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DESIGN OF A WEB-BASED SHOE SALES INFORMATION SYSTEM AT KIDIRO SECONDARY STORES

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ABSTRACT

Toko Kidiro Secondary is one of the companies engaged in the sale of shoes with various shoe brands. Toko Kidiro Secondary is one of the stores that processes every purchase of products customers must come to the store to see the desired shoe products. In sales, it is necessary to have an accurate and adequate information system to improve service to consumers. The study uses research methods such as observation, interviews, library studies. On the creation of sales web applications using the software development method Extreme Programming. In the creation of the application, it uses PHP as the scripting language and XAMPP as the database where the data is stored. The program is tested using the Blackbox method by entering existing data. Based on the results of the research with the design of this information system, it can make it easier for consumers to know information about shoe products..

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1.   INTRODUCTION

The development of computer technology that is increasingly modern, fast and practical greatly affects the lives of the wider community. The speed and accuracy of information that used to take a long time is now only a matter of seconds it can be received. Technological developments that have become part of everyday life today, the need for a database system that supports information processing is inevitable (Lubis, Achiral, &; Maulana, Management Optimization Using PostgreSQL Replication Database in Database System, 2017). With the development of increasingly advanced technology, a huge impact is seen in the social field where users usually interact and communicate with each other, especially to promote products sold or content created (Lubis, Prayudani, Lubis, &; Khowarizmi, 2021). With the internet, we can access whatever we want anywhere and anytime. Media that can be accessed through the internet is the website. Web site is a container of information that makes it easy for users to surf the internet (Azwanti, 2017). Research conducted by Asep Sayfulloh, Bina Sarana Informatika University with the title "Design of Web-Based Toy Sales Programs Using Extreme Programming Methods" which states that it makes it easier for customers to order without having to come directly to the store, and web-based online toy sales applications are easier to process such as data updates (Sayfulloh, 2021). Kidiro Secondary store is one of the businesses engaged in selling shoes with various shoe brands. Kidiro Secondary store is located very strategically, which is in front of the highway. Kidiro Secondary store is one of the stores that processes every product purchase, customers must come to the store to see the desired shoe product. Then, customers can order through the shopee application with the choice of budget they have but in the shopee application the seller does not display photos of the products sold. Store sales system, sellers must broadcast live (Live) in the shopee application to display what shoe brands are sold, how the condition of the product, then customers can comment in the live broadcast then the seller will explain the state or condition of the shoe brand that the customer wants. When customers want the desired shoe brand, customers can directly via chat to sellers at Shopee. In the sale of goods, the existence of an accurate and adequate information system is needed to improve service to

consumers. Therefore it is necessary to create an Information System for the Kidiro Secondary Store. Judging from the increasing sales at Kidiro Secondary Stores, it requires media that makes it easier to market products. Kidiro Secondary store wants to present sales information to consumers quickly and precisely, then provide convenience for customers in the buying process, customers do not have to come to the shoe store. Therefore, based on the above problems gives a thought for the author to design a sales information system. The system is made using PHP and MYSQL programming languages as a Database Management System (DBMS) for storing sales activity data. The title of the research that the author discusses is "**Design of a Web-Based Shoe Sales Information System at Kidiro Secondary Stores**".

2. RESEARCH METHOD

2.1 Prosedur Penelitian

Prosedur penelitian merupakan langkah-langkah yang digunakan sebagai alat untuk mengumpulkan data guna menjawab pertanyaan penelitian yang diajukan didalam penelitian ini. Didalam prosedur penelitian ini penulis membahas tentang metode pengumpulan data dan metode pengembangan perangkat lunak.

2.2 Metode Pengumpulan Data

The data collection methods carried out by researchers are as follows:

1. Research Methods

   The author made direct observations at the Kidiro Secondary store to find out the shoe sales system at the Kidiro Secondary store.

2. Interview Method

   In order to obtain complete information during the research, the author conducted a question and answer session or commonly called an interview with store owners about all activities related to the shoe sales system of the second kidiro store, with the aim of obtaining more detailed and clear information .

In this interview method, researchers conducted questions and answers about the information system at the Kidiro Secondary store which has authority over the process of processing sales product data.

2.3 Software Development Methods

(Ahmad, Borman, & Fakhrurozi, 2020) *Extreme Programming (XP).* Sasaran *Extreme Programming* adalah tim yang dibentuk berukuran kecil sampai medium saja tidak perlu menggunakan sebuah tim yang besar. Extreme programming berfokus pada implementasi desain sederhana. Adapun kelebihan (Ahmad, Borman, & Fakhrurozi, 2020)*extreme programming* yaitu :

1. Increase satisfaction to *customers.*
2. Establish good communication with *customers.*
3. The construction of a shoe sales information system is made faster.
4. Improve communication and mutual respect between *developers.*

