A STUDENT MENTAL HEALTH SUPPORT SYSTEM INTEGRATING JOURNALING, SENTIMENTAL ANALYSIS AND THERAPIST INTERACTION :CASE STUDY UGANDA CHRISTIAN UNIVERSITY (UCU)

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A PROJECT REPORT SUBMITTED TO THE FACULTY OF ENGINEERING, DESIGN AND TECHNOLOGY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY OF UGANDA CHRISTIAN UNIVERSITY

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UGANDA CHRISTIAN UNIVERSITY
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DECLARATION

We, the SAFE TALK team, hereby declare that this project report titled **"A Student Mental Health Support System Integrating Journaling, Sentiment Analysis and Therapist Interaction"** is our original work and has been carried out by us under the guidance of our Supervisors as part of our academic program in fulfillment of the requirements for the award of the Bachelors of Science in Information Technology at Uganda Christian University.

We further declare that this work has not been submitted to any other institution or university for the award of any academic qualification. All sources of information or ideas used in this project have been duly acknowledged and referenced in accordance with academic standards.

The development of this project was guided by our commitment and passion for technology to solve real world health challenges. We take full responsibility for the content herein and affirm it reflects our genuine effort and contributions.

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DEDICATION

We dedicate this project to all students facing mental health challenges, in the hope that this system will contribute to improving their well-being and access to support.

Finally, this work is dedicated to the advancement of mental health awareness within academic institutions, particularly at Uganda Christian University and beyond.

ACKNOWLEGEMENT

Firstly, we would like to like to deeply thank all those who contributed to the successful completion of this project titled “A Student Mental Health Support System Integrating Journaling, Sentimental Analysis and Therapist Interaction”.

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Abbreviations

CBT ……Cognitive Behavioral Therapy

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ABSTRACT

Mental health challenges among university students have become an increasingly significant concern, affecting academic performance, personal well-being, and overall student success. Despite the availability of counseling services at Uganda Christian University (UCU), many students do not utilize these services due to stigma, fear of social judgment, concerns about confidentiality, and limitations in access to professional counselors. This gap between the availability of support services and their actual utilization highlights the need for innovative approaches that encourage early engagement with mental health support.

The aim of this project was to design and develop a digital mental health support system that could complement existing counseling services and provide students with a discreet and accessible platform for emotional expression and self-help. The system incorporated a digital journaling feature that allowed students to record their thoughts and feelings, as well as a sentiment analysis component powered by Natural Language Processing (NLP) that analyzed journal entries to identify emotional patterns and potential signs of distress. In addition, the platform provided access to self-help resources and allowed students to request counseling support when necessary.

The study employed an agile system development approach involving requirements analysis, system design, implementation, and testing. Data was gathered through literature review, observation of the existing counseling structure, and interaction with students and counseling staff. The system was implemented first as a web application designed for ease of access through smartphones and other internet enabled devices. Testing results indicated that the system successfully supported student journaling, provided accessible mental health educational resources, and demonstrated the ability to detect emotional tone in journal entries. The platform showed potential to reduce barriers associated with stigma and encourage students to seek support earlier.

The study concluded that digital mental health platforms can serve as effective complementary tools to traditional counseling services in higher education institutions. The developed system provided a foundation for future improvements and potential adoption in other universities seeking to strengthen mental health support for their student.

CHAPTER 1:
1.1INTRODUCTION

Mental health is a fundamental component of an individual's overall well-being and academic success. Globally, according to new data realized by World Health Organization (WHO), Over 1 billion people are living with mental health disorders with conditions such as anxiety and depression ranking the most common across countries and communities (World Health Organization, 2025).

Despite the availability of counseling and guidance services in many universities, including Uganda Christian University (UCU), utilization of these services remains low. Factors such as stigma, fear of judgment, concerns about confidentiality, and limited accessibility discourage students from seeking professional help. As a result, many students continue to struggle in silence, which can negatively impact their academic performance, relationships, and overall quality of life.

With the advancement of technology, digital mental health solutions have emerged as effective tools for bridging the gap between the availability of support services and their utilization. Technologies such as digital journaling platforms, sentiment analysis, and online counseling systems provide accessible, discreet, and scalable alternatives that encourage early engagement with mental health support.

This project therefore focuses on the design and development of a digital mental health support system, SAFETALK, aimed at complementing existing counseling services at UCU. The system provides a secure platform for students to express their emotions through journaling, tracking their mental well-being, access self-help resources, and connect with professional counselors when necessary. By addressing the barriers associated with traditional mental health services, the system seeks to promote early intervention, reduce stigma, and improve the overall well-being of students.

1.2BACKGROUND

1.2.1 GLOBAL

Globally, university students have increasingly experienced mental health challenges. Digital mental health interventions such as teletherapy platforms, journaling applications, AI-driven sentiment analysis systems, and self-help mobile applications have been adopted to bridge service gaps. For example:

In Australia, university-student mental health has garnered attention with digital interventions aimed at anxiety and depression. One study focused on a low-intensity video-based intervention called Uni Virtual Clinic-Lite (UVC-Lite) implemented across 31 Australian universities. The tool addressed stress, anxiety, and depressive symptoms through video content and self-help exercises integrated into students' daily lives. In interviews and post-intervention survey responses, students reported the program was "acceptable and appropriate" for those with mild to moderate distress, though challenges remained around integration into everyday life and engagement. (Jackson et al., 2024)This suggests that digital tools can work in the Australian university context, but success depends on usability, promotion, and matching to student routines.

In the United States, BetterHelp functions as a large-scale global teletherapy platform that connects users to licensed therapists through a subscription-based model. The system has worked effectively in increasing accessibility, especially for individuals who prefer flexible scheduling and asynchronous communication. However, the effectiveness varies due to inconsistent clinical quality, subscription costs, and privacy concerns. Overall, BetterHelp works well for broad access but does not always achieve consistent therapeutic outcomes.

In Canada, Talkspace integrates therapy and psychiatry services, enabling users to access both counselling and medication management. This system has worked effectively for users who need coordinated care, particularly in regions with limited psychiatric access. However, its effectiveness is reduced in jurisdictions with complex regulatory requirements. As a result, Talkspace works

well in controlled regulatory environments but is less effective where legal structures for telehealth are not fully established.

7 Cups: 7 Cups provides a hybrid model consisting of volunteer peer-support listeners and licensed therapists. The system has worked well offering immediate, low-intensity emotional support and reducing stigma associated with seeking help. Nonetheless, because volunteers are not clinicians, the platform is less effective for individuals needing structured therapy. Thus, 7 Cups works for early-stage support but not as a standalone solution for clinical mental-health treatment.

Digital Therapeutics (Koa Health, MindDoc): Digital therapeutic platforms offer structured self-help programs such as CBT modules. These systems have worked effectively for mild to moderate mental-health concerns where users benefit from flexible, self-guided interventions. Their effectiveness is reduced for users needing high-intensity support or who struggle with app engagement. Therefore, these platforms work best when used as part of a blended care model.

1.2.2 REGIONAL

In Nigeria, the mental health dimension under study is primarily stress, depression, and anxiety among undergraduates, but with a strong barrier context of stigma, low awareness, and limited-service access. A cross-sectional survey at the University of Ibadan found that while 99.8% of students had mobile phones, 83.2% were unaware of any digital mental health platform for promotion, and 88.3% had never used a mental health app. (Ogundipe et al., 2025) Another study reviewed digital mental health interventions for youths in the Niger Delta and found limited evidence of effectiveness for substance use prevention, though promise exists for accessible tools. (View of Digital Mental Health Interventions for Substance Use Prevention Among Youths in the Niger Delta: A Systematic Review, n.d.) The tools exist theoretically, and students show positive attitudes (74.2% favorable) toward digital platforms, but usage and evaluation are very low indicating the system has not yet fully worked in this context.

A study of 400 undergraduate students in Nairobi (Kenya) examined preferred online platforms for managing psychological distress; a subset of participants with severe distress used six weeks of online therapy via Zoom, Google Meet or WhatsApp. Findings indicated that Zoom was the

most preferred platform, followed by Google Meet and WhatsApp. Key factors influencing choice included convenience, accessibility, ease of use, and perceived anonymity, but also noted that concerns about cost and internet connectivity remained. (Wawuda et al., 2025) This indicates that while the tool (online platforms delivering therapy) is feasible, for a full system rollout, the digital access gap must be addressed for broad success.

Wazi (Kenya): Wazi connects users to locally licensed therapists through phone and online counselling. The system has worked effectively in providing culturally relevant care that aligns with local languages and contexts. However, its effectiveness is limited by clinician shortages and funding constraints. Therefore, Wazi works well for localized, culturally sensitive support but struggles to achieve national-scale coverage.

1.2.3 NATIONAL

Uganda faces a significant mental health treatment gap. The country has very few trained mental health professionals, and specialized services are concentrated in urban centers and the services are expensive. In Uganda reports show Mental health disorders among youth increased from 24.2% before COVID-19 to 32% after the pandemic particularly affecting the youth (Ministry of Health). Among university students, stressors such as academic pressure, financial hardship, personal challenges, and relationship struggles are common, yet formal help seeking remains rare. Stigma and confidentiality concerns are especially powerful barriers. Sociocultural barriers are also significant: stigma, lack of awareness, reliance on traditional/community healers, and low coverage of mental-health services in general health care systems.

Digital interventions offer a promising avenue for improving accessibility and well-being. For example, the app Kuamsha (Pozuelo et al., 2024), a narrative based behavioral activation smartphone app, has been trialed among Ugandan adolescents for mental health support. A feasibility study among adolescents in Uganda found it feasible and acceptable because there was high retention and good adherence, indicating that a culturally tailored digital intervention can work in the Ugandan context, especially when adapted to the local context and when there is active outreach.

For a university context such as Uganda Christian University (UCU), a digital system offered the following advantages:

- Accessibility: available anytime, anywhere (overcoming fixed schedules of therapists)
- Stigma-free: allowed anonymous interactions with therapists, which reduced reluctance to seek help and improved Utilization of the university Counseling Services.
- Early Detection of Mental Health Issues**.** Through journaling and sentiment analysis, the system enabled early identification of emotional distress, allowing timely intervention before conditions worsened.
- Data Driven decision making. Aggregated (anonymous) data insights helped the university identify common student challenges and improve mental health programs and policies.

1.2.4 CASE STUDY – UGANDA CHRISTIAN UNIVERSITY

This study was conducted at Uganda Christian University (UCU), a private institution of higher learning with an estimated student population exceeding 13,000. Like many universities in the region, UCU faces an escalating mental health burden among students driven by addictions like substance abuse and drugs, masturbation, academic pressure and financial strain. Despite having an operational Counselling and Guidance Office, fear of judgement, confidentiality concerns, stigma among others still remain a challenge hindering people from accessing help.

During a preliminary qualitative assessment with UCU counsellors (2025), several key themes emerged.

- Client Engagement: Therapists noted inconsistency and a lack of openness among clients during sessions, often stemming from fear of judgment, lack of trust or social stigma.
- Common Issues Reported: The most prevalent concerns include alcohol and substance abuse in the first place, anxiety (especially linked to tuition stress), pornography and masturbation, and relationship-related challenges.
- Barriers to Treatment: Stigma and confidentiality concerns were identified as the greatest obstacles to consistent participation.
- Each counselling session lasts approximately 45 minutes, done physically, except for immediate emergency handling.
- Handling Suicidal Clients: Counselors reported engaging in frequent follow-ups, extended sessions beyond 45 minutes, and emotional check-ins to ensure client safety.

- Therapeutic Values: A strong emphasis was placed on empathy and confidentiality. One counselor summarized the guiding philosophy as: *"*Therapy must be built on empathy, the therapist's motto is empathy, never harshness."

Complementary findings from a Google Form-based survey (2025) conducted among UCU students (A sample of 56 students) revealed significant demand and readiness for digital mental health interventions:

- 90.9% of students reported having experienced stress, anxiety, or depression at a point during their academic journey.
- 82.1% were aware of the existence of the university's counseling services, yet only 14.3% had ever sought help again pointing to confidentiality concerns, stigma, fear of judgement and time constraints as major barriers.
- 100% of respondents confirmed having access to a smartphone and the internet, demonstrating the technical feasibility of a web-based solution.
- When asked about interest in a digital counseling system that helps journal thoughts and connect with counselors, 55.4% responded "Yes," 37.5% said "Maybe," and only 7% said "No."

These insights underscored the need for an approachable, anonymous, and technology-supported mental health journaling system that could complement the university's current counseling structure.

1.3 PROBLEM STATEMENT

Despite the availability of counseling services at Uganda Christian University (UCU), there is a significantly **low utilization rate** among students experiencing mental health challenges. Findings indicated that approximately 90.9% of students have experienced mental health conditions such as anxiety and depression and 82.1% are aware of the university's counseling services, yet only about 14.3% of affected students actively sought professional help (google survey).

This gap highlighted a critical disconnect between the availability of mental health support and students' willingness or ability to access these services. Several underlying factors contributed to this issue including fear of judgment, stigma, confidentiality concerns, lack of time and visibility associated with physically visiting counseling offices. Additionally, existing services are often not sufficiently student-centric and may lack the flexibility and convenience required to fit into students' schedules.

If unaddressed, this low engagement with mental health services could have led to serious consequences, including decline in academic performance, increased dropout rates, and the escalation of mental health issues into crisis situations. Furthermore, students may resort to harmful coping mechanisms such as substance abuse, while the institution risks deterioration in overall student well-being and reputation.

1.4 AIMS / OBJECTIVES

The main aim of this project was to analyze the existing mental health support system at UCU and support students suffering from mental disorders with a mental health system integrated with journaling, emotion detection and mood tracking, which would help patients do self-assessment through daily journaling of their emotions, thoughts and experiences. Journaling insights can increase a user's readiness to reach out for professional assistance when they recognize persistent negative moods, and Emergency protocols will also be triggered when high-risk content appears, enabling therapists to reach out.

1.5 SPECIFIC OBJECTIVES

The study aimed to:

i. To design a secure and student-centered mental health platform that ensures confidentiality through anonymous access and protected authentication systems.
ii. To develop core support features including a therapist directory, mood tracking system, and access to psychological resources that promote student resilience.
iii. To integrate Natural Language Processing (NLP) techniques to detect and interpret emotional patterns in student journal entries.

iv. To analyze user engagement and system effectiveness in improving access to mental health support and early intervention, including emergency response mechanisms.

