

Design of A Web-Based Social Network Information System

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ARTICLE INFO

Article history:

Received 31 Ags 2022

Revised 6 Sept 2022

Accepted 13 Okt 2022

Keywords:

Information systems,
social networks,
web,
MySQL

ABSTRACT

In this modern era, the community's need for information is growing, especially the need for the internet, which can provide information more quickly and according to requirements. The internet is one of the developments in information technology that allows time and distance to be no longer a limit for obtaining information. Social networking sites are web-based services that enable users to create profiles, view a list of available users, and invite or accept friends to join the site. The basic appearance of this social networking site displays the user's profile page, which consists of the user's identity and photo. The emergence of this social networking site was initiated by an initiative to connect people from all parts of the world. Facebook is a social networking service and website launched in February 2004 that is operated and owned by Facebook had more than 500 million active users. 50% of active users log in 2 to Facebook every day, and the average user has one hundred and fifty friends. Users can create personal profiles, add other users as friends, and exchange messages, including automatic notifications when they update their profiles. By utilizing internet facilities, communication in sharing information can be done quickly and easily. For this reason, using internet facilities can create a web-based application that can offer fast and easy communication. This application system is made by designing input, output, database, and user interface. The design results are then implemented into PHP, CSS, JavaScript, and MySQL scripts used for database management. So that a web-based application is produced that can facilitate communication.

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I. Introduction

Social networking sites are web-based services that allow users to create profiles, view a list of available users, and invite or accept friends to join the site. The basic appearance of this social networking site displays the user's profile page, which consists of the user's identity and photo. The emergence of this social networking site was initiated by an initiative to connect people from all parts of the world. Many social networking sites have sprung up lately, such as Friendster, My Space, Twitter, Facebook, and so on [1]. But at this time, the most popular social networking site is Facebook; according to the alexa.com site, Facebook is in the top three most frequently accessed sites and is the number one site most frequently accessed among other social networking sites [2].

Facebook is a social networking service and website launched in February 2004 that is operated and owned. Facebook has more than 500 million active users. 50% of active users log in 2 to Facebook every day, and the average user has one hundred and fifty friends. Users can create personal profiles, add other users as friends, and exchange messages, including automatic notifications when they update their shape [3]. Additionally, users can join purposeful groups, which are ordered by workplace, school, college, or other characteristics. The name of this Facebook service comes from the book given to students in the first academic year by university administrations in the United States to help students get to know each other [4]. Facebook also allows everyone at least thirteen years of age to become active on this social networking site [5].

Based on this background, researchers are interested in researching social networking sites to design a mass media system that interests and benefits many people. Therefore, the researcher wrote this thesis titled "Design of a Web-Based Social Network Information System That Includes Status Updates, Likes, Comments, and Relationship Status".

II. Methods

Before the analysis process is carried out, the researcher first conducts the data collection process. This process can be defined as a method used to obtain the data needed as input and consideration for researchers. The data collection process aims to find closely related sources to the system to be studied and discussed. In carrying out the data collection process researchers used three methods, namely:

1. Library Research
2. Internet
- a. Analysis and Design

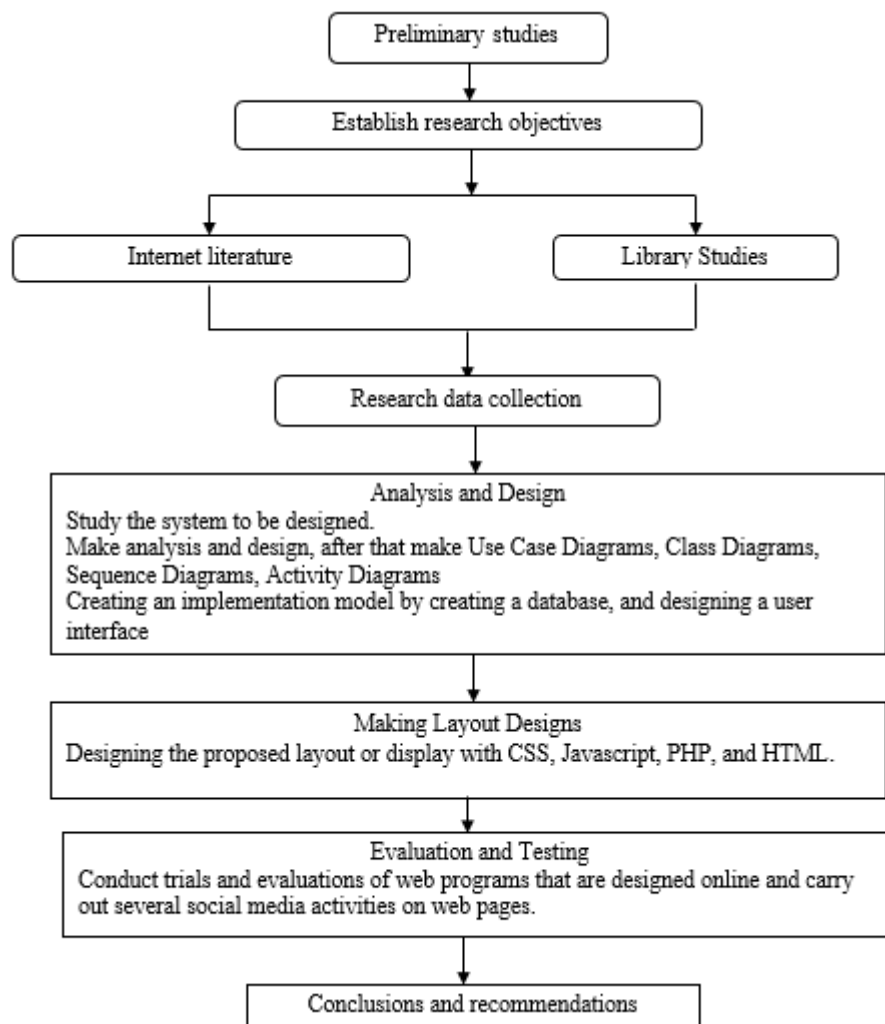
The analysis is a stage of the process for identifying problems, evaluating, understanding specifications, and ions, and conducting a review of a system.

