

IMPLEMENTATION OF WEB-BASED TRANSACTION SERVICES AT CAHAYA SEMI WORKSHOP

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ABSTRACT

Technological developments have increased and intensify business competition. Every company is trying to attract customers with their products or services. In the workshop business, a fast service system is needed to meet customer satisfaction. Cahaya Semi Workshop is a motorcycle workshop that provides repair, modification, and spare parts sales services. The problem in this workshop is that customers often made a wrong order by phone or WhatsApp. Therefore, the workshop could face with unclear which product catalogs and spare part on request. The development method that will be used in this research is the waterfall model. The result of this research is a website that is friendly for users to browse catalogs, schedule services, order services and spare parts, then choose delivery options, finally complete payments. Also to provide service reviews. The purpose of this website program development is to increase the effectiveness and efficiency in the transaction process at Cahaya Semi Workshop.

Keywords: Workshop, Website, Booking Order, Waterfall Model

1. PREFACE

Introduction

Cahaya Semi Workshop is a motorcycle repair workshop that offers service, modification, and spare parts sales. Currently, the workshop still relies on a manual operational system by accepting service orders via phone or WhatsApp. Although this method is effective for small order quantities, as orders increase it often causes orders to be missed. In addition, spare parts prices use a unique code known only to the workshop owner and there is no clear product catalog. This becomes an obstacle, especially when the workshop owner is not around when customers wish to purchase spare parts. In this increasingly connected world, the number of internet users continues to grow, and online communication has become routine for many individuals and businesses. Sales and purchases are two important phases in the business cycle, which applies to both businesses engaged in services and goods.

In this context, the internet is not just a communication tool, but can also be a tool for business growth and development. By taking advantage of this opportunity, Cahaya Semi Workshop can change the way it operates by utilizing technology and the internet to increase efficiency and provide better service to customers.

Rapid business development in adopting information technology has driven intense business competition. Every business tries to compete in the market and attract customers to use the products or services offered [1]. To fulfill and achieve customer satisfaction, workshops need a service system that can help customers quickly [2]. The booking system not only provides convenience for customers but also benefits the workshop. More organized booking data management and organized information help workshops improve operational efficiency and provide customer satisfaction [3]. Through the development of this web-based application, it is expected to be able to improve operational efficiency, improve customer service at Cahaya Semi Workshop.

2. RESEARCH METHOD

Data Collecting Method

Interview is a method used in collecting necessary data and to analyze the problems that occur in the Cahaya Semi Workshop. The interview method is an approach in which an interviewer actively interacts and conducts discussions with individuals who have been carefully selected. The interview process is used to understand the views, experiences, or knowledge of individuals about the subject under discussion [4]. The interview method allows researchers to ask more flexible questions in the search and collection of facts [5]. By using this method, it can increase the accuracy of information in the development of the application being created [6].

System Development Method

Software Development Life Cycle (SDLC) is a process that details methods and strategies for developing, designing, and maintaining software projects [7]. The Waterfall model is an approach that is often used in large projects in companies. The main characteristic of this model is its sequence of steps [8]. The Waterfall method applies a sequential approach from analysis, design, implementation, testing, to maintenance. This Waterfall method also allows easy management of software development because it has a comprehensive scope [9].

Materials

The information collected through the data collection process includes the beginning of the establishment of the Cahaya Semi Workshop, the types of motorcycles handled, available service, data on spare parts sold.

3. RESULT AND DISCUSSION

The result of this research is a website designed using the HTML, CSS, PHP programming language and using the MySQL database. Relational Table can be seen in (Figure 1).