1.5.1 Implementation Plan

OBJECTIVE	ACTIVITIES (Methods used)	OUTPUT	INDICATOR	% PROGRESS	WHAT NEXT
To develop core support features including a therapist directory, mood tracking system, and access to psychological resources that promote student resilience.	• Vetted verified licensed therapists. • Designed searchable directory interface. • Integrated filtering options (specialization, and availability). • Integrated an option to switch therapist. • Availed communication channels and appointment options for interaction between therapists and students.	A searchable therapist directory integrated within the platform.	• Users successfully searched and chatted with therapists. • Verified therapists displayed in the platform. • Students and therapist are able to schedule and view appointments. • Positive usability testing feedback.	100%	• Periodic updates and expansion of therapist databases. • Using real UCU Therapists into the system.
	• Designed mood logging interface. • Integrated mood tagging and visualization dashboard. • Conducted pilot testing for usability and engagement.	A functional mood tracking dashboard providing reflective insights.	• Users successfully logged moods. • Dashboard displayed mood trends over time.	100%	• Perfecting reflective prompts to self-help suggestions and resources to mood categories.
	• Curated evidence-based self-help materials and coping strategies. • Developed categorized resource sections. • Conducted pilot user engagement testing.	A structured resilience resource hub accessible on-demand.	• Students accessed resources successfully.	100%	• Continuous content updates and expansion.

To design a secure and student-centered mental health platform that ensures confidentiality through anonymous access and protected authentication systems.	• Implemented anonymous account system. • Integrated secure authentication protocols. • Encrypted sensitive data like passwords by using secure database infrastructure. • Conducted security testing. • Drafting a privacy policy that aligns with data protection standards.	A secure platform supporting anonymous usage and protected data storage.	• Successful anonymous registration. • No security breaches during testing.	100%	• Ongoing security monitoring and periodic audits.
To integrate Natural Language Processing (NLP) techniques capable of interpreting emotional patterns in student journal entries while embedding an emergency response mechanism that can immediately display relevant hotlines or referral options when prompted by the student.	• Researched suitable NLP libraries and sentiment analysis models. • Designed journal text-processing architecture. • Developed prototype sentiment classification model. • Conducted initial testing using sample journal data. • Finalized full deployment integration	A prototype NLP-based emotional pattern detection system partially integrated into the journaling feature.	• The system performed basic sentiment classification. • Initial testing accuracy met the minimum benchmark.	100%	• Improve emotional detection accuracy. • Expand to multi-emotion classification (stress, anxiety, burnout, etc.). • Conduct large-scale validation testing.
	• Designed and integrated trigger keywords prompting emergency crisis alerts to therapist. • Embedded verified national and campus-based	A fully functional emergency response feature, with a response time of under 5 seconds, that automatically displayed verified	• Crisis hotlines displayed instantly when trigger words were entered.	100%	• Routine updates of hotline database when necessary.

	hotlines into the system database. • Developed automatic crisis alert pop-up feature. • Conducted functionality and response-time testing.	hotlines and referral contacts.	• Response time remained under 5 seconds. • Successful system testing without failures.		• Broaden trigger word vocabulary.

1.6 PROJECT SCOPE

This scope of the project was specifically limited to Uganda Christian University (UCU), a private institution of higher learning.

1.6.1 Technical Scope

The core technical scope of the system included the development of a web-application first accessible via a smartphone, laptops, tablets, computers and or related devices. The system was designed to serve both students and authorized counselling staff within the university.

The major technical components implemented were:

- **Digital Journaling Module:** A secure platform where students recorded daily thoughts, emotions, and experiences.
- **Emotion Detection and Intent Analysis:** Integration of Natural Language Processing (NLP) techniques to analyze journal entries, identify emotional tone, and flag high-risk content for escalation to professional counselors.
- **Self-Help and Educational Resources:** A structured repository of mental health materials including coping strategies, relaxation techniques, and psychoeducational content.
- **Referral and Scheduling Module:** A system that enabled students to request appointments and connect with university counselors when necessary.
- **Data Privacy and Security Mechanisms:** Secure authentication, encrypted storage, and controlled data access were implemented to ensure confidentiality and compliance with ethical standards.
- **User Interface (UI/UX):** A responsive, fast web interface designed to provide ease of navigation, accessibility, and user comfort.

The system did not replace the university's existing counseling services but was designed to complement and enhance them through digital support and early detection capabilities.

1.6.2 Time Scope

The project was completed within a period of approximately four months and was structured into four major phases:

1. **Research and Requirements Analysis (2 Weeks):**
   This phase involved conducting a literature review, collecting data through surveys and interviews, identifying system requirements, and defining functional and non-functional specifications.
2. **System Design and Prototype Development (2 Months):**
   During this phase, system architecture, database schema, interface designs, and interaction flows were developed. A functional prototype was also created.
3. **Implementation and Testing (1 Months):**
   The core system components were developed during this stage. Sentiment analysis was integrated into the journaling module, and iterative testing was conducted with selected students and counselors to validate usability and functionality.
4. **Evaluation and Documentation (2 Weeks):**
   The final phase involved performance evaluation, refinement based on user feedback, system optimization, and preparation of the final project report.

The phased approach allowed for iterative development and continuous improvement to ensure technical reliability, usability, and contextual relevance.

1.6.3 Geographical and Institutional Scope

The research was conducted at Uganda Christian University, chosen as a case study due to its diverse student population, accessibility, increasing mental health concerns among young adults, and presence of an operational but underutilized Counseling and Guidance Office. Although the primary focus is UCU, the system design can be adjusted for use in other higher-learning institutions within Uganda.

1.7 SIGNIFICANCE OF THE SYSTEM

The development and implementation of the proposed digital mental health support system was significant for several key stakeholders, including students, counselors, the university administration, and the broader academic community.

1.7.1 To Students

The emergency response mechanism enhanced student safety by enabling the system to instantly display relevant mental health hotlines and referral services whenever distress-related prompts were detected. This feature ensured that students in urgent situations were quickly directed to appropriate support services.

The therapist directory further benefited students by simplifying the process of finding and connecting with certified mental health professionals. Through the searchable directory, students were able to identify therapists based on specialization and availability, thereby improving access to professional care.

Additionally, the mood tracking feature encouraged students to actively monitor and reflect on their emotional well-being over time. By visualizing emotional trends and receiving reflective prompts, students were able to better understand their emotional patterns and adopt healthier coping strategies.

The resource hub also played an important role in promoting psychological well-being. Students were provided with on-demand access to self-help materials, coping techniques, and resilience-building strategies that supported them in managing everyday stress and challenges.

Furthermore, the system ensured confidentiality through anonymous user accounts and secure authentication mechanisms. This feature reduced the fear of stigma often associated with seeking mental health support encouraging more students to utilize the platform.

1.7.2 To Counsellors

For counselors, the system acted as a supportive digital tool that enhanced the identification and management of students who required psychological support. Through emotion detection and sentiment analysis of journal entries, the platform helped flag potentially high-risk cases, enabling counselors to prioritize and respond to students who required urgent attention. Additionally, the

system streamlined the process of chatting, scheduling counseling appointments and monitoring student progress over time, thereby improving the efficiency of counseling services.

Reduced Pressure on Counseling Staff. The platform acts as a first-line support system through mental health resources, helping to manage minor cases and allowing counselors to focus on more critical cases.

1.7.3 To the University

For Uganda Christian University, the system contributed towards strengthening the institution's commitment to student development by supporting both academic and emotional well-being. By providing an additional channel for mental health support, the system complemented the university's existing counseling services and helped bridge the gap between students in need of support and available counseling resources. Improved mental health support was also expected to contribute positively to academic performance, student retention, and overall campus well-being.

Finally, the system also supported Sustainable Development Goal 3 (Good Health and Well-being) by promoting accessible digital mental health services.

1.8 ORGANIZATIONAL STRUCTURE OF THE CURRENT SYSTEM.

Before the implementation of the Safe Talk system, mental health support at Uganda Christian University **(UCU)** was managed through the Counseling and Guidance Office. The structure operated primarily through a traditional, face-to-face service delivery model supported by limited administrative personnel.

Registration and Intake Process:

Upon arrival at the Counseling Office, students are required to formally register before receiving services. The paper-based registration process involved filling in personal details such as:

i. Full names
ii. Registration number
iii. Hostel/place of residence
iv. Family background information

In addition, students completed a client information form and signed a consent form**,** indicating agreement to participate in counseling services.

Although this process ensured proper documentation and ethical compliance, it also discouraged some students from returning for follow-up sessions. Many students perceived the requirement to provide identifiable personal information as exposing their identity, which heightened fears of stigma and confidentiality breaches.

Staffing Structure:

i. At the time of the study, the Counseling and Guidance Office consisted of:
ii. One licensed counselor
iii. One administrator
iv. One receptionist

The limited number of counseling staff constrained service scalability and increased reliance on structured scheduling.

Appointment Scheduling and Availability:

Counseling services operated strictly within scheduled timeframes. Appointments were arranged between 8:00 AM and 5:00 PM, Monday to Friday**.** However, counselors were physically available on campus primarily on Tuesday, Wednesday, and Thursday**.**

Each counseling session lasted approximately 45 minutes**,** and sessions typically did not exceed this duration under normal circumstances.

Because there were no counselors available 24/7, all sessions relied heavily on prior scheduling. Students were required to book appointments in advance, which limited immediate access to support during emotional distress outside working hours.

Emergency and Special Case Handling:

In emergency cases, students still entered the standard counseling structure. However, follow-up frequency depended on the severity of the situation. High-risk students were sometimes invited for review every two days, or even every morning depending on progress and clinical judgment.

Counselors demonstrated flexibility by extending their availability beyond formal working hours when situations were intense. In severe cases, support could include late-night calls, even at unconventional hours such as 3:00 AM, until the student could be physically attended to.

For special circumstances where physical meetings were not possible, online sessions were conducted during weekends. Despite these efforts, emergency management still depended on manual monitoring and scheduled appointments rather than automated early detection systems.

Communication Channels:

The university maintained a toll-free counseling line intended to provide immediate access to support. However, the service was rarely utilized. Students continued to associate counseling with stigma, and many isolated themselves rather than reaching out through the toll-free channel.

This further demonstrated that accessibility alone was insufficient without addressing anonymity and perception barriers.

Therapeutic Approach and Progress Monitoring:

During sessions, counselors drafted individualized **action points** tailored to each student's situation. These action plans were collaborative rather than imposed. For example, a student struggling with addictive behavior might be advised to avoid staying alone in their room for consecutive nights to reduce triggers. Progress tracking was conducted qualitatively through therapist observation. Positive change was identified when students began demonstrating improved emotional expression, self-love, optimism, and healthier communication patterns. However, progress monitoring relied primarily on session discussions and therapist judgment rather than structured digital tracking tools or emotional trend analytics.

Limitations of the Existing Structure:

Although the existing counseling structure provided professional and empathetic care, it presented several structural limitations:

i. High visibility of service access (students being seen entering the office)
ii. Identity exposure during registration
iii. Limited operating hours
iv. Manual appointment scheduling

v. Absence of 24/7 emotional monitoring
vi. Lack of digital journaling or mood tracking tools
vii. Limited staffing capacity

These structural constraints highlighted the need for a complementary digital system that could enhance privacy, accessibility, continuity of care, and early detection of emotional distress.

CHAPTER 2: LITERATURE REVIEW

Mental health is increasingly acknowledged as a vital component of overall well-being, influencing academic performance, emotional resilience, and daily functioning. However, access to structured mental health support remains limited, particularly within university environments in low- and middle-income countries. Students frequently experience challenges such as academic pressure, social stress, and personal transitions, yet many do not seek help due to stigma, confidentiality concerns, or a lack of accessible services.

In response, digital mental health interventions such as journaling platforms, self-help tools, and automated emotion analysis systems emerged as effective and scalable solutions. These technologies provided private, on-demand avenues for emotional expression, mood tracking, and early identification of distress, while also enabling remote engagement with mental health professionals. This chapter reviewed existing literature on digital journaling systems, emotion detection technologies, therapist user digital interactions, and self-help resource integration. By examining global evidence and identifying contextual gaps, this review provided a foundation for the development of a university focused mental health journaling system with sentiment analysis and professional support.

Challenges in Accessing Mental Health Services.

Access to mental health services was shaped by complex social, economic, and institutional barriers. Research by Pichowicz et al. (2025) indicated that limited availability of trained professionals, high consultation costs, and persistent social stigma contributed significantly to underutilization of mental health care. Among university students, additional obstacles including

fear of judgment, lack of time, and concerns about confidentiality further reduced help-seeking behavior.

These challenges were particularly pronounced in institutions where counseling systems still relied on manual, paper-based processes that hinder privacy, scalability, and continual monitoring. As a result, many students experiencing depressive symptoms, anxiety, or academic burnout do not receive timely support. Digital solutions offered an opportunity to bridge this gap by providing anonymous, accessible, and user-driven mental health support that complements existing institutional efforts.

Digital Journaling Systems in Mental Health Care.

Digital journaling has grown as a therapeutic tool, allowing users to document emotions, reflect on experiences, and identify behavioral patterns. Studies published in the Journal of Medical Internet Research (2020) highlight that digital journal improved emotional awareness and reduced stress, particularly among adolescents who prefer writing privately on mobile devices. Journaling also enhances self-regulation, enabling individuals to express thoughts they may avoid sharing verbally.

Unlike traditional counseling models, journaling offers autonomy and immediate expression. When combined with structured prompts or emotion tagging, journaling can assist in early screening of mental health issues. However, most existing systems operate as standalone applications without integration to professional therapists or automated emotional assessment, creating a gap for students who require both privacy and guided support.

Emotion Detection and Sentiment Analysis in Mental Health

Sentiment analysis applies natural language processing to classify emotional tone in written text. In mental health contexts, it supports early identification of depressive expressions, self-harm indicators, and emotional instability. Research by Calvo et al. (2017) shows that emotion-detection algorithms can help flag high-risk journal entries and enable timely professional intervention.

Advanced sentiment models now analyze patterns such as negative phrasing, hopelessness, or anger signals strongly associated with declining mental health. Frontiers in Digital Health (2020) reported that these systems can augment early detection processes, providing continuous monitoring without requiring constant therapist presence.

