

E-Pasar Application to Improve Economic Stability of MSME in Jombang

Nur Khafidhoh^{1*}, Azmi Maghfirotul²

^{1,2}Informatika, Universitas KH. A. Wahab Hasbullah

*Email: nurkhafidhoh@unwaha.ac.id

ABSTRACT

This e-pasar application can make it easier for MSME actors to promote their products and make it easier for consumers to get information about the products owned by the seller. In this pandemic era, it is very impossible to hold a bazaar so the market cannot operate as usual. The purpose of making this e-pasar application is so that the market can continue to operate as usual and also facilitate buying and selling in this pandemic era. The research method used in making this e-pasar application is the waterfall method. The waterfall method provides a sequential software lifeflow approach starting from the analysis, design, coding, testing, and support stages. This research produces an online market website. This online market website serves to provide convenience to customers so that they can find information about products or goods sold in the market quickly.

Keywords: e-pasar, MSME, Website

INTRODUCTION

The development of the internet is not only for information or entertainment advice, but nowadays it is also widely used for online transactions. This online transaction is very helpful for people doing business, because online business can reach all regions in various worlds (Sifaunajah, 2020).

This market is a market that sells various kinds of basic needs, such as food, beverages, accessories, and others. This market, which is located in Jombang, only operates when there is a bazaar event. In this pandemic era, it is very impossible to hold a bazaar so the market cannot operate as usual. Some MSME actors also promote through personal social media (Widya & Airlangga, 2020). Customers must follow the personal account of the MSME actors in order to find out the latest information on the products they sell. Customers can also order products by contacting the seller directly through the contact person they include on the personal social media account of MSME actors (Sujono & Kafi, 2020).

The existence of social media is very helpful for MSME actors in this market in trading. But not all MSME actors in this market have social media accounts so that customers cannot access MSME information in the market. Based on the explanation above, a web-based e-pasar application is made. The purpose of making this e-pasar application is so that the krempyeng market can still operate as usual and also make buying and selling easier in this pandemic era.

METHOD

Research Methods

Research Methods used in making this e-pasar application is the waterfall method. It is called the waterfall because the stages that are passed must wait for the completion of the previous stage, namely the requirements stage.(Nur, 2019)

The waterfall method provides a software lifeflow approach sequentially starting from analysis, design, coding, testing, and support stages. The waterfall method is the most widely used research method for the development stage. This waterfall method is also known as the traditional method or the classical method.(Susilo et al., 2018)

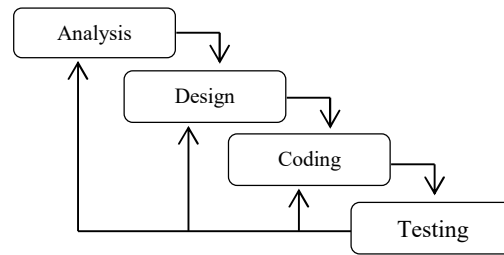


Figure 1. Waterfall Method

- Software requirements analysis
The process of gathering requirements is carried out intensively to specify software requirements.
- Design
This stage translates software requirements from the requirements analysis stage to a design representation so that it can be implemented into a program at a later stage.
- Programming the code
Design must be translated into a software program. The result of this stage is a computer program in accordance with the design that has been made at the design stage.
- Testing
Testing focuses on the software logically and functionally and ensures that all parts have been tested to minimize errors and output must match.

Research conducted by Himawan (2014) concluded that the existence of an e-commerce website that utilizes the internet as a marketing medium, makes it easier for shop owners to provide services to consumers, provide 24-hour information that can be accessed anytime and anywhere and a website designed to increase income, because income is not only from stores but also through online marketing.(Listianto, Fergiawan; Fauzi; Irviani, 2017)

Framework of Thinking

Before designing an e-market application, an analysis is also required. The problem analysis before designing this e-market application is as follows:

- The sales system in the market still uses the usual system, customers must directly come to the store or shop to order products.
- There is no system that can inform product details, prices, stock and others which causes customers to often run out of products to be ordered.(Fahrozi et al., 2020)
- In making this application also requires a flowchart or chart with certain symbols that describes the sequence of processes in detail to connect a process with other processes in a program.

