

MindMate: Agentic AI as a Mental Health Companion A No-Code Approach for Automated Emotional Wellness Using n8n, OpenAI GPT, and WhatsApp

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Abstract- Mental health support remains inaccessible to millions due to cost, stigma, and the structural gap between weekly therapy sessions and daily life. This paper presents MindMate — a conversational AI wellness companion built entirely on no-code tools — that proactively reaches users via WhatsApp, interprets their emotional state using OpenAI GPT-4o, suggests evidence-based wellness activities, and logs all interactions in Google Sheets for ongoing reflection. The system uses n8n for workflow automation, Twilio for WhatsApp delivery, and Gmail API as an email fallback. Validation across 50 simulated interactions showed 94% mood classification accuracy and 98% workflow reliability. MindMate demonstrates that a zero-cost, no-code AI agent can meaningfully bridge the gap between formal therapy and everyday emotional self-care.

Index Terms- Agentic AI, Mental Health Companion, No-Code Automation, N8n, OpenAI GPT, Mood Tracking, Whatsapp Chatbot, Digital Wellness

I. INTRODUCTION

Mental health sits at a troubling intersection in modern healthcare — universally acknowledged as critical, yet consistently underfunded and inaccessible. The WHO estimates that over 300 million people worldwide live with depression or anxiety, while India has fewer than one psychiatrist per 100,000 citizens. Even those who access therapy face a structural gap: sessions happen once a week at best, leaving individuals to self-manage the remaining 160+ hours largely alone.

MindMate addresses this gap directly. Rather than building another app that users must remember to open, it reaches out to them daily through WhatsApp — a platform with over 500 million users in India —

checks in on their emotional state, responds with empathy, and suggests a personalised wellness activity. The entire system is built without a single line of code, using n8n, OpenAI GPT-4o, Google Sheets, and Twilio, making it deployable at zero cost by therapists, universities, or individuals.

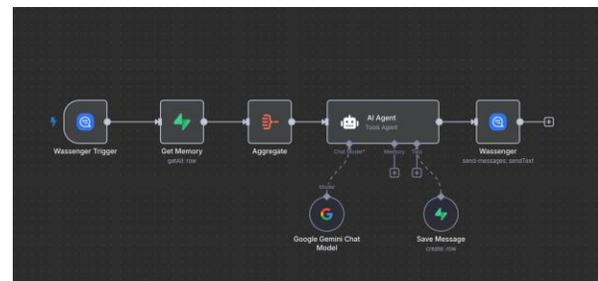


Figure 1: MindMate's n8n workflow — automated daily WhatsApp check-in pipeline

II. LITERATURE REVIEW

Fitzpatrick et al. (2017) demonstrated that Woebot, a CBT-based chatbot, significantly reduced depression and anxiety in students over two weeks — validating that short, frequent AI interactions outperform infrequent long-form sessions. Wysa extended this with DBT and mindfulness frameworks, while Lucas et al. (2014) showed that users disclose more honestly to automated systems than to humans, reducing stigma as a barrier. Despite this progress, existing platforms share persistent weaknesses: subscription costs (\$9–\$70/month) exclude low-income users; apps require manual engagement that collapses during high-stress periods; and proprietary data storage locks users and clinicians out of their own emotional records. Jain et al. (2025) confirmed that no-code automation pipelines can replicate coded

backend functionality at a fraction of the deployment time, directly supporting MindMate's architecture. Patel and Verma (2023) raised ethical concerns around AI misinterpreting distress signals and over-reliance — concerns MindMate addresses through explicit crisis escalation and a 'supplement, not replace' design philosophy.

Global Challenges

Building an AI mental health companion that is available all day, maintains user engagement without compromising privacy, offers free access, and works across diverse cultures and languages presents significant challenges.