Extreme programming is the most widely used *agile method* and is a very well-known approach. The stages of *Extreme programming* as shown in Figure 1.
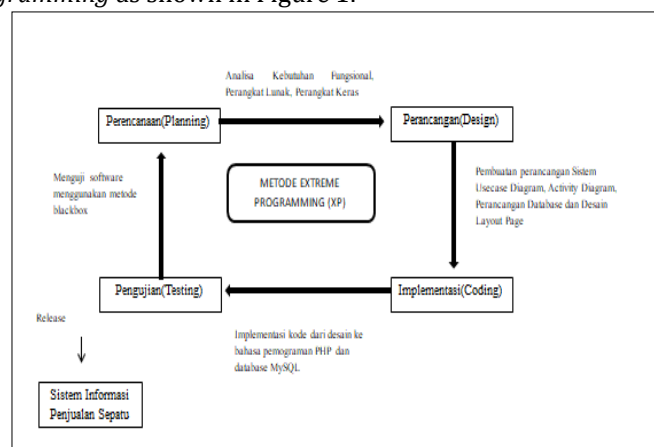

Figure 1 Stages of Extreme Programming

2.4 Requirement Analysis

The first thing that needs to be done in the needs analysis by identifying the needs obtained based on user needs is as follows:

1. Administrator (Admin)
1. Admins can add, delete, and update product data.
2. Admins can edit or override product prices.
3. Admins can add, delete, and update category data.

b. Pelanggan(Customer)
1. Customers can browse the products offered on the website.
2. Customers can place orders directly by contacting via telephone number.

2.5 Planning

System design includes Unified Modelling Language (UML), database and user interface. UML is a modeling of a system using diagrams and texts as explanation of diagrams. The system modeling used is use case diagrams, activity diagrams, and class diagrams.

2.6 System Planning

The system design process using UML is divided into 2 parts, namely from the admin and customer sides . As an admin will have full access rights regarding the functions and features of the system that will be made based on the needs of the admin in managing the system. *Customers* become users who have limited access rights.

Use Case Diagram
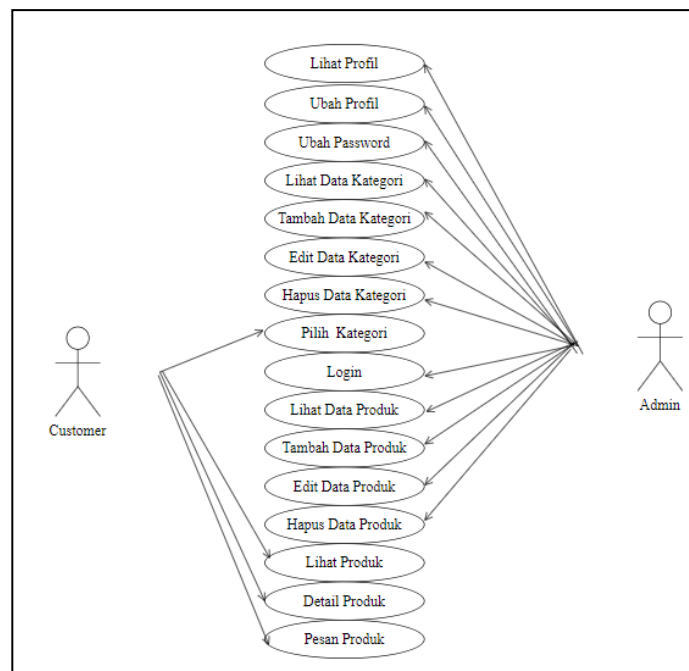
Gambar 2 *Use Case Diagram* Toko Kidiro Secondary

In designing the information system of Toko Kidiro Secondary there are two actors, namely admin and *customer*. The description of the actor is described in table 3.1 as follows:

Table 1 Description of Actors in *Kidiro Secondary Store* Use Case Diagram

Actor	Description
Admin	Users from the store who have full access rights to system management
Customer	Users who have limited access rights in accessing the system

Admins must log in to the system to manage category data, and product data. The description of *Admin Use Case* is described in table 2.

Table 2 Description *of Admin Diagram Use case*

No	Use Case	Description
1	Login	The admin process can enter the secondary kidiro store information system
2	Profile	The admin process can view admin data information and can change the password
3	Data Category	Process admins can manage product categories which includes adding, changing and deleting product data
4	Product data	Process admins can manage products which includes adding, modifying and deleting product data
5	Out	The admin process exits the secondary kidiro store information system

Customers can only select product categories, view products, product information, product prices and order products. The description of *Customer Use Case* is described in Table 3

Table 3 Deskripsi *Use Case Diagram Customer*

No	Use Case	Description
1	Category	Customer process can choose product category
2	Product	Process customers can view products, product information, product prices and order products

Activity Diagram
Activity diagram illustrates the work flow or activity of the secondary kidiro store information system which includes login, input, edit, delete processes carried out by the admin. For customers include the process of search, select, order.
1. Activity Diagram Login Admin
    Admin must login to be able to manage the kidiro secondary store information system. The login by admin flow is described in Figure 3
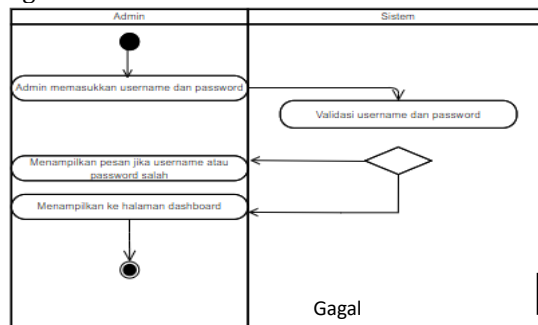

