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Website Design and Development to Help Create and Develop a Business to Increase the Number of MSMEs

Yogi Prasetyo[1], Btari Mariska Purwaamijaya[2], Syti Sarah Maesaroh[3]
[1,2,3]Universitas Pendidikan Indonesia

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ABSTRACT

The Covid-19 pandemic is now having quite serious consequences for the sustainability of the economy in Indonesia, this is because the government has established a policy of limiting community social activities where this policy is used to reduce the spread of Covid-19. As a result of this policy, economic activity barely runs at all. Because of this, the total number of MSMEs in Indonesia inevitably experienced a drastic decline and increased the number of unemployed. requires a treatment that is in line with current technological developments. One strategy to increase the number of MSMEs and reduce unemployment can be done by developing a website-based application that will be named "warung kita" where this website application is specifically to help people start their businesses, starting from providing goods at supplier prices that can be resold, market information regarding the goods to be sold, to education about strategies for selling. The development of this website-based application will be developed using the framework so that security in this website application is guaranteed.

Corresponding Author:

Yogi Prasetyo,
UPI kampus Daerah Tasikmalaya/Bisnis Digital,
Universitas Pendidikan Indonesia,
Jl. Soekarno-Hatta no. 819, Bandung, West Java, 40614, Indonesia.
Email: yogiprasetyo.upi.edu

1. INTRODUCTION

The Covid-19 pandemic is now having quite a serious influence on the sustainability of the economy in Indonesia, this is because the government has established a policy of limiting community social activities where this policy is used to reduce the spread of Covid-19. As a result of this policy, economic activity barely runs at all. (According to Mardiyah & Nurwati, 2020). The onset of the pandemic has resulted in small and large companies having no other choice but to make their employees work from home or be laid off.

One of the effects resulting from the spread of COVID-19 was that it brought down MSMEs, namely 1,785 cooperatives and 163,713 MSME actors affected by the spread of covid (Thaha, A. F., 2020). This can be seen from the situation before the existence of Covid-19, the percentage of good or very good business conditions was 92.7%, then bad or very bad business conditions were 1.0%, after Corona, bad or very bad business conditions soared as much as 56.8 % compared to when it was originally only 1.0% (Silfia and Utami, 2021). One reason is the decreased opportunity to carry out direct marketing, while marketing is the most important factor in maximizing the performance of MSMEs (Tirtayasa, 2021) (Sumolang, 2019) (Atmaja, 2021) (Hardilawati, 2020) (Pakpahan, 2020)

Not only on the performance of MSMEs, the Covid-19 pandemic had an impact, the condition of MSMEs when the pandemic started in 2020, there were 30 million MSMEs that were out of business. This is found in the data known from the chambers of commerce and industry. (Jelita, 2021).

In addition to the decline in the percentage of MSME performance, according to BPS data, during the August 2020 phase, the number of unemployed people jumped to 2.67 million. Therefore, the number of workers in Indonesia who lost their jobs increased to 9.77 million (Mutia Fauzia, 2021).

These two things require a handling that is in harmony with today's technological developments. In the case of MSMEs, business people really know that digital technology is needed to increase the amount of income (Fadhilah, 2021). In addition, the presence of MSMEs is able to reduce unemployment through improving and improving the economy (Syairozi and Susanti, 2018) (Dongoran, 2016).

One strategy to increase the number of MSMEs and reduce unemployment can be done by developing a website-based application which will be named "warung kita" where this website application is specifically to help people start their businesses, starting from providing goods at supplier prices that can be resold, market information regarding the goods to be sold, to education about strategies for selling. Why is this application highly recommended? Seeing from the results of a survey entitled Asia Pacific Young Entrepreneurs organized by Herbalife Nutrition, it is known that informants in Indonesia must have very mature thoughts about starting their businesses. It is not only the level of income that is being targeted, but it is important to anticipate the initial funds including the roots and the amount then the impact of the Covid pandemic on new businesses that will be carried out so that they anticipate the steps that have been prepared (M. Reza Sulaiman, 2021).

The development of this website-based application will be developed using the framework so that security in this website application is guaranteed. In this study it is hoped that the application developed can increase the number of MSMEs so that it will also have an impact on the number of unemployed in Indonesia.

