Website Based Information System on Startup SharingKu

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Abstrak

Gangguan mental merupakan salah satu masalah kesehatan yang banyak dialami oleh banyak orang. Konsultasi atau terapi merupakan alternatif yang bisa dilakukan saat kondisi mental sedang buruk. Tujuan dari adanya pengembangan ini yaitu untuk merancang sistem informasi yang memudahkan berbagai kalangan khususnya para pasien mental agar dapat melakukan konsultasi online dengan lebih mudah dan efektif baik secara waktu, biaya maupun tenaga. Hasil akhir dari penelitian ini berupa sistem yang sudah dapat diimplementasikan dan sudah melewati uji coba proses yang sudah berhasil. Pengujian tersebut terdiri dari fungsionalitas user pasien yang sudah berhasil melakukan pemesanan, user psikolog yang sudah berhasil mengelola data pasien, user admin yg sudah berhasil mengelola data psikolog dan user super admin yang sudah berhasil mendaftarkan akun psikolog dan admin.

Kata Kunci: Sistem Informasi, Startup, Kesehatan Mental, Framework Laravel.

Abstract

Mental disorders are one of health problems that are experienced by many people. Consultation or therapy is an alternative that can be done when mental conditions are bad. The purpose of this development is to design an information system that makes it easier for various groups, especially mental patients, to be able to conduct online consultations more easily and effectively both in time, cost and effort. The final result of this research is a system that can be implemented and has passed the trial process that has been successful. The test consists of the functionality of patient users who have successfully placed orders, psychologist users who have managed to manage patient data, admin users who have managed to manage psychologist data and super admin users who have successfully registered psychologist and admin accounts.

Keywords: Information System, Startup, Mental Health, Laravel Framework.

1. Introduction

Mental health can be defined as a condition of a person who is psycho-socially prosperous and aware of his own potential, can face the normal stresses of life, is able to work productively and can make a positive contribution to his community [1].

Good or bad mental health is influenced by events in life that leave a great impact on a person's personality and behavior. Just like physical, mental disorders can also be experienced. Mental health disorders are conditions that affect our mood, thoughts and behavior. [2] These events can take the form of domestic violence, child abuse or long-term severe stress. Impaired mental health, resulting in mental disorders or mental illness. Mental disorders can change the way a person handles stress, relates to others, makes choices, and even triggers a desire to hurt himself. Consultation or therapy is also an alternative that can be done when the state of mind and feeling is not good. Good communication is the recovery criteria most mentioned by experts. [3] Objective solutions from psychologists are needed to solve life's problems. Psychology is not just listening to stories and then giving advice, psychologists work by helping to find the basis of the problem through knowledge, training and skills possessed. Solutions such as how to control thoughts, feelings or how to behave when there is a problem can be found. Psychologists have a code of ethics to keep health conditions confidential. All kinds of

outpourings, complaints and problems of life will be private. Psychologists will also position themselves as neutral parties, which means not taking sides with something selfish or their ideals so that everything is safe and useful. [4]

The description and problems above can be turned into a TA report (Final Project) with the title "Website-Based Information System on Startup SharingKu" because at this time there are still few information systems that provide online consulting services, so it is very suitable as a pilot application. SharingKu is a web-based startup that brings together psychologists and patients to conduct online consultations with the aim of restoring and improving the mental health of patients. SharingKu also provides employment opportunities for psychologist graduates who have the ability to restore one's mentality. Consultations can also be done offline according to the agreement of the psychologist and the patient while still following the flow of the system. It is hoped that with the design of this web-based startup, consulting services for people in need can run well. [5]

2. Research Method

The author uses development research methods or often also referred to as Research & Development, namely by looking for information to be used as reference material to develop the information that has been received so that there is an increase in technology, theory and information as needed.

2.1 Analysis

This analysis stage performs several activities, namely problem identification, problem solving proposals and system requirements analysis. This modeling begins with finding the needs of the entire system that will be applied to software.

2.2 Design

The next stage is the design, at this stage is the modeling stage based on the results of the analysis that has been made previously and determines how an application solves the problem. This stage includes the creation of an overview, use case diagrams, system flowcharts, context diagrams, Data Flow Diagrams, Physical Data Models and mock ups of the system.

2.3 Coding

The next stage is programming or coding. This stage is the result of the transfer of the design into a predetermined programming language. This stage uses the PHP programming language with Visual Studio Code and uses the Laravel framework as a liaison to the database. The SharingKu system applies a dynamic and custom system in coding or backend. The dynamic system is on the super admin user while the custom system is on the patient user, psychologist user and admin user.

