

Information System for Processing Data of Swallow's Nests at Father Jimris's Swallow House Prabumulih City

Dhea Natasya^{1*}, Yuntari Purba Sari², Nurmayanti³

^{1,2,3}Universitas Prabumulih
natasyadhea2312@gmail.com

Abstract

Father Jimris' swallow house is a rolling business in the dragon-pineapple industry located in the village of the prabumutown. The data-processing process in the Mr. Jimris' home is still done by hand, causing employees or old employees to do work, and this research is aimed at creating an application or a swallow's nest data processing system using PHP programming languages and mysql as databases. The development method used is RADS (rapid application development) consisting of need planning, design and application processes. The results of this study are expected to make it easier for employees to process and access data and be able to make data processing more effective and efficient.

Keywords: information systems, data processing, RAD

1. Introduction

The development of the modern era and increasingly fast information technology has created increasingly fierce competition in almost all aspects of life. This results in the public's need for easy processes in all areas of work that can run quickly. Using a computer-based system, in this case, is the use of an information system, especially for processing data on swallow nests at Mr. Jimris' Swallow House so that data processing can be carried out effectively and efficiently. Mr. Jimris' Swallow House is a business that operates in the field of selling swallow's nest products which was started in 2019 and is located at Jl. Jendral Sudirman Tugu Nanas, Patih Galung Village, West Prabumulih District. Tugu Nanas Housing Postal Code 31127 South Sumatra. Of the various products being marketed, one of them is swallow's nest which is a superior product that can be processed. In carrying out its business so far, the way of conveying information or sales promotions is still the usual marketing method, namely word of mouth, so it is very difficult for consumers to obtain information about what products are available. And it is very difficult to process data because data recording at Mr. Jimris's Swallow House is still done using book recording and is still manual. This causes data processing to be less effective. Based on this, the author hopes that by designing an information system that will be processed by the author, it can help simplify the existing data management process so that it can produce effective and efficient data. Based on the problems above, next I as the author will create an information system or a web-based application with the title "Information System for Data Processing Swallow Bird Nests at Mr Jimris' Swallow House, Prabumulih City"

2. Theoretical Review

2.1. Understanding Systems

A system is an entity consisting of components or elements that are connected together to facilitate the flow of information, material or energy to achieve a goal [1]. The system is a basis for movement in all activities, the existence of a system in all fields is very necessary, without the concept of a system activities or work will run without control [2].

2.2. Understanding Information

Information is data that is processed to be useful in making decisions for its users [3]. Information is data that has been processed, formed, or manipulated according to certain needs [4]. Based on the definition above, it can be concluded that information is the result of data that has been processed so that it becomes a form that is useful for the recipient and is used as a tool in the retrieval process for the user.

2.3. Understanding Information Systems

An Information System is a system within an organization that meets the needs for processing daily transaction data, supports managerial operations and strategic activities of an organization and provides certain external parties with the necessary reports [5].

2.4. Understanding Data Processing

Data processing is a process of structuring data because data, because the data collected is rough data. Data processing is carried out so that rough data can be organized and analyzed so that conclusions can be drawn [6].

2.5. Understanding Swallow's Nest

Swallow's nests are bird's nests made from the saliva or saliva of swallows which are used as food which is very beneficial for human health. The location for managing swallow's nests is in natural habitats and outside natural habitats. Natural habitat bird's nests are the environment where birds live. Swallows live and develop naturally. A swallow's nest outside its natural habitat is a swallow's nest that is managed by a manager in a building in any form which is partly or wholly intended or provided as a place to manage swiftlet's nests and is outside its natural habitat. Management locations for swiftlet nests in natural habitats include: conservation areas, natural forest areas, natural caves. Meanwhile, swallow nest management locations outside the natural habitat include: buildings and houses [7].

2.6. Understanding MVC (Model View Controller)

MVC (Model View Controller) is a concept that is quite popular in web application development, starting from the small talk programming language, which separates business logic (thinking flow), data logic (data storage) and presentation logic (application interface) or simply is to separate design, data and process [8].