MoodMirror is a progressive web application designed to enhance personal well-being through AI-supported journaling and advanced mood analytics. The system offers an offline-first, mobile-friendly journaling experience and integrates key technologies such as ARIMA-based mood forecasting, NLP-driven sentiment and emotion analysis, and keyword extraction to help users understand emotional trends. Additional features include speech-to-text input, GPT-powered journal summarization, and analysis of sleep mood correlations, creating a comprehensive emotional health overview. Built with secure authentication and efficient PWA (Progressive Web App) caching, Mood Mirror demonstrates strong performance in mood prediction and visualization, reinforcing its potential as an accessible and effective digital mental health tool (Wanjale et al., 2025).

Despite these advancements, challenges remain: cultural expressions, slang, and multilingual contexts may reduce the accuracy of emotion detection models, especially in African settings where NLP (Natural Language Processing) datasets are limited. These limitations highlight the need for context-sensitive models tailored to local linguistic patterns.

Digital Therapist Engagement and Case Management

Digital communication tools allow therapists to engage with users remotely through messaging systems, structured feedback, and appointment scheduling. Evidence from Telemedicine and e-Health (2021) suggests that asynchronous text-based communication increases engagement among young adults, who often prefer messaging over face-to-face interaction. These systems also allow therapists to manage caseloads more effectively using dashboards that consolidate user journals, emotional trends, and appointment histories.

Platforms such as TalkSpace and BetterHelp demonstrate that journal-sharing combined with therapist messaging enhances continuity of care. Therapists do not respond through journaling but rather through separate chat systems, maintaining a clear boundary between emotional expression (journaling) and professional guidance (chat).

However, institutional adoption in African universities remains limited due to confidentiality concerns, limited technical capacity, and lack of tailored platforms. These gaps emphasize the need for secure, locally adapted systems that support student–therapist interaction.

Self-Help Resources and Psychoeducational Materials

Self-help materials, such as guided videos, mental health articles, breathing exercises, and cognitive behavioral therapy worksheets, are widely used to support emotional well-being. According to research in BMC Psychiatry (2020), students who accessed psychoeducational materials showed reduced depressive symptoms and improved coping mechanisms. Digital access further increased engagement, particularly when resources are categorized, contextually relevant, and available on-demand.

Resource libraries served as critical supplements to journaling and professional support, giving students tools for independent emotional management. However, many applications lacked personalized recommendations especially recommendations informed by emotional analysis which limited their effectiveness. Integrating resource delivery with sentiment trends from journals can provide timely, tailored support.

Technological Approaches and Mobile Integration

With advancements in cloud platforms, mobile-first interfaces, and NLP APIs, digital mental health systems have become more accessible and scalable. Supabase, Firebase, and similar backend platforms offer secure data storage, authentication, and real-time communication, enabling the development of interactive journaling and chat systems.

Mobile integration further enhances accessibility allowing students to journal, view mood trends, and contact therapists from any device. Studies in the JSRT Journal (2021) show that mobile delivered mental health tools increase user adherence and reduce barriers related to time and distance.

Gaps in Literature

Although digital mental health tools are growing globally, several gaps remained relevant to this project:

- Few existing systems integrated journaling, sentiment detection, therapist messaging, and self-help resources into a single platform.
- Limited research existed on emotion detection tailored to African linguistic expressions.
- Many digital platforms lacked confidentiality guarantees required in university environments.

- Very few solutions specifically addressed stigma-related barriers by combining anonymous journaling with optional professional engagement.
- There was limited evidence on university specific digital mental health systems that support both students and counselors through structured dashboards.

These gaps created a clear justification for developing a secure, university-focused mental health journaling system with integrated emotional analysis and professional support.

In conclusion, the reviewed literature demonstrated that digital journaling systems, sentiment analysis technologies, therapist messaging tools, and self-help resources each provide substantial benefits for mental health support. By addressing these gaps, a unified system that combines journaling, automated emotion detection, therapist communication, and resource delivery can significantly enhance mental health support for university students in Uganda.

CHAPTER 3: METHODOLOGY

This chapter describes the methodology that was used to design, develop, and evaluate the proposed digital mental health support system. It explains the research design, data collection methods, system development approach, and tools used in the implementation of the system to ensure that the developed solution addressed the mental health support challenges identified among students at Uganda Christian University.

3.1 RESEARCH APPROACH

The research utilized a mixed-methods approach, integrating both quantitative and qualitative components. This method allowed in capturing both numerical data (from student surveys) and in-depth professional insights (from therapist interviews).

- Quantitative Approach: A Google Form survey was administered to students to collect measurable data on their perspectives, readiness to use digital mental health tools, features they would love to see among other questions.
- Qualitative Approach: Applied through structured interviews with the university counselor to explore their professional experiences, guidance and best practices in therapy.

3.2 DATA COLLECTION METHODS

3.2.1 Google Form Survey (Quantitative Data)

A structured digital questionnaire was developed using Google Form and distributed to Students of Uganda Christian University (UCU) in the different WhatsApp groups to understand their view on a number of things to help with the development process.

- Purpose: The survey aimed to (1) gauge students' awareness of existing mental health services, (2) measure their willingness to adopt a digital mental health support, (3) To understand barriers preventing people from seeking help etc.
- Sample Size and technique: The survey received 56 responses. The participants were chosen based on their easy accessibility and availability, as the questionnaire was shared publicly through the WhatsApp channels to different academic group forums to reach a broad cross-section of the student body.

3.2.2 Interviews with Licensed Therapists (Qualitative Data)

A structured interview was conducted with a licensed university counselor to obtain professional insights.

- Purpose: The interviews aimed (1) To understand current workflow and challenges in the counseling processes, (2) Strategies for client engagement and crisis handling, (3) To use these findings to guide in the design of the web application.
- Instrument: A semi-structured questionnaire containing open-ended questions covering therapy challenges, suicidal case handling, client confidentiality, empathy techniques etc. was drafted.

- Data Management: Interview responses were documented via taking notes manually with pen and paper, and responses summarized into key themes. Also use of a recorder to ensure no information was left out.

3.2.3 Literature Review

A literature review was conducted to understand existing digital mental health solutions, common mental health challenges faced by university students, and the effectiveness of technology-based counseling systems. Research articles were used to gather relevant information.

3.2.4 Data Analysis Techniques

Meaningful data collected was critically extracted from both methods for better decision making analyzed as follows:

1. Quantitative:

   Responses from the Google Form were automatically compiled in Google Sheets and analyzed using descriptive statistics (percentages and frequency tables). Sample results indicated that 90.9% of students have experienced stress or anxiety at some point, 100% had smartphone access establishing strong feasibility for the proposed system.

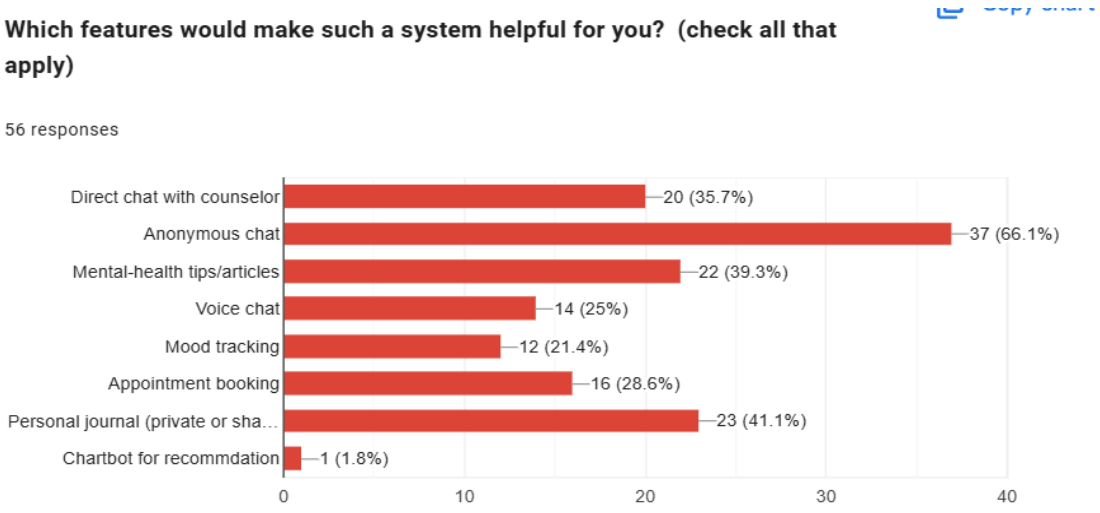

Figure 3.1. Bar Graph showing feature choices

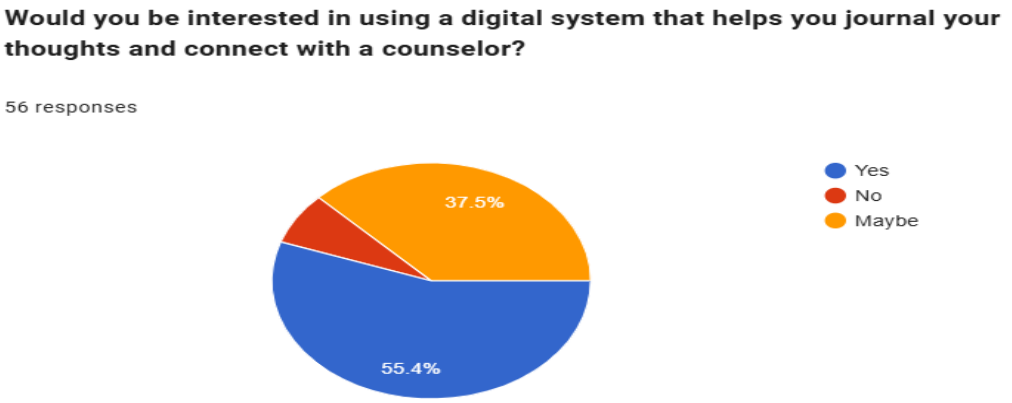

Figure 3.2. Pie chat representing interest in a digital platform

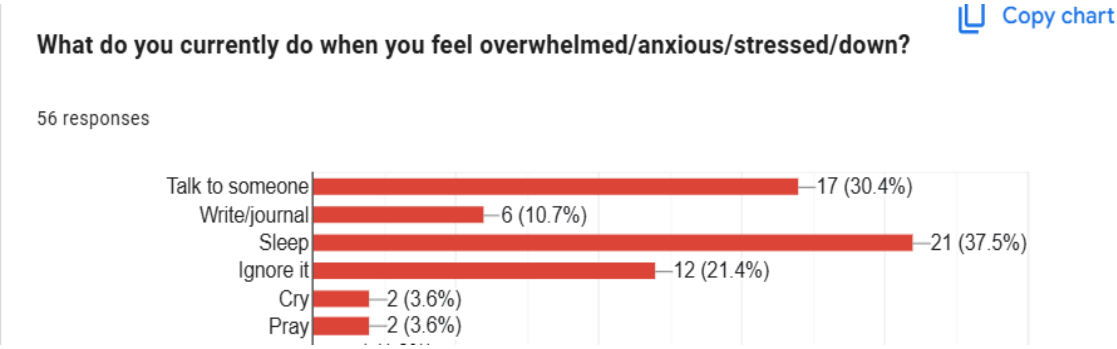

Figure 3.2. sample graph showing how people coup with mental challenges

2. Qualitative Data:

Interview data was analyzed, where recurring themes such as stigma, low client engagement, empathy during sessions and confidentiality were identified. These insights powered the application's design logic.

3.3 DEVELOPMENT PROCESS

3.3.1 System Planning

This stage defined the project's scope, objectives, and feasibility.

Objective:

To develop a web-based mental health support system that offers journaling, emotion detection, access to professional counselling guidance, and a rich library of supportive resources within a secure and user-friendly digital environment.

Key Activities:

- Defined the goals and target audience.
- Identified stakeholders (users, mental health professionals).
- Established system features and technical requirements.
- Assessed feasibility (ethical, technical, and resource considerations).
- Created development timelines and milestones.

3.3.2 System Analysis

This phase focused on gathering system requirements and understanding user needs.

Data Collection Methods:

This was done through the mixed approach i.e., quantitative and qualitative approach.

- Interviews with licensed therapists and students to identify user expectations.
- Online surveys to assess barriers, expected features and comfort levels with a digital mental health platform.

Requirement Analysis:

- Defined functional requirements (e.g., journaling, crisis detection, interaction with therapists)
- Defined non-functional requirements (e.g., data privacy, response time, scalability).
- Identified system constraints such as ethical compliance and secure data storage.

3.3.3 System Design

The system architecture comprises several key interconnected components designed to support emotional wellness, journaling, resource access, and therapist engagement.

User Interface (Web or Mobile):

- Developed using React.js for a modern, fast, and responsive experience.
- Fully responsive designed for phones, tablets, and laptops.

- Intuitive navigation that accommodated both tech-savvy and first-time users.

Journaling Module (core feature):

- Provided a private digital journal where students recorded daily thoughts and emotions.
- Integrated sentiment analysis to detect emotional tone and trends.
- Entries were selectively shared with a counselor if the student choose to.

Therapist Directory & Emergency Protocol:

- Contains a list of certified university counselors and mental health professionals.
- Allowed students to request sessions or send messages.
- Included real-time emergency prompts (e.g., suicidal phrases or severe distress).
- Displays emergency hotlines and on-campus support contacts when high-risk content is detected.

Self-Help Resources Module:

- Provided a rich library of mental health support materials.
- Includes videos, articles, blogs, guided exercises, and self-care tips.
- Organized by categories such as anxiety, stress management, depression, and academic burnout.
- Helps bridge the gap for students who may not be ready to seek counseling immediately.

Database Layer:

Built using Supabase, offering secure storage for:

- User accounts and authentication
- Journal entries
- Counselor-student messages
- Resource library metadata

Backend:

Managed via Node.js for handling authentication, data logic, and API communication.

