Timmi E-Commerce Website Design Using Java, PHP, and MySQL

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Abstract
In the current digital era, technological developments are very rapid, making it easier for humans to increase information and knowledge. Technological developments also affect various sectors, for example trade. Trading patterns that were previously traditional have now become very advanced with the existence of the e-commerce system. E-commerce is the activity of buying and selling goods or services via electronic networks, especially the internet. E-commerce makes buying and selling activities easier, whereas previously customers had to visit a shop to buy the goods they wanted to buy, now customers only need to open websites on communication devices such as computers and gadgets.

Keywords : *digital era, technological developments, information and knowledge, e-commerce*

INTRODUCTION

Timmi E-commerce is an online shop that sells new and used goods on Instagram. Timmi's online shop carries out buying and selling activities by relying solely on sales and promotions via Instagram, so it is less competitive with other online shops that already have websites and sell their products via the website. One way for an online shop to develop is by selling the products it sells via Instagram and also the website.

From this background, an article was written with the title "Designing the Timmi E-commerce website using PHP and MySQL." It is hoped that with this E-commerce website, people will be able to find new or used goods easily. The limitations of the problem in scientific writing are: . E-commerce website testing is carried out offline. If successful with localhost, later hosting will be carried out and can be accessed as a whole Research purposes

The aim of this research is to create a sales system on the thriftshop_id e-commerce website that is user friendly and will make it easier for people to buy new or used goods without having to go to an offline shop.

METHODS

This system was created in several stages, namely:

1. Planning

At this stage, creating a website for an online shop will create a database using MYSQL. The system will be designed to promote goods sold online to the Indonesian public.

2. Analysis

With the need for an online shop, they will create a website, therefore create a website program to facilitate the online sales process to the public.

3. Application design and creation

At this stage, the application flow design will be described using a navigation structure and flowchart. This application uses PHP, HTML and MySql as its database processor.

4. Implementation

At this stage it will be implemented using the Microsoft Edge, Google Chrome, Safari browsers

RESULTS AND DISCUSSION

The sales application at the website-based Timmi_id store displays information about various types of new and used goods being sold, such as clothes, shoes, jackets and others. Website visitors can immediately choose and make transactions online.

This website was created using the PHP (Hypertext Processor) programming language and uses the MySql database system. This website has several pages consisting of a home page, basket page, login page, register page, checkout page, shopping history page. The home page displays the main page of the shop displaying the product. The basket page displays the products that the user will buy. The login page displays the page for entering a user account. The registration page displays a page for creating an account for users who do not yet have an account. The checkout page displays the ordering process carried out by the user. The Shopping history page displays the user's shopping history.

Planning

The design section is divided into 3 parts, including navigation structure design, UML diagram design, file structure design used on the thriftshops_id online shop website and interface page design.

Navigation Structure Design

The navigation structure is a sequence of flow of a program which is a design of relationships between different areas. On the thriftshops_id online shop website, there are 2 types of navigation structures, including the admin navigation structure and the user navigation structure.
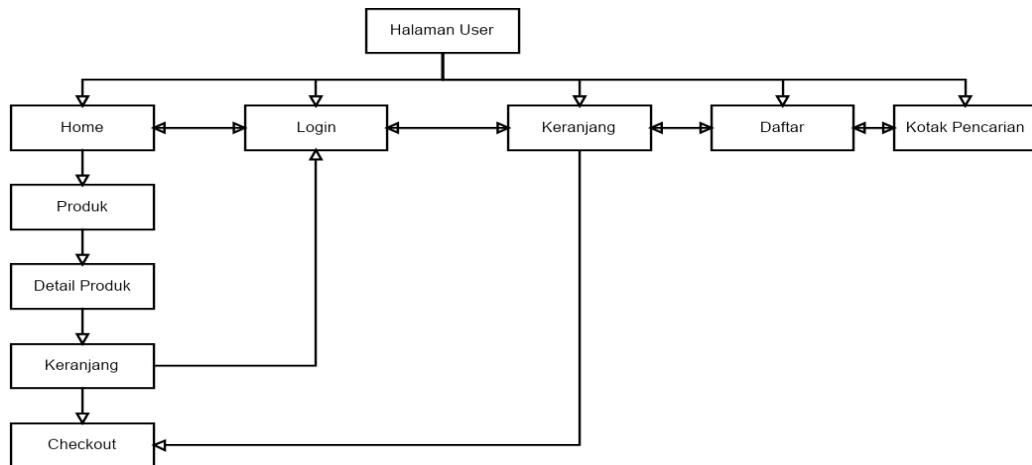
The user navigation structure contains several pages that can be accessed by a website visitor. The following is the flow of the user navigation structure:

a. When a visitor first accesses the Timmi website, the first page that will appear is the home page. On the home page, visitors can see the products being sold. Visitors can also see details of the product.