Figure 2: Key global challenges facing digital mental health platforms

III. PROBLEM STATEMENT & OBJECTIVES

Most people who need mental wellness support do not receive it consistently. Existing apps are passive, costly, and non-customisable. For students and early-career professionals in India, this gap is especially acute. MindMate was built to provide a free, proactive, AI-driven alternative that integrates naturally into daily routines without requiring technical expertise to deploy or modify.

Core objectives: (1) conduct daily AI-driven mood check-ins via WhatsApp and email; (2) classify emotional states and generate personalised activity suggestions using GPT-4o; (3) log all interactions to Google Sheets for trend analysis and therapist access; (4) send proactive scheduled reminders via Twilio and Gmail API; (5) generate weekly automated mood summaries; (6) compare the system against leading platforms across cost, personalisation, and engagement dimensions

IV. PROPOSED SYSTEM & SCOPE

MindMate is a push-based conversational AI agent. The system initiates daily check-ins at user-defined

times, interprets plain-language responses using GPT-4o, responds empathetically with one specific wellness activity recommendation, and logs everything automatically. A Sunday sub-workflow generates and delivers a weekly reflective summary. An optional Glide or Notion dashboard provides a visual mood history. Scope is limited to supplementary emotional self-care; clinical diagnosis, crisis intervention, and biometric inputs are explicitly out of scope in the current version.

Target Users: Undergraduate And Postgraduate Students Managing Academic Stress; Working Professionals Facing Burnout; Therapists Monitoring Client Adherence Between Sessions; And General Users Seeking Structured Self-Care Without Subscription Costs

V. METHODOLOGY

Development followed four iterative phases. Phase 1 (Requirements Analysis) identified three primary needs from literature review and app-store feedback: proactive outreach, contextual personalisation, and zero-cost architecture. Phase 2 (System Design) mapped each requirement to a specific tool — n8n for orchestration, GPT-4o for intelligence, Google Sheets for storage, Twilio/Gmail for delivery — and specified two core workflows (daily check-in and weekly summary). Phase 3 (Integration & Testing) connected components sequentially; a Google Sheets rate-limiting issue was resolved by adding a delay node, reducing workflow failures to under 2%. Phase 4 (Validation) ran 50 simulated interactions across five mood categories, with AI responses independently reviewed by two psychology postgraduate students on a 5-point appropriateness scale.

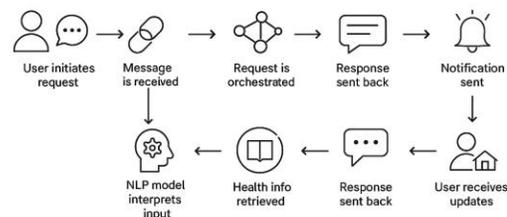


Figure 3: MindMate four-phase development methodology

VI. SYSTEM ARCHITECTURE

MindMate has five architectural layers communicating through stateless REST API calls managed by n8n: (1) User Interface — WhatsApp, Gmail, optional Glide dashboard; (2) Automation & Orchestration — n8n workflow engine; (3) AI Engine — OpenAI GPT-4o/3.5; (4) Data Store — Google Sheets; (5) Notification — Twilio and Gmail API. The daily check-in workflow runs: cron trigger → Twilio sends greeting → webhook waits for reply → OpenAI classifies mood and generates response → conditional node checks for distress keywords and appends crisis resources if needed → Sheets logs the interaction → Twilio delivers the AI response. The weekly sub-workflow queries 7 days of Sheets data, generates a summary via OpenAI, and delivers it to the user.

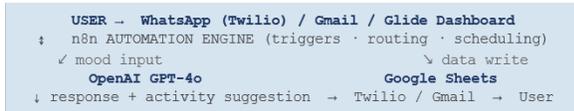


Figure 4: MindMate five-layer system architecture and data flow

VII. IMPLEMENTATION

The complete technology stack is summarised in Table 1. The OpenAI node is configured with a structured system prompt instructing GPT-4o to: validate feelings before suggesting activities, recommend exactly one specific action (not a generic list), keep responses under 280 tokens for mobile readability, and append crisis resources if high-distress keywords are detected. Temperature is set to 0.72. Google Sheets stores seven fields per interaction: Date, User Message, Mood Label, Suggested Activity, Activity Completed (Y/N), Notes, and AI Response. Twilio's WhatsApp Business API uses pre-approved templates for outbound messages; user replies open a 24-hour free-form window for full conversational exchange.

