



Implementation of Sales Information System of Indonesian Spices at PT.Indo Rempah

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ABSTRACT

Spices and herbs are important biological resources in human life. The demand of spices and herbs more increase in this pandemic era, due to they reputed to be health for human body. The increasing demand from household or industry sector made them difficult to find the spices or herbs. To solve that problem it needed to use e-commerce media to find the information. The information system development model used is the SDCL (System Development Life Cycle) waterfall (Waterfall) or classic life flow. The phases in the system analysis and design process include: system requirements analysis, design, code generator, testing and support. From the results of this study, it is hoped that the sales information system of spices can help farmers, especially spice producers in increasing the selling power of their agriculture, easy promotion, sales transaction and in making reports.

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1. Introduction

During pandemic of corona virus, it attacks many people regardless of age, gender and religion. The experts try to find a vaccine to fight the corona virus. While waiting vaccine, the people need is to maintain immune system of body and people believe that one way to increase immunity is consume spices.

Indonesia is rich of spices, whether used for cooking, for drinking or for medicinal purposes. Spices and herbs are important biological resources in human life. Spices are parts of plants used as spices, flavor enhancers, fragrances, food preservatives and medicines. The use of spices continuously both from household sector to industrial sector, makes consumers difficulty to find and buy because the limited information access.

To meet market and consumer needs in finding and buying spices is use e-commerce media. E-commerce is a trade transaction contact between sellers and buyers using internet media. The advantage of using transactions through e-commerce is to make consumers easy to access information and meet the needs of spice consumption for all consumers easily and quickly.

To optimize e-commerce management in solving the problem, it includes product pages, product detail pages, order pages, payment pages, shipping pages, return pages, and sales report pages.

2. Research Method

2.1 Software Development Method

The waterfall method is a systematic and sequential information system development model [13]. The Waterfall method has the following phases [13]:

1) Requirements analysis and definition

System services, constraints, and objectives are determined by the results of consultation with users then defined in detail and serve as system specifications.

2) System and software design

The system design phase allocates system requirements both hardware and software by forming the overall system architecture. Software design involves identifying and delineating the basic system abstractions of software and its connection.

3) Implementation and unit testing

At this phase, the software design is realized as a series of programs or program units. Testing involves verifying that each unit comply its specifications.

4) Integration and system testing

The individual units of the program is combined and tested as a complete system to ensure whether the software requirements comply or not. After testing, the software can be sent to the customer.

5) Operation and maintenance

Usually (though not always), this phase is the longest. The system is installed and used for real. Maintenance involves correcting errors were not found in the previous phase, improving the implementation of the system unit, and improving system services as new requirements.