Figure 3 Admin login flow

2. Activity Diagram Admin Input Profil
    Admins who have logged in can manage profile or Berhasil   adding admin information data that can be done on the profile input menu. The flow of adding admin profile data is described in Figure 4
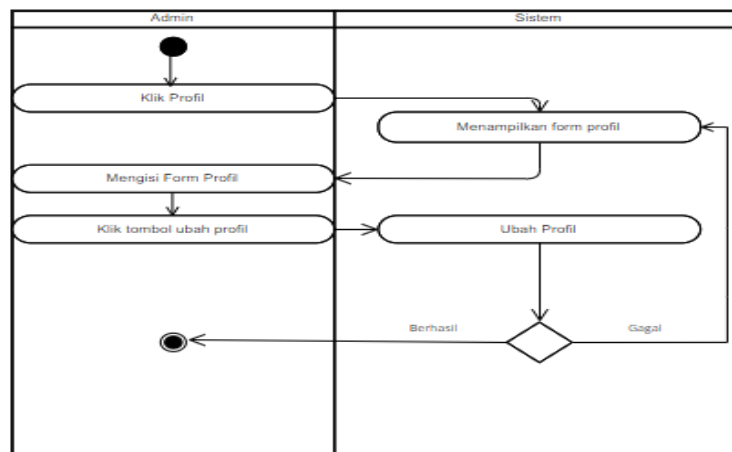

Figure 4 Profile input admin flow

3. Activity Diagram Admin Ubah Password

Admins who have logged in can manage profile data, namely changing admin passwords which can be done on the change password menu on the profile menu display. The admin password change flow is described in Figure 3.5
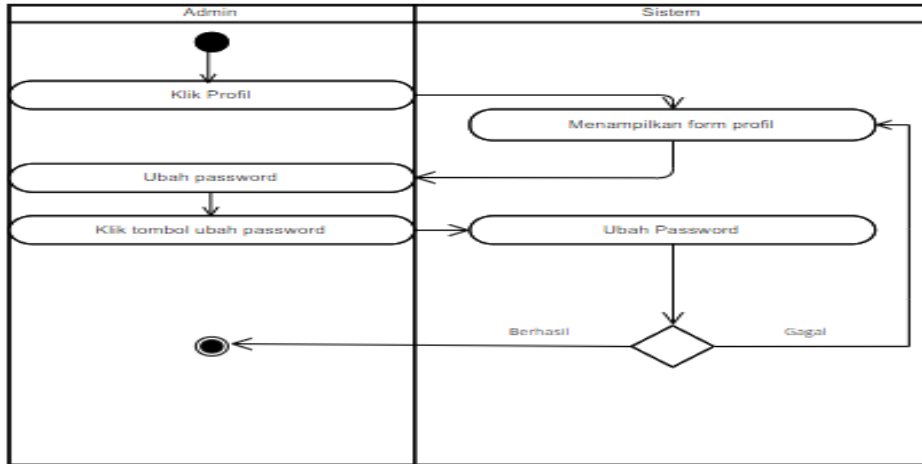

Figure 5 Admin flow Change Password

4. Activity Diagram Admin Tambah Data Kategori

Admins who have logged in can manage category data, namely adding category data which can be done on the category data menu. The add category data flow is described in Figure 6
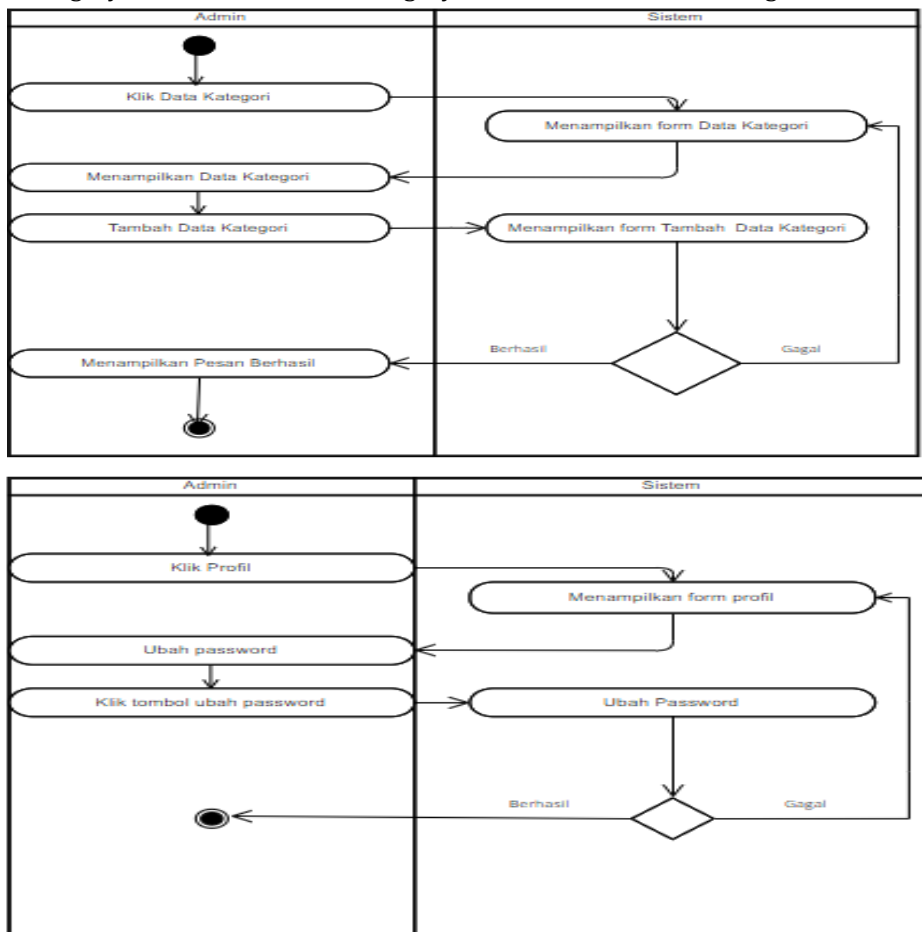

