Emerging Information Science and Technology
Vol. 2, No. 1, (2021), pp. 1-7

Web-Based Information System for Listing Goods at the Semoga Jaya Store

Ade Prasetyo Ramadhan*, Asroni, Aprilia Kurnianti

Universitas Muhammadiyah Yogyakarta, Jln.Brawijaya, Tamantirto, Kasihan, Bantul, Yogyakarta 55183, Indonesia
**Corresponding author: ade.prasetyo.2014@ft.umy.ac.id*

Abstract

Manual processing at the Semoga Jaya Store troubles the owner. This issue necessitates an information system that the business owner and customers can access immediately, at any time, and from any location. The system must offer precise, fast, and accurate information on the available stock. Hence, this study created a web-based information system designed with the Hypertext Processor (PHP) programming language and the MySQL database. The system could ease the store's financial data management, offer information on its stock, and facilitate customers to discover information on the goods. This research involved needs analysis, system design, implementation, and testing. Functional testing was conducted on this stock list information system, revealing that it could facilitate data processing and provide information effectively and efficiently.

Keywords: *Information system, Stock, Waterfall method, Web.*

1. Introduction

The information system is defined as "data that is processed into a form that is more useful and more meaningful to the recipient". Data are facts in raw form, data represent measurements or observations of event objects which are then processed into information. The process of transforming data into information is called an information system[1].

SDLC (System Development Life Cycle) is the process of developing or changing a software system using models and methodologies that people use to develop previous software systems, in a way that has been well tested[2]. SDLC in its system development phase uses the System Development Live Cycle (SDLC) Framework with a waterfall approach which consists of several stages of activity flow that run in one direction from the beginning to the end of the system development project[3]. There are several stages that must be achieved in the same direction after other stages such as stairs or cascading waterfalls in the waterfall method[4]. PHP stands for PHP Hypertext Preprocessor which is used as a server-side scripting language in web development 'inserted' in HTML documents. PHP users allow the web to be made dynamic so that maintenance of the website becomes more efficient. PHP is open source software that is distributed and licensed free of charge[5].

In the study entitled "Development of Application Sales and Stock of Goods at Nuansa Electronic Pacitan Stores" that every established business has the same goal, namely how to get even bigger profits. With the development of fast and accurate information technology, where this information can be obtained using the web[6]. The web server itself is software that is the backbone of the 'word' wide web (www). The web server waits for requests from clients using browsers such as Netscape Navigator, Internet'Explore, Modzilla, and other browser programs[7]. In the study

entitled "Development of Drug Sales Information Systems at Punung Pharmacy" that the information system process is a series of components including people, procedures, data, and technology used to produce valuable information for decision making. The information system is inherent and is the infrastructure that supports the success of each organization in achieving its goals[8].

The research entitled "Development of a Goods Stock and Sales System at Sero Elektronik Stores" shows that the processing of sales data which is still conventional, namely without being computerized, causes many problems, including inaccurate checking of uncontrolled goods, searching for goods data and making reports of goods data which takes time. quite a long time[9]. As well as research entitled "Information System for Data Processing of Goods and Computer Services at the Sinar Terang Computer Pacitan Store" that information is useful data that is processed so that it can be used as a basis for making the right decisions. Data that has been processed has use value or benefits for the user in the process of making decisions or information or output from the transformation process where the data functions as input[10].

The Semoga Jaya Store's business method has not yet incorporated information technology. Consequently, it relies on customers coming directly to the store to purchase or inquire about a product. This sales method encounters too many flaws, including insufficient shop service time and conflicts with customers' busy schedules, such that customers still have problems obtaining product information. Because promotion at the store is conducted by personally telling customers who visit the store or their friends and family, it is difficult for consumers in distant locations to obtain stock information on goods. In addition, the store has trouble managing product data and generating inefficient sales reports since it is still performed manually by gathering sales notes from the daily sales transaction and recording them in a book, which takes some time.

Stock information on goods is a necessary component of the business sector. Essentially, the stock information system facilitates consumer access to the store's stock. Therefore, the stock information system at this store is critical to consumers and helps store operations.