2. RESEARCH METHOD

This research will be carried out using the Waterfall method where the application development process is divided into several stages as shown in Figure 1 Waterfall Method.

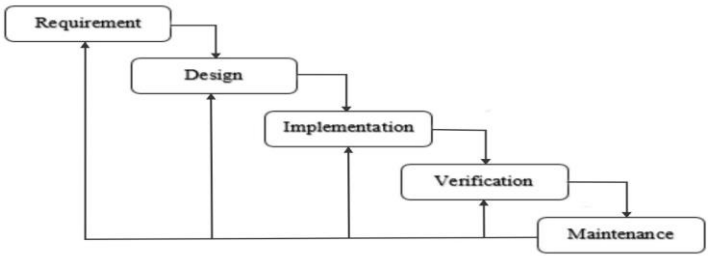


Figure 1. Waterfall Metode

2.1 Requirement

When the development stage is carried out, you must find out all the information what the software needs, such as the functions desired by the user and the extent to which the software is limited. Usually information is obtained from interviews, surveys, or discussions. Then it is analyzed to get complete data for user needs for the software being developed

2.2 Design

In this phase the developer must know all the information about the software requirements, such as: B. the ease of use of the software desired by the user and the limitations of the software. This information is usually obtained from interviews, surveys or discussions. Then it is analyzed to get complete information about the user's needs for the software to be developed.

2.3 Implementation

The coding process is in this phase. Software creation is divided into small modules, which are then assembled in the next step. At this point, the finished module is also examined more closely to see whether it has performed the desired function or not.

2.4 Verification

In this fourth step, the previously manufactured modules are assembled. Then tested whether the software is in accordance with the desired design and whether there are still errors or not.

2.5 Maintenance

That is the last step of all the steps in the waterfall development and operation stage The research begins with an application for SMEs. The results of this study are the identification of the workings and process flow of application development for SMEs made by other researchers. The application references found will be the initial basis for further and more effective development.

The second stage is starting the application development process starting from the first stage of the Waterfall method to the final stage, namely Maintenance.

3. RESULTS AND DISCUSSIONS

The recent spread of the Covid-19 virus has had quite a serious influence on the sustainability of the economy in Indonesia, this is because the government has established a policy of limiting community social activities where this policy is used to reduce the spread of Covid-19. As a result of this policy, economic activity has almost completely stopped. Responding to this situation, it is necessary to implement training transformation and strengthen education in the business sector.

Utilizing a website application is one way to help improve education in the business that will be made. a website application named Warung Kita will definitely improve business education and skills needed in business. In developing this application, it is necessary to analyze the needs to match the user's needs with the application to be designed.

The problems that have been analyzed, the solution that can be offered is the development of applications specifically aimed at business development environments, where in this application provides education to improve business skills and an environment for buying and selling products between members or outside members.

3.1 System Design

The depiction or design method used in this study is the Unified Modeling Language (UML). UML is used to facilitate the delivery of information about the application to be designed. Then the UML diagram used is:

3.2 Use Case Diagram

The use of diagrams aims to describe the general description and nature of the application being designed.

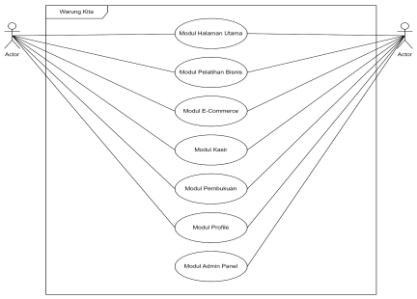


Figure 2. Use Case Diagram Warung Kita

An overview and the relationship between the modules with ordinary users and admin users can be seen in Figure 2. Users are designed to be able to access several modules such as: main page module, Training module, E-Commerce Module, Cashier Module, Bookkeeping Module, Profile Module. In contrast to the admin user where the admin user is given the Admin Panel Module which has the function to manage all activities in the application.

3.3 Activity Diagram

This diagram is an active diagram. This diagram is an illustration of the flow of activities in the designed application. In addition, this diagram explains the interrelationships of the functions designed in the application so that it can assist programmers in making their programs.