2.4 Testing

At this stage, each feature and function is tested to find out whether it can work properly. Testing is done by testing the website independently. Testing is done with the standard whether the application features are running properly or not.

2.5 Maintenance

This stage is a stage that needs to be carried out in carrying out maintenance or maintenance by updating the application regularly so that the application can be maintained properly after testing.

3. Literature Rivew

The concepts in this research come from literature review in form of articles, scientific journals, research reports, books, and internet sites that are used as references in this research.

3.1 Information System

Information system is a system that includes a number of human components, computers, information technology and work procedures that process data into information to achieve a goal or goal. (Abdul Kadir, n.d.)

3.2 Mental

Mental is a way of thinking or the concept of human thinking to be able to learn and respond to something. Mental is another word for mind. So, mentality can be said as a way of thinking about something. The way a person thinks is influenced by experience, learning outcomes or the environment can also influence this mindset. (Samad, 2020)

3.3 Laravel Framework

Laravel is a PHP framework that emphasizes simplicity and flexibility in its design. Laravel is released under the MIT license with source code provided on Github. Just like other PHP frameworks, Laravel is built on the basis of MVC (Model-View-Controller). Laravel comes with a command line tool called Artisan which can be used for bundle packaging and bundle installation. According to a survey conducted by Sitepoint.com in December 2013 in terms of the popularity of PHP frameworks, Laravel topped the list. (Erinton1 et al., 2017)

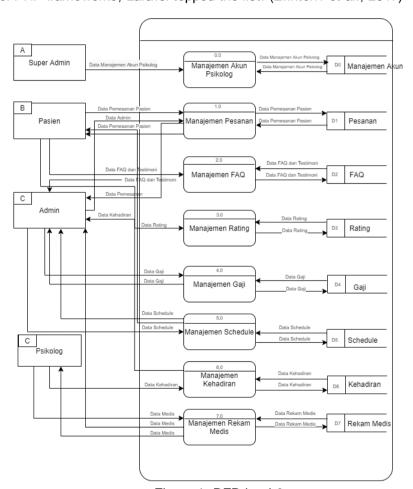


Figure 1. DFD level 0

Figure 1. DFD level 0. DFD level 1 is a further stage of DFD level 0, where all processes in DFD level 0 will be detailed in full so that it is more complete and also detailed. The level 1 DFD of this system's order management is as follows.

4. Result and Discussion

The advice that can be given from the research on Website-Based Information Systems on Startup SharingKu is that it is hoped that this system can be developed not only limited to consultations related to mental health but also develop a system with more complete features and is also developed not only limited to mental illness but also other diseases so that it does not limit the use of the system in the community.

4.1 Patient Login Page

The patient login page is a page that contains a form to login for patient users who want to join SharingKu. The display of the patient login is as follows.



Figure 2. Patient Login Page

Figure 2 is an implementation of the login form display for patient users. The patient login form consists of an Email and password form. After the patient fills out the registration form, the patient can login and can also access special user features found in SharingKu

4.2 Patient Profile Page

The patient profile page is a page that contains the patient's personal data, consultation history and medical records. The display of the patient profile page is as follows.

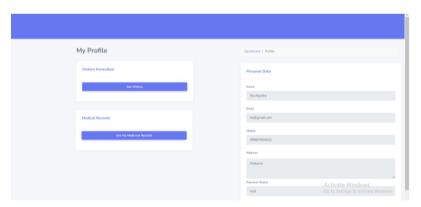


Figure 3. Profile Page

Figure 3 is the implementation of the profile page. The picture describes the patient's personal data profile page. In addition, there is a consultation history menu as additional information to patients and a medical menu to view medical records and permits.

4.3 Payment Page

The payment page is a page for making payments. The page implements several features of the payment gateway to make it easier for users to make payments. The first step to make a payment can be seen in the following image.

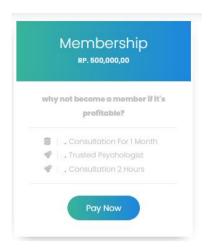


Figure 4. Payment Page

Figure 4 is the user's first stage in making a payment. Users are required to select the price menu to be directed to the payment menu. The second stage for making payments can be seen in the following image.



Figure 5. Payment Page

Figure 5 is a display of the payment format. For users who want to make payments, they must fill out this form. The third stage for making payments can be seen in the following image.

