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## Prototype Development Of Information System Customer Relationship Management Web-Based Aesthetic Beauty Clinics

Sutono<sup>1</sup>, Halimah<sup>2</sup>, Ochi Marshella Febriani<sup>3</sup>

<sup>123</sup>Information Systems Study Program, Darmajaya Institute of Informatics and Business

Jl. ZA Pagar Alam No.93, Gedong Meneng, Lampung, Indonesia

e-mail: [sutonodarmajaya@gmail.com](mailto:sutonodarmajaya@gmail.com), [halimahyunus@darmajaya.ac.id](mailto:halimahyunus@darmajaya.ac.id), [ochimarshella@darmajaya.ac.id](mailto:ochimarshella@darmajaya.ac.id)

### ABSTRACT

Every company will definitely develop innovations that are always the latest in order to provide comfort in service to customers. Good service quality must be managed professionally, especially in managing information related to the customer. One of the means to accommodate customer data management is to develop a Customer Relationship Management (CRM) information system on Kartika Aesthetic that operates in the field of beauty clinics. As in general, customers who will take care must come directly to Kartika Aesthetic for registration. Not only that, notification of the customer's routine check schedule is also done when the customer finishes doing maintenance. Therefore, many customers forget the check date again because there is no notification or reminder about it. Notifications regarding discounts or treatment promo prices are also notified using social media Instagram and Facebook, if the customer does not have an account, then the customer does not get information about the ongoing promo or discount. With the existence of this CRM information system, it is expected to be able to help the acquisition of information needed by customers to be easy and fast in accordance with the expectations and needs of customers and to bridge the communication between Kartika Aesthetic and customers. The purpose of this research is to develop a prototype CRM information system, to test and evaluate the CRM information system that has been designed. The programming languages used in this system are Java and MySQL databases. The method for developing this information system uses the Relational Unified Process method with UML tools (use case diagrams, activity diagrams, class diagrams and Sequence diagrams). This CRM information system is designed with attention to user needs. In addition to making it easy for customers to register directly through the Prototype information system, this CRM information system enables customers to obtain information about maintenance schedules, new types of treatments and other promos easily and in accordance with and the need sof the customers.

Keywords: CRM, Prototype, UML

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## 1. INTRODUCTION

The role of a technology is for information we are one of an important part in increasing productivity of low class on the great commission nor the ability and increase the quality of of a corporation both in the scale a big or small sum that is used how to manipulate and a data muslim groups said charlie hebdo both the clean water that take turns to use them system of manual as well as by the use of the selling data , for the purchase of the .A the source of any information as input decision makers very important considering that competition among car leasing companies a business that is increasingly complex , andof course you know a technology is for information able to answer of bonds indosat will float of input to student performance and the needs of the source of information for that it is processed are taken into account so it was expected that an outgrowth of the output to the that is to be maximized .On work safety all companies will surely develop innovations that is always latest in order to provide convenience in act to provide service for customers of the private clean .

Kartika aesthetic is one of the klinik beauty that is in bandar lampung with an address in jl.Cit ditiro housing homestead mas block h he no. 23, kemiling-kota bandar lampung.Kartika aesthetic have a practice of health agency and have the energy doctor who is expert and competent in areas like. aestheticKartika aesthetic has been a lot of man the phones with a facial like meso glowing, mesoacne, mesowhitening and mesolifting.

As in general customer coming to kartika aesthetic to maintain the registration must first .The customer done by means of going straight to register consultation treatment in a clinic .Then , customer complete the registration form consultation given by customer service and customer services record the data customer into the book the customer and the customer care given during the consultation will do to doctors .After the filling in the forms , customer waiting for the call customer service to do consulting to doctors .In the consultation , doctors noted complain and treatment into treatment customer cards , then give medicines to customer .After that , doctors noted complain and drugs given into the book great care and treatment of all card .Not only that , notice the customer also carried out routine checks when consumers melaku finished

For that reason it is , in order to raise service standards and dibutuhkanlah a system customer relationship management that can be in addition to facilitating for its customer can a list of direct through an integrated information system for crm would also make it possible for its customer can gather information about the maintenance schedule , a kind of maintenance stages as well as promo-promo extending loans for new and it on to some dead portable and handy it was in keeping with and the needs of for its customer.