2. Method

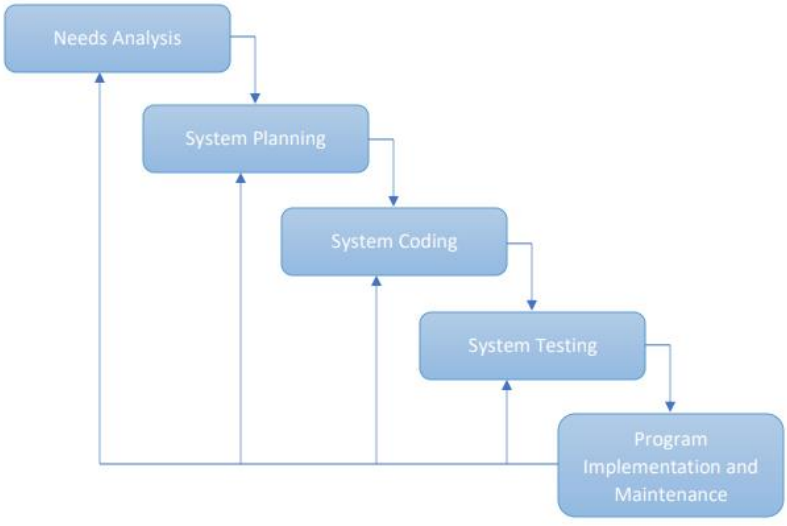

Figure 1 Waterfall Method

2.1. Needs Analysis

Needs analysis refers to reviewing documents, activities, and interactions concerning the system to be built. All transactional and non-transactional activities carried out by users and end users were collected completely. This needs analysis has provided an overview to information system developers in building a system flow according to user needs.

2.2. System Design

The subsequent stage was creating a system design based on the needs analysis results. It aimed to offer a realistic representation of the system to be built using the appropriate method based on the features of the information system. The Unified Modeling Language (UML) was utilized to model the system, design, system flow, and database based on user demands.

2.3. System Coding

Coding could be defined as the translation of design into a computer-understandable language. It was the real stage of system development. Through this phase, the usage of computers was maximized.

2.4. System Testing

After completing the coding, a system test was conducted, also known as testing the constructed system. It aimed to identify and rectify errors in the constructed system.

2.5. Program Implementation and Maintenance

It was the software maintenance process. The built software must include a maintenance or update phase, allowing for discovering new features and correcting any errors emerging in the system.

3. Analysis Results

3.1. Home Page Display

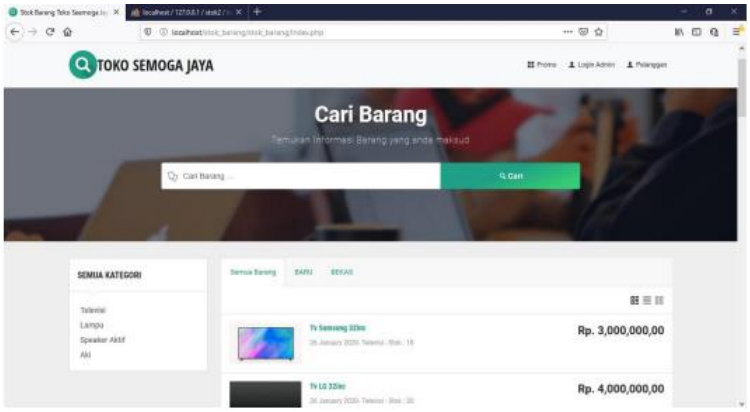

Figure 2 Login Interface

The home page display was the initial display when users accessed the website. Customers could select new and used items on the home page by selecting the appropriate category. Figure 2 depicts the login interface.

3.2. Category Page Display

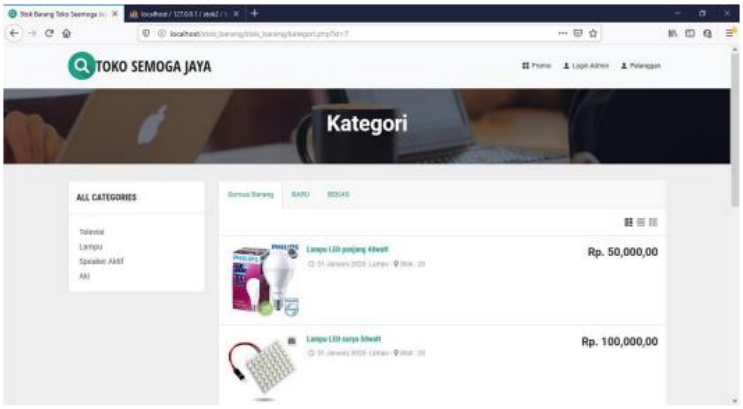

Figure 3 Category Page Display

Figure 3 illustrates the appearance of the product category to assist customers in selecting a product.