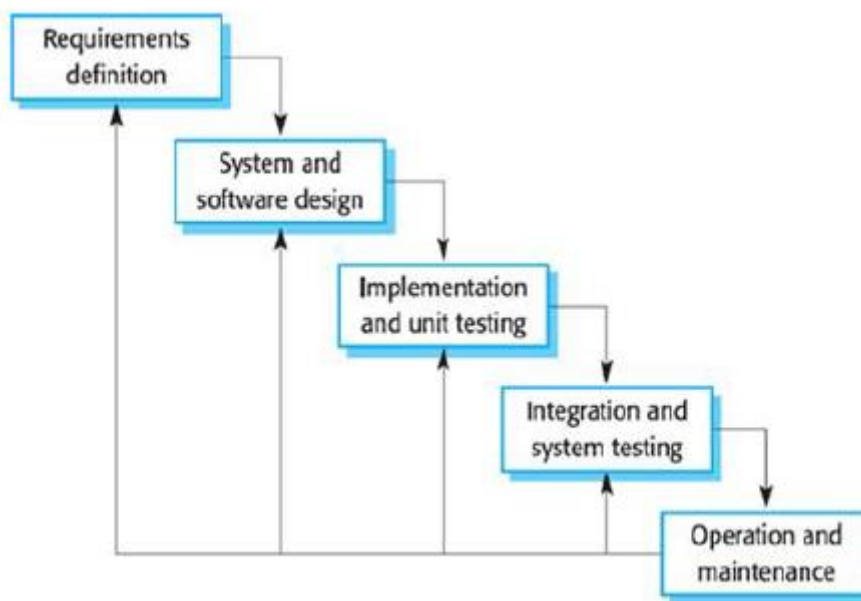


Figure 1. Waterfall Method

2.2 Data Collection Techniques

To collect data, the author uses several data collection techniques:

1. Observation

The writing observes directly the activities carried out by PT. Indo Rempah in order to find out the sales process that is done by employees. In this observation technique, we do the admin section who handles sales where the process is to recap each order made by the customer into the fund order book, which will take a long time and risk the data being scattered.

2. Interview

Directly interact from and conduct questions and answers with Mr. Muhajir as the leader of PT. Indo Rempah regarding the ordering and sales process. The results of the interview are about the problems occurred in the running system is still miss communication of recording data on sales of goods.

3. Literature study

This method supports data has been obtained from the company with references from books, journals related to this research, it is e-commerce-based sales information system.

2.2 Relevan Research

Based on research in the journal entitled "Design of Online Sales Information System, Tokoku Case Study" concluded that a system is needed to overcome the problems of space and time, where the consumers can order products from anywhere and anytime [3].

Based on other research in the journal entitled "Analysis and Design of Online Sales Information Systems (E-Commerce) at CV Selaras *Batik* Using Descriptive Analysis" concludes that CV Selaras *Batik* realizes that the role of website media can be used to increase sales omzet and also as marketing media of *batik* products to reach wider market and minimize operational costs such as advertising costs and also the cost of renting a physical store [4].

Another research in the journal entitled "Design and Build a Website-Based Shoe Sales Information System Using Waterfall Method" concludes that Based on the results of research, website development is very important, especially to overcome today's business competition, especially shoe sales in transaction activities from order processing, storing product data, changing product data and deleting product data thus produce the information that fast, precisely, accurately and attractively [5].

Based on research in the journal entitled "Design of a Web-Based Sleeping Equipment Sales Information System (SIPPAT) at Fortun Barokah Karawang" concluded that with this web-based system already connected to database, it facilitate data processing of goods for sale and helpful in product marketing, because available information to consumers faster and more accurate [6].

The journal entitled "Designing a Web-Based Clothing Sales Information System at the Uj Outlet Store" concluded that this research was conducted to design a sales website at the Uj Outlet Store in order to promote clothing widely in selling the product and to make purchases easily for consumers without have to come directly to the Uj Outlet Store[7].

According to research in the journal entitled "Web-Based Fertilizer Sales Information System at PT. Sri Aneka Karyatama" concludes that This Information System for Making Sales of Fertilizers can help simplify the fertilizer transaction process, and as a media of promotion[8].

Based on another research in the journal entitled "Web-Based Sales Information System at CAKI CAKE KARAWANG Restaurant" concluded that the website can help deliver detailed product and price information to consumers. It is hoped that be able to answer the problems faced by the CAKI CAKE restaurant in supporting the restaurant's performance more efficient, increasing the trust and providing its own satisfaction for consumers [9].

Based on research in the journal entitled "Designing Web-Based Auto Parts Sales Information System Case Study: Kreasi Auto Parts concluded that By using web-based sales information system, spare parts marketing is getting wider, calculating and processing sales data is getting faster and less error occurs in recording transaction and in making sales reports faster [10].

According to research in the journal entitled "Design of Web-Based Packaged Beverage Sales Information System at Bambu Sejahtera Bekasi Store" concluded that online sales system using sales promotion media with the aim of increasing sales volume to increase the store income [11].