The flow of the process of using this application, the customer logs in first and then looks for the desired product category. After selecting the desired product, the product will be added to the shopping cart. After shopping, fill in some of the forms that have been provided to proceed to the payment process. Confirmation of customer payments will be received by the admin, then the admin will confirm to the seller to carry out the product packaging process. Then the product is sent by courier.

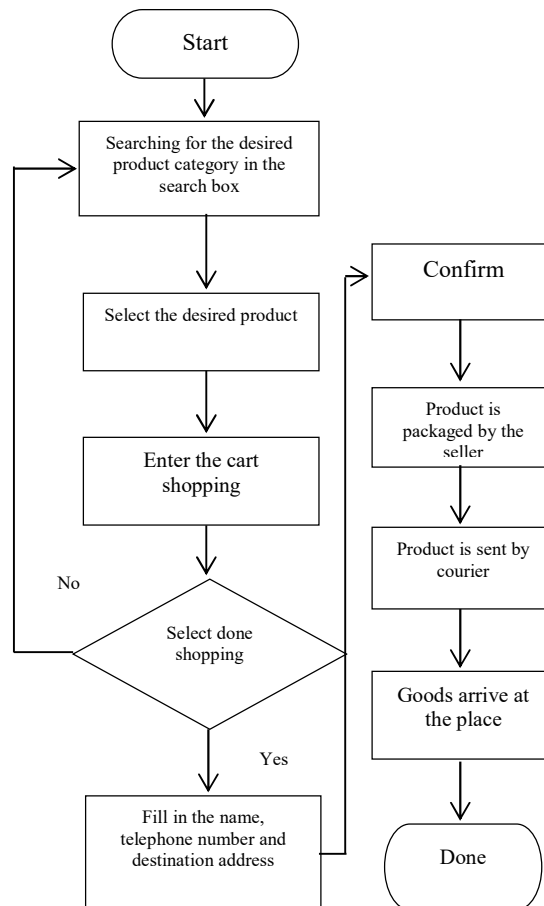


Figure 2. Application Flowchart

Theoretical Basis

- Applications
Applications or software are used to solve problems faced by users or users by using computer capabilities. This e-pasar application is made to make it easier for customers or consumers to get information and buy products. (Listianto, Fergiawan; Fauzi; Irviani, 2017)
- PHP My Admin
PHP My Admin is used to handle MySQL administration. PHP My Admin supports various MySQL operations, such as managing databases, tables, fields, relations, users, and others.
- XAMPP
XAMPP is useful as a stand-alone server. XAMPP stands for X four operating systems which include Apache, MySQL, PHP and Perl. This program is available under the General Public License which is an easy-to-use web server that can display dynamic web pages.(Susilo et al., 2018)
- MySQL
MySQL is used to process databases using SQL language. MySQL is open source so we can use it for free. PHP programming is also very supportive or supports the MySQL database.(Haerulah & Ismiyatih, 2017)
- HTML
HTML is a set of symbols or tags written in a file that is used to display pages in a web browser. HTML tags always start with <x> and end with </x> where x HTML tags are like b, i, u, etc.(Haerulah & Ismiyatih, 2017)

- **PHP**
PHP is a scripting language that provides an easy way to embed programs on web pages. Because a page is processed first by PHP before being sent to the client, the script can generate dynamic page content, such as displaying query results from MySQL on the page.

PHP advantages:

- PHP can be used to generate GIF image files, or even GIF images that are streamed from the server to the browser.
 - PHP supports multiple databases in native mode and via ODBC. Such as Adabas, dBase, Empress, FilePro, Infomix, InterBase, MySQL, Oracle, and databases that support ODBC that can use PHP. (Setiabudi, Haryadi, Djoni & Rahardjo, Surya, 2002)
- **Marketplace**
Marketplace is an online business that is used to promote merchandise or to process transactions online. (Khumaidi, 2018)
- **Website**
Website can be interpreted as displaying text data information, image data, animation data, sound, video, and a combination of all of them, both static and dynamic which form a series of interrelated buildings, each of which is connected by page networks or hyperlinks.(Haerulah & Ismiyatih, 2017)

RESULT AND DISCUSSION

Result

In this study resulted in an online market website. This online market website serves to provide convenience to customers so that they can find information about products or goods sold in the market quickly. There is a market website admin section that can input products, delete products, edit products, manage transaction data, and cancel orders from customers.