b. Visitors can move to the login page. On this page, visitors log in so they can carry out the transaction process. Visitors can also see the shopping history of the account

c. The shopping cart page contains a list of selected products and the checkout process is carried out by visitors.

d. On the registration page, visitors can create an account, for login and transactions.

e. In the search box, visitors can search for the desired item

Admin Navigation Structure
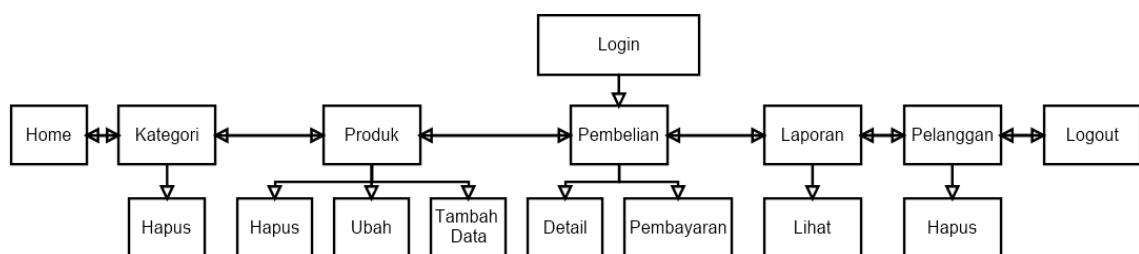
The admin navigation structure contains several pages that can be accessed only by an admin. The following is the flow of the admin navigation structure:

a.   Admin must log in first to enter the admin page. Admin enters the specified username and password

b.   After the admin has successfully logged in, the first page that appears is the home page.

c.   Below the home page, there is a category page. On the category page, admins can see category data.

d.   Below the category page, there is a product page. On the product page the admin can add, change or delete products.

e.   Below the product page, there is a purchase page. On the purchase page the admin can see purchase data such as buyer's name, proof of payment, total price, purchase details.

f.   Below the purchase page, there is a report page. On the report page the admin can see purchase data at a specified time.

g.   Below the report page, there is a customer page. On the customer page, the admin can see registered customer accounts and the admin can also delete these accounts.

h.   Under the customer page, there is a Logout page which is used to exit the admin page.

UML Design

The configuration on this website was created using a design from the Unified Modeling Language (UML) diagram. The types of diagrams created include use case diagrams, activity diagrams, and class diagrams.
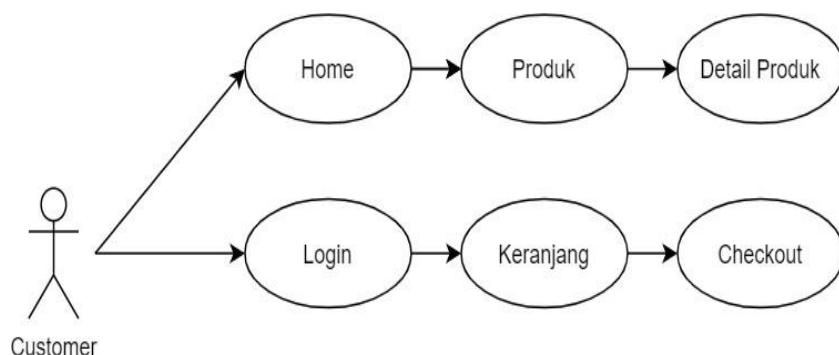
Figure 1. Use Case Diagram Design

Database Design

Creating a Timmi E-commerce website is based on a file structure which is a specification of each attribute contained in a table or file in the database system. The tables used in creating this website include: admin table, category table, postage table, customer table, payment table, purchase table, product_purchase table, product table. The following is the file structure of these tables:

Tabel 1. Table admin

No	Nama	Jenis	Panjang	Keterangan
1	Id_admin	Int	11	Primary Key, Auto Increment
2	Username	Varchar	100	
3	Password	Varchar	100	
4	Nama_lengkap	Varchar	100	

Tabel 2. Table Category

No	Nama	Jenis	Panjang	Keterangan
1	Id_kategori	Int	5	Primary Key, Auto Increment
2	Nama_kategori	Varchar	100	

Tabel 3. Table Delivery

No	Nama	Jenis	Panjang	Keterangan
1	Id	Int	5	Primary Key, Auto Increment
2	Nama_pulau	Varchar	100	
3	Tarif	Int	11	

Tabel 4. Table costumers

No	Nama	Jenis	Panjang	Keterangan
1	Id_pelanggan	Int	11	Auto Increment, Primary Key
2	Email_pelanggan	Varchar	100	
3	Password_pelanggan	Varchar	50	
4	Nama_pelanggan	Varchar	100	
5	Telepon_pelanggan	Varchar	50	
6	Alamat_pelanggan	Text		

Tabel 5. Table Payment

No	Nama	Jenis	Panjang	Keterangan
1	Id_pembayaran	Int	11	Auto Increment, Primary Key
2	Id_pembelian	Int	11	
3	Nama	Varchar	255	
4	Bank	Varchar	255	
5	Jumlah	Int	11	
6	Tanggal	Date		
7	bukti	Varchar	255	

Tabel 6. Table buyer

No	Nama	Jenis	Panjang	Keterangan
1	Id_pembelian	Int	11	Auto Increment, Primary Key
2	Id_pelanggan	Int	11	
3	Id_ongkir	Int	11	
4	Tanggal_pembelian	Date		

5	Total_pembelian	Int	11	
6	Nama_pulau	Varchar	100	
7	Tarif	Int	11	
8	Alamat_pengiriman	Text		
9	Status_pembelian	Varchar	100	
10	Resi_pengiriman	Varchar	50	

Interface Design

At this stage, interface design specifications or interface designs are needed to understand the description of each page and the relationships between pages

website. This design focuses on several types of design, which are the designs that support the website so that it can run well. The design of each page of this website is as follows:
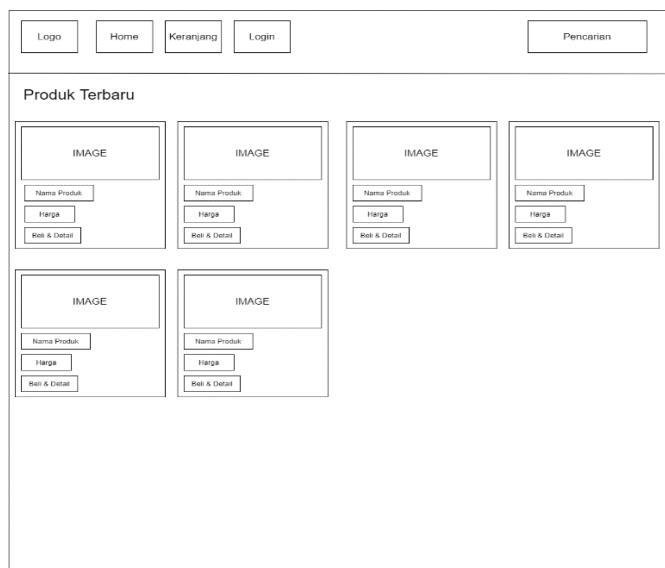
Design the Home Page before logging in

The image above shows the overall layout of the Front End page. The first time a visitor accesses this website, this is the initial display that will appear. This page layout contains several components such as Home, Cart, Login, Search and Products. Visitors can also see the latest products on the website

CONCLUSIONS

The Timmi E-commerce website has been completed and has been successfully opened via Google Chrome, Microsoft Edge and Safari Web Browser. The Thriftshops_id

website has gone through a testing phase, including functionality testing. Based on the tests that have been carried out, it was found that all functions can function well, as expected.

So that the Timmi E-commerce Website can be used properly. The existence of this website can make it easier for Timmi online shop owners to promote the products they sell, as well as making it easier for customers to find the products they want.

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