Design and Build an E-Catalog Application for Typical Jombang Products

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ABSTRACT
Technological developments encourage business actors to be more creative in competing to provide the best service for consumers. However, during the current pandemic, many business actors have gone out of business due to the pandemic because people are prohibited from leaving their homes. Therefore, during the current pandemic, business actors should implement sales that make it easier for consumers to buy the desired product without coming to the store and can also be done with transfer payments. The purpose of this research is to make it easier for consumers to find Jombang typical food products through digital catalog applications. This study uses R&D research, namely the data collection stage by studying objects about the system, and retrieval of data from books, the internet, journals, and other sources that are useful for the preparation of the E-catalog of Typical Jombang Products. The results of the feasibility trial of this application are 80%, which means that this application is feasible to be used and applied in the community. With the application of this typical Jombang product E-catalog, people will find it easier to shop as they want and display products and orders that were previously manual to be easier and faster because all data is processed on a computer.

Keywords: e-Katalog; Website; Reasearch and Development (R&D).

INTRODUCTION

The development of science and technology is currently very fast bringing dynamic changes in various sectors, especially in the field of information and communication technology. The development of information technology causes human dependence on information technology to be higher. People become consumers of information and also produce information both to help and to facilitate a job, in this case, information technology is widely used, one of which is to find culinary information or local food, by using the help of a website from a company or store to be able to view and choose products. most preferred local without having to come directly to the place (Hariono & Putra, 2021).

A website is a collection of pages consisting of several pages that contain information in digital form, be it text, images, animations provided via the internet so that it can be accessed from outside Jombang with an internet connection (Hardiyanto & Airlangga, 2021). Catalogs are a means to present a detailed range of local foods with various types that reflect the natural potential of an area.

Information technology plays an important role in improving the quality of a product, one of which is a typical Jombang souvenir shop. Likewise, the condition of the products that have been sold in shops, outlets, or stalls in Jombang is a reflection of the typical food that has been provided as souvenirs for tourists and all Jombang residents themselves (Sujono & Herlambang, 2021). Lack of awareness of business actors, especially in the development of information technology, makes products, especially souvenirs, still unable to reach a wide market. Media technology can be used to carry out promotions in increasing the competitiveness of industrial tourism sales products, especially in the Jombang area. Therefore, marketing must be improved.

Based on the above background, the researchers tried to carry out implementation to increase market competition by making "Designing The Application Of Jombang Special Product E-Catalog" as a promotional media to display the results of product list information that is made electronically and can be accessed online. This study aims to make it easier for consumers to find product availability through the website by inputting keywords without visiting the store directly. (Indrajaya, S. (2016).

METHOD
## Operational Definition

- Definition of Web

  The World Wide Web is an information presentation service that uses the concept of hyperlinks (links) that make it easier for surfers (the term for computer users who browse or search information via the internet). The web is used as the fastest-growing service. The Web allows highlighting words or images to link or point to other media.

- Definition of Internet

  Internet is a global network that connects a network with other networks around the world. The internet network works based on a protocol (rules). TCP / IP is a standard protocol used to connect networks on the internet so that data can be sent from one computer to another. Each computer is assigned a unique number called IP. (Darma Susila, I. M., Riza Hilmi, M., & Arya Suita Darma, I. P. (2020).

- Definition of PHP My Admin

  PHP My Admin is used to handle MySQL administration through a network of websites. PHP My Admin supports various MySQL operations including, processing databases, tables, fields, relations, indexes, users, permissions, and others.

- Definition of PHP (HyperText Processor)

  PHP is used for handling the creation and development of a website that can be used on HTML. PHP is designed to be able to work with database servers and is made in such a way that the creation of HTML documents that can access the database becomes so easy. The purpose of this scripting language is to create applications where the application built by PHP will generally provide results in a web browser, but the whole process is run by the server.

- Definition of XAMPP

  XAMPP is used as a stand-alone server (localhost) which consists of several programs including Apache HTTP server, MySql database, and language translator is written in PHP and Perl programming languages. This program is available GNI (General Public License), is a server that is easy to use, and can display dynamic web pages.

- Definition of CSS

  CSS stands for Cascading Style Sheet, which is an extension of pre-existing HTML code. CSS can determine the basic structure of web pages more easily and quickly, and save size.(Prasetyo, A., & Syaifulloh, A. (2018).

- Definition of Sublime Text

  Used to write some codes and can open various types of files. In addition, it also supports various programming languages such as C++, CSS, ASP, HTML, and so on.

- Definition of CodeIgniter Framework

  The CI framework serves to speed up and simplify our web creation. CI produces a very neat programming structure both in terms of code and the structure of the PHP file. Provide coding standards so that it makes it easier for us or others to relearn the application system that has been built.(Hidayat, R. (2017).