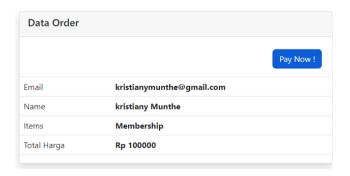


Figure 6. Payment Page

Figure 6 is a display of order data. The data displays the payment information that will be made by the user. The fourth stage for making payments can be seen in the following image.

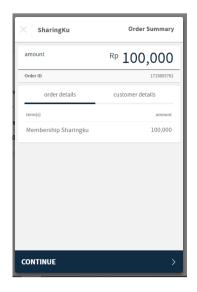


Figure 7. Payment Page

Figure 7 is a display of order details and customer details. The image describes the order and the customer. The fifth stage for making payments can be seen in the following image.

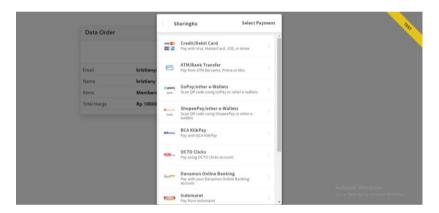


Figure 8. Payment Page

Figure 8 is a display of select payments. In this feature, users are given the choice of what method to make payments. The sixth stage for making payments can be seen in the following image.

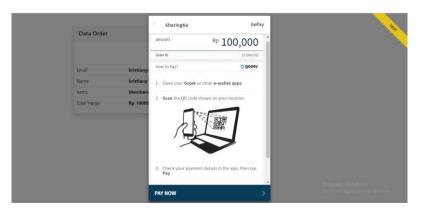


Figure 9. Payment Page

Figure 9 is a display of the payment steps. At this step, the steps that need to be taken to make the selected payment method are given. The seventh stage for making payments can be seen in the following image.



Figure 10. Payment Page

Figure 10 is a display of the payment barcode. The barcode will be brought to QRIS. The eighth stage for making payments can be seen in the following image.

4.4 Patient schedule

Patient schedule page is a page that contains patient schedule data. The display of the patient schedule is as follows.

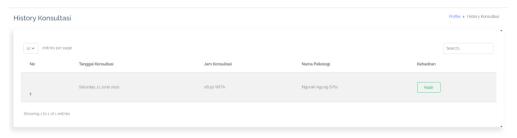


Figure 11. Patient Schedule

Figure 11 is a display of the patient consultation schedule. In the picture there is information on the date, time of consultation, the name of the psychologist and attendance that can be arranged by the psychologist.

4.5 Patient Schedule Notification

The patient schedule notification is information about the patient's consultation schedule with a psychologist sent by the admin via email to the patient. The display of the patient schedule is as follows.

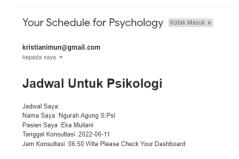


Figure 12. Patient Schedule Notification

Figure 12 is a display of the patient schedule notification. Schedule notifications sent via email are data on psychologist's name, patient name data, date and time of consultation data.

4.6 Medical Record Approval Page

The patient's medical record approval page is information on approval or permission to share the patient's medical record with others. The display of the patient's medical record approval page is as follows.



Figure 13. Patient's Medical Record

Figure 13 is an implementation of the patient's medical record approval display. A notification will be sent by the admin to the patient and if the patient allows the medical record will appear in the psychologist's information on the main page.

4.7 Final System Test

Payment

Schedule

Chat

System testing is a stage to check whether the resulting software can be run according to certain standards. System testing is the most important thing that aims to find errors or deficiencies in the software being tested. The testing technique carried out on the SharingKu system is Black Box testing, testing focuses on the functional requirements of the software. The following tests are carried out to briefly check the accuracy of the system. System testing for patient users can be seen in the table below.

Input Proses Output Hasil Uii Patient User Patient users click the The patient user is taken Succeed Registration registration button then fill to the login page. out the form and verify via email. Patient User The patient patient user The patient user has Succeed clicks the login button and successfully logged into Login logs in using a registered the Sharingku page. account. The patient user clicks on the The patient user is taken **Booking** Succeed consultation card and places to the payment page.

A successful payment

notification appears.

Chat page appears.

Schedule

appears.

Table 1. System Testing for Patient Users

The patient user clicks on the

pay now menu and makes a

payment using the selected

Patient users click on the

schedule page on the profile

payment method.

page.

chat feature and chat.
The patient user clicks on the

Succeed

Succeed

information Succeed

Medical records	The patient user clicks on the medical record page on the	Succeed
	profile page.	