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## 2. LITERATURE REVIEW

*Prototyping Paradigma* began by gathering the needs of prototyping. Developer and customers meet and define objective the whole system ( software ) that will be made , identify all the things known , and the area the outline of where further definition is mandatory then will be “design the lightning “. The design of the lightning focusing on the presentation of of aspects of the software that will be revealed for all consumers / users ( for instance approach the input and output ) format [1].

Information system is a system in an organization that confront the processing of daily transactions that supports function operation organization is in the managerial strategy from an organization to be able to provide certain outside the necessary. “ so for understanding on we can conclude that information system is a pile of data terintegritasi or connected with a network complement produces an output to to solve the problem and decision-making [2].

Crm is ( customer relationship management ) is a strategy used by a company to manage a good relationship with pelanggan ( customer ) so as to give a contribution to and long-term benefits for the company .Each company need to control a chain the value of crm is to be able to meet the needs of customers so customers do not just feel satisfied but also want to be loyal customers .Through crm , shall have power over the company strategy maintain customers , acquire new customers and develop customers [3].

See the problem from several air service aspects was the most important in handing over the a variety of services as a form of appreciation against other major foreign perusahaan for its customer .If the online registration process for its customer be able to add this directly through a system that has been artificially formed by dams the eligibility of the should be run as soon as the facilities that are of an enterprise of a , so for its customer will experience the agony of perusahaan service to around kartika aesthetic [4].

“Discussing the unified also known iterative incremental is a process and the process of development software that was done in the iterative ( recurring ) and incremental ( ascending stages by the process).”One of the unified process known is rup ( relational unified process).The following phase rup used :

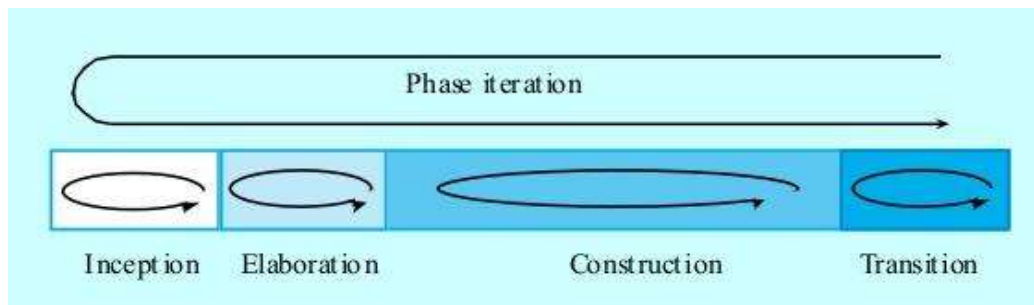


Figure 1. Phase Relational Unified Process

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The unified modeling language (UML ) is one standard of language has much used in this world industry to define requirement , make analysis & design , as well as describing object oriented architecture in programming [6].

### 3. RESEARCH METHOD

#### Data Collection Method

Data collection is conducted to gather information required in order to achieve research objectives .The answer that is expressed in the form of hypothesis is the answer while to a question research data collection method could be done by:

a. Observasi

Direct observation is held to obtain data carried out between the institutions in research conducted in kartika aesthetic, bandar lampung.

b. Interview

The interviews were conducted by means of communicate with managers kartika aesthetic , bandar lampung .

c. The literature study

The literature study done to obtain data and information by reading various materials and other scientific sumber-sumber writing an essay about the problems associated with writing

#### Method of Development System

In the resolution of problems in this research is done based on method of development selected system that uses the system development relational unified process. Relational unified process ( rup ) having 4 the stage or the iterative also can be done .The following is an account for each phase RUP :

1. *Inception* (Permulaan)

This stage over at the modeling of business process required ( business modeling ) and defines the need for a system that will be made ( requirements )

2. *Elaboration* (Perluasan/Perencanaan)

This stage be focused on planning system architecture.This stage can also detect whether system architecture desirable can be made or not.Detect the risk that might happen of architecture created.This stage more analysis and a system design and implementation of the system that focus on the system (Prototype).