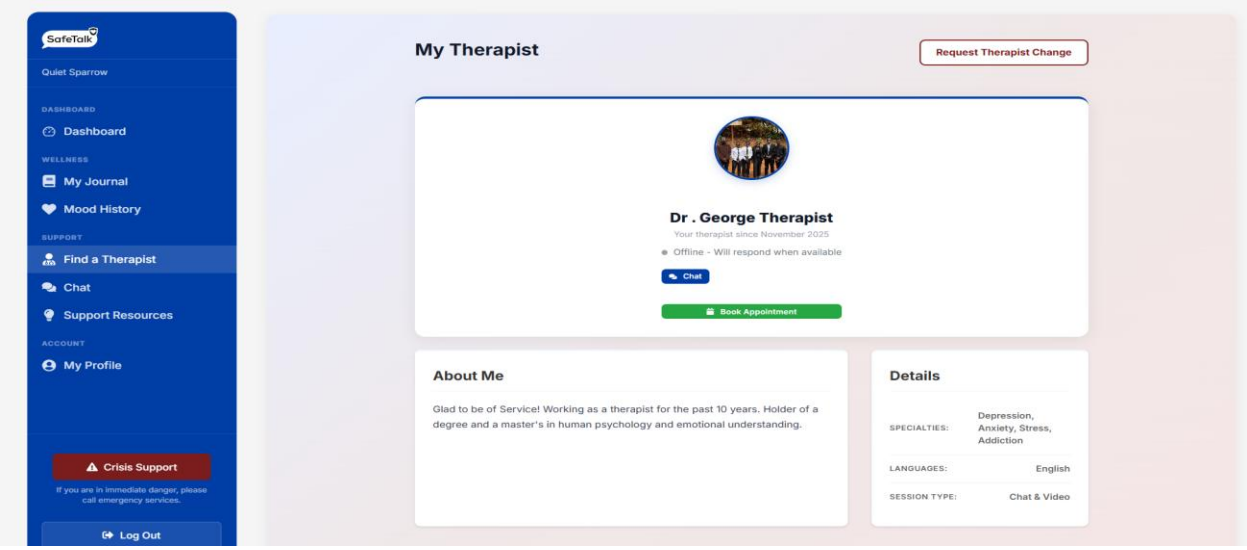

Figure 3.1. Student's Dashboard view with a linked therapist

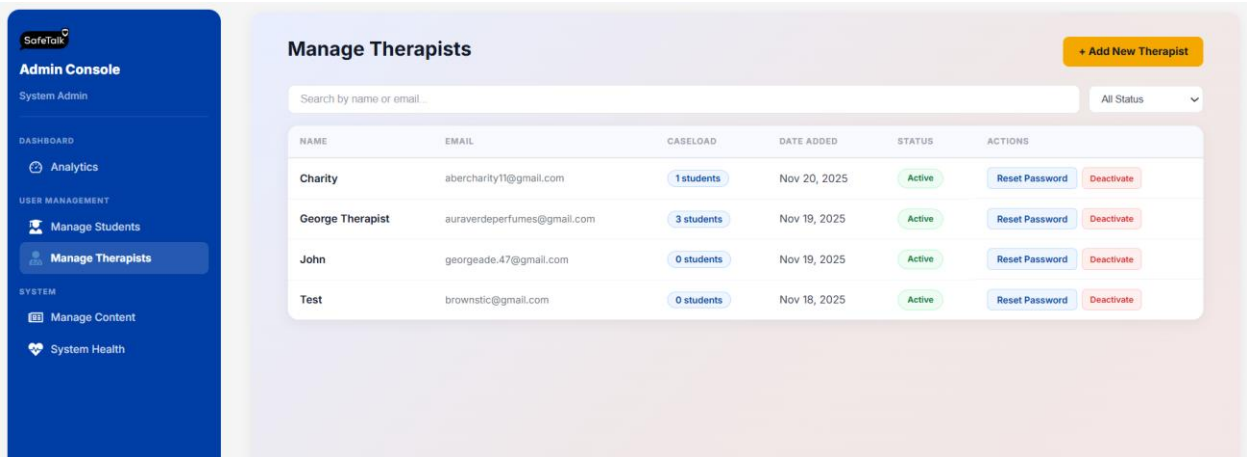

Figure 3.2. Admin Dashboard showing therapist management page

3.3.4 System Implementation

The system components were developed and integrated to create a functional application. The major modules implemented included:

- User authentication
- Digital journaling
- Sentiment analysis for emotion detection
- Mental health educational resources
- Counseling referral and appointment scheduling

Tools & Technologies used:

- Frontend: React.js
- Backend: Node.js
- Database: Supabase
- Hosting: Railway
- Mood tracking
- NLP for sentimental Analysis

3.3.5 System Testing

Each Agile was concluded with validation testing:

- Unit Testing: Journaling input, mood detection algorithms, user account features
- Integration Testing: Ensured that the frontend, backend, and database interact seamlessly.
- User Acceptance Testing (UAT): Tested usability with real users (students, therapists).
- Performance Testing: Checked system load speed, latency (The time delay between a user's action or request and the resulting response,), and reliability.

Example Success Metrics:

- Response accuracy ≥ 90%
- Journal entry save success rate = 100%
- Page load latency ≤ 2 seconds
- Accurate sentiment detection ≥ 80% (non-clinical level)

3.4 HOW THE SYSTEM WORKS

3.4.1 Use Case Diagram

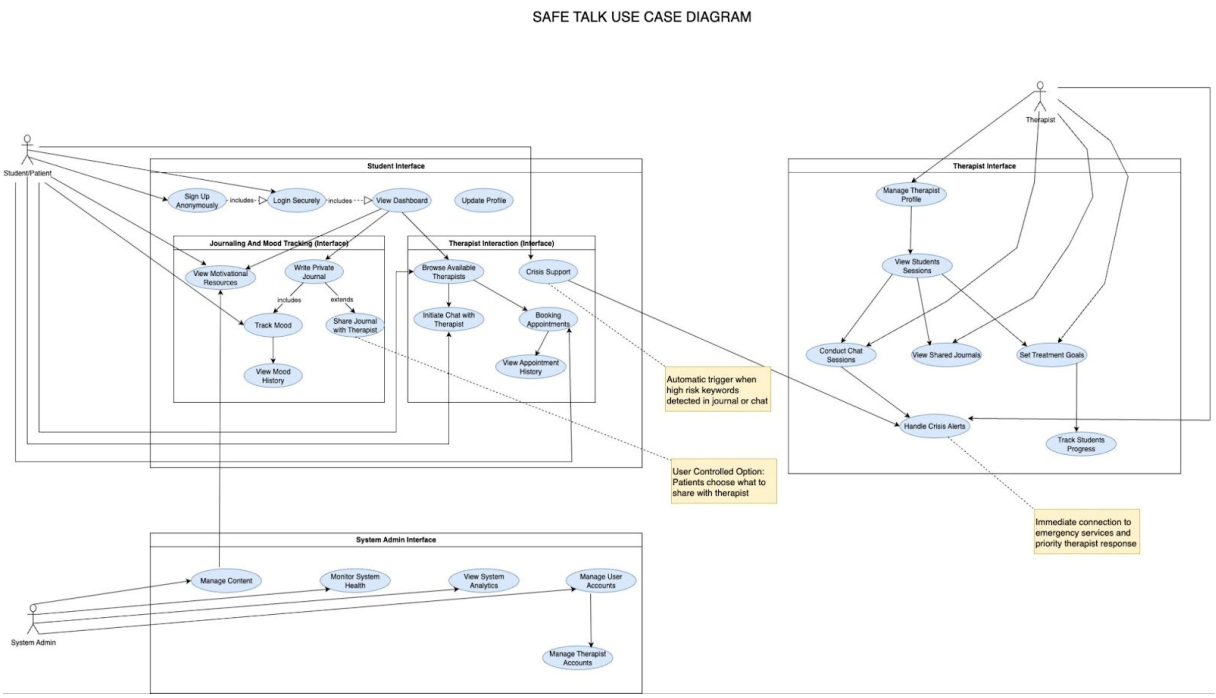

Figure 3.3. Use case diagram

Actors:

- Student: Interacts with the journal and therapist through chatting.
- Therapist: Provides professional support upon referral.
- Administrator: Manages the therapists, students and content.
- Database: Stores user data securely.

3.4.2 Entity Relationship Diagram

Figure 3.4. Entity Relationship Diagram

CHAPTER 4: PRESENTATION AND DISCUSSION OF RESULTS.

1.1 REQUIREMENTS

The development of the digital mental health support system was guided by a set of functional and non-functional requirements identified during the requirements analysis phase. These requirements were derived from literature review findings, observations of the existing counseling process, and interactions with students and counseling staff at **Uganda Christian University**.

The requirements defined the core capabilities that the system needed to provide in order to effectively support students' mental health and complement the university's existing counseling services.

1.1.1 Functional Requirements.

The developed system supported the following functions.

User Registration and Authentication: Students were able to create secure accounts and log into the system using their credentials. This ensured that only authorized users could access the platform while maintaining confidentiality.

Digital Journaling: The system allowed students to record their daily thoughts, emotions, and experiences through a digital journaling interface. This feature encouraged self-expression and reflection while providing input data for emotional analysis.

Mood tracking: It allowed students to monitor their emotions by logging daily moods. A form appears once a day upon logging in, whatever mood a student selected was recorded in the history feature for insights on performance.

Emotion Detection and Sentiment Analysis**:** The system analyzed the textual content entered by users in the journaling module. Natural Language Processing techniques were used to identify emotional tone and detect potential distress signals in student entries.

Self-Help and Mental Health Resources**:** The platform provided access to mental health resources such as stress management techniques, relaxation exercises, and educational materials related to emotional well-being.

Counselor Referral and Appointment Scheduling**:** Students who required professional assistance were able to request counseling sessions through the system. The scheduling feature allowed students to book appointments with available counselors.

Risk Alert and Escalation**:** When the system detected potentially concerning emotional patterns in journal entries, alerts were generated to notify counselors so that appropriate follow-up actions could be taken.

4.1.2 Non-Functional Requirements

This defined the attributes the system needed to meet to ensure effective operation.

Usability: The system was designed with a simple and intuitive interface to ensure that students could easily navigate the platform and access its features without technical difficulties.

Security and Confidentiality: Given the sensitive nature of mental health data, strong security measures were implemented. These included password authentication, controlled access to sensitive information, and secure data storage.

Accessibility: The platform was designed as a mobile-first web application, allowing students to access it conveniently through smartphones and other internet-enabled devices.

Performance: The system was designed to respond quickly to user interactions and process journal entries efficiently without delays.

Scalability: The architecture of the system allowed for potential expansion to support additional users or integration with other university systems in the future.

CHAPTER 5:

This chapter presents the evaluation of the developed digital mental health support system, highlighting how effectively it addressed the objectives of the study. It also discusses the

limitations encountered during the implementation of the technology, the problems experienced during the project development process, and recommendations for future improvements and research.

5.1 EVALUATION

The developed system was evaluated to determine whether it met the objectives outlined at the beginning of the study. The evaluation focused on system functionality, usability, reliability, and its ability to support mental health awareness and early intervention among students.

The results showed that the system successfully implemented the key features that were proposed during the system design phase. Students were able to register and access the platform securely, create digital journal entries, and access mental health educational resources. The journaling feature provided a safe space where students could express their emotions and experiences in a private and structured manner.

The integration of sentiment analysis allowed the system to analyze journal entries and detect emotional patterns that could indicate distress. This functionality demonstrated the potential of the platform to assist counselors in identifying students who may require additional psychological support.

Overall, the system demonstrated its capability as a supportive digital tool that complements the counseling services available at **Uganda Christian University**. The system provided an alternative entry point through which students could begin addressing their mental health concerns.

5.2 LIMITATION ON TECHNOLOGY

Despite the successful implementation of the system, several technological limitations were identified during the project.

One limitation involved the accuracy of sentiment analysis. While the system was able to detect general emotional patterns in journal entries, natural language processing models may not always fully interpret the complexity of human emotions, sarcasm, or culturally specific expressions. This means that certain emotional states may not be accurately classified by the system.

Another limitation was the reliance on internet connectivity. Since the platform was implemented as a web-based application, students required stable internet access in order to use the system. In situations where internet connectivity was limited, the accessibility of the system could be affected.

Additionally, the system depended on user input for emotional analysis. If students chose not to actively use the journaling feature or did not honestly express their emotions, the system would have limited ability to detect potential mental health risks.

5.3 PROBLEMS ENCOUNTERED

During the development of the project, several challenges were encountered.

One of the major problems involved integrating Natural Language Processing functionality into the journaling system. Selecting suitable NLP libraries, training models, and achieving accurate emotional classification proved technically complex.

Time constraints also posed a challenge during the development process. The project had to be completed within a limited academic timeframe, which restricted the extent to which advanced features could be implemented and tested.

5.4 RECOMMENDATIONS / FUTURE RESEARCH

There is a strong need to adapt natural language processing (NLP) models to the African linguistic and cultural context**,** particularly for Ugandan Gen Z users. Current AI models are largely trained on Western datasets and may fail to accurately interpret local expressions, slang, code-switching (e.g., English mixed with Luganda), and culturally specific ways of describing emotional distress. Future research should therefore focus on developing localized datasets and culturally aware NLP models to improve relevance, accuracy, and user trust.

In addition, improving user engagement and retention **is** essential for the long-term success of the system. One promising approach is the integration of **gamification elements**, such as progress tracking, streaks, rewards, and motivational feedback. These features can encourage consistent usage, promote habit formation, and make mental health support more interactive and appealing to students. However, future research must carefully evaluate the ethical implications of

gamification in mental health contexts to ensure that it supports well-being without trivializing serious issues.

One key area for improvement is the optimization of reflective prompts and self-help recommendations. The current system provides generalized coping strategies based on detected user input; however, future research should focus on developing more **context-aware and personalized response frameworks** depending on how a user feels at that moment.

Furthermore, the inclusion of multimodal communication features**, particularly an** audio feature and video-based interaction and with therapists, is highly recommended. While text-based chat provides anonymity and accessibility, it lacks non-verbal cues such as facial expressions and body language, which are critical in therapy. Future systems could incorporate secure video sessions within the platform, enabling users to transition from non-verbal support to real-time human interaction when needed. This hybrid approach would significantly improve the quality of care, especially for more serious cases.

Finally, future studies should explore long-term effectiveness and integration with existing health systems**.** This includes assessing the chatbot's impact on mental health outcomes over time, its role in reducing the burden on university counsellors, and its potential for scaling to other institutions. Additionally, integrating the chatbot with professional services such as automated referrals, appointment scheduling, and crisis escalation protocols will be crucial for creating a holistic and reliable mental health support ecosystem.

5.5 CONCLUSION

This project focused on the development of a digital mental health support system designed to complement existing counseling services and provide students with a confidential platform for emotional expression and self-support.

The study identified a significant gap in the utilization of mental health services among university students, largely influenced by stigma, fear of social judgment, and concerns about confidentiality. In response to this challenge, the developed system introduced a technology-driven approach that

allowed students to engage with mental health support resources privately through digital journaling and access to educational materials.