The activity diagram created in this application design consists of several activity diagrams including: Admin Activity Diagram, Member Activity Diagram, Cashier Activity Diagram. On Figure. 3 shows the admin activity diagram, where the admin activity diagram describes the activity of checking master data which includes user data, training data and goods data. The activity diagram also describes the activity of adding master data and viewing details of admin data.

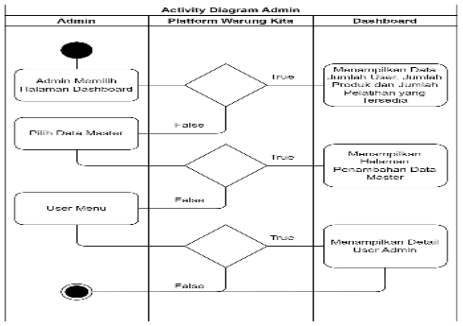


Figure 3. Activity Diagram Admin

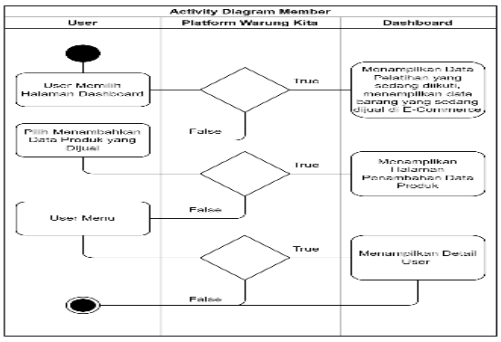


Figure 4. Activity Diagram Member

The activity depicted in Figure 4 is a user activity to see what training data is available and to see what products are sold in this E-Commerce application, another activity described in Figure 4 is activity in the process of opening and adding item data to User's E-Commerce and activity displays user's profile details.

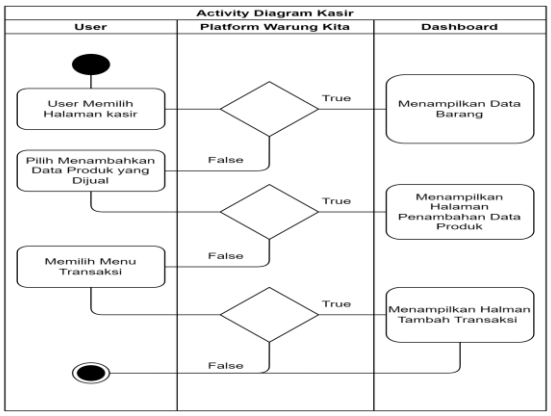


Figure 5. Activity Diagram kasir

The activity depicted in Figure 5 is the activity of the cashier user to see what item data is available and to add product data and activities to display the profile details of the cashier user.

3.4 Sequence Diagram

Namely to show a diagram that is used to describe a special reaction from an activity. where in this diagram you will see a more detailed flow of interaction between the user and the application compared to the activity diagram. The sequence diagrams contained in this application include diagrams for admin and diagrams for cation.

Figure 6. shows the activities carried out by the admin when using this application, the activity depicted in the admin sequence diagram is the activity when the admin first logs in to view master data such as training data, user data and product data.

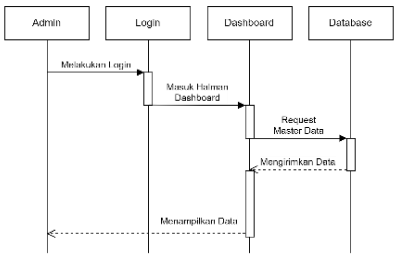


Figure 6. Sequence Diagram admin

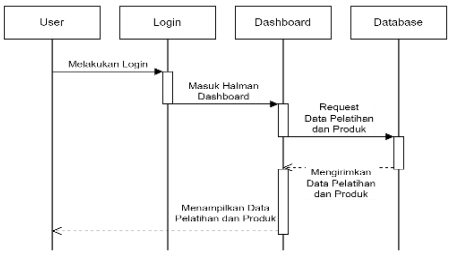
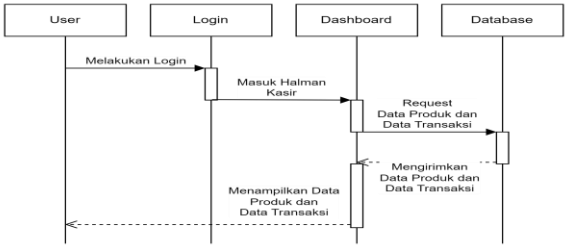


Figure 7. Sequence Diagram user

Figure 7 describes the activities that occur when the user starts logging in and requests access to display training data and product data on the user's dashboard.