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## 3. *Construction* (Konstruksi)

This stage focus on the components and features system features .This stage more on implementation and testing the system that focus on the implementation of software on a program code

## 4. *Transition* (Transisi)

This stage over at the deployment or installations system so as to be perceptible by user .Activity on this stage including at training the user , the maintenance and testing the system is it already meet the hopes user

## 4. FINDINGS AND DISCUSSION

Use case who is running at the clinic kartikaAesthetic

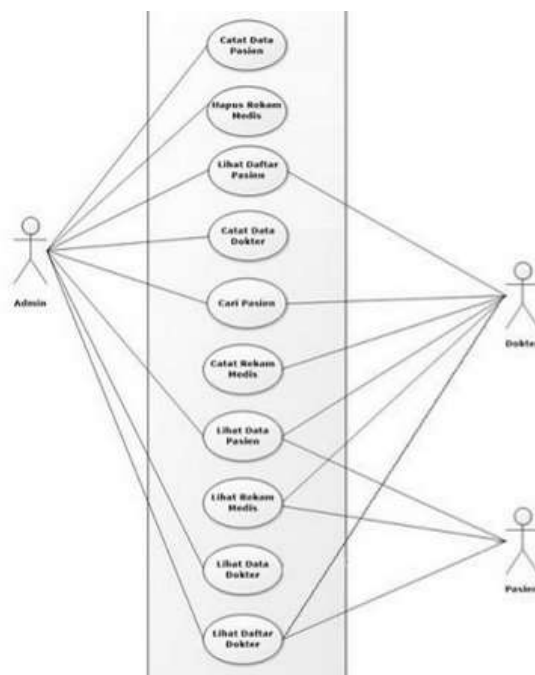


Figure 2. Diagram Use Case Kartika Aesthetic

Based on the result analysis by the system running there are weaknesses as follows :

In the registration process customer data that will make an emergency must come straight to the clinic that it often happened a long line at certain jam-jam mainly during the weekend.Officers will check in and search for data customer if he is a long, and to new patients officers will be

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recorded in ledgers and made one member. The officer will determine the schedule customer. treatment as needed

Design a model that is proposed on a system shown in the form use case .Use case or diagram use case is modeling to ( criminals behavior ) the system of information would be made .Use case described a interaction between one or more actor with a system of information would be made .For more details , use case proposed is presented in figure follows:

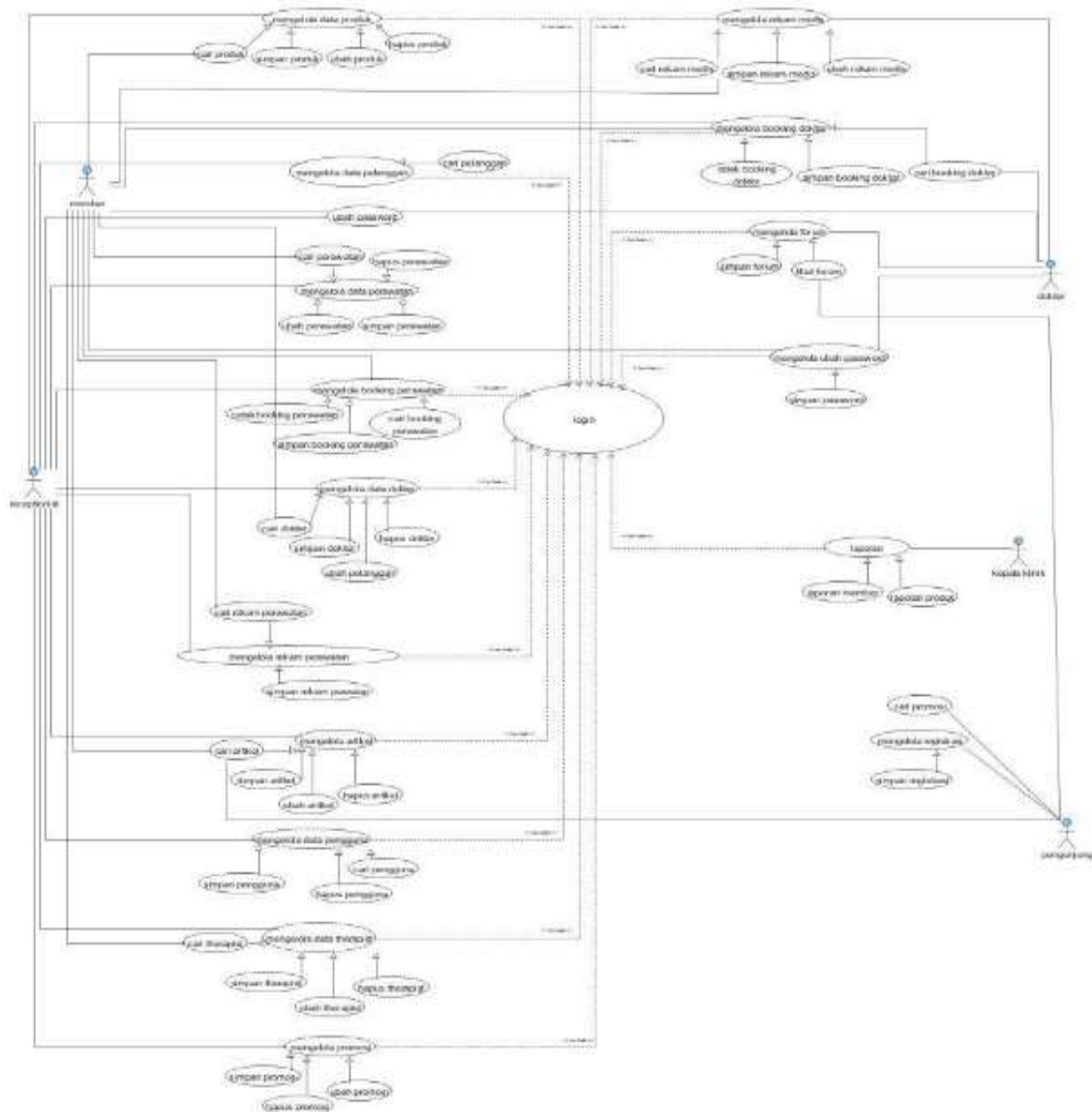


Figure 3. Use Case Yang Diusulkan

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The design of input output

Here is the design of output and input in the development of a prototype of information systems at the clinic Kartika Aesthetic :