Figure 5 Admin flow Change Password

5. Activity Diagram Admin Tambah Data Kategori

Admins who have logged in can manage category data, namely adding category data which can be done on the category data menu. The add category data flow is described in Figure 6
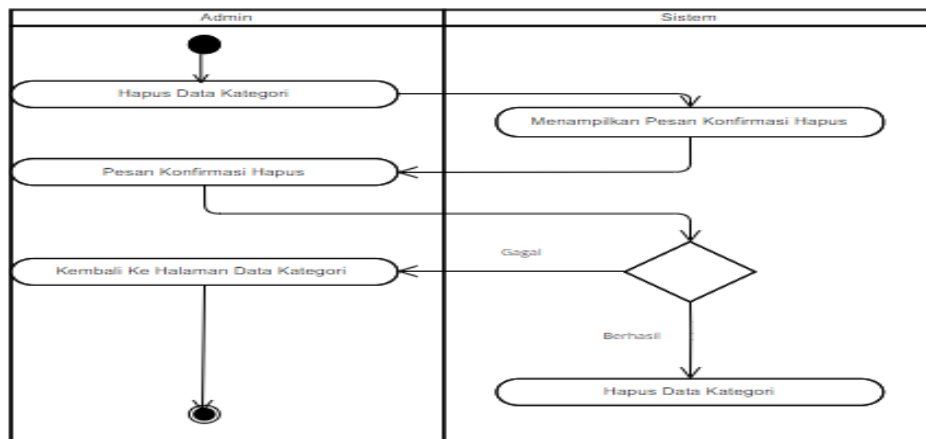
Figure 7 Delete Category Data Admin Flow

6. Activity Diagram Admin Edit Data Kategori

   Admins who have logged in can manage category data, that is, edit category data which can be done on the category data menu. The category data edit flow is described in Figure 8
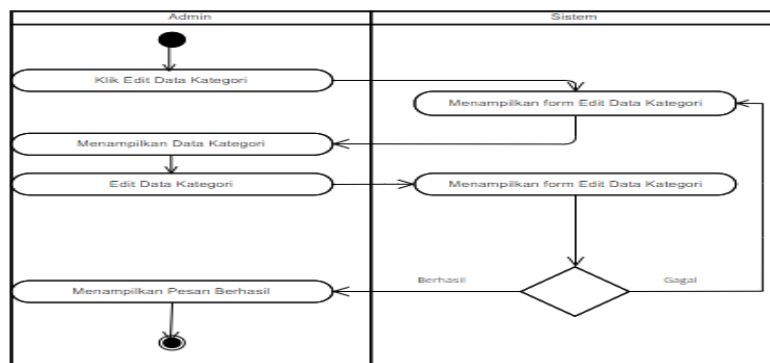

Figure 8 Admin flow Edit category data

3.   RESULTS AND DISCUSSION

3.1 Research Results

This thesis final project research aims to develop a Shoe Sales Information System at Website-Based Secondary Kidiro Stores using the Extreme Programming (XP) development method where each phase has stages of planning, design, and system testing. In designing a web-based shoe sales information system at Kidiro Secondary stores, admin users and customers can access information easily.
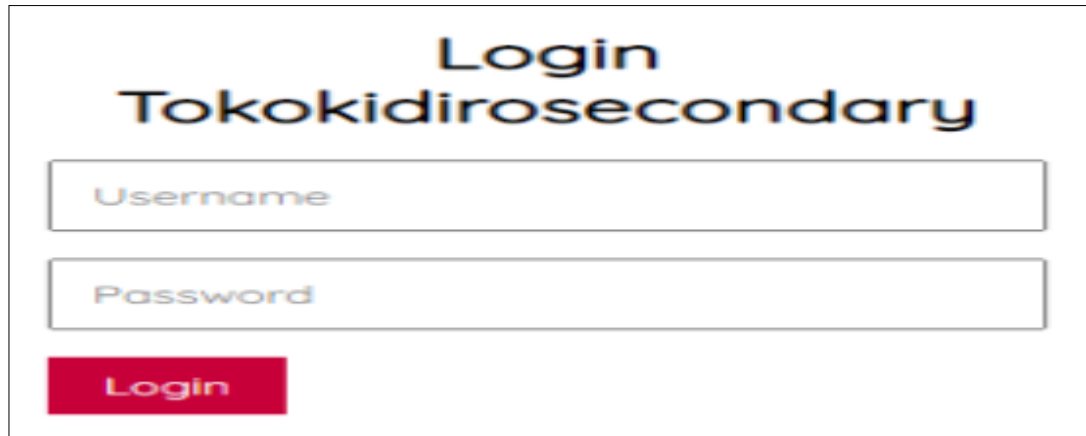
3.2 Discussion