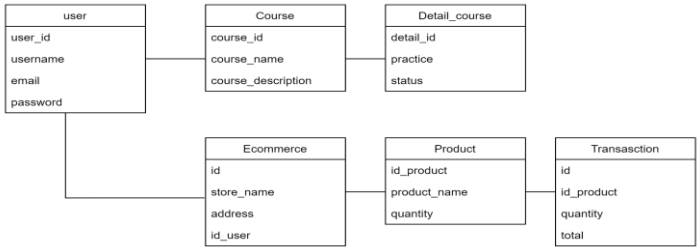


Gambar 8. Sequence Diagram kasir

Figure 8 describes the activities that occur when the cashier starts logging in and requests access to display product data on E-Commerce and sales transaction data where all these activities go through five stages until finally the requested data is available on the cashier dashboard page.

3.5 Class Diagram

The class diagram is an overview of the designed system where the shape is in the form of a static structure which consists of the method of operation and the relationship between objects and this class diagram represents the functions that are in the system to be designed. Figure 9 shows the relationship between user, training and product where each class has its own attribute which functions to store informative data from this application



Gambar 9. Class Diagram

3.6 Mockup Design

The mockup design or display in this application includes 4 main sections, namely the main page, the E-Commerce page, the Training page and the Cashier page.

3.7 Main Page Design

This main page is the very first page that will appear when accessing our shop application, where on this page has some basic information needed by the user, the first is information about favorite business training, the second is information about favorite E-Commerce products and testimonial information from users as one of the marketing strategies to increase the number of users who register as members, all of which can be seen in Figure 10

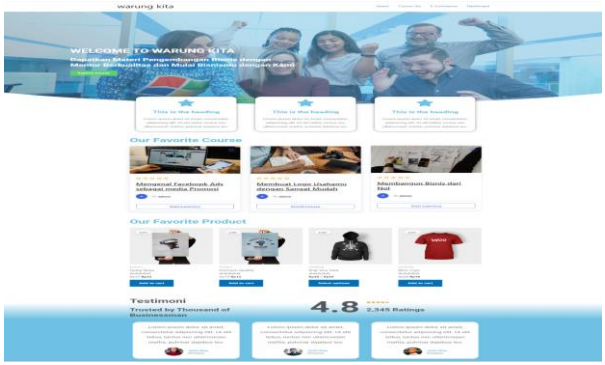


Figure 10. Main page

3.8 E-Commerce Page

The E-Commerce page in Figure 11 is a page specifically made to display and manage products to be sold, so that users, both with the role of sellers or as buyers, can access and make transactions.

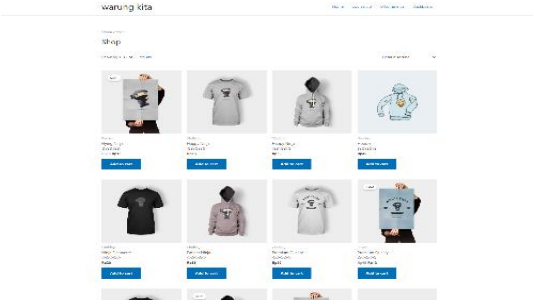


Figure 11. E-Commerce Pages

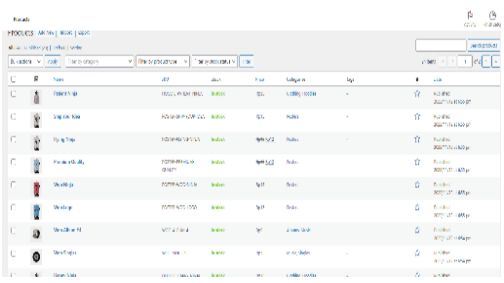


Figure 12. Product List Page

Users who have registered will have a product list page as shown in Figure 12, where in this product list we can see information on the product name, SKU, stock, category, tags and information on the date when the product was published.

