fast and secure payment confirmation, whereas COD provides flexibility for customers without digital wallets. This dual-method approach widens accessibility and meets diverse user preferences.

Enhancement of Transaction Speed and Service Efficiency

The implementation of the new digital ordering process significantly reduces the amount of time customers spend waiting to place orders. By enabling customers to order directly through the system, both dine-in and delivery processes become more efficient. The automation of order input eliminates bottlenecks that usually occur during peak hours, reducing workload pressure on staff while minimizing human errors. Consequently, service efficiency increases and customer satisfaction is positively impacted (Chang et al., 2017; Kim et al., 2007; Ali et al., 2023).

Contribution to Operational Accuracy and Inventory Control

One of the major advantages of the new system is the improvement in operational accuracy, especially in order recording and financial documentation. The systematic recording of transactions ensures that all sales activities are captured without omission. Although the system primarily supports sales management, its ability to organize transaction data indirectly contributes to better stock monitoring. Reliable transaction logs help staff estimate consumption levels of raw materials, supporting more informed inventory control decisions.

Overall Impact on Restaurant Performance

The transformation from manual to digital operations has a profound impact on Bu Murni Restaurant's performance. The system not only enhances operational consistency but also supports business scalability by providing structured data that can be analyzed for future development. Through improved customer service, secure account management, efficient ordering flows, and real-time reporting, the web-based sales information system becomes a crucial asset in strengthening the restaurant's competitiveness in the evolving culinary industry.

CONCLUSION

The web-based sales information system for Bu Murni Restaurant has been successfully designed to improve efficiency and accuracy in managing sales data. This system provides features that support the integrated management of menus, orders, customers, and employees. With this website, customers can easily place orders either directly on-site or online, offering greater flexibility in service. The web-based sales information system for Bu Murni Restaurant has been successfully designed and implemented to address various existing issues. With the implementation of this system, significant benefits have been achieved. The system has automated the ordering process, reducing potential errors that frequently occurred with manual

record-keeping. Transactions have become faster and more efficient, especially during peak hours, thanks to the integrated online ordering feature. The MySQL-based database enables real-time stock management, helping the restaurant anticipate shortages or surpluses. The system provides more systematic reports, making it easier for the restaurant owner to analyze business performance quickly and accurately. The online ordering feature via the website offers customers greater flexibility, making the restaurant's services more modern and competitive. Thus, the development of this web-based sales system provides significant benefits for Bu Murni Restaurant, both in terms of operational efficiency and enhanced customer experience. Technology-based management like this also offers a higher competitive advantage, enabling the restaurant to adapt to the more dynamic needs of modern customers.

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