

## IRON SHOP SENTOSA E-COMMERCE WEBSITE APPLICATION USING PHP AND MYSQL

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### ABSTRACT

Information technology is an important part of human life and cannot be separated. Activities in interacting, communicating, and transacting are no longer limited by space, distance, and time. Today's website development is no longer an obstacle that is difficult to obtain. Many various websites were created, for example, a sales website (Marketplace). Marketplace is used as an intermediary between sellers and buyers. With a sales website, it makes it easier for consumers to buy goods without having to come to the store directly. The purpose of scientific writing is to make it easier for owners to provide information and to promote and sell existing products in the online store Iron shop to provide information and promote the sale of new products. only done by selling offline and customers have to come directly to the store, but with the covid-19 pandemic the store was forced to temporarily close in order to limit physical contact between sellers and buyers. Looking at these conditions, the creation of the Sentosa Iron Shop website online is the right solution and this application has been successfully created so that businesses can still run in the midst of the Covid 19 pandemic.

**Keywords:** Java, Mysql, Php, Visual Studio, Website

### 1. INTRODUCTION

Technology is an important part of human life and cannot be separated. This section has helped humans in various fields such as education, social, and even business. In the field of sales business, it becomes easier with internet technology [1]. The internet is a medium that can be relied upon as a medium for disseminating information from all activities in all fields. Activities in interacting, communicating, and transacting are no longer limited by space, distance, and time. The development of the website today is no longer an obstacle that is difficult to find. Many various websites have been created, for example, the sales website (Marketplace). Marketplace is used as an intermediary between sellers and buyers [2]. With a sales website, it makes it easier for consumers to buy goods without having to come to the store directly [3].

Iron shop is a business unit engaged in the sale of iron. The iron business is one of the rapidly growing business opportunities because many people need iron, especially in the construction sector. The Sentosa iron shop was founded in 2013. Product marketing at the Sentosa shop only opened one shop which is located in Sukagumiwang sub-district, Indramayu. So that the marketing and sales of products at the Sentosa store are still not optimal.

Based on the description above, in scientific writing, the writer intends to create an iron sales website [4]. This website can place iron orders efficiently and safely. This website can also market products in the Sentosa store and make it easier for customers to access complete product information.

### 2. RESEARCH METHODOLOGY

The research method used in Scientific Writing includes literature and field studies, by going through various stages, namely:

#### 2.1 Problem Identification

In this study the authors collected data by interviewing the owner of the Sentosa iron shop and collecting data on literature from theories for scientific writing through books, journals and literature obtained from the internet.

#### 2.2 Analysis

The analysis carried out is the search for the required information, such as the program used, and the data needed.

## 2.3 Application Design

This stage is in the form of website design activities about Toko Besi Sentosa and designing the appearance of the website both in terms of the front end which is the display that will be seen by the user and the back end which is the back side of the screen from a web page.

## 2.4 Implementation

The implementation stage is the stage of making an application using predefined software.

## 2.5 Commisioning

This stage ensures that there are no errors in the application that has been made by testing the website. At this stage it is also used to see whether the system is as expected.

## 3. RESULT AND DISCUSSION

### 3.1 Website Overview

The website-based Sales Application at the Sentosa Iron Shop displays information about various new types of iron being sold such as mild steel, chicken claw, and others. Website visitors can directly choose and make transactions online. This website was created using the PHP (Hypertext Preprocessor) programming language and uses the MySql database system. This website has several pages consisting of a home page, Cart page, login page, list page, checkout page, shopping history page. The home page displays the store's main page that displays the product. Cart page displays products that will be purchased by the user. The login page displays a page to enter a user account. The list page displays a page for creating accounts for users who don't have accounts. The checkout page displays the ordering process made by the user. The shopping history page displays the shopping history of the user.

### 3.2 Website Planning

In this study, each website page was designed and created using the PHP (Hypertext Preprocessor) programming language and MySql as a Database Management System (DBMS)[5, 6]. The components needed to build this system, such as the computer specifications used are as follows: Processor: Intel Core i7, RAM: 8 GB, Operating System: Windows 10 Pro 64-bit.

The components required in terms of software or software, include the following: Sublime Text 3, Xampp v3.3.0., Google Chrome. The types of programming languages used to build this website are as follows: PHP v7.4.4

### 3.3 Design

The design section is divided into 3 sections, including navigation structure design, UML diagram design, file structure design used in the Besi Sentosa online shop website and interface page design.

### 3.4 Navigation Structure Design

The navigation structure is the sequence of a flow of a program which is the design of the relationship between different areas. On the Sentosa store website, there are 2 types of navigation structures, including the admin navigation structure and the user navigation structure.