Research

This type of research is a type of development research that refers to the R&D (Research and Development) model. The R&D model is used to develop and validate products used in education and learning (Hamdani, A. U., Informasi, S., Informasi, F. T., Luhur, U. B., Utara, P., & Lama, K. (2020). The product developed in this study is a typical Jombang product catalog used by a typical Jombang souvenir center shop. The steps in the R&D model consist of system design, implementation, and maintenance. The instruments used in this study were interview guides, literature studies, and data analysis. (Wahyuni, T., & Puadah, U. (2015).

Research Flow
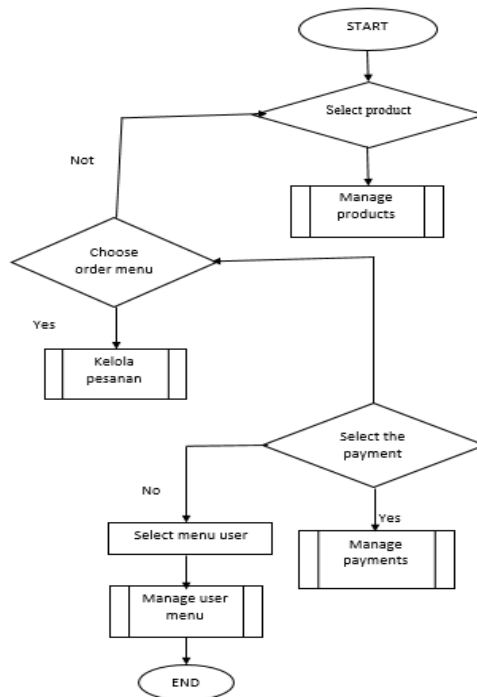
Figure 1. Flowchart Admin

This flowchart describes the flow of input, management, and customer payments carried out by the admin.
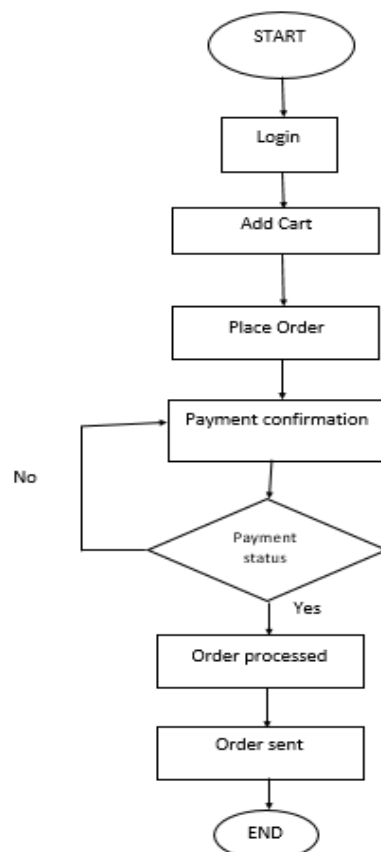
Figure 2. Flowchart User

This flowchart explains the flow of how users to order products, add orders for purchased products, and find out product prices easily.

RESULT AND DISCUSSION

The following are the results and discussion obtained after the research and the working process Jombang Typical Product E-catalog Application:

Result

The results of this study are applications with two levels, namely user and admin, admin here as monitoring products, customer orders, and checking the status of customer payments. While the user is an application user who wants to buy a product according to his wishes.

Discussion

Table 1. Admin Display Test

No	Test	Status			
		SB	B	LB	KB
1.	Home View	√			
2.	Add Product	√			
3.	Add Product Category		√		
4.	Add Product Unit		√		
5.	Order List		√		

Table 2. User Display Test

No	Test	Status			
		SB	B	LB	KB
1.	Home Page View	√			
2.	Product Page View	√			
3.	Cart Page View		√		
4.	Make Order View		√		

Information :
SB (Very Good)   : 4
B (Good)   : 3
LB (Pretty Good)   : 2
KB (Not Good)   : 1

- Admin Product Data Display

This view is used by the admin to update and monitor products.
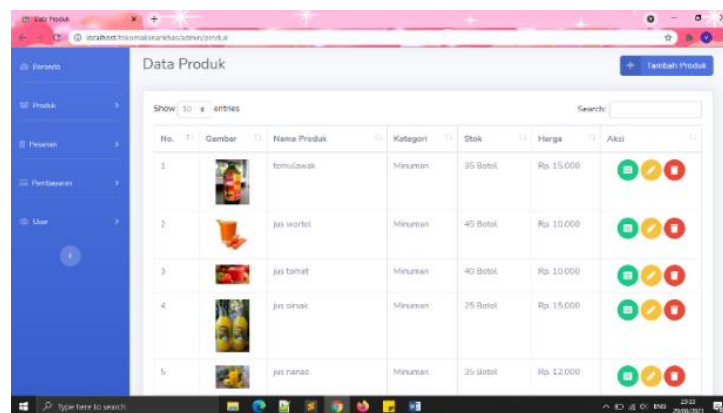
Figure 3. Admin Product Data Display