2.7. Understanding MySQL

Mysql is a type of database server that is very well known and is widely used to build web applications where the database is the source and data management. Mysql's popularity is partly because Mysql uses SQL as the basic language to access the database so it is easy to use [9].

3. Research Metods

Research methods are rational, empirical and systematic ways of scientific thinking used by researchers in a scientific discipline to carry out research activities. The type of research used by the author is qualitative research, which is research that produces several findings that cannot be achieved using statistical procedures or other methods of measurement. The results of qualitative research activities can be in the form of in-depth descriptions of speech, writing and behavior observed from an individual, group, society and certain organization in a certain situation [10]. The data collection techniques that the author used in preparing this proposal are:

- 1 Observation
Data collection was carried out directly in the field in the research area, observation of writing this proposal was carried out at Mr. Jimris' Swallow House, Prabumulih City.
- 2 Interview
Data collection was carried out by communicating or having a question and answer session directly with Mr Jimris' Swallow House.
- 3 Literature Study
Data collection by searching for information from books, journals and articles related to research.
- 4 Documentation
Data collection using documentation techniques is used to search for information related to research in the form of photos and documents

4. System Design

Based on the system analysis that has been carried out, we propose the development of an application that can help Mr Jimris' Swallow House in managing swallow nest data. To make designing this application easier, we recommend using Unified Modeling Language (UML).

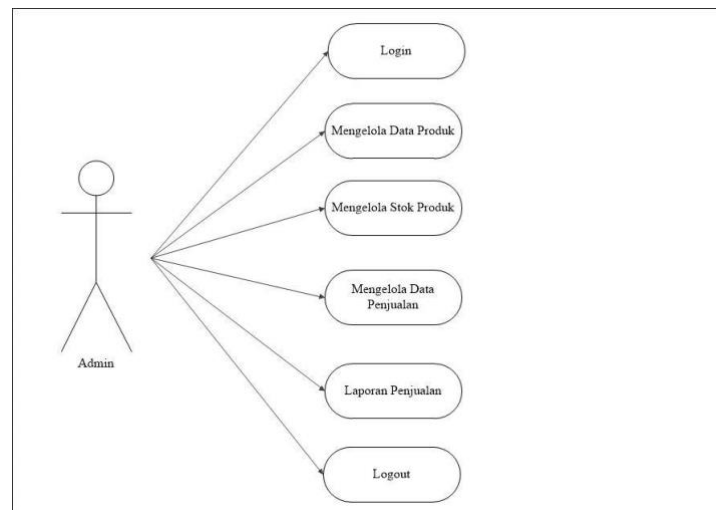


Fig. 1: Proposed Usecase

Figure 1 shows the Information System for Processing Swallow Nests at Mr. Jimris's Swallow House, Prabumulih City. At the initial design stage, this was done by first creating a Usecase Diagram which was structured from login, namely to enter an application account in the form of a username and password. Product Data is an option. application menu which functions to manage product data. Product Stock is one of the application menus which functions to input stock data. Sales Data is a sales report within one day. Incoming and outgoing money data is to find out financial reports within 1 month. Employee data is Employee information in the form of personal data on human resources (HR) and position. Financial reports function to record each product name, number of products and product prices within 1 month.