Based on research in the journal entitled "Web-Based Shirt Sales Information System at the Depok Distro Project" concluded that with the online sales system in all every class company in bussiness can take advantage of the system to offer the products wider and faster, and can make consumers buy the product without come to the store directly [12].

4. RESULTS AND DISCUSSION

4.1 Draft Proposal

1. Use case diagrams

Use case or use case diagram is a modeling for the behavior (behavior) of the information system made. Use case describes an interaction between one or more actors and the information system. Use cases used to find out the functions and the use of function in information system [14].



Figure 2. Usecase Diagram Online

2. Activity Diagram

Activity diagrams describe the workflow or activities of a system or business process or menu in the software. It should be noted that the activity diagram describe system activities, not what actors do, so activities that can be carried out by the system [14].

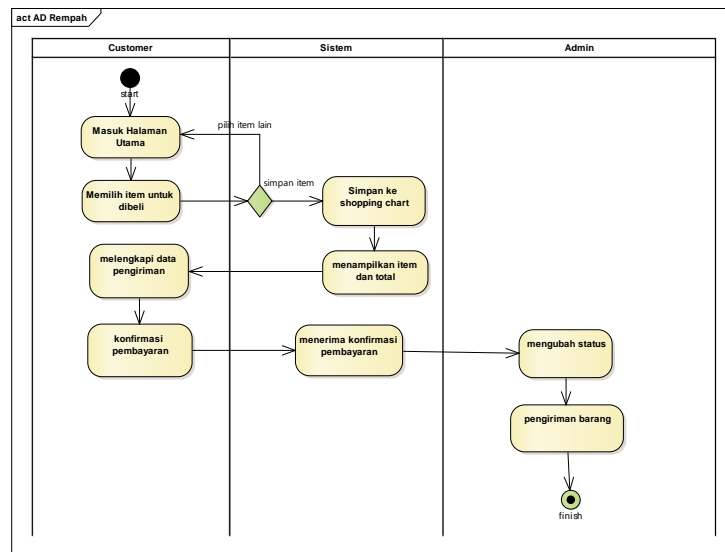


Figure 3. Activity Diagram Ordered

3. Entity Relationship Diagram

Entity Relationship Diagram (ERD) is a design or form of relationship activity in the system related the function in the process directly. ERD is a modeling of a relational database based on perceptions in the real world consists of collection of objects are interconnected with one another [15].