To overcome the distribution of sales information Kidiro Secondary Store to *customers* by developing a sales information system. Features contained in the system for admins are creating admin profiles, category data to see a list of shoe brands, product data to see types of shoe brands. For customers, *customers* can only see the brand of shoes sold and order directly via chat by automatically connecting directly to via *whatsapp.* The implementation of *the* Kidiro Secondary Store Shoe Sales Information System interface is explained on each actor's process page.

3.3 Implementasi Desain Interface

After the design of the page layout design is complete, the implementation of the interface design is carried out. Management of shoe sales information system for secondary kidiro stores using PHP-based application development as *web programming.*

Login Interface Implementation

Figure 9 is an implementation *of the* login page interface design for admins, in the shoe sales information

system of the secondary kidiro store by entering the username and password first.

Figure 9 *Login Interface Implementation*

Implementasi Interface Dashboard Admin
Figure 10 is an implementation of *the admin dashboard page interface* design. On the dashboard menu page display where this page displays the welcome admin name.
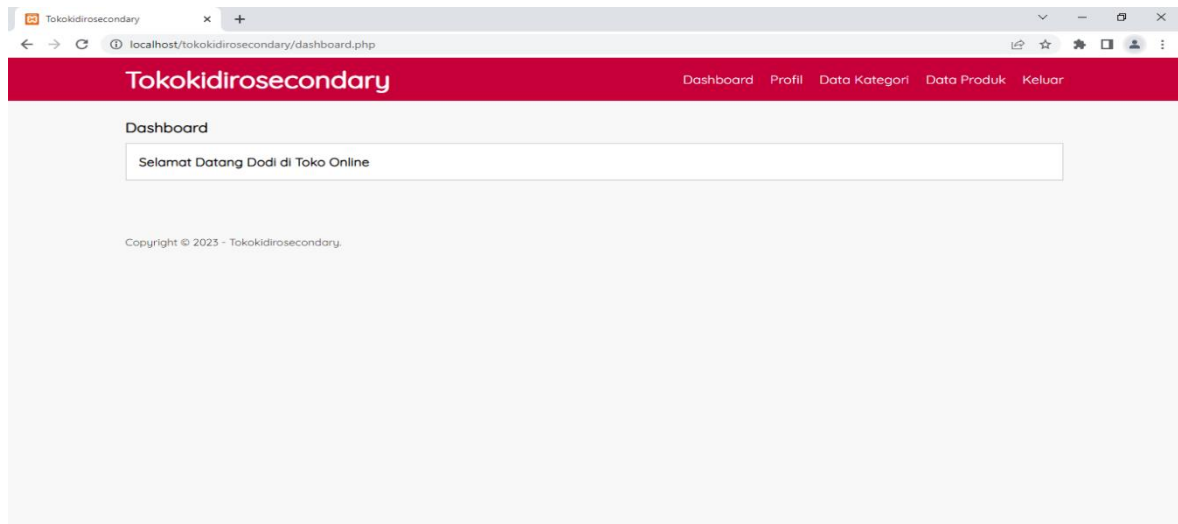