5. System Implementation and Testing

5.1. Database Implementation

In the web-based design of the Data Processing Information System at Mr. Jimris' Swallow House, Prabumulih City, the researcher used the MySQL phpMyAdmin database via a web server, namely the Xampp Control Panel. Here is what the implementation looks like:

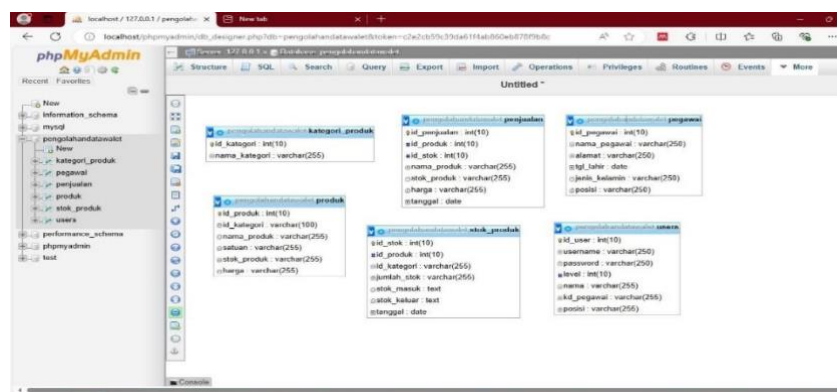


Fig. 2: Swallow's Nest Data Processing Information System Database

Based on the image above, the existing and displayed database consists of user tables, product categories, products, product stock, sales, incoming stock, outgoing stock and employees.

5.2. Interface Implementation

In the implementation part of this interface, the researcher creates a website display where each page display is made in the form of a file with a PHP extension, and this is what is accessed as a liaison between the admin and users of this website. The following is the interface implementation of the Information System design. Prabumulih City Swallow Nest Data Processing is as follows:



Fig. 3: Login Page Display

The login page is useful for admins to enter the data processing website.

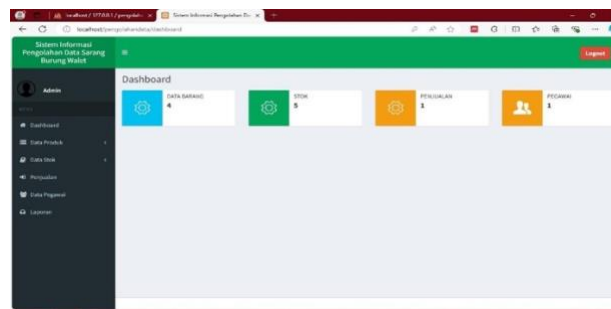


Fig. 4: Admin Dashboard View

In Figure 4 you can see this menu is the page after logging in, the admin dashboard menu contains data on goods, stock and sales.

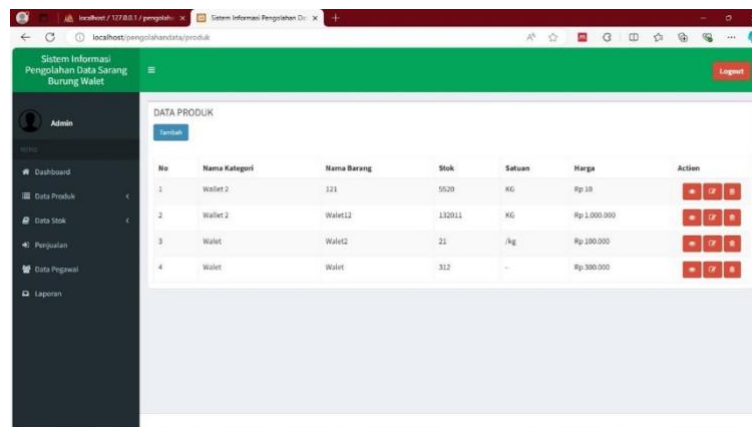


Fig. 5: Product Data Display

In figure 5 This menu is used to add product data.