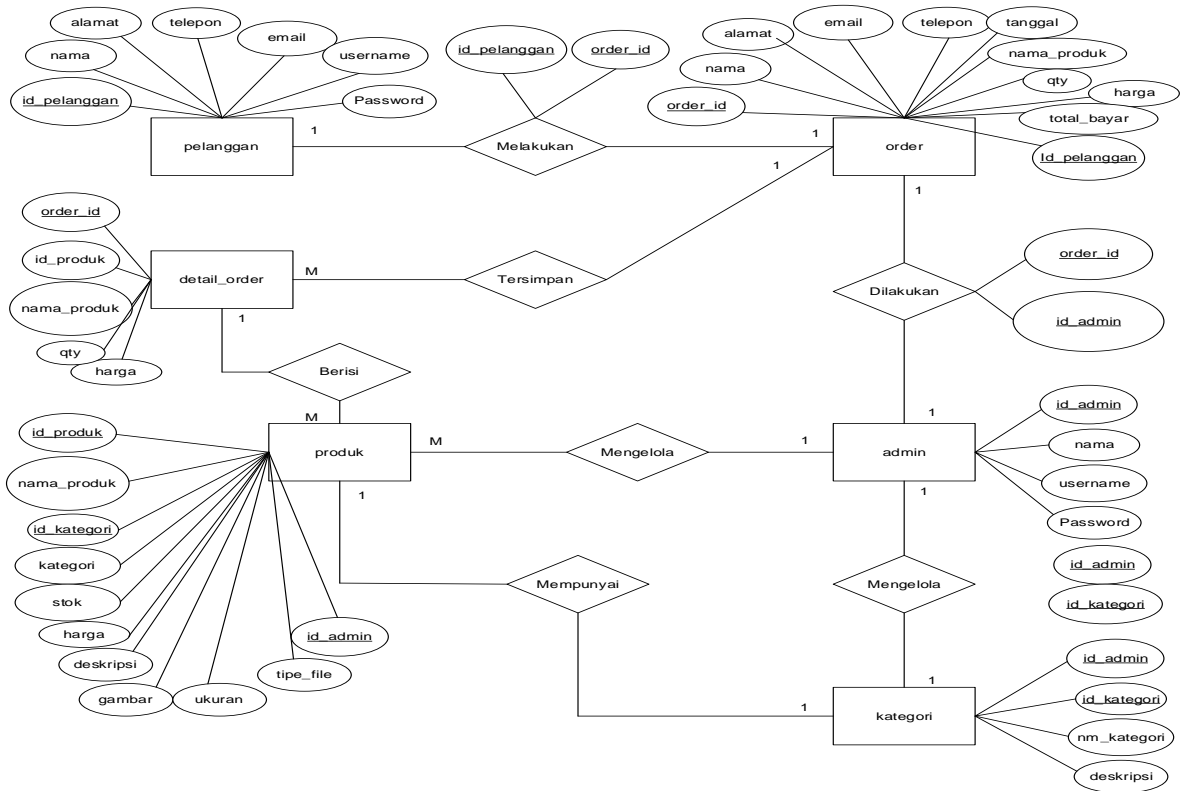


Figure 4. ERD Spice Sales System

4.2 System Implementation

The implementation of the program is the following:

1. Main Page Display (Home Menu)

Visitors who will see spice products will be directed to visit the web home page.

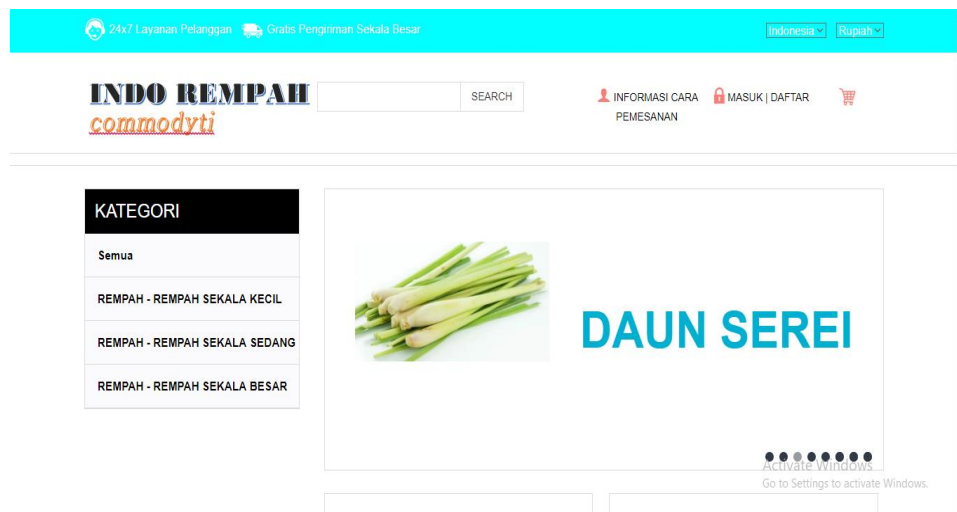


Figure 5. Display of Home Menu (Main Page)

2. Product Details Page View

The product detail page is the visitors or customers can see the details of product to selected purchased.