Discussion

Page for Customer

- **Customer Main Page**
This main page is the page when the customer first visits the market website. On this page there is a category menu to view product categories consisting of food, beverages, and accessories. There is a login menu provided for customers who want to make a purchase transaction. for customers who want to buy a product, click the image to view product details, then click the buy button.

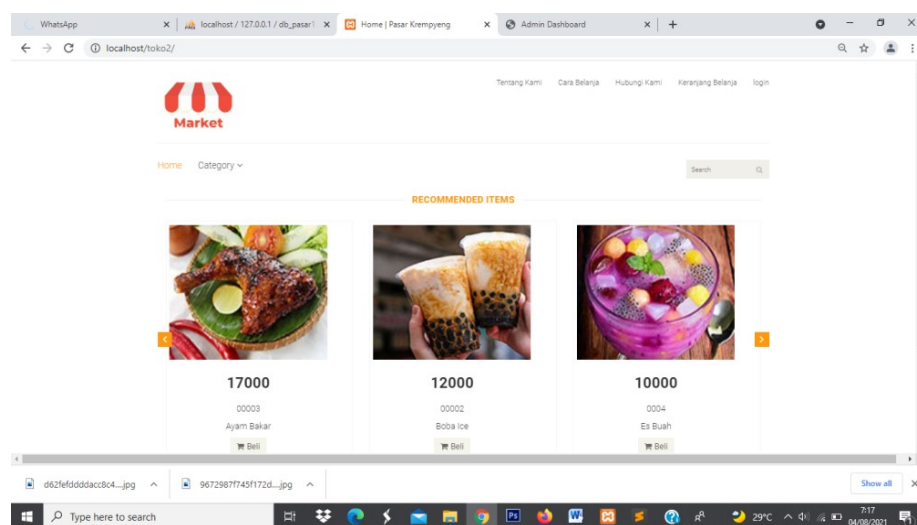


Figure 3. Customer Main Page

- **Shopping Cart Page**
This website page there is a shopping cart page to view the selected products. There is an update cart button to update the number of purchases the customer wants, a shopping button to continue shopping, and a finished shopping button to finish shopping. There is also a delete button to remove the product from the product cart from the customer's shopping cart.