Although certain technological limitations were identified, the project successfully demonstrated the potential of digital platforms to support mental health awareness and intervention within university environments. Overall, the system provided a promising foundation for integrating digital mental health solutions into higher education institutions and highlighted the importance of combining technological innovation with traditional counseling services to improve student well-being.

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APPENDICES

Appendix A: CODE SNIPPETS.

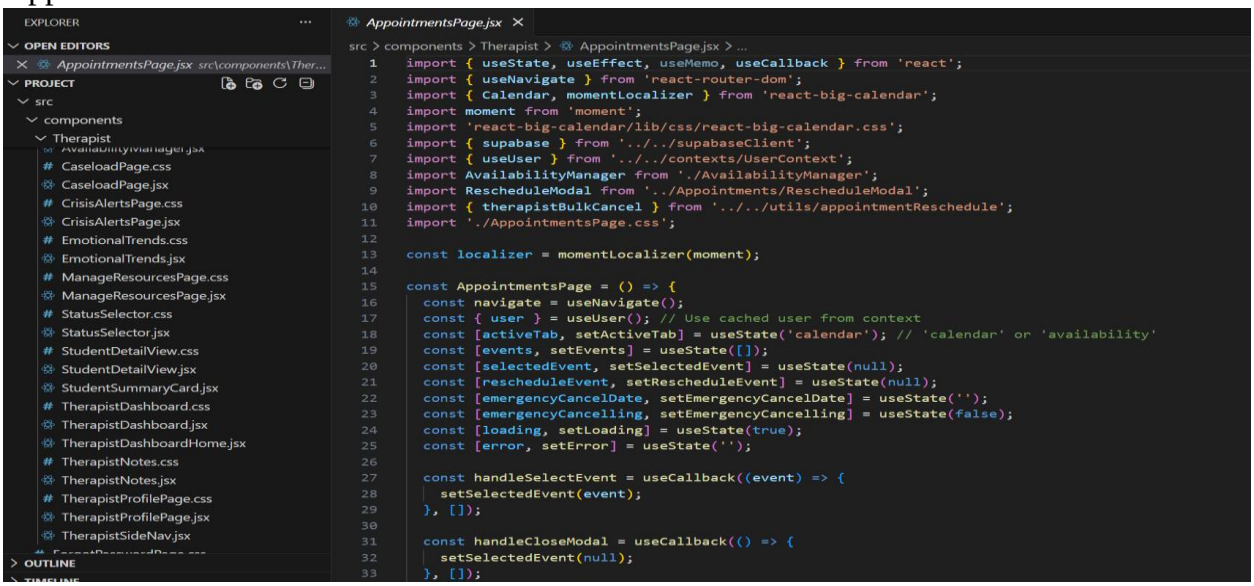


Figure A.1: Therapist

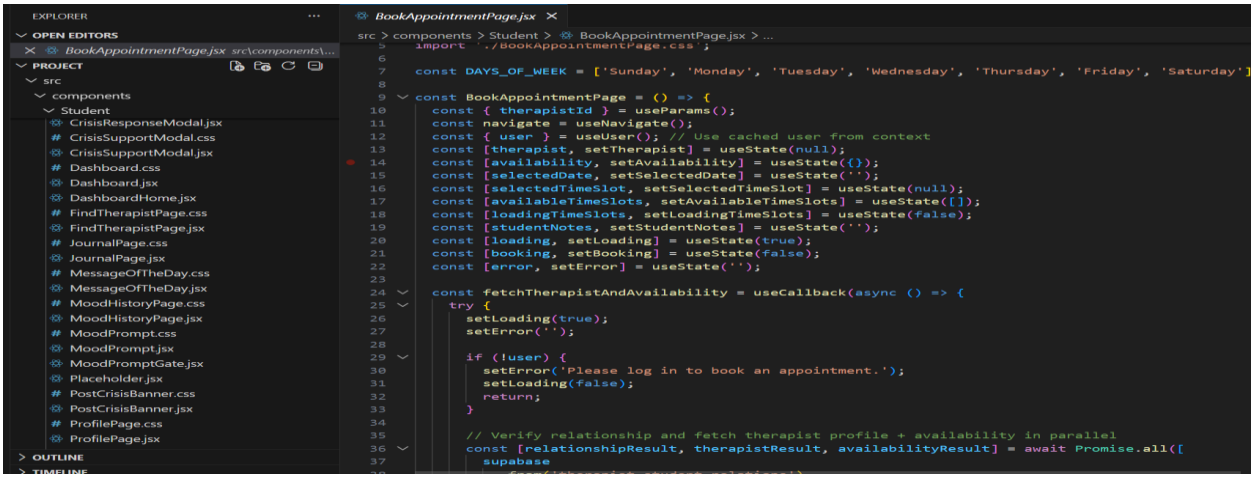


Figure A.2: Student

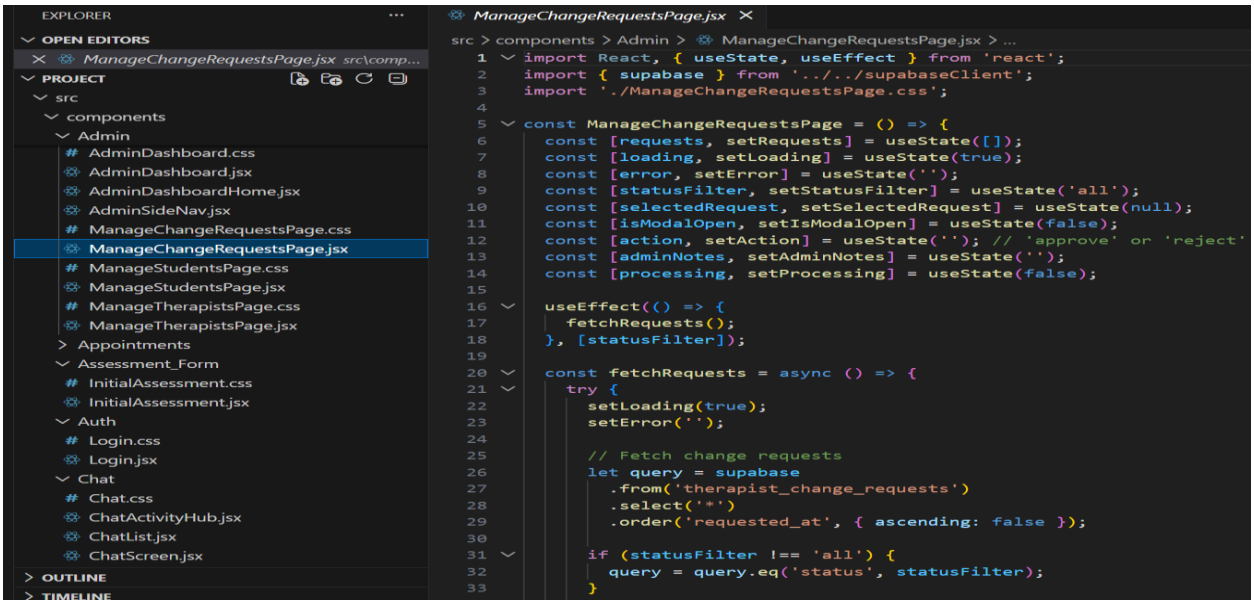


Figure A.3: Admin

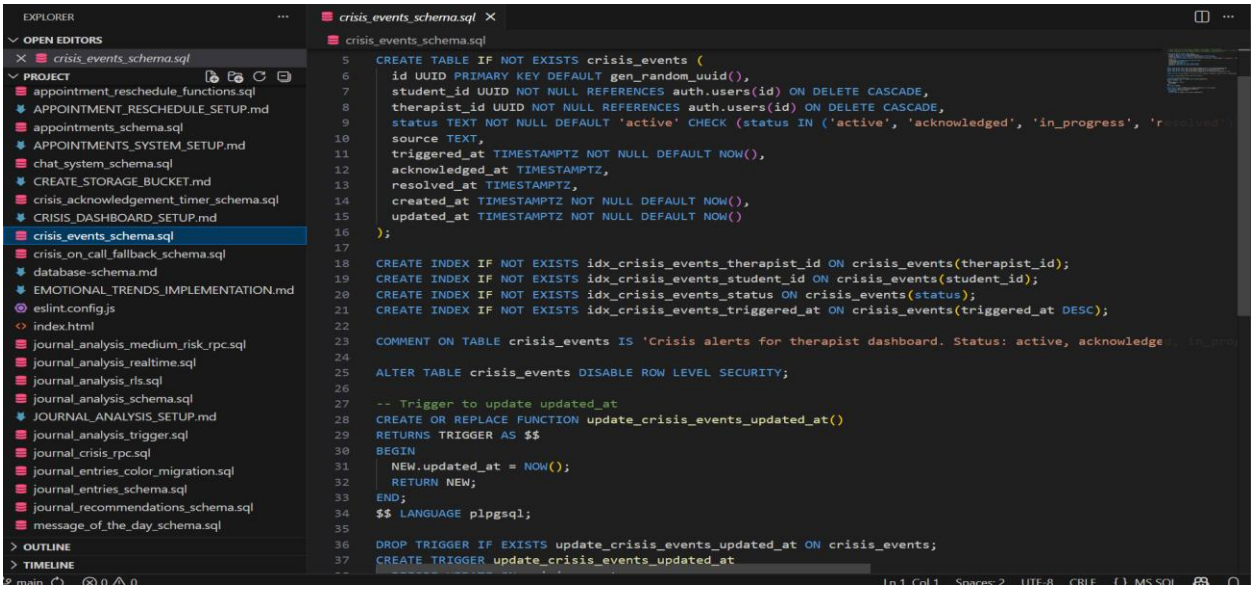


Figure A.4: Supabase Code

Appendix B: PLATFORM LANDING PAGE

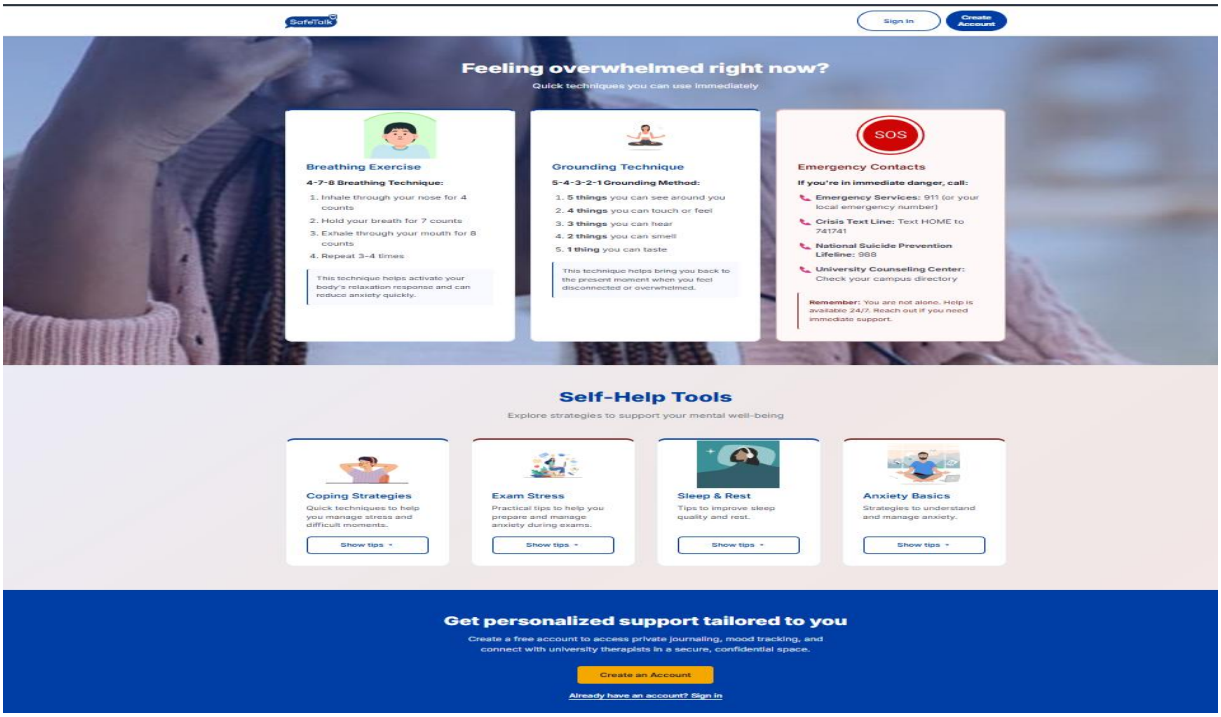


Figure B: Main page and Explore resource pages on landing page.

Appendix C: LOGIN AND SIGNUP FORMS.