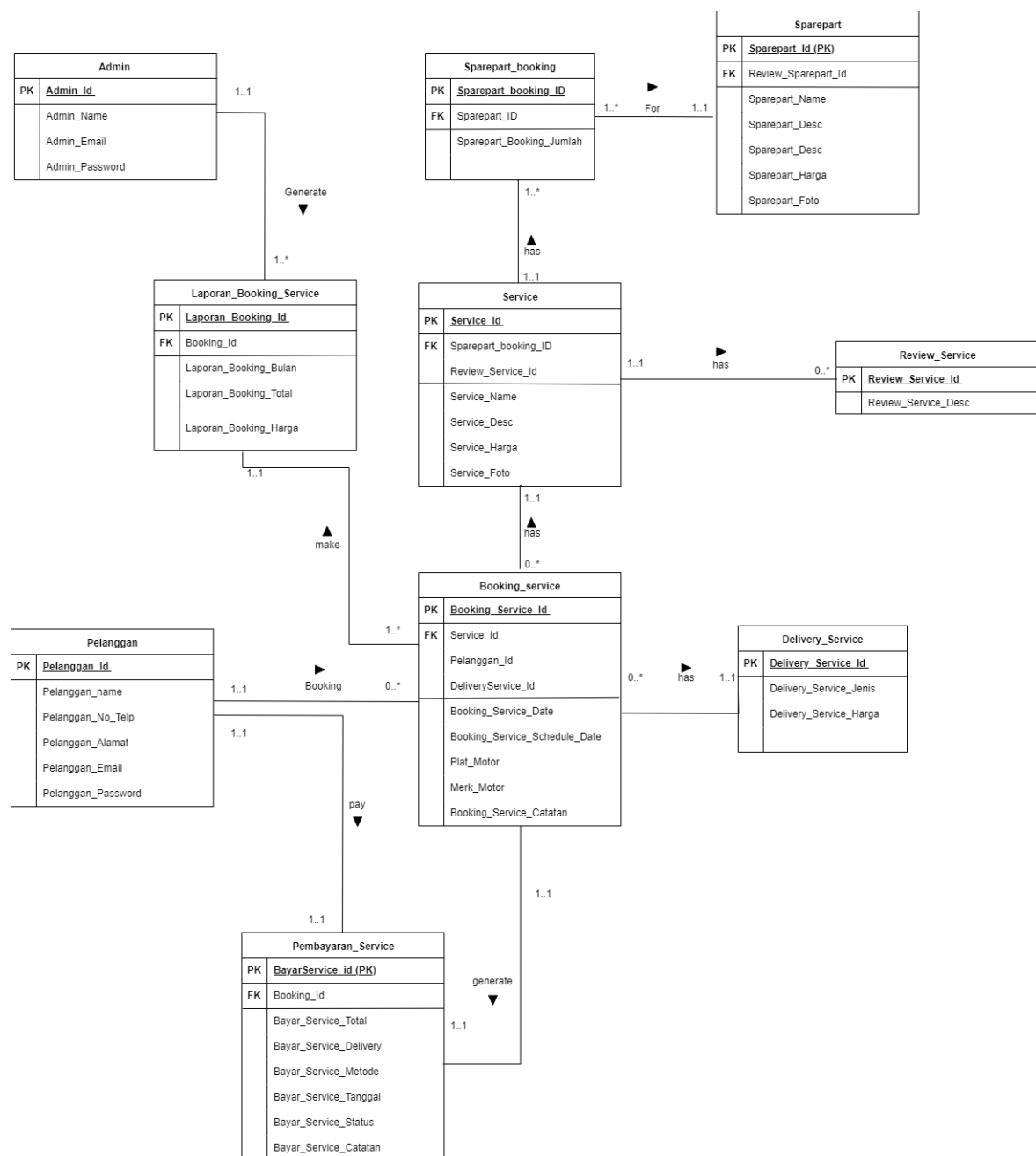


Figure 1. Relational Table
Image Source : personal documentation

Booking Service

In this web-based application, the catalog menu consists of a service catalog and spare parts catalog. With this catalog, it helps customers to access service and spare parts information. The service catalog can be seen in (Figure 2).