Not only is a list of products prepared for users, users will also be given access to add products that will be sold at our shop's E-Commerce as shown in Figure 13. Products to be entered must fill in some data before being published to the E-Commerce page. Commerce includes data that needs to be filled in, namely data on the name of the item, price, category and description of the item.

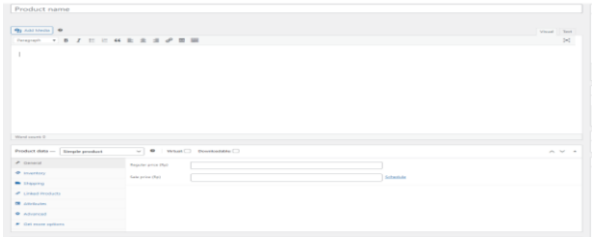


Figure 13. Add Product Page

3.9 Training Page

The Training page in Figure 14 is a page specifically created to display and offer training in the business field. So that users can access and choose business training according to the user's own needs.

In addition to the training list page, this designed application also provides a training detail page as shown in Figure 15. The function of this training detail page is to convey information about the training to be taken such as a brief description of the training, the material to be studied and the training completion time.

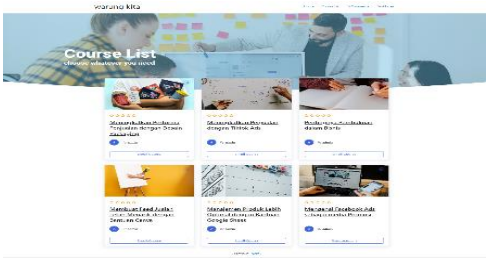


Figure 14. Business Training Page

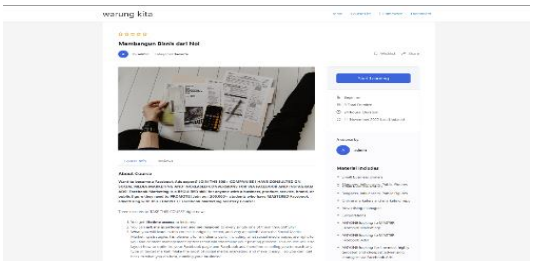


Figure 15. Training Details Page

3.10 Cashier Page

The cashier page in Figure 16 is a page specifically made for users with the role of cashier which displays a list of products and transaction screens, making it easier for cashiers to make sales transactions.

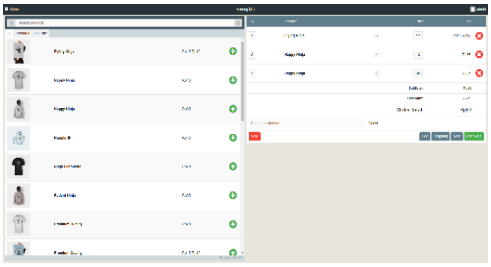


Figure 16. Cashier Page

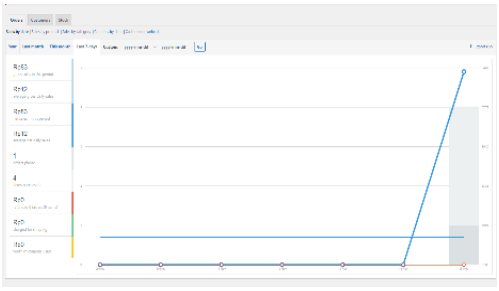


Figure 17. Finance Page

In this cashier module there is also a financial report page as shown in Figure 17, where this page informs about the transaction reports made, so that the user can analyze finances every month.

4. CONCLUSION

The results of the research conducted can be outlined that the availability of the Warung Kita application as a training application and transactional activities to support and improve education and skills in the business sector so as to increase the number of MSMEs, users can access training according to their individual needs with the aim of increasing business for them, this application also offers E-Commerce to facilitate buying and selling transactions for users who register, not only E-Commerce that is prepared this application also provides access to cashiers and bookkeeping so that users can set the right strategy to improve their business.

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