### 3.5 User Navigation Structure

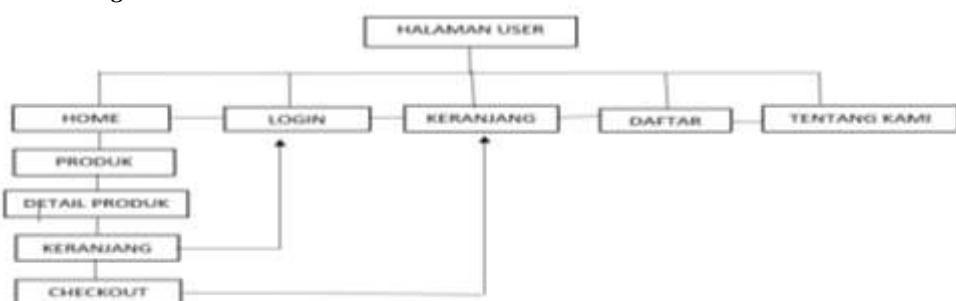


Figure 1. Structure Navigation

The user navigation structure uses a linear navigation structure, containing several pages that can be accessed by a website visitor. The following is the flow of the user navigation structure

### 3.6 Admin Navigation Structure

The admin navigation structure uses a composite navigation structure, containing multiple pages that can be accessed only by an admin.

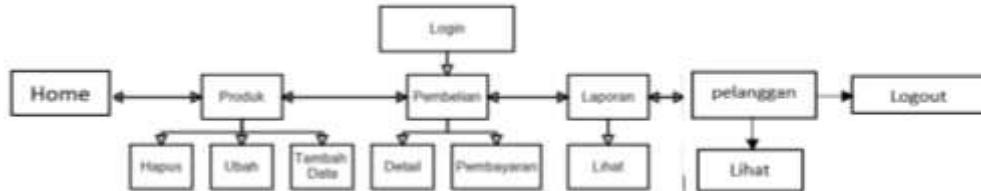


Figure 2. Admin Navigation

### 3.7 Use Case Diagram Design

In the use case diagram design shown for a user who is an actor from this diagram. Users can see a series of information on each website page. Apart from that, users can, of course, make transactions on this website but customers are required to log in and then be able to add products to the cart. After that the customer can checkout the product to be purchased.

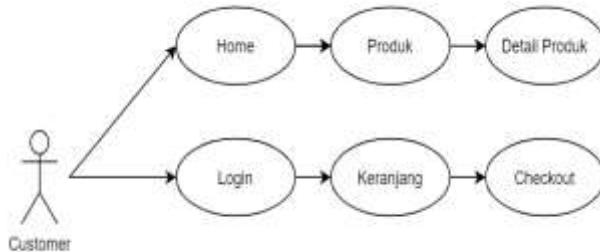


Figure 3. Use case User diagram

### 3.8 Use Case Diagram Admin

In the design use case diagram above is a diagram shown for an administrator who is the actor of this diagram. An admin can carry out his activities by logging in as an admin first. The admin will enter the username and password to be able to access the admin page. After entering the admin page, an admin can manage various sets of information that will later be displayed on website pages. Admins can also manage products, view purchase data, view purchase reports, and view customer data.

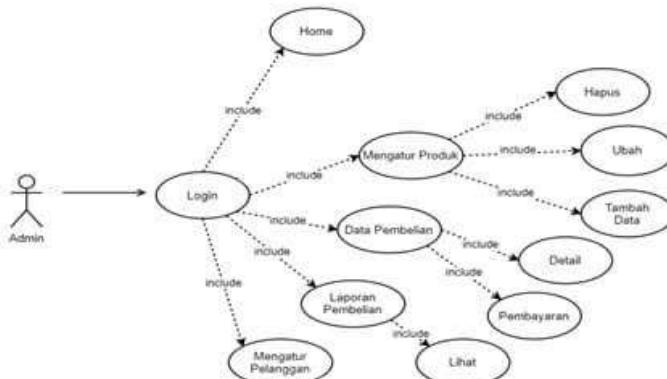


Figure 4. Admin Use Case Diagram

### 3.9 Home Page

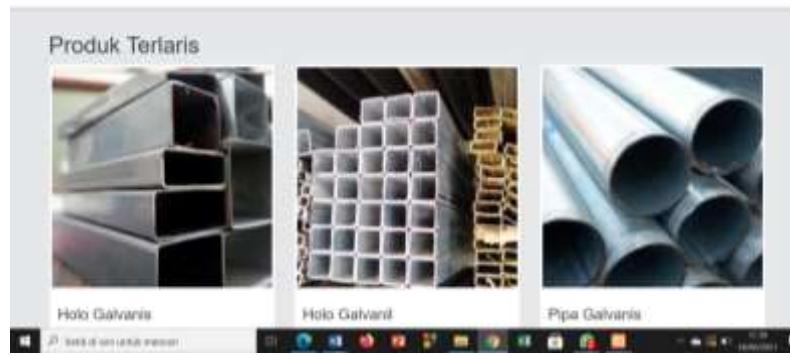


Figure 5. Home Page

### 3.10 Product Details Page

The Details page provides information about the details of the selected product.