3.3. Details Page Display

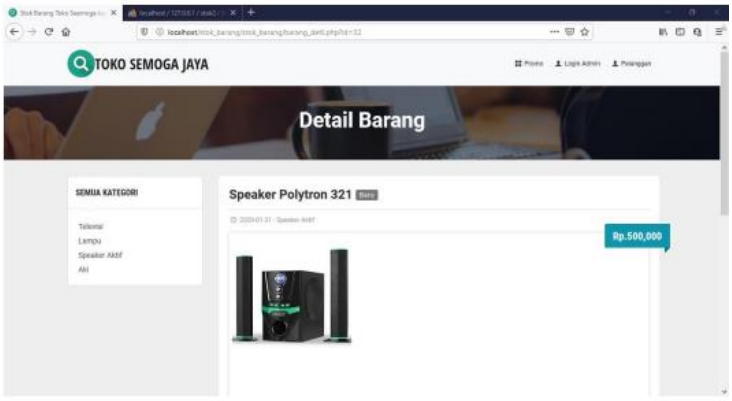

Figure 4 Details Page Display

Figure 4 exhibits a more thorough overview of the products. Customers could view the stock, the price, and the details of the products.

3.4. Item Order Page Display

Figure 5 Item Order Page Display

Figure 5 displays product messages. Customers could order goods by filling out the form.

3.5. Promo Page Display

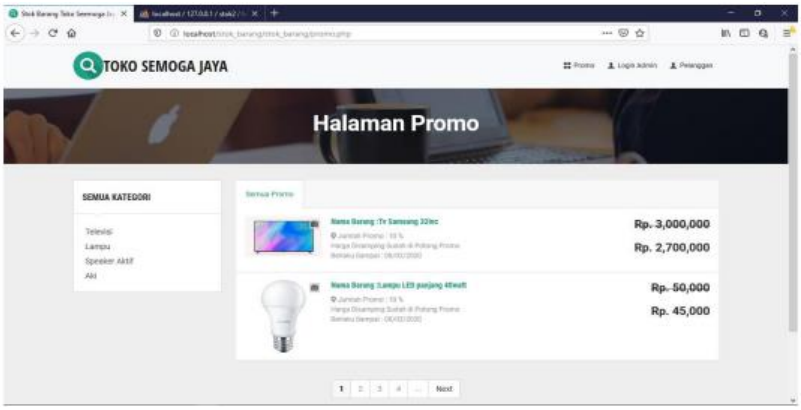

Figure 6 Promo Page Display

Figure 6 demonstrates a display of promotional products with several discounts. Customers could also purchase promotional products before the expiration date.

3.6. Customer Registration Page Display

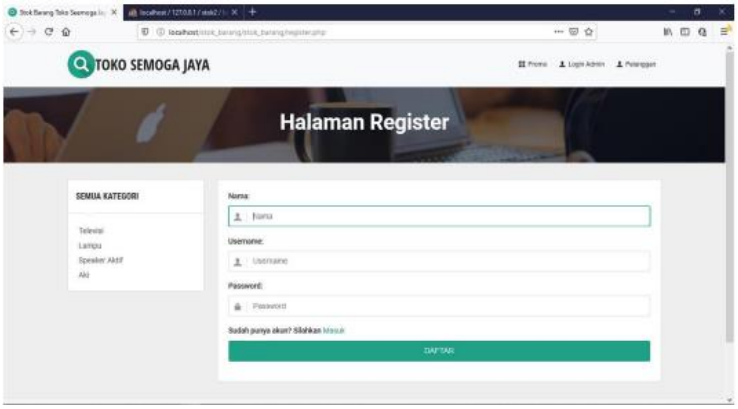

Figure 7 Registration Page Display

Figure 7 portrays the registration page for customers before ordering products.

3.7. Customer Login Page Display

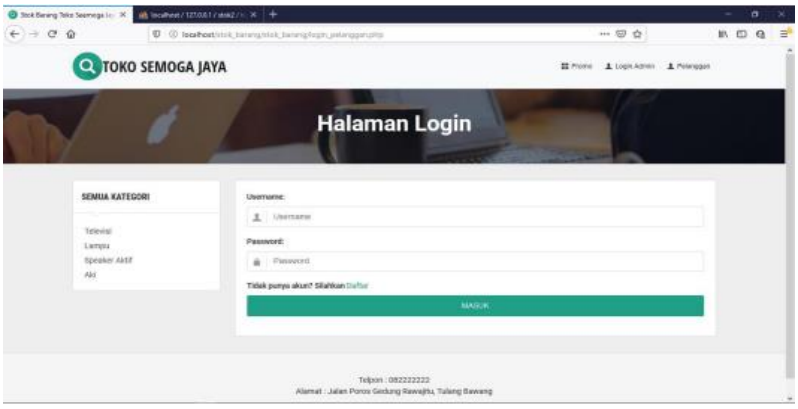

Figure 8 Fund Recipient Data Interface

Figure 3.7 depicts the customer login page. Before placing an order, the customer must first log in.