## 1. Prototype Halaman Utama Web Klinik Kartika Aesthetic



Figure 4. Halaman Utama Web

## 2. Prototype Halaman Registrasi Customer

Figure 5. Halaman Registrasi Customer

### 3. Prototype Halaman Penjadwalan Perawatan

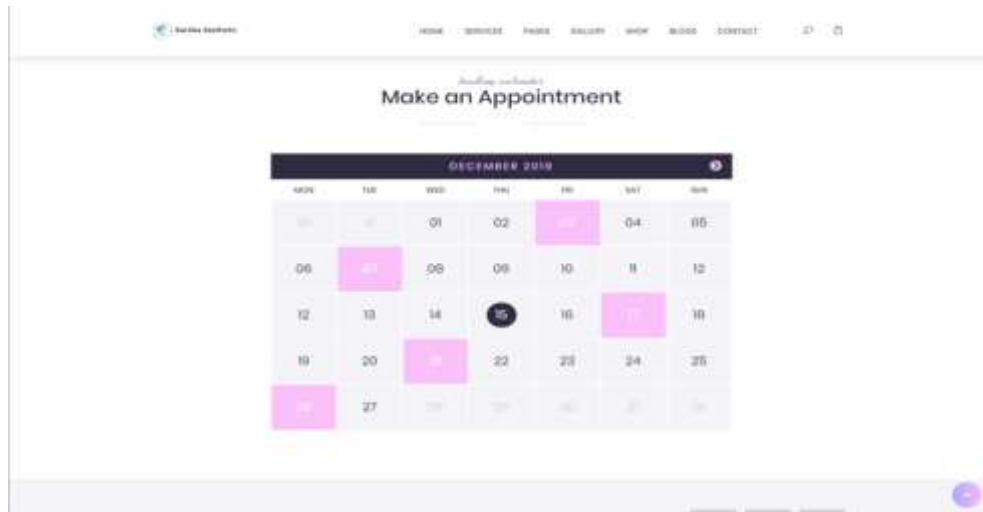


Figure 6. Halaman Halaman Penjadwalan Perawatan

### 4. Prototype Halaman Produk Kecantikan

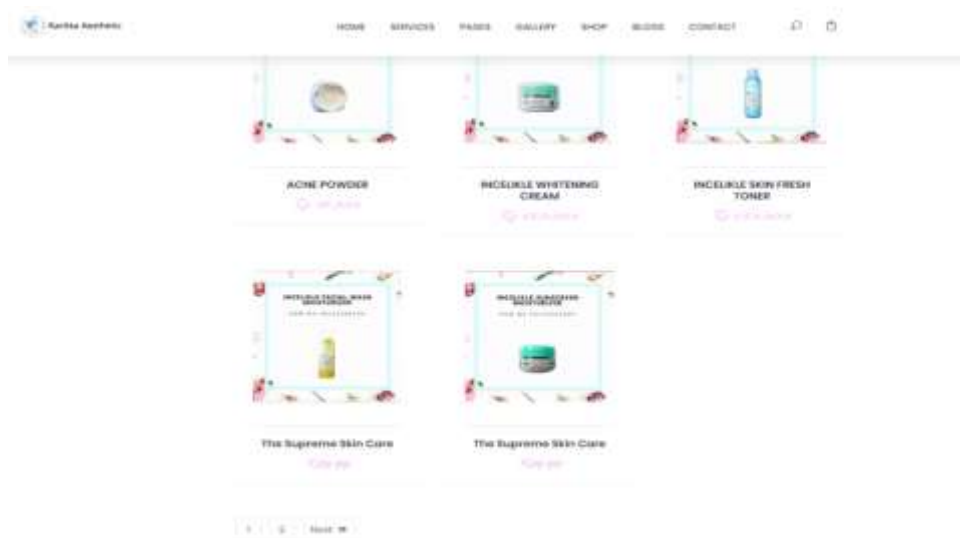


Figure 7. Halaman Produk Kecantikan



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## 5. Prototype Halaman Jenis-Jenis Treatment