- Display of Customer Order List

This view is used to view admin orders and view order status. Whether the order has been paid for, has not been paid for, or is being processed.
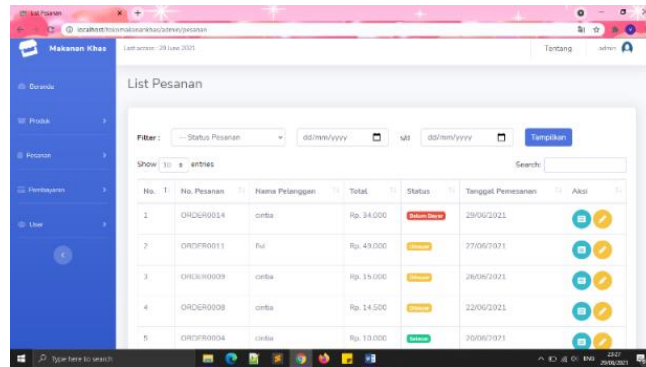
Figure 4. Display Order List

- Shopping Cart Display

The order page displays what products are ordered, the unit price of the product, the number of products ordered, the total price of the product.
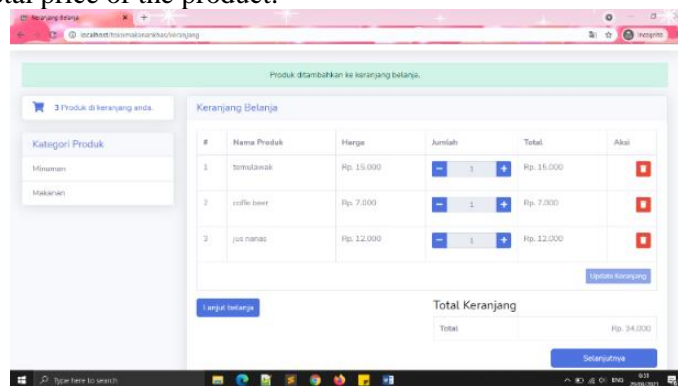

Figure 5. Shopping Cart Display

- Next Page View

In this process, if the user has finished shopping, they must fill in the destination address form for the delivery of the product they have ordered.
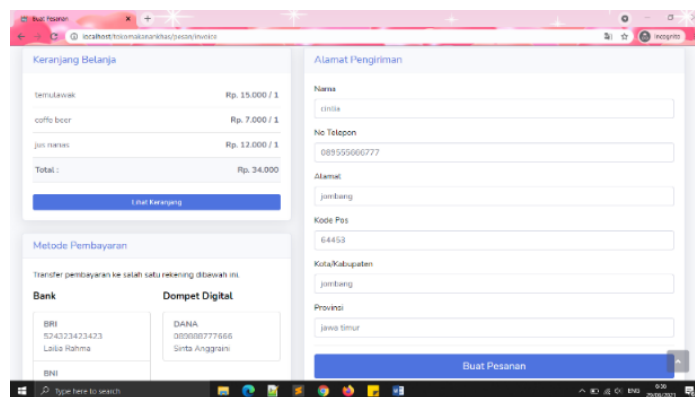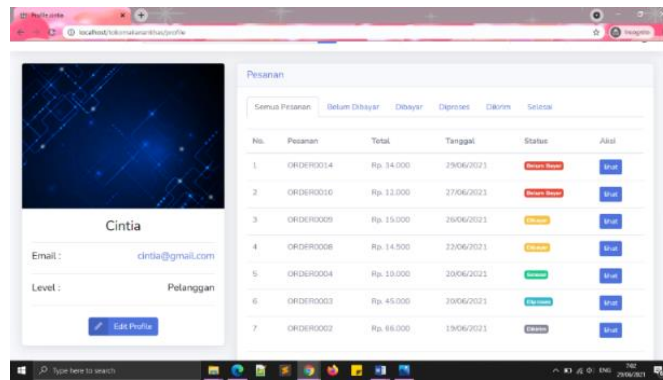

Figure 6. Display of the Shipping Address Input page

- Customer Order History Page View

This display helps customers to be able to check what products have been ordered, and can also know the status of the product whether the product they ordered has been sent or not.

Figure 7. Order History and User Profile

CONCLUSION

The conclusion that can be drawn from the existence of this web-based application is that the display of products and orders that were previously manual becomes easier and faster because all data is processed on a computer. The online store application for Typical Souvenirs from Jombang can still be developed in terms of appearance and additional features, such as delivery services from stores to customers. This is because of the limited data collected by researchers. As well as the lack of product data presented because of the limited information that can be collected by researchers.

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