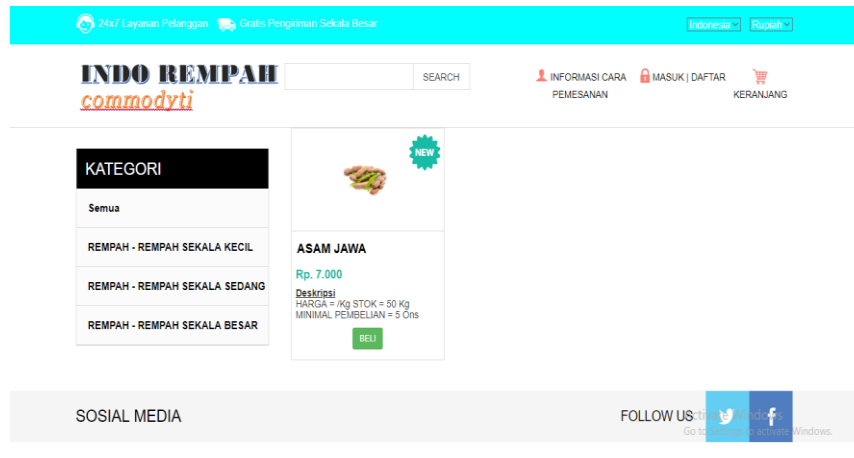


Figure 6. Displays of Product Detail Page

3. Shopping Cart Page

On the shopping cart page, customers can see the products purchased and will be directed to the next order process page to complete the ordering process.

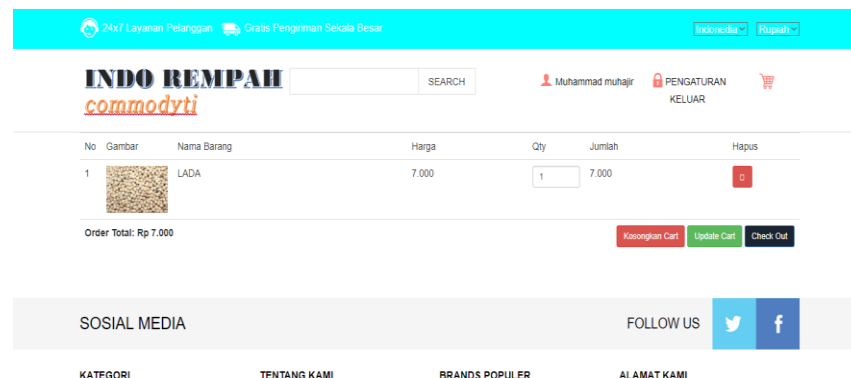


Figure 7. Display of Shopping Cart

4. Admin Main Page

On the main admin page, admin will be able to see the modules used to manage the website starting from adding products, viewing products, adding categories, viewing categories, viewing customer personal data, customer transactions, and also being able to view and print transaction reports and stock of goods reports.

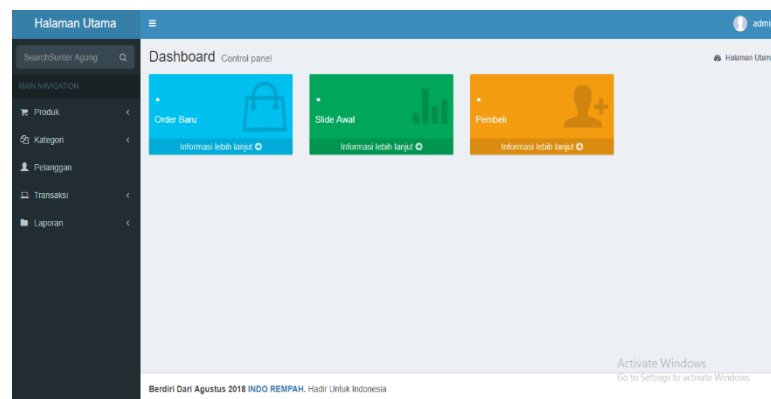


Figure 8. Display of Admin Main Page

5. CONCLUSION

The conclusions from this study are:

The advantages of ordering products on this website can save time and costs than ordering products directly to the market, and buyers can view product catalogs viewed on this website page directly.

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