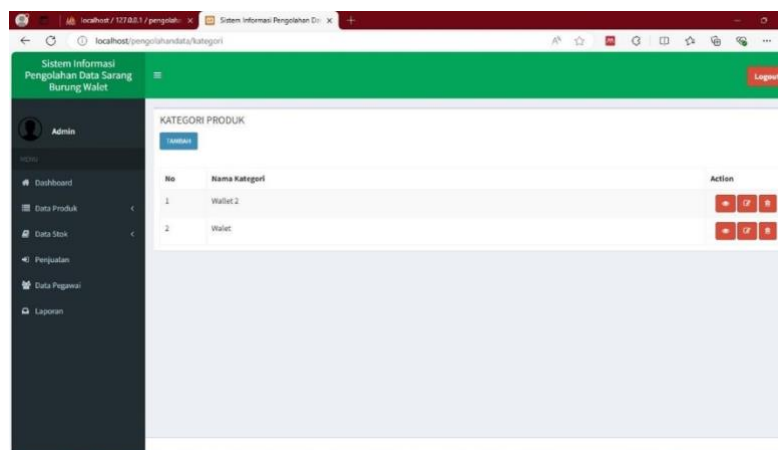
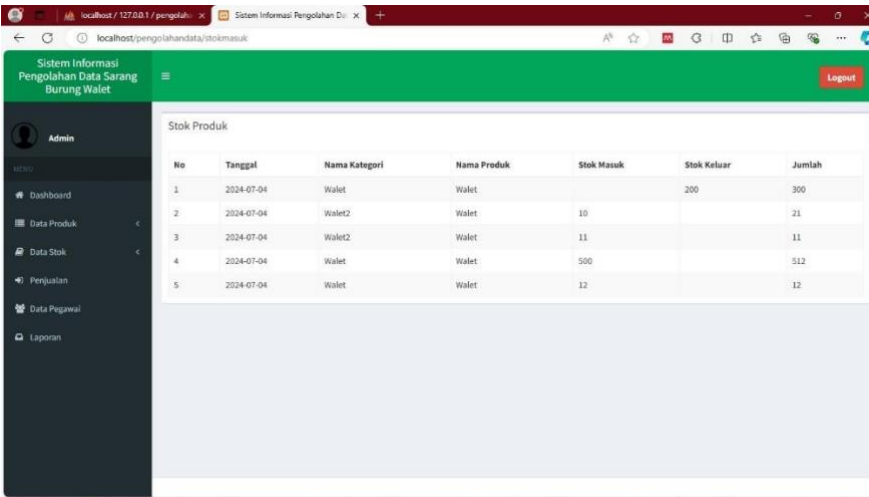


Fig. 6: Product Category View

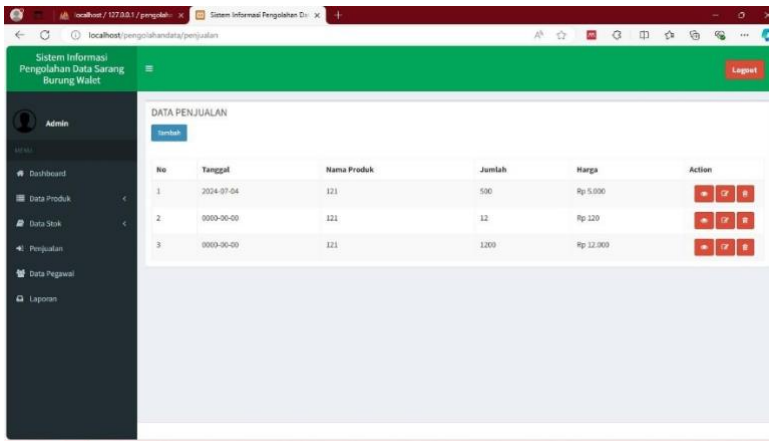
In figure 6 This menu is used to add product categories to be sold.



No	Tanggal	Nama Kategori	Nama Produk	Stok Masuk	Stok Keluar	Jumlah
1	2024-07-04	Walet	Walet		200	300
2	2024-07-04	Walet2	Walet	10		21
3	2024-07-04	Walet2	Walet	11		11
4	2024-07-04	Walet	Walet	500		512
5	2024-07-04	Walet	Walet	12		12