3.8. Login Page Display

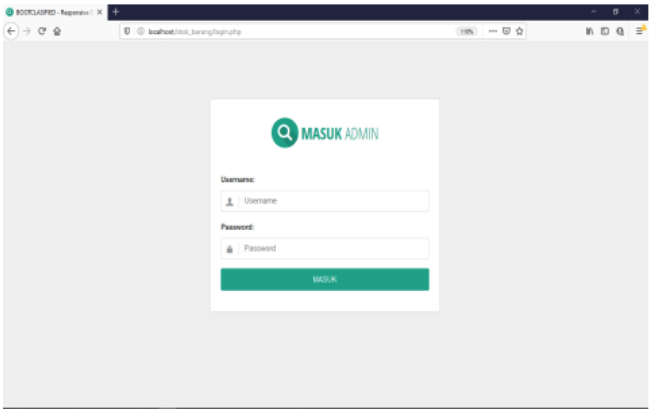

Figure 9 Financial Report Interface

Figure 9 represents a page for administrators. The login process enabled the administrators to control the data of goods at the Semoga Jaya Store by granting them unlimited access. To access the page, the administrators must submit a username and password.

4. Conclusion

Based on the results of the Functional testing, several conclusions can be drawn, namely, a web-based sales information system has been produced for Toko Harapan Jaya. For the process of ordering goods made by customers, it can be done online or through a web-based information system that has been provided by means of which customers must register first to be able to order goods. Once registered, customers can order goods and then confirm. The built web-based information system can record order transactions, stock information and reports on incoming stock with a web-based information system so that it can find out and provide fast, precise and ac ccurate information.

References

[1] Suryati, B. E. (2012). Pembangunan Sistem Informasi Pendataan Rakyat Miskin Untuk Program Beras Miskin (Raskin) Pada Desa Mantren Kecamatan Kebonagung Kabupaten Pacitan . ISSN : 1979-9330 (Print) - 2088-0154 (Online) - 2088-0162 (CDROM) , 74.

[2] Firmansyah, Y., & Udi. (2018). Penerapan Metode SDLC Waterfall Dalam Pembuatan Sistem Informasi Akademik Berbasis Web Studi Kasus Pondok Pesantren Al Habi Sholeh Kabupaten Kubu Raya, Kalimantan Barat. Pontianak.

[3] Puspitasari, D. (2015). RANCANG BANGUN SISTEM INFORMASI KOPERASI SIMPAN PINJAM KARYAWAN BERBASIS WEB . Jurnal Pilar Nusa Mandiri Vol. XI, No.2 September 2015, 187.

[4] Raninardi, Vincent. 2008. Building a Data Warehouse With Examples in SQL Server. New York: Apress.

[5] Yuhendra, R. E. (2015). REKAYASA PERANGKAT LUNAK PENGOLAHAN DATA DISTRIBUSI OBATOBATAN DI PT. ANUGRAH PHARMINDO LESTARI BERBASIS WEB . Vol.17 No.2. Agustus 2015 Jurnal Momentum ISSN : 1693-752X , 70.

[6] Nurcahyono, F. (2012). Pembangunan Aplikasi Penjualan Dan Stok Barang Pada Toko Nuansa Elektronik Pacitan . Journal Speed – Sentra Penelitian Engineering dan Edukasi – Volume 4 No 3 - 2012 - ijns.org , 15.

[7] Oklilas, D. L. (2010). Analisis Perbandingan Load Balancing Web Server Tunggal Dengan Web server Cluster Menggunakan Linux Virtual Server . Vol.5 No.2 (Juli 2010) JURNAL GENERIC , 31.

[8] Tri Utami, B. E. (2014). Pembangunan Sistem Informasi Penjualan Obat Pada Apotek Punung . IJMS - Indonsian Journal on Medical Science – Volume 1 No 1 – 2014 - ijmsbm.org , 18.

[9] Suprayitno, U. I. (2012). PEMBANGUNAN SISTEM STOK BARANG DAN PENJUALAN PADA TOKO SERO ELEKTRONIK . (IJCSS) 14 - Indonesian Jurnal on Computer Science Speed - FTI UNSA Vol 9 No 3 – Desember 2012 - ijcss.unsa.ac.id , 94.

[10] Sukmana, F. (2014). Sistem Informasi Pengolahan Data Barang Dan Service Komputer Pada Toko Sinar Terang Komputer Pacitan . IJNS – Indonesian Journal on Networking and Security - Volume 3 No 4 – Oktober 2014 – ijns.org , 53.