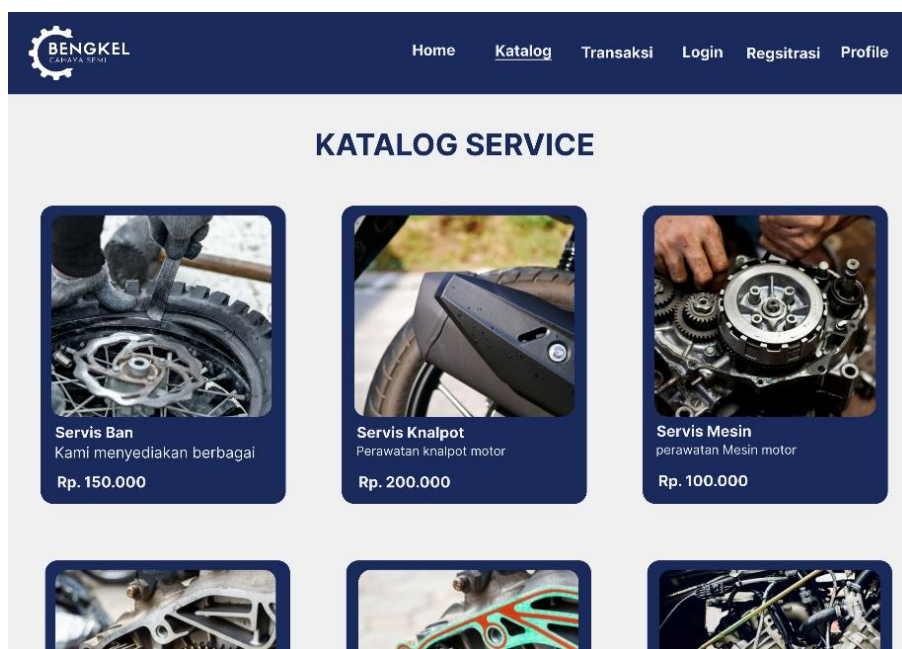


Figure 2. Service Catalog
Image Source : personal documentation

On the service detail page which can be seen in (Figure 3), customers can book a service by clicking on the booking button, which will direct customers to the booking form which can be seen in (Figure 4).