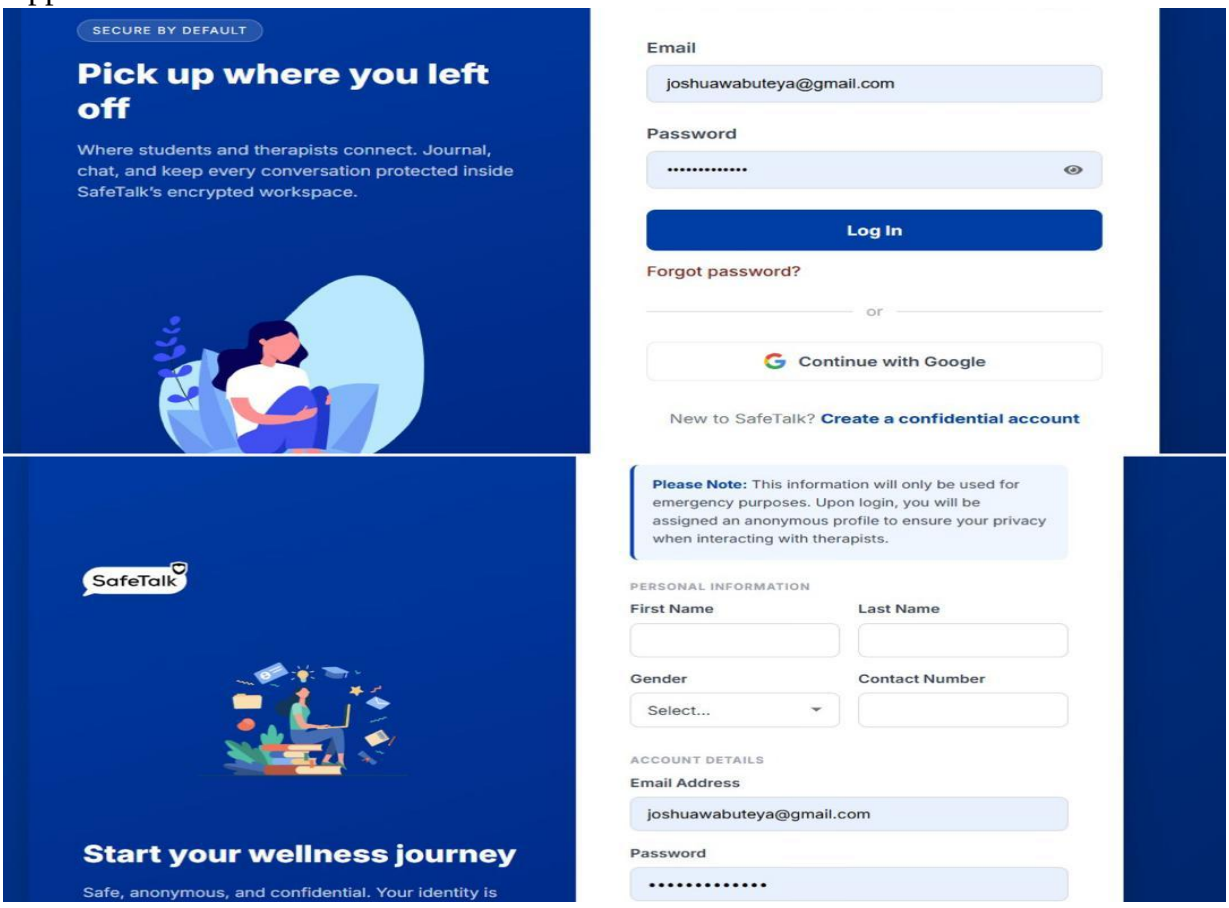
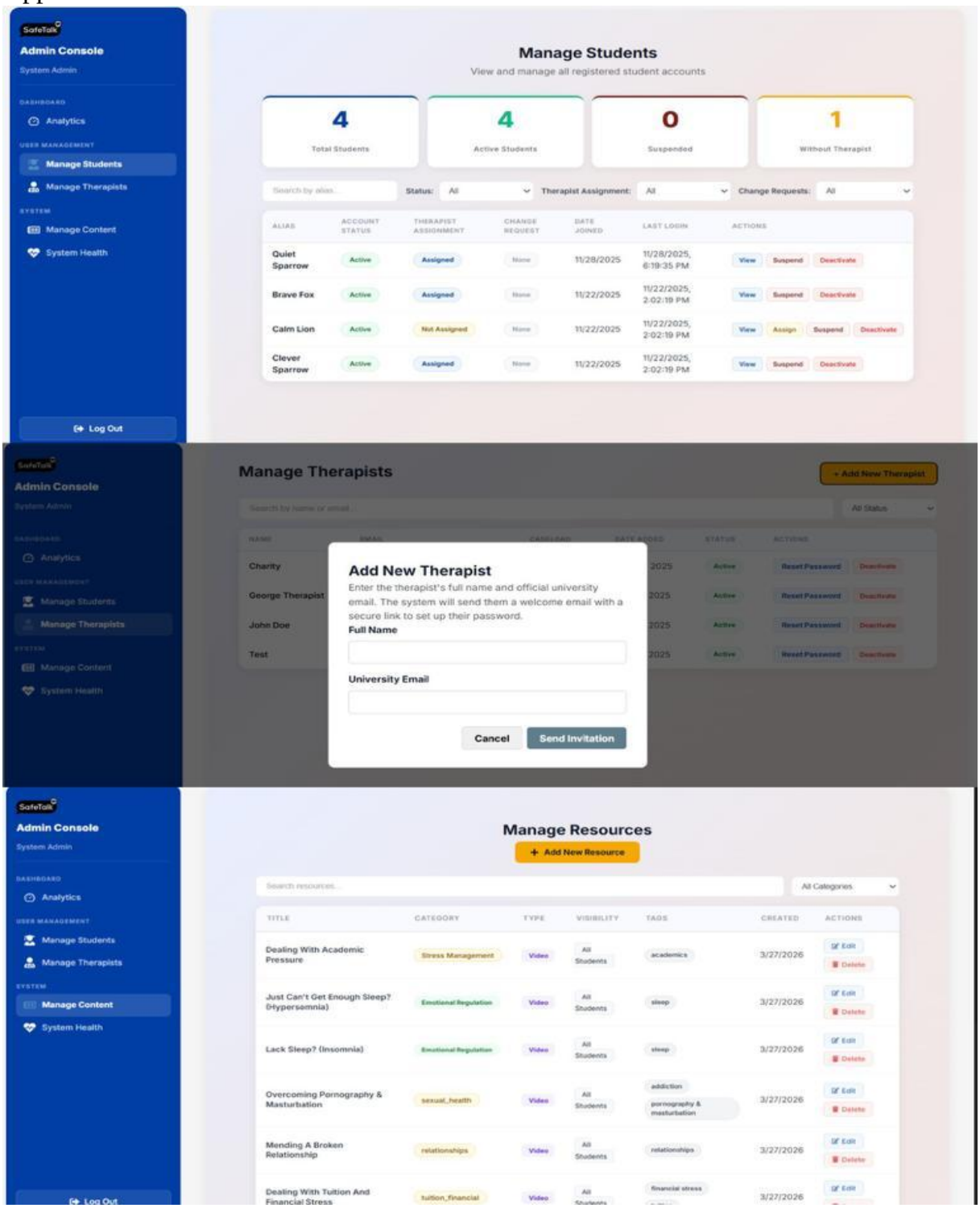


Figure C: login and Signup pages

Appendix D: ADMIN INTERFACE



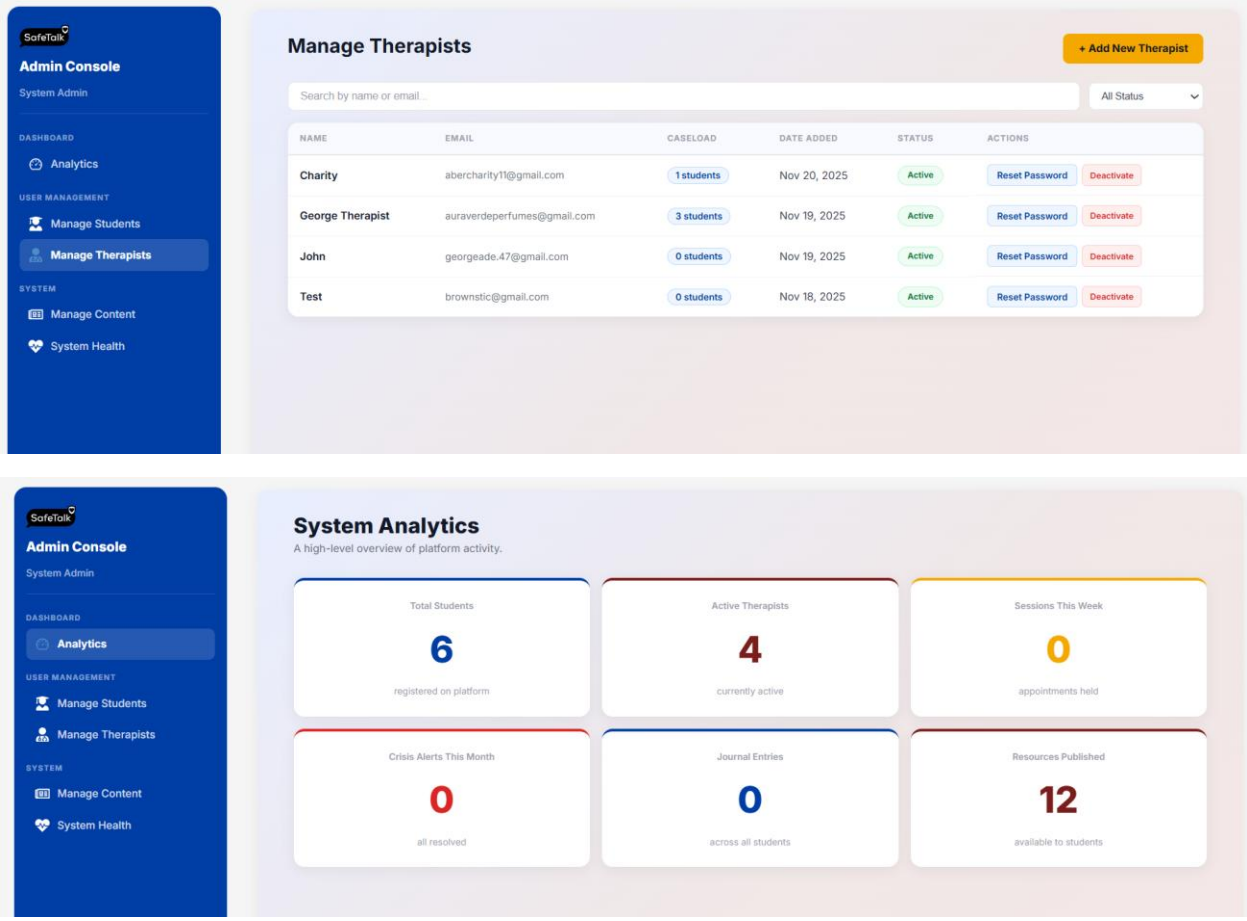


Figure D.1: Sample admin dashboard.

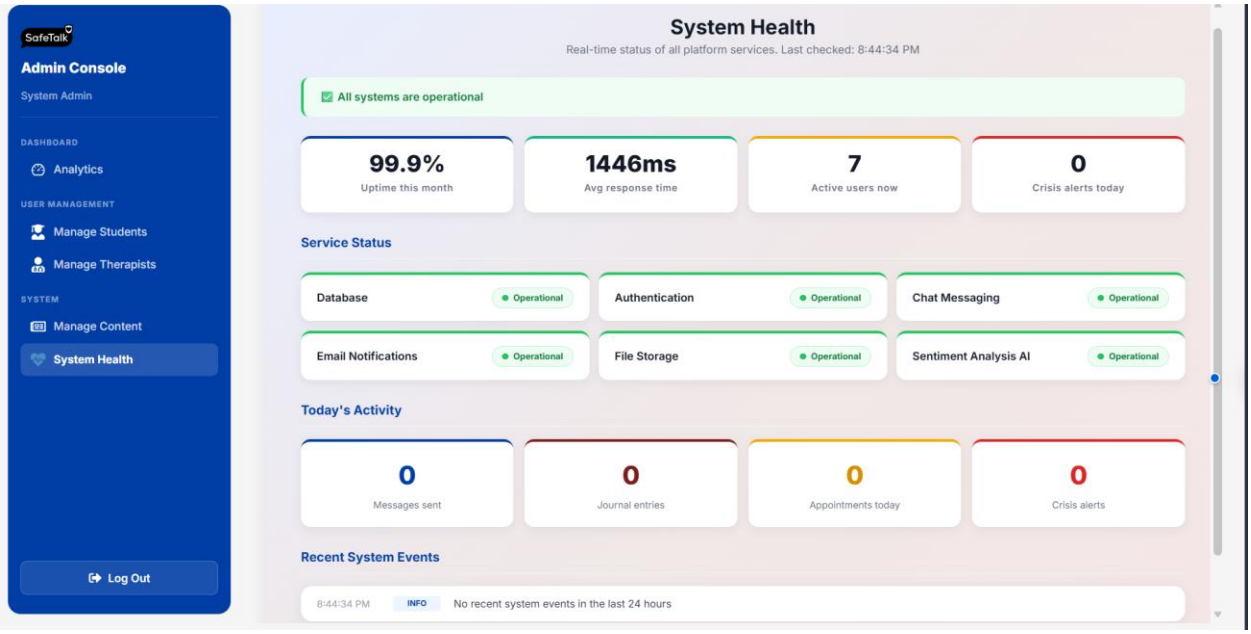


Figure D.2: System Health on admin dashboard

Appendix E: STUDENT INTERFACE

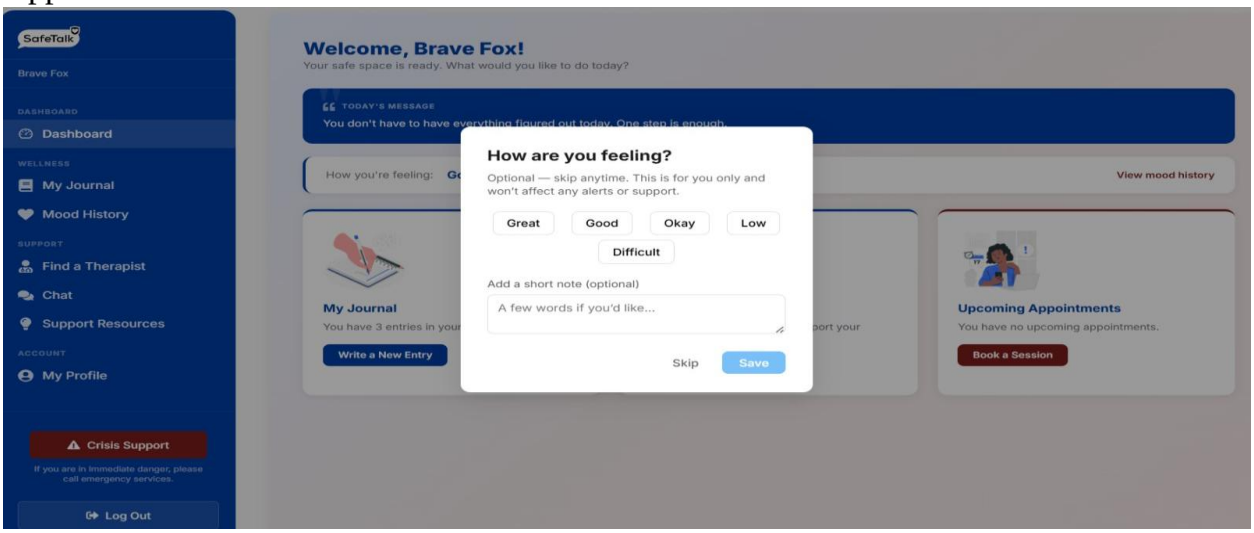


Figure E.1 Student dashboard that pops a mood form on login.