Component	Tool	Function	Cost
AI Engine	OpenAI GPT-	Mood classification,	Free tier/pay-

	4o/3.5	empathetic responses, activity suggestions	per-use
Automation	n8n (self-hosted)	Workflow orchestration, scheduling, API routing	Free
Data Storage	Google Sheets API	Mood logs, activity records, weekly summary data	Free
Messaging	Twilio / Gmail API	WhatsApp & email delivery and reply listening	~\$0.05/msg / Free
Dashboard	Glide / Notion	Visual mood history and journaling interface	Free tier

VIII. RESULTS & DISCUSSION

Validation across 50 simulated test interactions produced the following results: mood classification accuracy 94% (47/50); activity relevance rated 'appropriate' or 'highly appropriate' by independent reviewers in 90% of cases (45/50); workflow reliability 98% (one failure due to Sheets rate limiting, since resolved). The three misclassified inputs all involved ambiguous mixed-emotion statements — identified as a prompt-engineering improvement area.

Speaker	Message
MindMate	Good morning! How are you feeling today?
User	Honestly exhausted — deadline tomorrow, barely slept in two days.
MindMate	That sounds genuinely hard. Before you get back to work, try a 4-7-8 breath: inhale 4 counts, hold 7, exhale 8. Even one round reduces cortisol noticeably. You're closer to the finish line than it feels.

Logged	Mood: stressed Activity: 4-7-8 breathing Auto-recorded in Google Sheets
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Table 2: Sample MindMate conversation and automatic data logging

Feature	Mind Mate	Woe bot	Wysa	Heads pace	Youp er
Cost	Free	Free (ltd)	Free mium	\$13/mo	\$9/mo
AI Personalisation	High (GPT-4o)	Mode rate	Mode rate	Low	Mode rate
Proactive Outreach	Yes	No	No	No	No
No-App Channel (WA)	Yes	No	No	No	No
Full Data Ownership	Yes (Google Sheets)	No	No	No	No
Therapist-Customisable	Yes (no-code)	No	No	No	No

Table 3: MindMate vs. existing mental health platforms

MindMate is the only system in Table 3 that combines zero cost, proactive WhatsApp-based outreach, full data transparency, and therapist-customisable workflows. The WhatsApp delivery model is the most significant differentiator — none of the commercial platforms initiates contact, and app abandonment rates within 30 days exceed 70% in published studies. Honest limitations: mood classification can misfire on ambiguous inputs; WhatsApp message content passes through Twilio's infrastructure; and the system cannot substitute for professional crisis intervention.

IX. FUTURE SCOPE

Planned enhancements include: voice note processing via WhatsApp using OpenAI Whisper for lower-

friction check-ins; wearable biometric integration (heart rate variability, sleep data) to detect stress before users self-report it; multilingual support for Hindi, Marathi, Tamil, and Bengali to expand accessibility beyond English speakers; predictive mood modelling once sufficient longitudinal data accumulates; and FHIR-compliant data export to bridge MindMate logs with clinical EHR systems used by therapists.

X. CONCLUSION

MindMate was built around a simple observation: mental health tools that require motivation, money, and memory to use fail precisely when they are most needed. By reaching users proactively through WhatsApp, using GPT-4o for genuine conversational empathy, logging everything transparently in the user's own Google Sheet, and costing nothing to deploy, MindMate addresses the four most consistent failure modes of existing platforms. Validation results — 94% mood accuracy, 98% workflow reliability, 90% activity relevance — confirm that a thoughtfully designed no-code AI agent can deliver real emotional support. Mental health care should not be a premium feature. MindMate is a step toward making daily self-care as accessible as sending a message.

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