Figure 10 *Admin Dashboard* Interface Implementation

Admin Profile Interface Implementation
Figure 11 is the implementation of *the* admin profile page interface design in the kidiro secondary store sales information system. On the profile menu page display where this page displays information about the admin such as admin name, admin phone number, admin email, and admin address. Apart from the profile, admins can also change passwords.
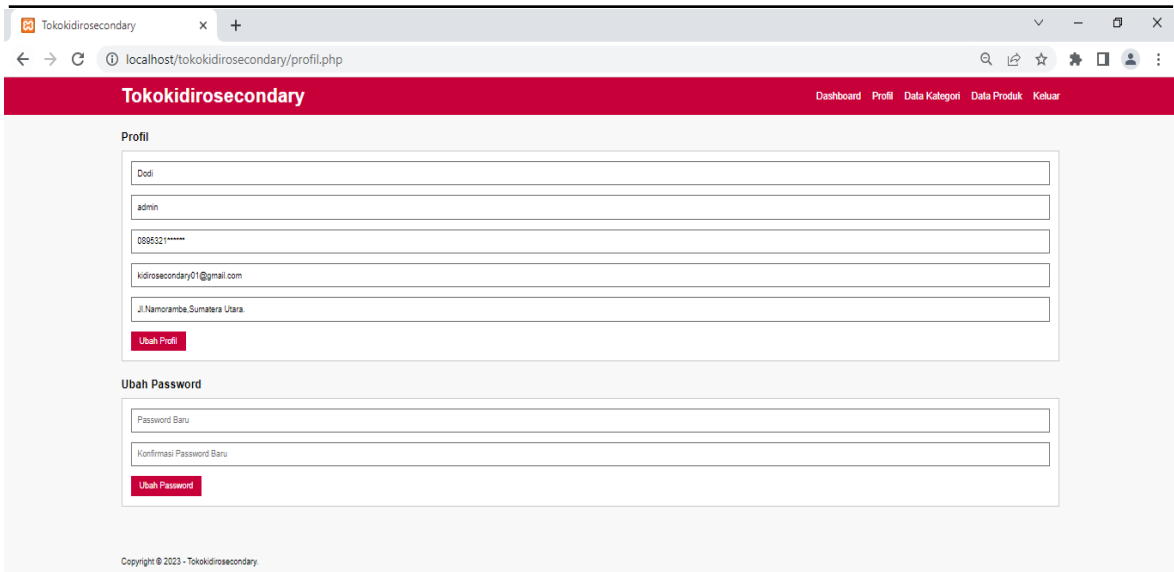
Figure 11 *Admin Profile* Interface Implementation

Implementation of Category Data Interfaces

Figure 12 is an implementation of the *interface* design of the admin category data menu page in the second kidiro store sales information system. In the category data menu display where this page displays information about the list of shoe brand categories
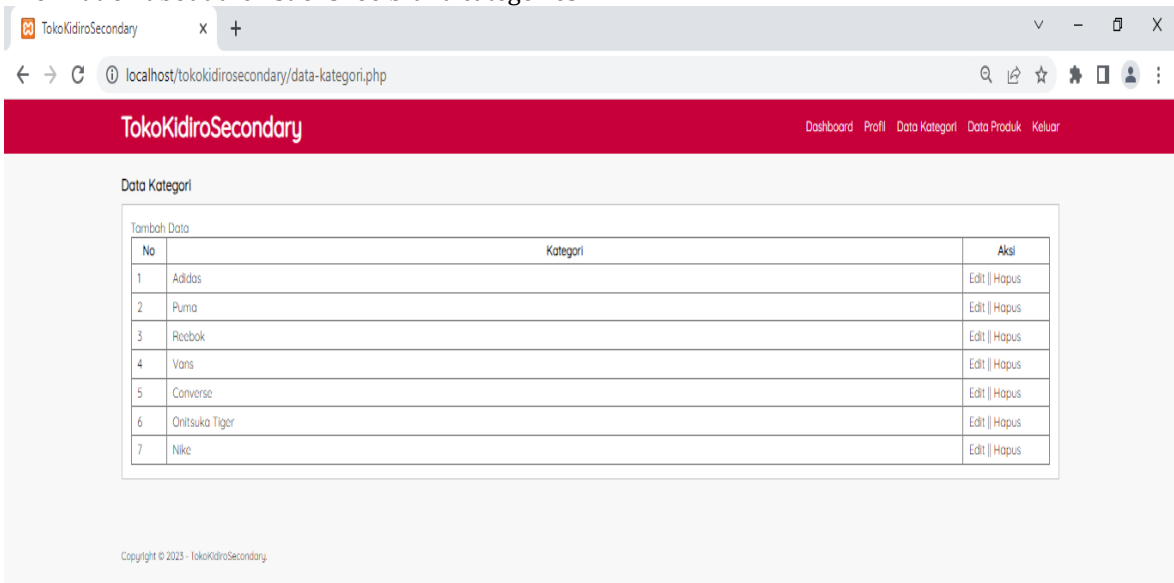

Figure 12 Implementation of *Category Data Interfaces*

Implementation of the Add Category Data Interface

Figure 13 is the implementation of the *interface* design of the menu page add admin category data in the sales information system of the second kidiro store. In the menu display add category data where this page is to add the name of the shoe brand sold.
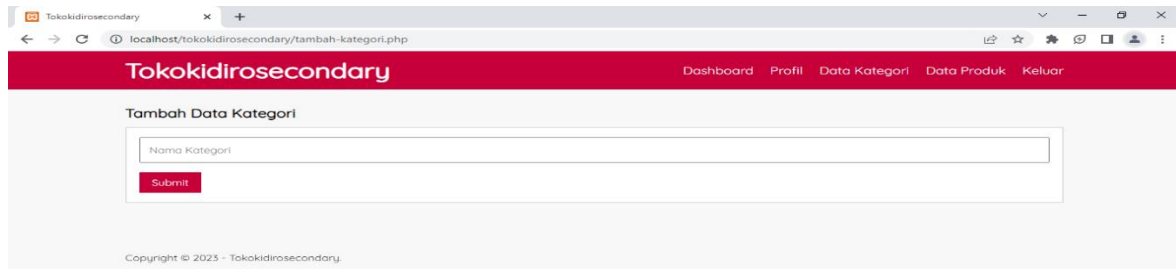
Figure 13 Implementation of the Add Category Data Interface

Product Data Interface Implementation

Figure 14 is an implementation of the *admin* product data menu page interface design in the second kidiro store sales information system. In the product data menu display where this page displays information about the list of shoe brand categories.