Table 1 is a system test using the Black Box method on the SharingKu information system. Testing the system describes several processes such as patient user registration, patient user login, ordering, payment, chat, schedule and patient medical records that have been declared successful. System testing for user psychologists can be seen in the table below.

Table 2 System Testing for User Psychologists

Psychologist User Registration	The psychologist user clicks the registration button then fills out the form and inputs the CV.	The user is taken to the login page.	Succeed
Psychologist User Login	The psychologist user clicks the login button and logs in using the account that has been created by the super admin.	User has successfully logged in to the psychologist dashboard.	Succeed
Chat	Psychologist users click on the chat feature.	A chat page appears from the patient user	Succeed
Schedule	The psychologist user clicks on the schedule page on the patient sidebar.	Schedule information appears.	Succeed
Presence	The psychologist user clicks the patient attendance button on the schedule sidebar.	The patient information appears.	Succeed
Medical records	The psychologist user inputs the patient's medical ream on the psychologist dashboard page.	Medical records have been successfully inputted and can be accessed by admin users and patient users.	Succeed
Wages	Psychologist users click on the Salaries sidebar.	Psychologist salary information appears.	Succeed

Table 2 is a system test using the Black Box method on the SharingKu information system. Testing the system describes several processes such as psychologist user registration, psychologist user login, schedule, chat, attendance, patient medical records and salaries that have been declared successful. System testing for admin users can be seen in the table below.

Table 3. System testing for admin users

Login User admin	The admin user clicks the feature. The admin user clicks the login button and logs in using the account that has been created by super admin.chat.	The user has successfully logged in to the admin dashboard.	Succeed
Chat	The admin user clicks on the chat feature.	A chat page appears from the patient user.	Succeed
Schedule	The admin user inputs the meeting schedule based on the patient order data that has been entered on the schedule page on the patient sidebar.	A new schedule appears that can be accessed by patient users and psychologist users.	Succeed

FAQ	The admin user clicks on the FAQ sidebar and inputs answers to incoming questions.	FAQ information appears both on the admin dashboard and the main system page.	Succeed
Medical records	The admin user accesses the patient's medical record that has been inputted by the psychologist user.	Patient medical record information appears.	Succeed
Wages	The admin user inputs the psychologist's salary based on the order made by the patient user.	Psychologist salary information appears.	Succeed

Table 3 is a system test using the Black Box method on the SharingKu information system. Testing the system describes several processes such as admin user login, schedule, chat, schedule, FAQ, patient medical records and salaries that have been declared successful. System testing for super admin users can be seen in the table below.

Table 4. System Testing for Super Admin Users

Manage account	The super admin user registers a psychologist and admin account.	The psychologist and Succeed admin accounts have been successfully registered.
Send Email	•	The account that has Succeed been created is sent to the admin or psychologist via Email.

Table 4 is a system test using the Black Box method on the SharingKu information system. Testing the system describes two processes, namely managing accounts and sending emails that have been declared successful.

5. Conclusion

Website-Based Information System on SharingKu is designed by making several features that support the convenience of the system. Manual consultation requires the patient to come to the clinic and then fill out the registration form then the consultation can be carried out, while the web-based startup brings together psychologists and patients to conduct online consultations. Features for patients include information pages, profile pages, registration features, login features, ordering and payment features, questions features, psychologist rating features, chat features and medical record access features. Features for super admins include admin and psychologist account management features. Features for admins include the information management feature for both patients and psychologists on the admin page, schedule management feature, salary management feature and chat. Features for psychologists include dashboard pages, chat features and medical record features found on the psychologist page. The Website-Based Information System on SharingKu manages patient complaint data to get consultations by designing FAQ features and chatting with psychologists and admins. Patients who already have confidence in the system and psychologists can immediately register and pay to get online consultation services and after completing the consultation, the patient will also receive a medical record from a psychologist. Medical records can be reused when the patient consults another psychologist from Sharingku. Information System Based on the website on SharingKu, it provides a profile of psychologists who already have a rating history and testimonials from previous patients so that patients can effectively choose the psychologist of interest to consult. After the patient registers and pays, the admin will arrange a consultation schedule for both parties. After the consultation schedule appears in the system, the psychologist will contact the patient for a consultation through a tentative online room meeting because this is not an expert system.

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