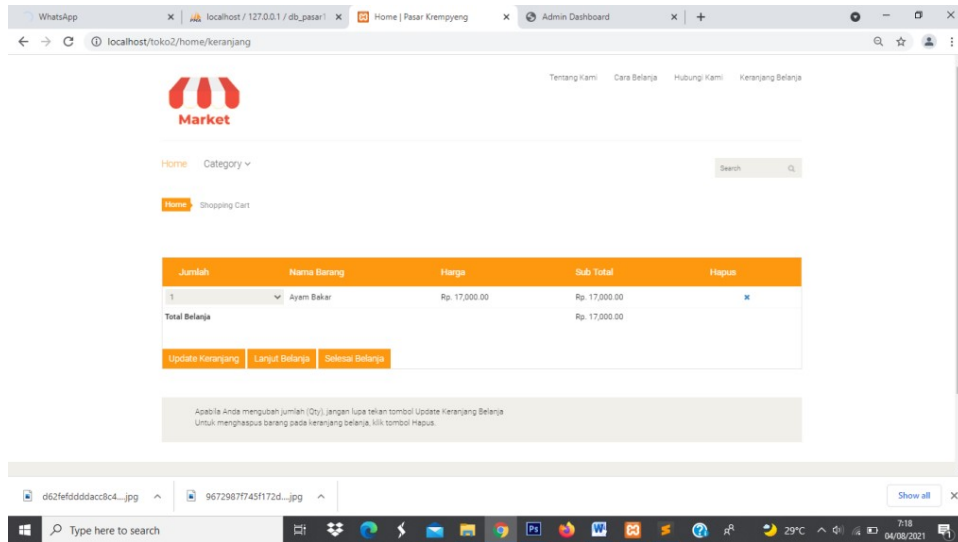


Figure 4. Shopping Cart Page

- **Shopping Checkout Page**
This page is used for customers who have finished shopping. Customers must fill in several forms that have been provided such as recipient's name, recipient's email, recipient's address, no. telephone, province, city, postal code, choice of payment method, and upload a picture file of proof of transaction. Then click on the send button to send the data that has been filled in by the customer which will then be inputted by the admin.

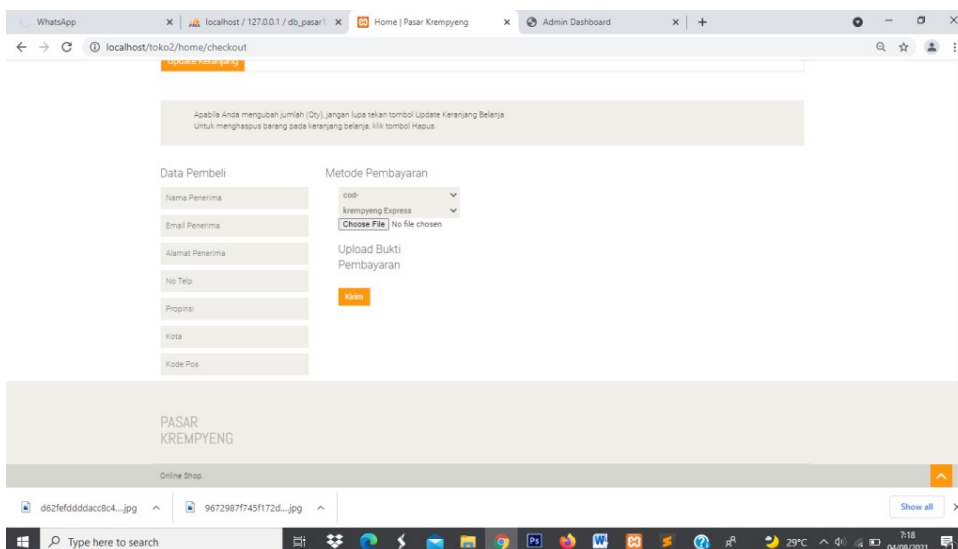


Figure 5. Shopping Done Page

Page for Admin

- **Admin Login Page**
This page is made only for admin. Admin must enter username and password in order to access this admin page.

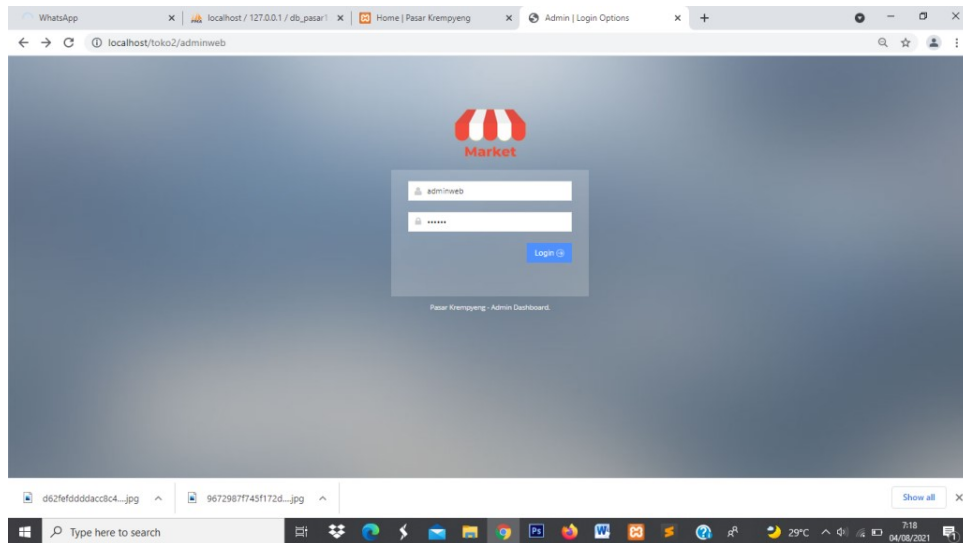


Figure 6. Admin Login Page

- **Transaction Processing Page**
page managed by the admin to input customer payment confirmations.