Figure 6. Detail Page

### 3.11 Login Page

Customers who already have an account can immediately enter their email and password, while those who don't have an account must register first.

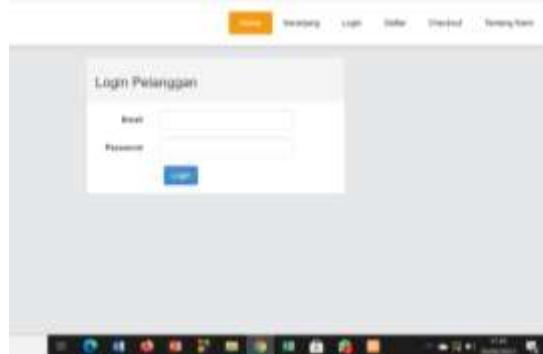


Figure 7. Login Page

### 3.12 Shopping Cart Page

On the shopping cart page, customers can see what items they want to buy. Customers can continue shopping or checkout.



Figure 8. Shoping Cart Page

### 3.13 Checkout Page

On the checkout page, customers are given information on what items they want to buy. The customer also selects the shipping cost and enters the full address.

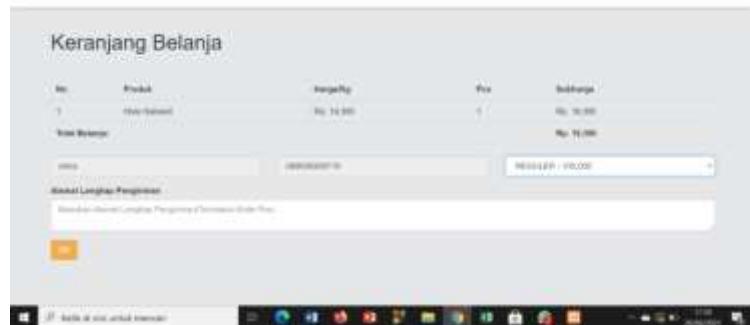


Figure 9. Checkout Page

### 3.14 Billing page

On the billing page, the customer is given purchase details and asked to transfer with a predetermined amount.



Figure 10. Billing Page

### 3.15 Shopping History Page

The Shopping history page provides information about date, status, and total. Customers can also input payments via the payment input button.

Riwayat Belanja Renta					
No	Tanggal	Status	Total	Opsi	
1	2021-08-01	Lunas	Rp. 14.000	<input type="button" value="Bayar Pembayaran"/>	
2	2021-08-11	Pending	Rp. 14.000	<input type="button" value="Bayar Pembayaran"/>	
3	2021-08-17	Pending	Rp. 14.000	<input type="button" value="Bayar Pembayaran"/>	
4	2021-08-20	Pending	Rp. 14.000	<input type="button" value="Bayar Pembayaran"/>	
5	2021-08-26	Pending	Rp. 14.000	<input type="button" value="Bayar Pembayaran"/>	

Figure 11. Shopping History Page

### 3.16 *Payment Input Page*

On the payment input page, the customer enters the name of the depositor, the bank used, enters the predetermined amount, and uploads a photo of proof of transfer.



Figure 12. Payment Input Page

### 3.17 *View Payment page*

The view payment page provides information on transactions made by customers.



Figure 13. View Payment page

### 3.18 *Admin Login Page*

Halaman ini berisi form login yang terdapat dua buah textfield yaitu username dan password untuk proses login admin agar dapat mengakses halaman admin.



Figure 14. Admin Login Page

### 3.19 *Admin Product Page*

Data Produk						
No	Nama Produk	Harga	Berat(kg)	Stok	Foto	Aksi
1	Minuman	10000	0.5	10		<a href="#">Detail</a> <a href="#">Edit</a>
2	Kopi Gourmet	15000	1.0	5		<a href="#">Detail</a> <a href="#">Edit</a>
3	Aqua Caramel	10000	1.0	8		<a href="#">Detail</a> <a href="#">Edit</a>
4	Es Krim	10000	1.0	10		<a href="#">Detail</a> <a href="#">Edit</a>

Figure 15. Admin Product Page

### 3.20 Admin Purchasing Page

The admin purchase page provides information about customer purchases such as customer name, purchase date, purchase status, and total.