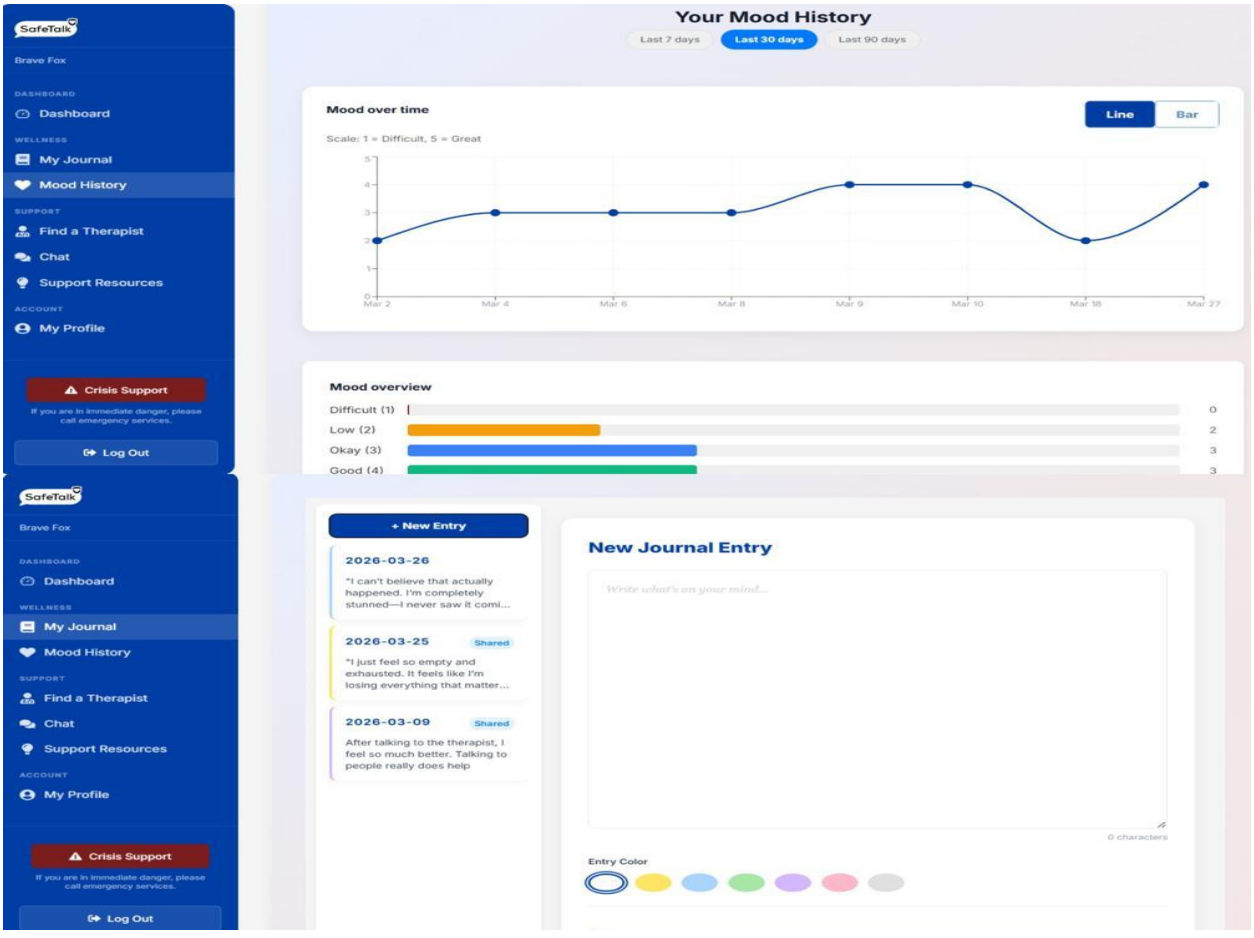


Figure E.2: Journal and mood history pages

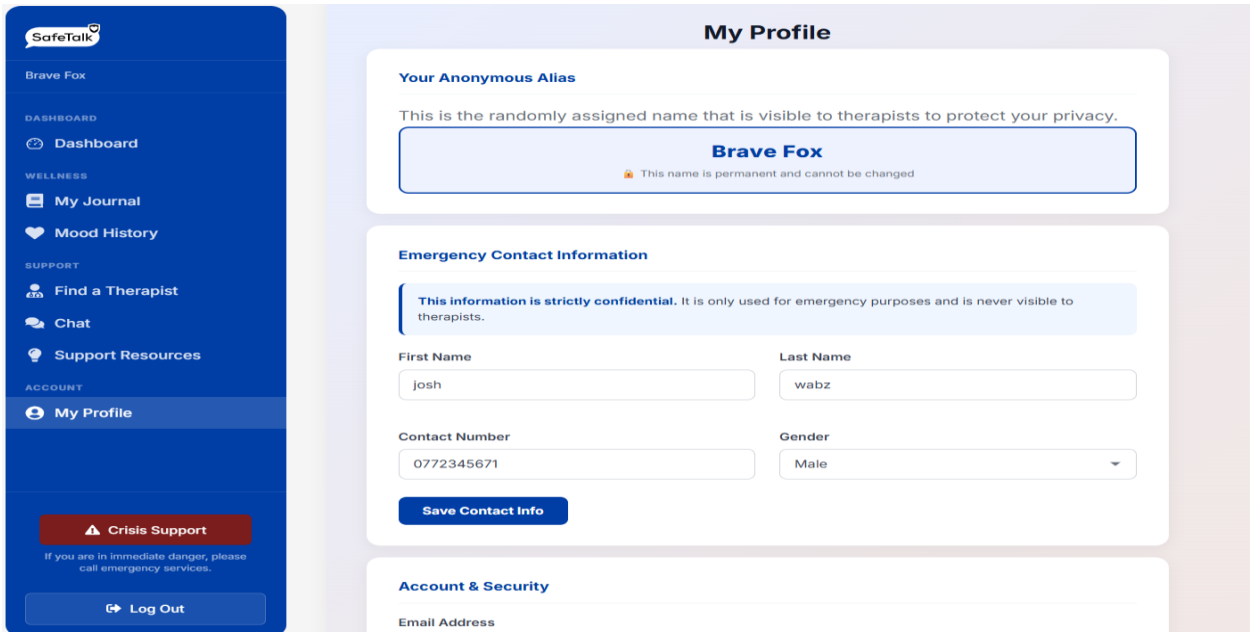
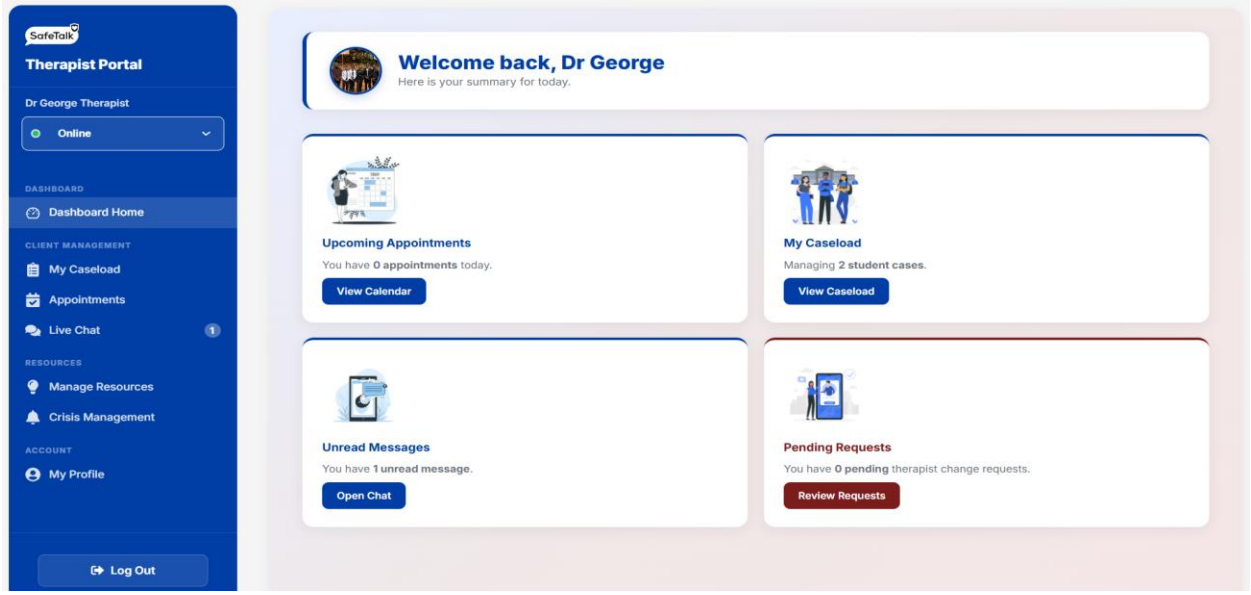


Figure E.3: Student Profile.

Appendix F: THERAPIST INTERFACE.



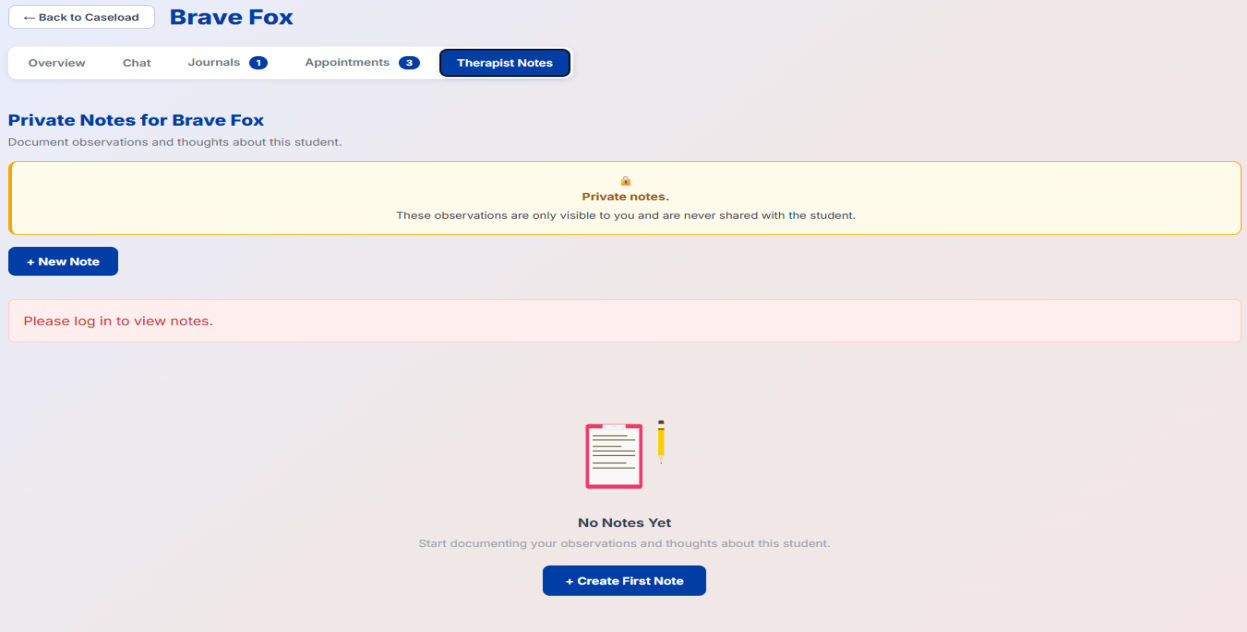


Figure F.1: Dashboard and Caseload pages

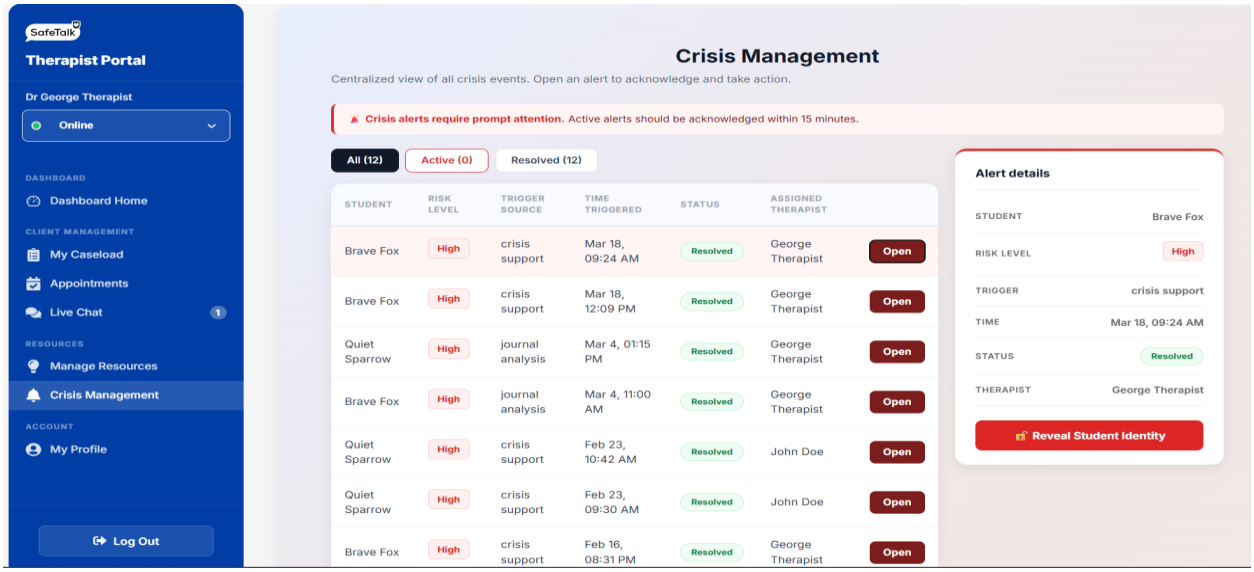


Figure F.2: Crisis management page handled by therapist.