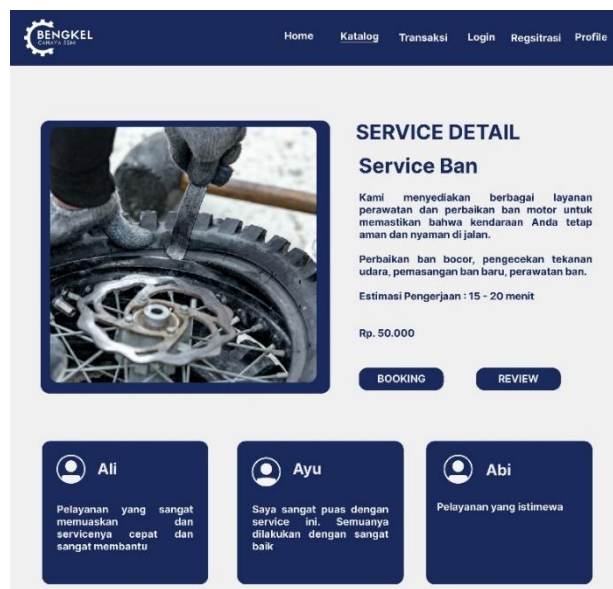


Figure 3. Service Detail
Image Source : personal documentation

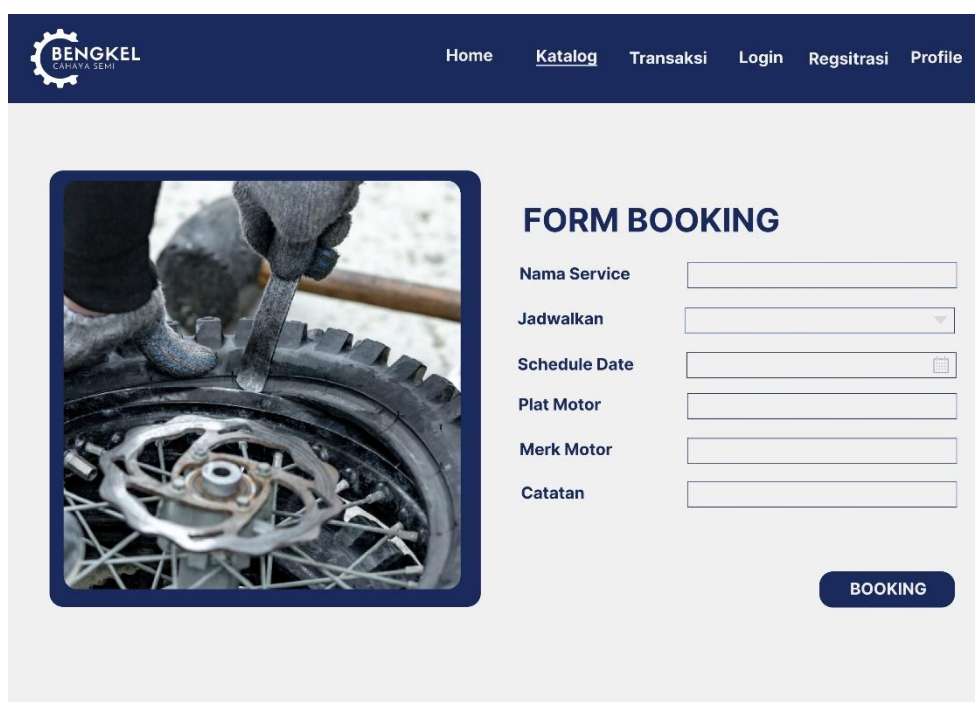
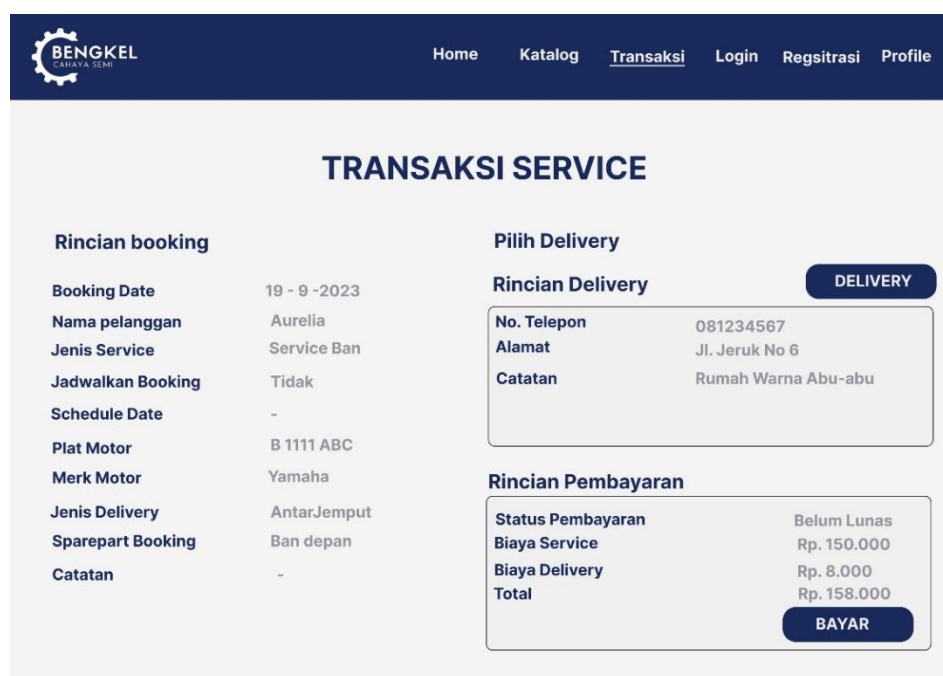


Figure 4. Booking Form
Image Source : personal documentation

After booking a service, customers can view transaction details on the transaction menu shown in (Figure 5).