Figure 14 *Product Data* Interface Implementation

4.   CONCLUSION

The conclusions of this study are:

1. The creation of a sales website at the Kidiro Secondary Store can present information intended for customers.
2. With this information system can expand the product sales area.
3. Applying extreme programming methods so that the website-based secondary kidiro store sales system produces products that have passed the stages of analysis, design, implementation, and testing.

REFERENCES

Abdulloh, R. (2018). "7 in 1 Pemprograman Web untuk Pemula. *Jurnal PT Elex Media Komputindo*.

Afifah, I. I., & Supriyanta. (2018). Sistem Informasi Penjualan Busana Pengantin Pada Tuntut Manten Yogyakarta. *Journal Speed - Sentra Penelitian Engineering Dan Edukasi, Vol.10, No.8*.

Agusli, R., Sutarman, & Suhendri. (2017). Sistem Pakar Identifikasi Tipe Kepribadian Karyawan Menggunakan Metode Centainty Factor. *Jurnal Ilmu Teknik Informasi, Vol.7, No.1*.

Agustina, R., Lubis, I., & Irwan, D. (2022). Sistem Informasi Geografis Pencarian Lokasi Terdekat Wahana Hiburan Anak - Anak Dengan Metode EucliDean Distance. *Djtecno : Journal Of Information Technology Research Vol.3, No 2*, 307-308.

Ahmad, I., Borman, R. I., & Fakhrurozi, J. (2020). Software Development Dengan Extreme Programming (XP) Pada Aplikasi Deteksi Kemiripan Judul Skripsi Berbasis Android. *Jurnal Inovtek Polbeng, Vol.5, No.2*.

Ahmad, R. F., & Hasti, N. (2018). SISTEM INFORMASI PENJUALAN SANDAL BERBASIS WEB . *Jurnal Teknologi Dan Informasi (JATI) Vol 8 No 1*, 69.

Ahmadar, M., Perwito, & Taufik, C. (2021). Perancangan Sistem Informasi Penjualan Berbasis Web Pada Rahayu Photo Copy Dengan Database Mysql. *Jurnal Aplikasi Ipteks Untuk Masyarakat, Vol.10, No.4*.

Ajie, M. D. (2018). Sistem Informasi Konsep Dasar. *Hand Out*, 6.

Ammann, R. (2020). Recovering the web's unclaimed legacy of academic text standards: SGML, HTML, and the misremediation of quotation. *Internet Histories, Vol.4, No.1*, 66-86.

Aris, Sari, I. P., Atriyani, D., & Restiqi, T. C. (2016). Desain Aplikasi Sistem Informasi Penjualan Secara Online Pada PT.Ultinet Indonesia. *Seminar Nasional Teknologi Informasi dan Multimedia*.

Aziz, M. H. (2017). "Perancangan Desain Website Sebagai Salah Satu Media Promosi The Cobbler Yogyakarta. *Jurnal Tugas Akhir*.

Azwanti, N. (2017). Sistem Informasi Penjualan Tas Berbasis Web Dengan Pemodelan UML. *Ilmu Komputer*, 2.

Carolina, I., & Supriyatna, A. (2019). PENERAPAN METODE EXTREME PROGRAMMING DALAM PERANCANGAN APLIKASI PERHITUNGAN KUOTA SKS MENGAJAR DOSEN. *Journal Universitas Persada Indonesia Y.A.I.*

Destiningrum, M. (2017). Sistem Informasi Penjadwalan Dokter Berbasis Web Dengan Menggunakan Framework Codeigniter (Studi Kasus : Rumah Sakit Yukum Medical Centre). *Jurnal Teknoinfo, Vol.11, No.2, 30-37*.

Fitriyana, & Sucipto, A. (2020). Sistem Informasi Penjualan Oleh Sales Marketing Pada PT Erlangga Mahameru. *Jurnal Teknologi dan Sistem Informasi (JTSI), Vol.1, No.1*.

Gumelar, T., Astuti, R., & Sunarni, A. T. (2017). Sistem Penjualan Online Dengan Metode Extreme Programming. *Jurnal Telematika mkom, Vol.9, No.2*.

Gusrizaldi, R., & Komalasari, E. (2016). Analisis Faktor-faktor Yang Mempengaruhi Tingkat Penjualan Di Indrako Swalayan Teluk Kuantan. *Jurnal Valuta, Vol.2 No.2*.

Hidayat, M. K., & Ningrum, R. C. (2017). Sistem Informasi Penjualan Online Pada Toko Yusuf Bekasi. *IJCIT (Indonesian Journal on Computer and Information Technology), Vol.2, No.2*.

Iqbal, I., Witjaksono, W., & Kurniawan, M. T. (2015). Perancangan Aplikasi Penjualan Berbasis Web Dengan Metode Prototyping pada CV Khatulistiwa. *Jurnal Tugas Akhir Fakultas Rekayasa Industri, E-Proceeding Of Engineering Vol.2, No.1*.

