Report

1.Introduction

In recent years, the psychological problems of college students have become the focus of society. Studies have shown that master students and doctoral students are more likely to suffer from anxiety disorders. Factors such as high learning pressure and fast social rhythm affect students' psychology to a certain extent. When depression exceeds a certain limit or continues to prolong, it may even develop into depression.

Most students are unaware of their mental problems. Or because of public opinion pressure and privacy, etc., they are not willing to consult a psychiatrist. This situation is the main reason why the mental health problems of college students are difficult to solve. Universities need to establish ways to investigate the mental health of student groups. It also encourages students to actively participate in mental health assessments and feedback.

In response to these issues, the team designed an application to solve. In the application, a college mental health support community was built, including a forum system and an appointment consultation system.

2.Summary of the proposed solution

The application is intended for students, doctors, and system administrators. The program mainly provides two functions of forum community and online appointment. Students can post on the forum and relieve stress through mutual communication and encouragement. At the same time, students can also schedule an offline meeting with a counselor. Doctors can post knowledge about science or interact with students to help students. The administrator maintains the website. Administrators can manage student and doctor accounts, community content, and appointment information. In addition, all non-registered users can also browse the website information. The system can be viewed not only by browsers on Windows, but also by browsers on andriod and IOS systems.

2.2 Operational feasibility

This system uses the browser under Windows system, and the user is very familiar with it. Secondly, the system web page is simple and the requirements for operation are very low. Simply enter the button corresponding to the click to complete. From the operational point of view, the development of this system is feasible.

3.Requirements

Student users can log in, log out, write posts, reply to posts, modify personal information, make appointments, and cancel appointments.Doctor users can log in, log out, write posts, reply to posts, modify personal information, and modify the timetable for visiting.Administrators can log in, log out, and manage

users (including adding users, finding users, deleting users, modifying user information, etc.), and managing posts (including adding, checking, deleting, changing posts, etc. are not listed) Modify the doctor's information and modify the doctor's timetable for visiting the doctor.
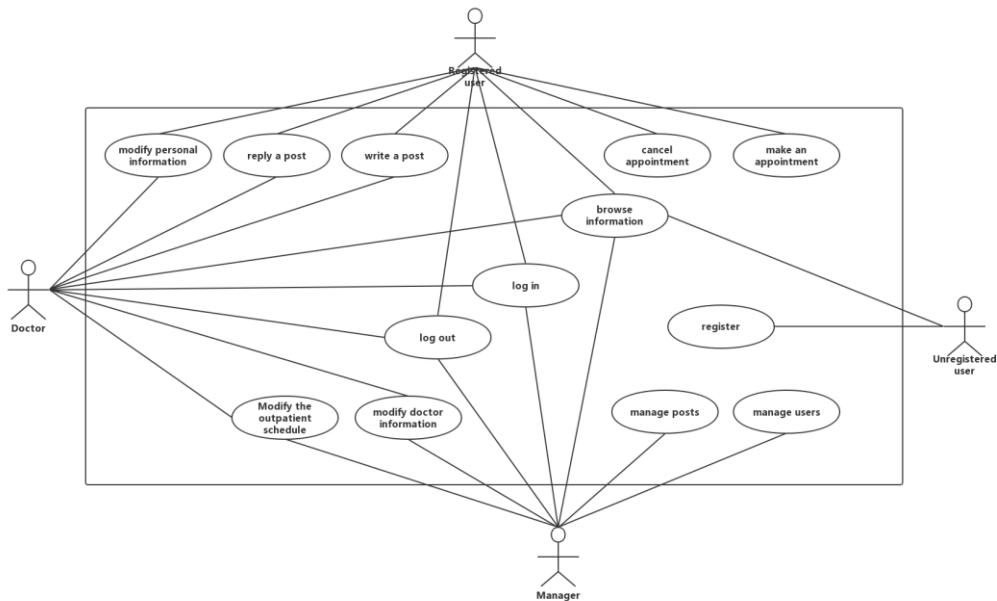
## 3.2 Non-functional requirements:

1, security needs

(1) User authentication requirements. (2) Data integrity and privacy requirements. (3) Authorization requirements.[1]

2, reliability requirements

In order to improve the performance of the system, only half an hour is left for daily maintenance of the system, such as data transmission and exchange.[2]

4.Using the Proposed Solution
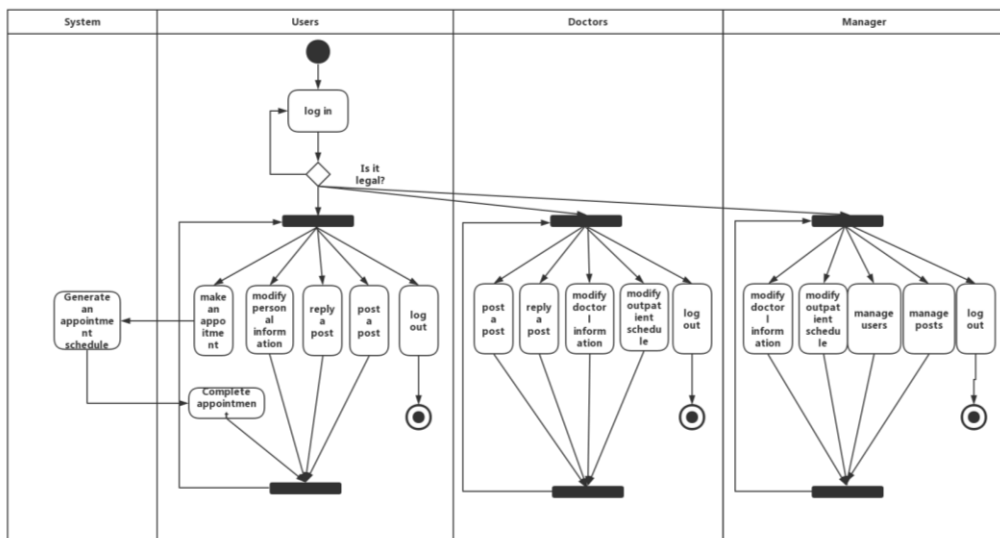
Peter is a college student who feels a lot of academic pressure. He enters this website and can log in