Fig. 7: Product Stock Display

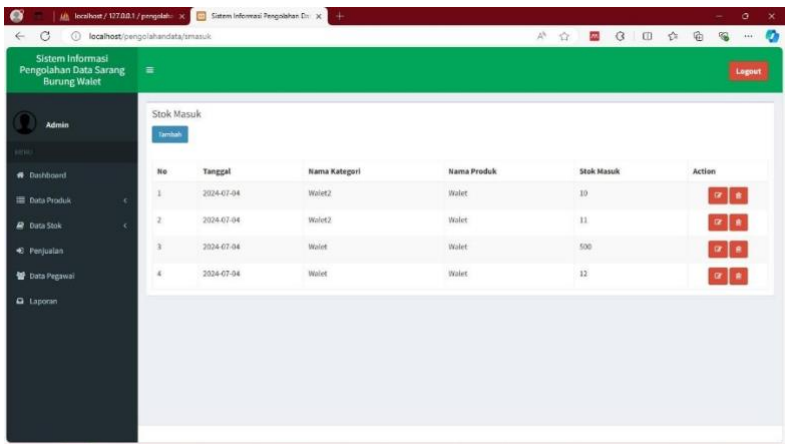
In figure 7 This menu is used to add stock of products to be sold



No	Tanggal	Nama Produk	Jumlah	Harga	Action
1	2024-07-04	121	500	Rp 5.000	[Edit] [Delete]
2	0000-00-00	121	12	Rp 120	[Edit] [Delete]
3	0000-00-00	121	1200	Rp 12.000	[Edit] [Delete]

Fig. 8: Sales Data Display

In Figure 8. This menu is used to view swallow sales data.



No	Tanggal	Nama Kategori	Nama Produk	Stok Masuk	Action
1	2024-07-04	Walet2	Walet	10	[Edit] [Delete]
2	2024-07-04	Walet2	Walet	11	[Edit] [Delete]
3	2024-07-04	Walet	Walet	500	[Edit] [Delete]
4	2024-07-04	Walet	Walet	12	[Edit] [Delete]

Fig. 9: Incoming Stock Data Display

in figure 9. This menu is used to display the amount of incoming stock.

No	Tanggal	Nama Kategori	Nama Produk	Stok Keluar	Action
1	2024-07-04	Wilet	Wilet	200	[Edit] [Delete]

Fig. 10: Out Stock Data Display

In Figure 10, this menu is used to display how much stock is out.

No	Nama Pegawai	Tanggal Lahir	Alamat	Jenis Kelamin	Posisi	Action
1	Beni	1928-11-07	Jl. Rta	Laki-Laki	HRD	[Edit] [Delete]

Fig. 11: Employee Data Display

In Figure 11, this menu is used to add employee data.

No	Nama Produk	Jumlah	Harga
1	121	1200	Rp 12.000
2	121	12	Rp 120
3	121	500	Rp 5.000

Fig. 12: Report Menu Display

In Figure 12, this menu is used to print sales data recaps.

5.2. Result

Based on all the test results that have been carried out by previous researchers, the researchers can conclude that the information system for processing data on swallow nests in the swallow house of Mr. Jimris, Prabumulih City that has been designed and created can run and function well. This is in line with research conducted by [11] entitled Application of the Rapid Application Development (RAD) Method in Developing a Store Data Information System which resulted in Providing Information Systems to Stores. Blessings for processing shop data and forms of data security so that it doesn't Accessed by Any Person.

6. Conclusion

Based on the explanation and discussion above, the results of creating a research system at Mr Jimris' Swallow House using the Rapid Application Development (RAD) method are as follows:

1. The system is designed using the PHP programming language (Hypertext Processor) and UML (United Modeling Language) tools.
2. By applying the Rapid Application Development (RAD) method, the development of the data processing system for the swallow house can be carried out effectively and efficiently.
3. Based on the results of research that has been carried out to create a data processing information system at Mr. Jimris' swiftlet house, it has been achieved in accordance with what is required by this swiftlet house, because the system created has been approved by the supervising lecturer so that the system can be used by the admin and carry out processing. data easily such as creating product data, product stock data and sales data.

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