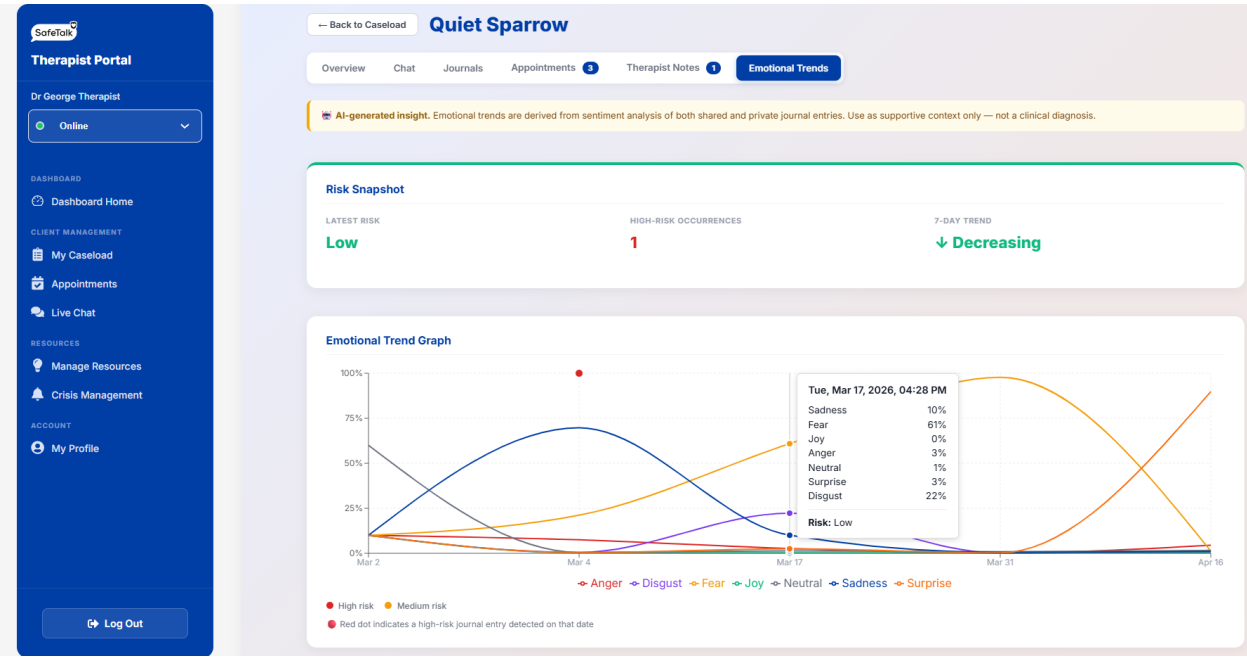
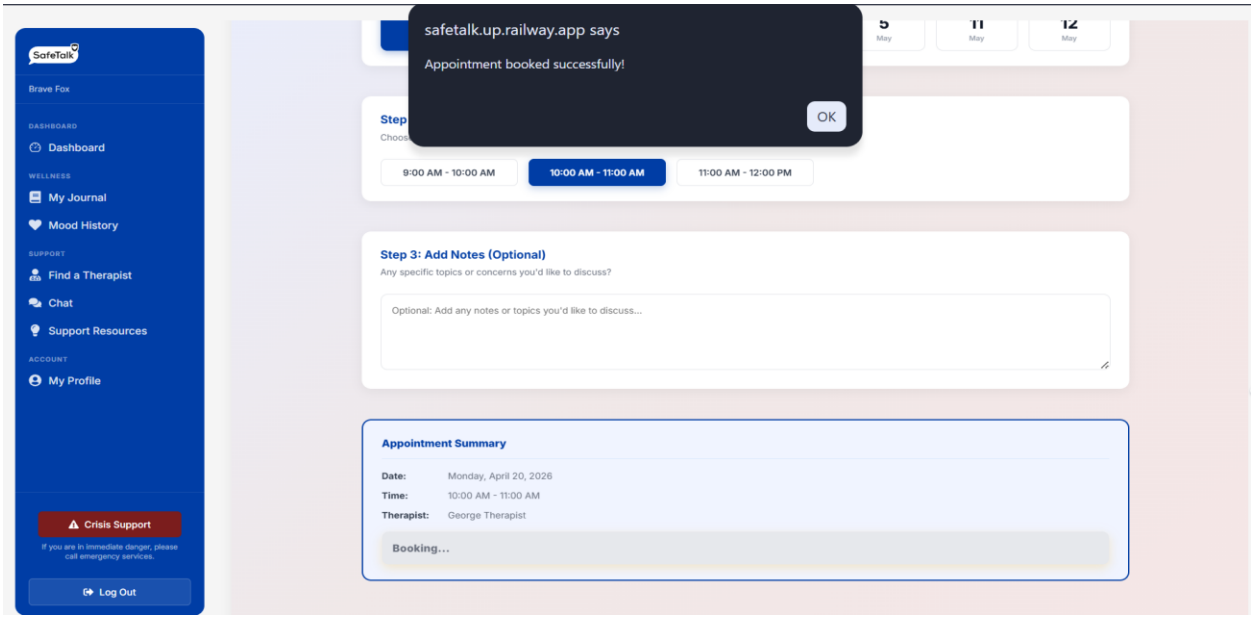


Figure F.3: Emotional trend of student x (Quiet Sparrow) seen by therapist.



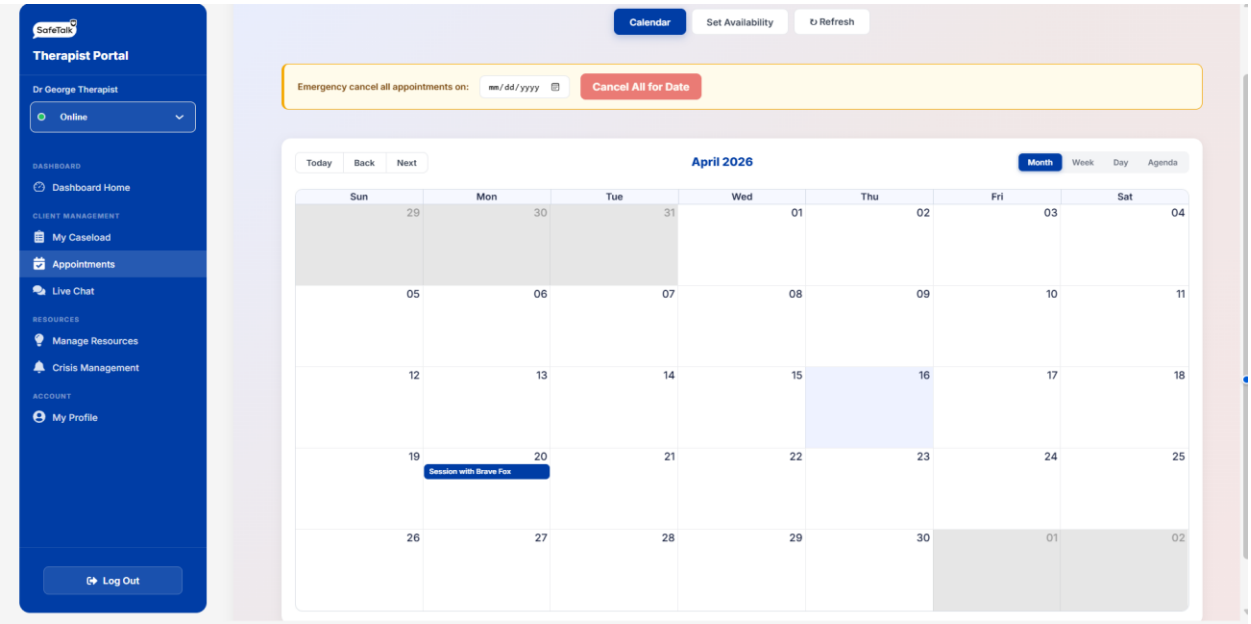
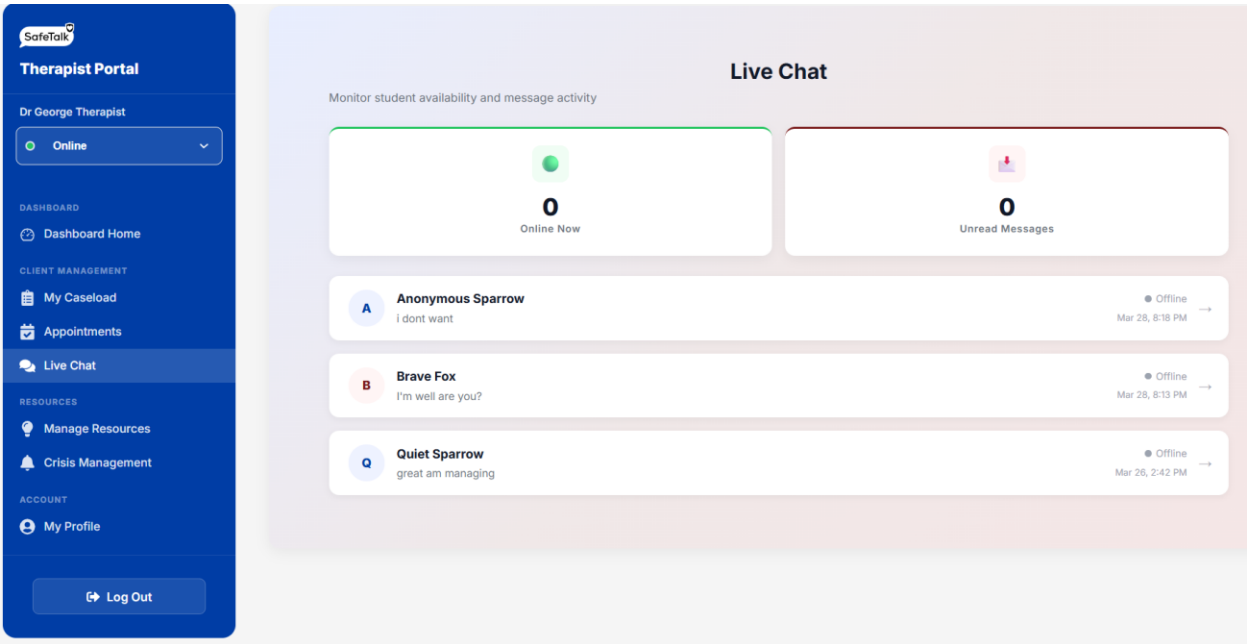


Figure F.4: Therapist Appointment calendar



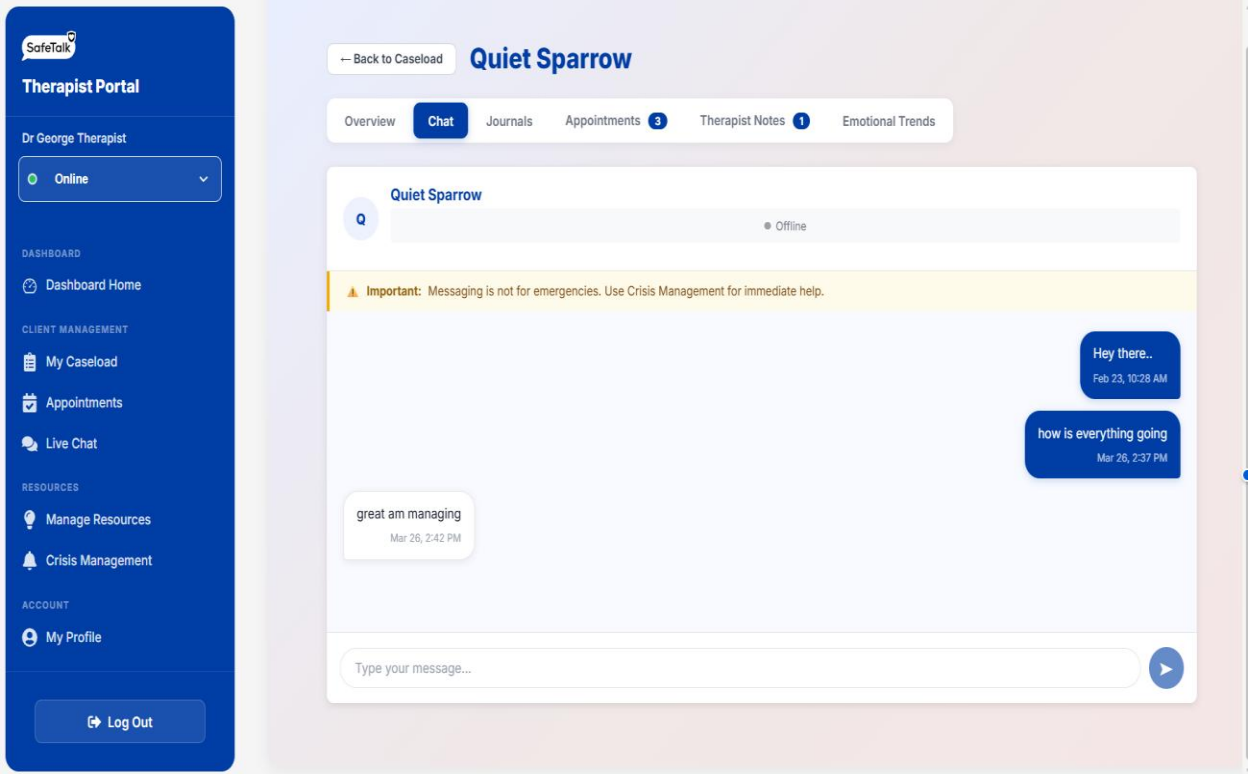


Figure F.5: Chat interface between student and patient

Appendix G: THERAPIST QUESTIONNAIRE

MENTAL HEALTH SYSTEM QUESTIONARE

TO: LICENSED THERAPIST/ COUNSELOR AND/OR PROFESSIONAL RELATED

1. What challenges do you face engaging with clients. (consistency, not opening up etc.)
2. Since our project involves designing an Al mental health chatbot, we'd like to understand how professionals handle disengaged clients. How do you usually follow up with clients who stop responding and what approaches help bring them back on into care?
3. What do u think contributes to most of these issues?
4. What barriers do you think are hindering people from seeking treatment?
5. What challenges do you face engaging with clients? (consistency, not opening up etc.)
6. What are the most common mental health issues you encounter among your clients.
7. When responding to clients, how do you decide when to be empathetic and gentle and when to be straightforward and direct with clients?
8. How do you handle situation where a client expresses Suicidal thoughts or shows signs of self-harm.
9. How do you handle situations where a client's condition seems to worsen despite therapy. (do you refer them, involve other professionals etc.)
10. Could you explain how you track a client's progress, throughout therapy, how you decide when they are ready to end therapy and continue their life.
11. Do you ever encounter clients who approach their mental health challenges froms a spiritual or religious perspective? If so, how do you handle such cases.
12. How would you rate the overall mental health right now?
13. (exceptional, very good, good, fair, poor)
14. What does confidentiality mean to you?
15. What's your view on using technology (like Al chatbots) For mental health support? What benefits or risks do you foresee in using Al for early mental health detection

Figure G: DRAFTED QUESTIONNAIRE FOR INTERVIEW WITH THE COUNSELLOR.