TRANSAKSI SERVICE	
Rincian booking	
Booking Date	19 - 9 -2023
Nama pelanggan	Aurelia
Jenis Service	Service Ban
Jadwalkan Booking	Tidak
Schedule Date	-
Plat Motor	B 1111 ABC
Merk Motor	Yamaha
Jenis Delivery	AntarJemput
Sparepart Booking	Ban depan
Catatan	-
Pilih Delivery	
Rincian Delivery	
No. Telepon	081234567
Alamat	Jl. Jeruk No 6
Catatan	Rumah Warna Abu-abu
Rincian Pembayaran	
Status Pembayaran	Belum Lunas
Biaya Service	Rp. 150.000
Biaya Delivery	Rp. 8.000
Total	Rp. 158.000

Figure 5. Service Transaction Page
Image Source: personal documentation

On the transaction page, customers can choose the type of delivery they want. In this website, there is a shuttle option for vehicles that want to be serviced as shown in (Figure 6).

The screenshot shows the 'Delivery Service' form within the BENGKEL CAHAYA SENI application. The form is titled 'Delivery Service' and includes a 'Rincian Delivery Service' section. The fields are as follows:

Rincian Delivery Service	
No.Telepon	081234567
Alamat	Jl. Jeruk No 6
Jenis Delivery	<div>AntarJemput</div> <div>Langsung ke Bengkel</div>
Biaya Delivery	
Catatan	

A 'DONE' button is located at the bottom right of the form.

Figure 6. Delivery Service Form
Image Source : personal documentation

After filling in the desired delivery, customers can make payments by clicking the pay button and then filling in the payment form shown in (Figure 7).

The screenshot shows the 'pembayaran Service' form within the BENGKEL CAHAYA SENI application. The form is titled 'pembayaran Service' and includes a 'Rincian Pembayaran service' section. The fields are as follows:

Rincian Pembayaran service	
Nama Pelanggan	
Tanggal Pembayaran	
Metode Pembayaran	
Bukti Pembayaran	
Catatan	

A 'DONE' button is located at the bottom right of the form.

Figure 7. Service Payment Form
Image Source : personal documentation

Once the service is complete, the customer can provide feedback or comments. Customers can fill in the service review form shown in (Figure 8).

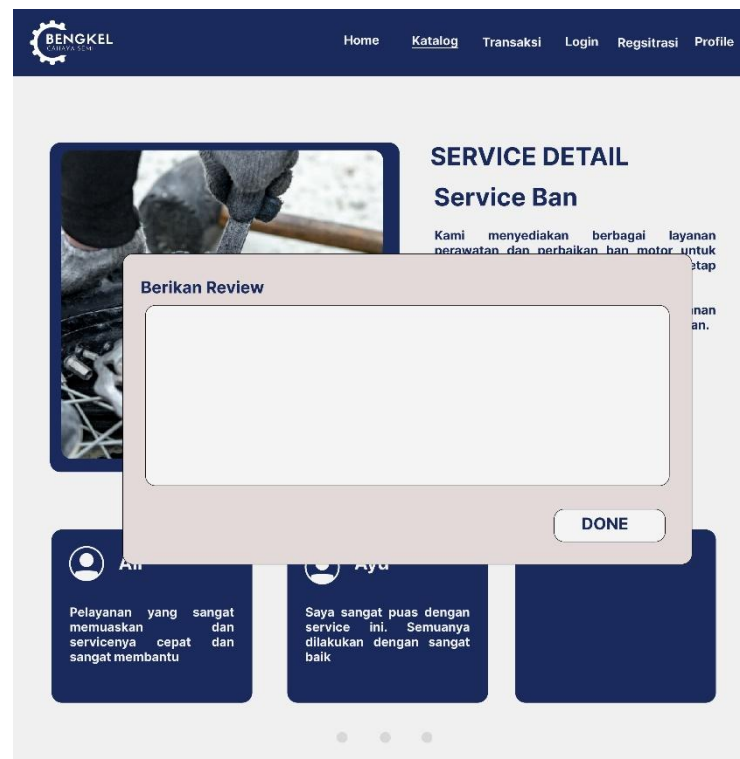


Figure 8. Service Review Form
Image Source : personal documentation

4. CONCLUSION AND RECOMMENDATIONS

It can be concluded that the design of this website can provide convenience for customers in accessing data through catalogs on the website and provide convenience in booking services. Meanwhile, this website also helps workshops manage booking transaction data clearly and in more detail.

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