successfully after entering the correct personal account number and password. Go to the home page and you can see some basic information about this website. He clicks on the "Forum" in the navigation bar to view the advice of the professional doctor and the posts of the students. He clicks on topics of interest to view specific information (including responses and interactions between students and doctors' instructions) and to respond. He can click on "Write Post" in the navigation bar to post his question for help. He can click on the "reservation" in the navigation bar to enter the appointment interface. The system returns to him an appointment schedule for him to choose the appropriate time. After selecting the appropriate time, click Submit to make a successful appointment. He can click on the navigation bar "Personal Information" to view and modify his personal information (name, gender, height, weight, etc.) and appointments. If he wants to cancel the appointment, click Cancel Appointment.

5. Implementing the Proposed Solution

The system adopts the B/S three-layer structure mode as the framework for design and implementation. The system uses SSH framework as the main technical framework, JSP technology as the main display technology of the client, and MySQL database as the data storage unit of the system.

The software required for this system is an open source tool, which can be downloaded directly from the Internet. Development needs to be implemented on a personal computer. And the configuration and performance of the personal computer can fully support the development of this project. Development projects have almost no physical cost, just a simple labor cost. In the future, it will only add one server. Therefore, the development of this project is possible in terms of economic feasibility.
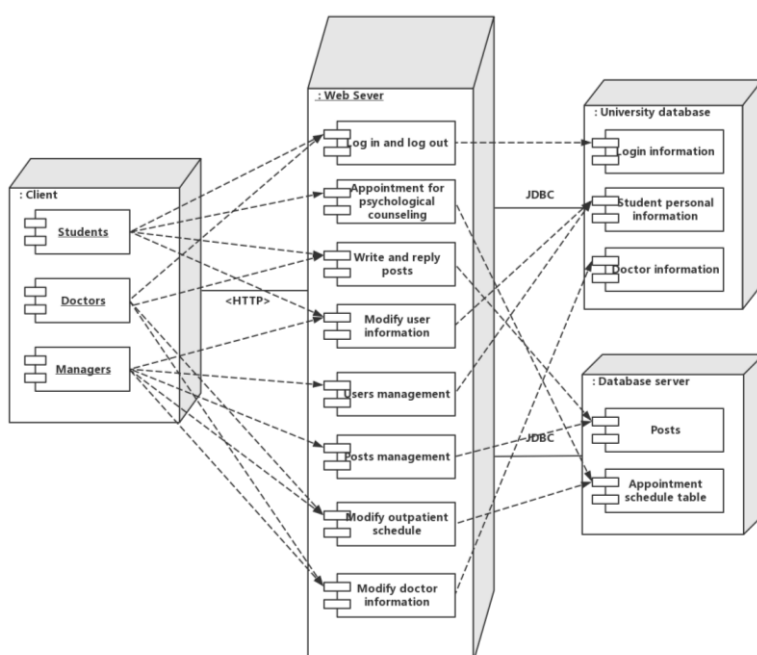
5.2 Solution for non-functional requirements

1, security needs

(1) User authentication requirements:

To protect the data security of the system, the system will leave a login time of 10 minutes for each login user. During this time period, if there is no execution action, the system will automatically log out of the login interface.

(2) Data integrity and privacy requirements:

The password must be stored encrypted; the user account and password must be transmitted over SSL to ensure that the data entered into the system does not affect the security of the system.

(3) Authorization requirements:

The type, level, and work of the user will vary. The system must control and assign access rights to achieve certain page access restrictions. Users have no rights and cannot operate restricted pages.

2. Reliability requirements

(1) Optimize software performance, system cost is small. The system should respond to users in a very short time.

(2) Meet the standardization requirements. The technology used conforms to international common technical standards, and has good compatibility with other information systems and data exchange and system integration capabilities.

(3) Provide all technical manuals and management documents, and provide interface program source code to ensure that the purchaser can carry out system integration and secondary development in the future.[3]

6. Conclusion

In the operation of this system, it is bound to collect information about the student's personal information and medical records. Therefore, the relevant staff must sign a confidentiality agreement to protect the privacy of users and ensure that data is not leaked. This is the professional ethics that doctors and information workers should abide by. At the same time, software developers and schools are also responsible for supervising the relevant staff to use the software legally.

The team analyzed the functional requirements of the system in combination with the characteristics of the system using objects and users, and designed the system architecture. Based on UML modeling technology, structural design of the use case diagram, activity diagram and component diagram of the system. At the same time, the economic feasibility, technical feasibility and operational feasibility were analyzed.

Although this system provides a new way for students to receive mental health support, it still has limitations. This system lacks intelligent modules. The lack of intelligent algorithms automatically analyzes and evaluates student status. If you have this feature, you can provide more information for your doctor to treat.

Reference

1. ^ E.W.Dijkstra Archive: The pragmatic engineer versus the scientific designer
2. ^ Parnas, David L. (1998). "Software Engineering Programmes are not Computer Science Programmes". Annals of Software Engineering. 6: 19–37. doi:10.1023/A:1018949113292., p. 19: "Rather than treat software engineering as a subfield of computer science, I treat it as an element of the set, {Civil Engineering, Mechanical Engineering, Chemical Engineering, Electrical Engineering,....}."
3. https://wenku.baidu.com/view/d76c02f148649b6648d7c1c708a1284ac950055b?pn=50