**Functional Requirements**

1. User Registration and Login:

- Student and Counselor Registration: The platform must provide distinct registration processes for students, counselors, and administrators. Upon registration, users should provide their full name, email address, grade level (for students), or professional details (for counselors). The registration system must include email verification to ensure user authenticity.

- Login Authentication: Users must log in using a username (email) and password. The system should include the option to reset a password through email verification. It should also implement session management, so users stay logged in securely for a designated time unless they manually log out.

2. User Roles and Permissions:

- User Types: The system must differentiate between three user roles: student, counselor, and administrator. Each user type will have distinct permissions and access levels.

- Students: Can access mood rating, schedule appointments, participate in counseling, and use resources.

- Counselors: Can manage schedules, access student profiles, and conduct online counseling.

- Administrators: Have full access, including system management, user monitoring, and reporting.

- Role-based Access Control: Ensure proper role-based access control (RBAC), meaning only authorized users can perform certain actions (e.g., only counselors can view student mood data).

3. Scheduling Features:

- Student Scheduling: Students should be able to create and manage a personal profile where they can input their Each student can create and manage a personal profile, including contact information, program of study, and year/semester level.

- Counselor Scheduling: Counselors must be able to manage their availability for appointments. The platform should display available time slots based on the counselor's working hours and prevent double bookings. Counselors should be able to mark themselves unavailable during vacations or busy periods.

- Appointment Requests: Students can request an appointment with their counselor by selecting an available time slot. Once requested, the counselor can approve or reject the appointment, and notifications should be sent to both parties.

- Rescheduling and Cancellations: Both students and counselors should be able to reschedule or cancel appointments. The system must handle notification updates in case of rescheduling or cancellation.

4. Mood Rating System:

- Mood Logging: Students must be able to log their mood daily using a simple interface. The system should provide a selection of mood options (e.g., happy, sad, stressed, anxious) represented by icons or emojis. Each mood entry should include a date stamp for tracking purposes.

- Mood Analytics: Students and counselors should be able to view historical mood data through visual charts (e.g., line graphs, bar charts) to track mood patterns over time. The platform should generate weekly or monthly mood summaries.

- Intervention Triggers: The system can be configured to alert a counselor if a student's mood consistently reflects a negative trend (e.g., stressed or anxious for several consecutive days).

5. Counseling Appointment Management:

- Appointment Booking: Students can request a counseling session through the platform by viewing the counselor’s available time slots. The system should confirm appointments and send email notifications for both the student and counselor.

- Session Management: During a session, counselors can take notes or input feedback directly into the platform. These session notes should be stored securely and be accessible only by the counselor and the student involved.

- Follow-Up Appointments: After a counseling session, the counselor can recommend follow-up appointments and schedule them through the system. These follow-ups should appear on both the student's and counselor’s calendars.

6. Chatbot Support:

- 24/7 Availability: The chatbot should be available 24/7 to answer common student inquiries related to scheduling, counseling, and mental health resources. It must provide pre-programmed responses for frequently asked questions (FAQs).

- Counseling Advice: The chatbot should offer mental health tips based on student inputs. For example, if a student reports feeling stressed, the chatbot might offer suggestions for relaxation techniques.

- Mood Monitoring Integration: The chatbot should remind students to log their mood daily and provide gentle prompts if it notices a pattern of low mood entries, encouraging the student to seek counseling.

- Escalation to Human Counselor: The chatbot should have the ability to escalate complex questions or emergency situations (e.g., severe anxiety, self-harm indications) to a human counselor for immediate assistance.

7. Profile Management:

- User Profile Customization: Students and counselors should be able to edit their profile information, such as contact details, preferences, and calendar settings. Each user can upload a profile picture and set availability notifications.

- Private Notes: Counselors should have the ability to add private notes to a student’s profile, which would be accessible only to the counselor for reference during future sessions.