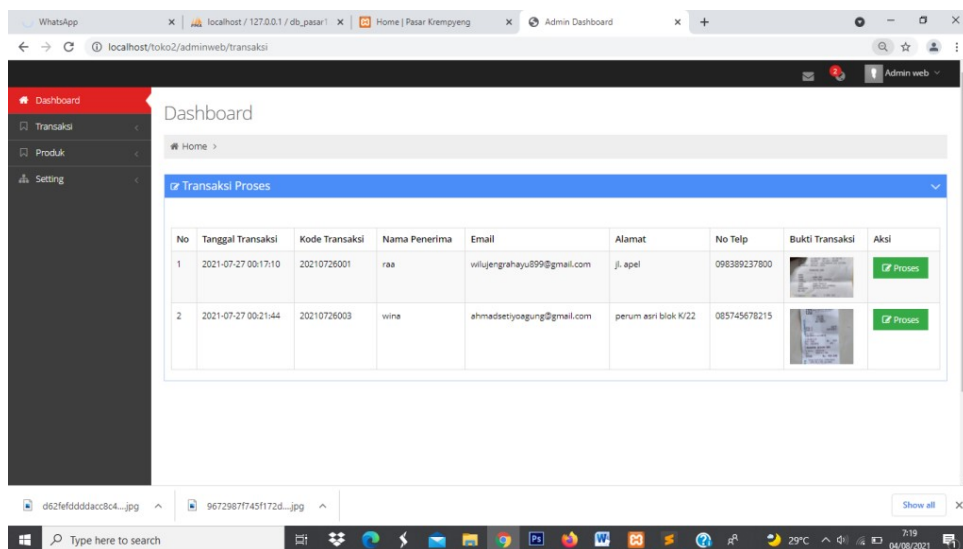


Figure 7. Transaction Processing Page

- **Processed Transaction Page**
This page contains transaction data that has been processed which will then be packaged and sent to the customer.

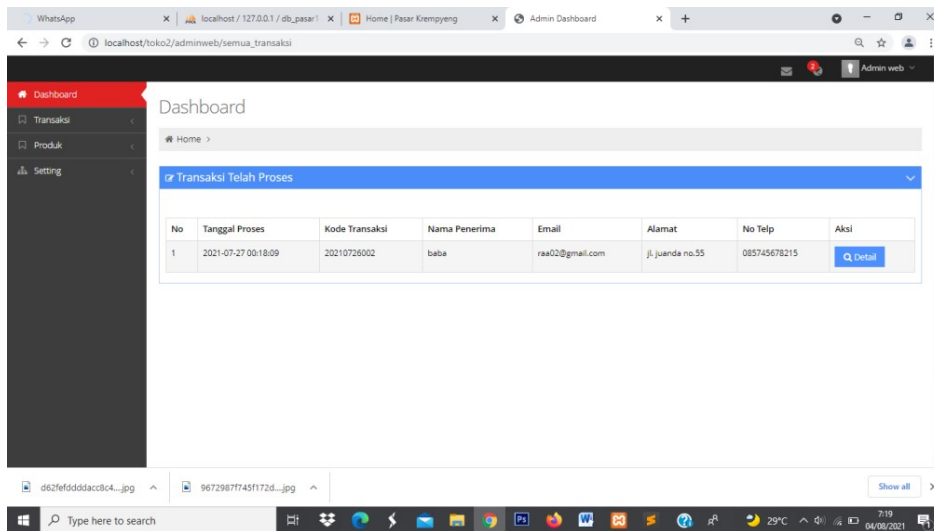


Figure 8. Processed Transaction Page

- **Brand Adding Page**
On this page admin can add, edit, and delete Brands.