Lubis, A. R., Fachrizal, F., & Maulana, H. (2017). Management Optimization Using PostgreSQL Replication Database in Database System. *Advanced Science Letters*.

Lubis, A. R., Maulana, H., & Fachrizal, F. (2017). Database Management Optimization Using PostgreSQL Replication Database in Database System. *Advanced Science Letters, Vol 23, No 5*.

Lubis, A. R., Prayudani, S., Lubis, M., & Khowarizmi, A. A. (2021). The Effect of E-Commerce Towards Sales Growth on Social Media among Students in Indones. *International Conference on Electrical Engineering, Computer Science and Informatics (EECSI)* .

Lubis, M. Y., & Zufria, I. (2022). Perancangan Aplikasi Pendataan Valins Yang Tervalidasi Oleh PT.Telkom Witel Medan Berbasis Web. *Aisyah Journal Of Informatics and Electrical Engineering Universitas Aisyah Pringsewu*, 35.

Mulia, G. S., Najoan, X., & Lumenta, A. (2022). Analisa Teknologi HyperText Markup Language(HTML) Versi 5. *Jurnal Teknik Informatik, Vol 15, No 2*, 1.

Palit, R. V. (2015). Rancangan Sistem Informasi Keuangan Gereja Berbasis Web Di Jemaat Gmim Bukit Moria Malalayang. *Jurnal Teknologi Elektro dan Komputer, Vol.4, No.7*, 1-7.

Rahmayu. (2016). Rancang Bangun Sistem Informasi Pada Rumah Sakit Dengan Layanan Intranet Menggunakan Metode Waterfall Mulia. 33-40.

Risma, N., Nur, S., & Komarudin. (2021). Rancang Bangun Sistem Informasi Penjualan Berbasis Web Dengan Metode Extreme Programming Pada PT.Dae Duck Texttile. *Jurnal Computech & Bisnis, Vol.15, No.2*.

Rusmana, D. A. (2019). Pengantar Pengolahan. *Analasis Sistem Informasi*, 3.

Salamah, U., & Khasanah, F. N. (2017). Pengujian Sistem Informasi Penjualan Undangan Pernikahan Online Berbasis Web Menggunakan BlackBox Testing. *INFORMATION MANAGEMENT FOR EDUCATORS AND PROFESSIONALS Vol.2, No. 1,*, 36.

Saputra, & Sudarmaji. (2017). Pemodelan Sistem Aplikasi Pengolahan Data Pasien Pada Rumah Sakit Islam Kota Metro Lampung. *Mikrotik Jurnal Manajemen Informatika, Vol.7, No.1*.

Sayfulloh, A. (2021). Perancangan Program Penjualan Mainan Berbasis Web Menggunakan Metode Extreme Programming. *Riset dan E-Jurnal Manajemen Informatika Komputer, Vol.5, No.2*.

Seprina, I., & Yulianingsih, E. (2022). SISTEM INFORMASI PENERIMAAN CALON PESERTA DIDIK BARU DI SMK NEGERI 1 MUARA KUANG BERBASIS WEB. *Jurnal Informanika, Vol.8, No.1*.

Septiana, A. (2017). Perancangan Sistem Informasi Penjualan Baju Online Pada Atlit Shop Berbasis Web.

Solihin, H. H., & Nusa, A. A. (2017). Rancang Bangun Sistem Informasi Penjualan Pembelian Dan Persediaan Suku Cadang Pada Bengkel Tiga Putra Motor Garut. *Jurnal Infotronik Volume 2, No. 2*, 107-115.

Suendri. (2018). "Implementasi Diagram UML (Unified Modelling Language) Pada Perancangan Sistem Informasi Remunerasi Dosen Dengan Database Oracle(Studi Kasus: UIN Sumatera Utara Medan). *Jurnal Ilmu Komputer dan Informasi, Vol.3, No 1*.

Sukamto, & Shalahuddin. (2018). Rekayasa Perangkat Lunak Terstruktur dan Berorientasi Objek. *Jurnal Informatika*.

Supriati, R., Saputra, A. S., & Islamiah, S. S. (2018). APLIKASI SISTEM PENGIRIMAN BARANG EKSPOR BERBASIS WEB PADA PT TUNTEX GARMENT INDONESIA TANGERANG GUNA MENINGKATKAN MUTU PROSES PENGIRIMAN EKSPOR BARANG. *Journal SENSI Strategic Of Education in Information System, Vol.4, No.1*, 88-102.

Tujni, B., & Megawaty. (2017). Pelatihan Pembuatan Web Dengan PHP Pada SMP NEGERI 27 Palembang. *URNAL ABDIMAS MANDIRI VOLUME 1 No.1*, 37-40.

Winarti, Muhammad, I., & Wulandari, N. (2020). Perancangan Sistem Informasi Penjualan Berbasis Web Pada Toko Campus Mart Unimuda Sorong dengan PHP dan Mysql. *Jurnal Petisi, Vol.1, No.1*.

Wongso, D., & Sama, H. (2021). Perancangan dan Implementasi Website Pariwisata di Desa Sembulang Dengan Metode Extreme Programming. *Journal of Information System and Technology, Vol.2, No.3*.