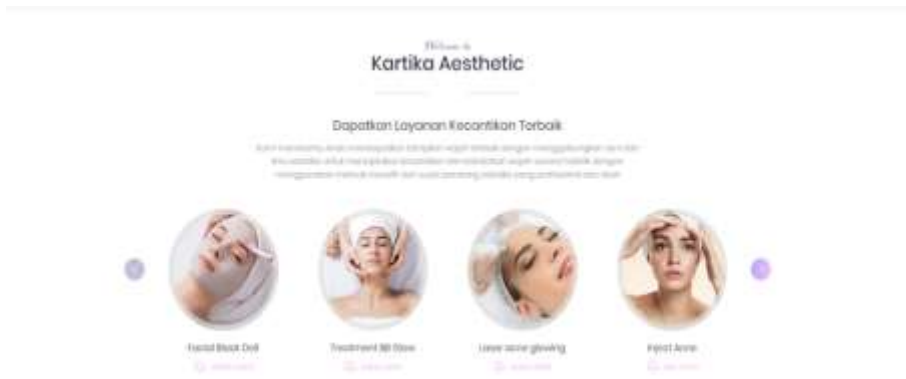


Figure 8. Halaman Jenis-Jenis Treatment

## 6. Prototype Halaman Jenis-Jenis Promo Produk dan Treatment Kecantikan

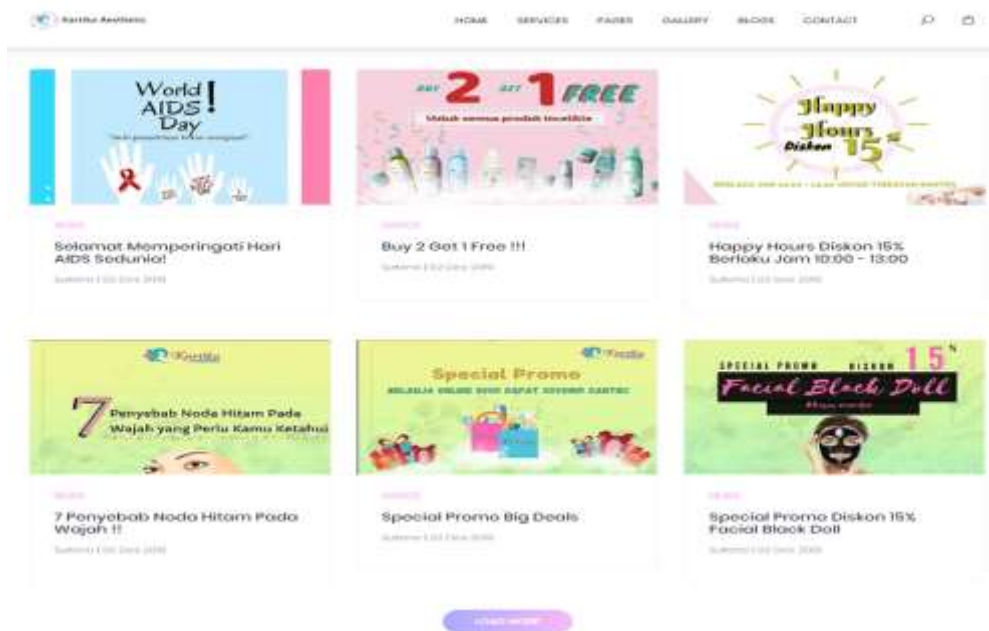


Figure 9. Halaman Jenis-Jenis Promo Produk dan Treatment Kecantikan

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## 7. Prototype Halaman Gallery



Figure 10. Halaman Gallery

## 8. Prototype Halaman Harga Treatment

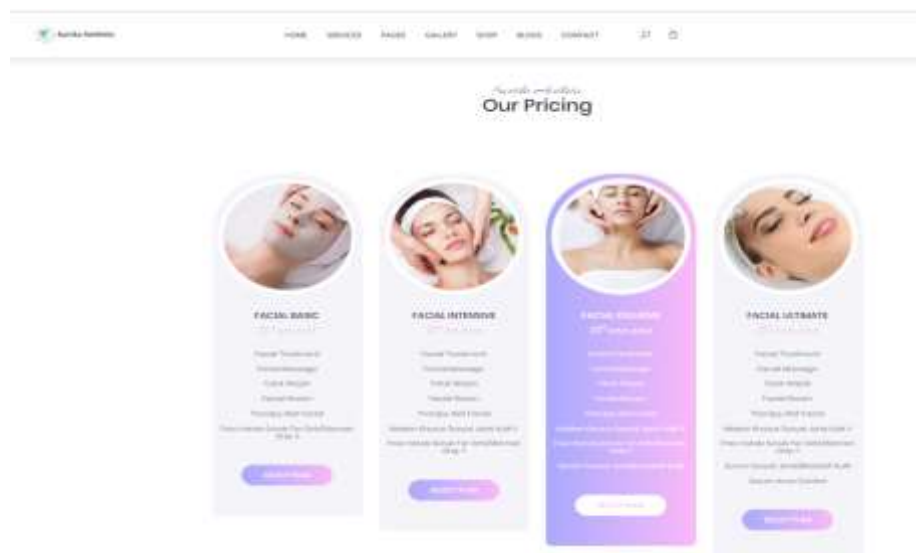


Figure 11. Halaman Harga Treatment

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## 5. CONCLUSION

Based on the process of building prototypes customer relationship management information system on kartika web based aesthetic that began in to the stages of design, analysis the conclusion can be drawn as follows:

1. Simplify the clinic kartika aesthetic in managing all the process of business that runs, like the administration; marketing; maintenance and customer can be integrated into one system.
2. By implementing the crm this , make it easier for the clinic kartika aesthetic in cultivate for its customer data will be brought forward and easy services in pass on the information to for its customer .
3. With the crm website based, this system to facilitate customer signed up online for medical treatment without having to come to the clinic. And this system provides some important information such as receiving information about the schedule, treatment new kind of treatment and other promo-promo easily and in accordance with and the needs of the customer.
4. CRM system it has features the suggestions and criticisms to accommodate input and complaints from customer service if there is considered unsatisfactory in their hearts .

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