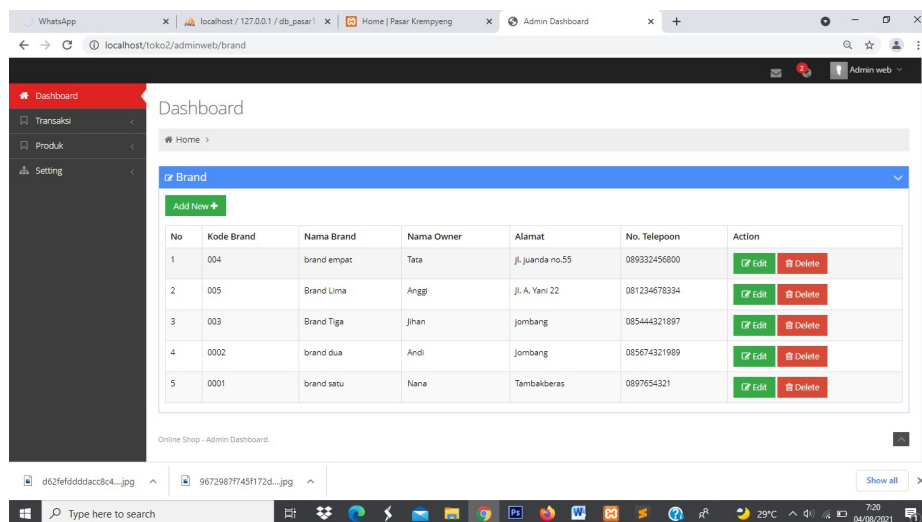


Figure 9. Brand Adding Page

- Product Adding Page
On this page admin can add, edit, and delete products.

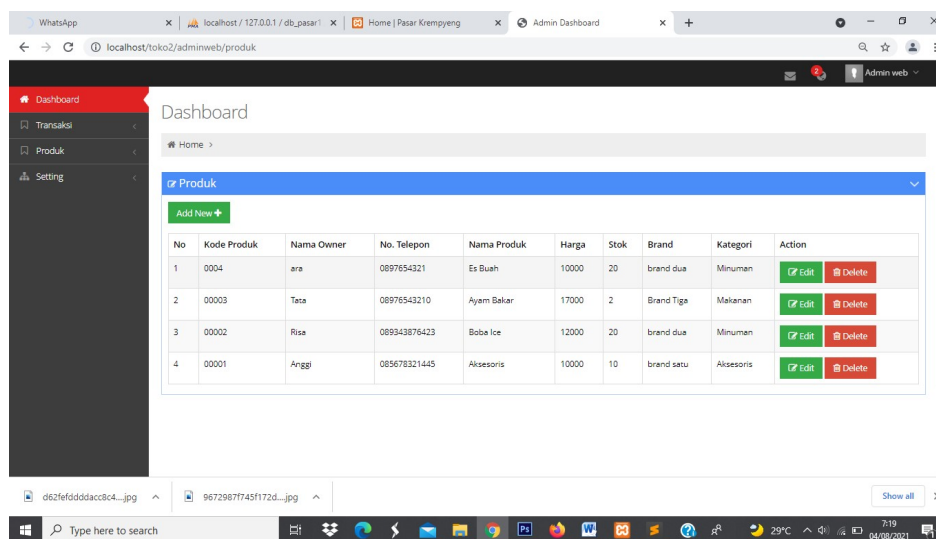


Figure 10. Product Adding Page

Test Results

Testing this application is the final stage in making the application. At this stage, logic and functions have been tested so that they are feasible to implement.

Based on the test conducted to 10 users, stated that this application helps in getting information and buying products on the market. This application is also easy to operate by users

CONCLUSIONS

Based on the research conducted, it can be concluded that a web-based online market application has been created that can make it easier for sellers to display product information for sale. This application also makes it easy for customers to get information on products being sold. This research can be developed further by making mobile applications that are more accessible and it is hoped that this application can be applied more widely in several other cities. This application can still be developed in terms of appearance or additional features.

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