Skills in the analysis process include:

1. Ability to analyze abstract concepts, rearrange them into logical divisions and implement
2. Problem-solving based on division.
3. The ability to absorb facts or information.
4. The ability to understand the user's environment.
5. Ability to implement software and hardware systems elements in the environment
6. concerned.

- b. Test Method

Researchers tested the program that had been designed. This stage is the final stage of the program design process carried out by researchers. This is done to look for errors that occur in the program, so researchers can make improvements to get a better application program. In summary, the research methodology in this thesis is shown in Figure 1.

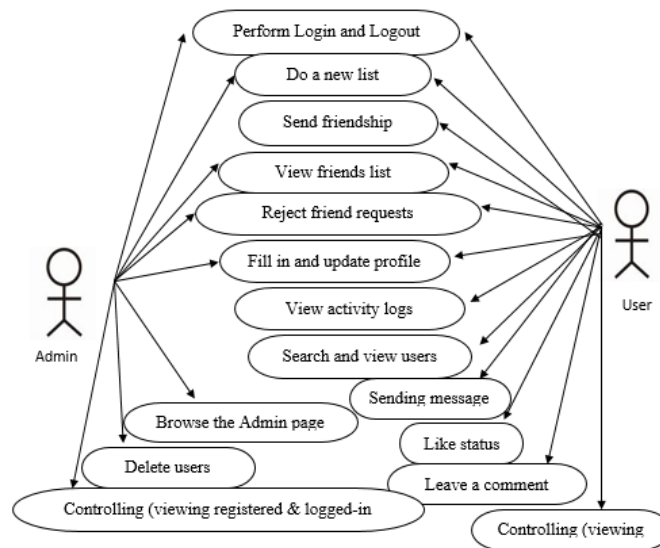


Research Methodology

III. Result and Discussion

A. Use Case Diagrams

The Use Case diagram describes what activities are carried out by the systems from an outside observation point of view. The Use Case diagram of an online web-based news information system can be seen in Figure 2.



Use case diagram

B. Activity Charts

From the use case diagram and class diagram above, the system to be built consists of the following:

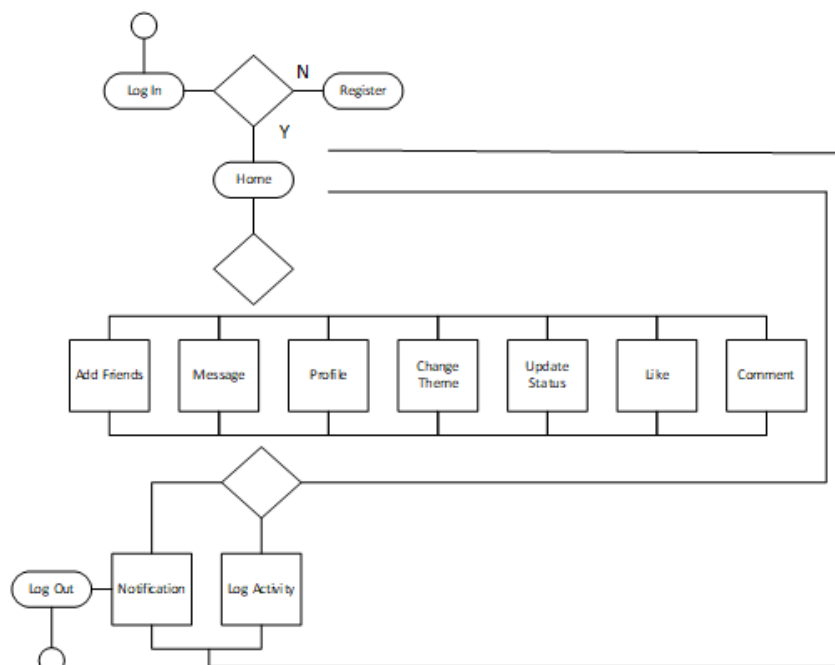


Diagram Activity

C. Database Design

The database used in this information system is MySQL Server with a table structure as follows:

Database Name: Chitchat

Table 1. Comment

No.	Filed Name	Type	Width	Description
1	User status	Varchar	4	Id user status
2	Usercomment	Varchar	4	Id user comment
3	Comment	Varchar	255	Fill in the comments
4	Date	Date	-	Comment Date
5	Time	Time	-	Comment time
6	Status	varchar	255	Status on comments

Table 2. Friend

No.	Filed Name	Type	Width	Description
1	Id_add	Varchar	10	Friend requester id
2	Id_confirm	Varchar	10	Request recipient id
3	Confirmation	Bit	1	Confirm status
4	Relationship	Varchar	20	Friend request relationship
5	Status	Bit	1	Friend request status
6	Date	date	-	Friend request date

Table 3. Message

No.	Filed Name	Type	Width	Description
1	Id_user	Varchar	10	Message recipient id
2	Id_send	Varchar	10	Message sender id
3	Date	Date	-	Message sent date
4	Time	Time	-	Message reception time
5	Status	Bit	1	Message reception status
6	Reading	Bit	1	Message reading status
7	Fill	Text	-	Message content

Table 4. User

No.	Filed Name	Type	Width	Description
1	Userid	Double	-	User name (primary key)
2	First_Name	Varchar	255	User's first name
3	Last_Name	Varchar	255	User's last name
4	Email	Varchar	50	User e-mail
5	password	Varchar	50	User passwords
6	Date of birth	Date	-	User's date of birth
7	Gender	Varchar	6	User gender
8	Create_Date	Date	-	Manufacture date
9.	Status	varchar	10	Status userid

Table 5. Like

No.	Filed Name	Type	Width	Description
1	Userstatus	Varchar	4	Status writer user
2	Userlike	Varchar	4	Status-loving users
3	Date	Date	-	Status liking date
4	Time	Time	-	Status liking time
5	Status	Varchar	255	Fill status

Table 6. log_activity

No.	Filed Name	Type	Width	Description
1	Id_user	Varchar	10	Id user
2	Id	Varchar	10	Id log activity
3	Activity	Varchar	100	Activity description
4	Date	Date	-	Activity Date

Table 7. notice

No.	Filed Name	Type	Width	Description
1	Id_user	Varchar	10	Notification recipient id
2	Id_send	Varchar	10	Notification sender id
3	Date	Date	-	Notification date
4	Status	Bit	1	Notification status
5	View	Bit	1	Status viewing notifications
6	Describe	Varchar	50	Notification describes

Table 8. status_update

No.	Filed Name	Type	Width	Description
1	Userid	Varchar	4	User id
2	Status	Varchar	255	Fill status
3	Picture	Varchar	255	Pictures status
4	Date	Date	-	Status creation date
5	Time	Time	-	Status creation time

Table 9. about

No.	Filed Name	Type	Width	Description
1	Userid	Varchar	4	User id
2	City Now	Varchar	100	user city
3	Hometown	Varchar	100	User's hometown
4	Highschool	Varchar	100	User education
5	Collage	Varchar	100	Collage
6	Company	Varchar	100	User job
7	Relationship	Varchar	100	User state

D. Software Design

System interface with other application devices on interacting systems, including operating systems, database management systems, programming languages used, and other supporting programs.

Table 10. Software requirements for system operation

Application Type	Name and Version	Describe
Operating system	Windows XP Sp4	As a proposed operating system software environment.
DBMS	MySQL 5.1.41	As a database management information system software proposal
Programing Language	HTML, CSS, Javascript dan PHP	As a proposed information system software programming language.
Browsers	Mozilla Firefox, Google Chrome, Internet Explorer, dan Opera	As a proposed information system software browser.

E. How to run this application, including:

1. The user must use a device that is connected to the Internet.
2. Users run browser programs, such as Google Chrome, Internet Explorer, Mozilla Firefox, and Opera Mini.
3. The user types the web URL in the browser's address bar, the following is the URL address that the user must type. <http://www.chitchat.com>.
4. After typing the URL, the user must fill in the login form. If the user has not been registered, a new registration must be made first to be able to log into the system.

IV. Conclusion

The following are some conclusions drawn from the results of the study,

1. The design of social media chitchat is acceptable and even in demand by many groups of people, from children to adults.

2. The current use of social media sites makes it very easy for various parties and groups to achieve interactions and relationships.
3. Creating a wider and unlimited social relationship and reducing distance limitations so that it feels closer.
4. Allows everyone to interact with each other without exception and can also be a more efficient and effective means of doing business.

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