No	Nama Pembelian	Tanggal	Status Pembelian	Total	Aksi
1	Novi	2021-05-01	Created	114000	<button>Detail</button> <button>Ubah</button> <button>Hapus</button>
2	Astro	2021-05-01	Pending	114000	<button>Detail</button> <button>Ubah</button> <button>Hapus</button>
3	Novi	2021-05-01	Created	114000	<button>Detail</button> <button>Ubah</button> <button>Hapus</button>
4	Novi	2021-05-01	Pending	114000	<button>Detail</button> <button>Ubah</button> <button>Hapus</button>
5	Novi	2021-05-01	Pending	114000	<button>Detail</button> <button>Ubah</button> <button>Hapus</button>
6	astro	2021-05-01	Created	114000	<button>Detail</button> <button>Ubah</button> <button>Hapus</button>
7				114000	<button>Detail</button> <button>Ubah</button> <button>Hapus</button>

Figure 16. Admin Purchasing Page

### 3.21 Admin Purchase Details Page

The purchase detail page provides more detailed information to the admin about customer purchasing data.

Detail Pembelian		
Pembelian	Pelanggan	Pengiriman
Pembelian: 2021-05-01 Total Rp. 114.000 Status: Luruh	Pelanggan: Novi Alamat Pelanggan: Jl. Gg. 12/21 Provinsi: Bandung Kota: Bandung	Pengiriman: Novi Total Rp. 114.000 Amanat: 100.000 Sisa: 10.000
No	Nama Produk	Jumlah
1	Hand Sanitizer	1
		Rp. 114.000

Figure 17. Admin Purchase Details Page

### 3.22 Admin Payment Data Page

On the admin payment data page, it provides information about transactions made by customers.

Data Pembayaran		
Pembelian	Pelanggan	Pengiriman
Pembelian: 2021-05-01 Total Rp. 114.000 Status: Luruh	Pelanggan: Novi Alamat Pelanggan: Jl. Gg. 12/21 Provinsi: Bandung Kota: Bandung	Pengiriman: Novi Total Rp. 114.000 Amanat: 100.000 Sisa: 10.000
No	Nama Produk	Jumlah
1	Hand Sanitizer	1
		Rp. 114.000

Figure 18. Admin Payment Data Page

### 3.23 Admin Reports page

The admin report page provides purchase information with a specified time.

Laporan Pembelian dari 2021-05-01 hingga 2021-06-26				
Tanggal Mulai		Tanggal Akhir		
2021-05-01				<input type="button" value="Cari"/>
No	Pembelian	Tanggal	Jumlah	Status
1	Novi	2021-05-01	Rp. 114.000	Created
2	Astro	2021-05-01	Rp. 114.000	Pending
3	Novi	2021-05-01	Rp. 114.000	Created
4	Novi	2021-05-01	Rp. 114.000	Pending
5	Novi	2021-05-01	Rp. 114.000	Pending
6	Novi	2021-05-01	Rp. 114.000	Pending
7	astro	2021-05-01	Rp. 114.000	Created
8		2021-05-01	Rp. 114.000	<input type="button" value="Cetak"/>

Figure 19. Admin Reports page

### 3.24 Admin Customer Page

The customer page provides information on which customers have registered. Admins can also delete customer accounts.



A screenshot of a web-based application titled "Data Pelanggan". The left sidebar contains navigation links: Home, Produk, Penjualan, Laporan, Pengiriman, and Logout. The main content area is titled "Data Pelanggan" and displays a table with columns: No, Nama Pelanggan, Email, and Telepon. The table lists 8 entries:

No	Nama Pelanggan	Email	Telepon
1	Hanifah	hanifah@gmail.com	08123456789
2	jevi	jevi@gmail.com	0823456789
3	Riau	riau@gmail.com	08312345678
4	rita	rita123@gmail.com	080987654321
5	anisa	anisa23_345@yahoo.com	087777777777
6	selfi	selfi@gmail.com	08999999999
7	ameng	ameng@gmail.com	08999999999

Figure 20. Admin Customer Page

## 4. CONCLUSION

The Toko Besi Sentosa website has been completed and has been successfully opened via Google Chrome, Microsoft Edge and Safari Web Browser. The Cheap UD Iron Shop website has gone through a trial phase including functionality trials. Based on the trials that have been carried out, it is found that all functions can function properly, as expected. So that the Sentosa Iron Shop website can be used properly. The existence of this website can make it easier for Toko Besi Sentosa online shop owners to promote the products they sell, as well as make it easier for customers to find the product they want.

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