

Design Thinking Project Workbook

Don't find customers for your product but find products for your customers

27.

Team Name: Cognisera (Your Friendly Support for a Healthy Mind)

Team Logo:



Team Members:

1. 2320030357 - Arun T [Backend developer]
2. 2320030466 - R. Rajitha [Logo designing]
3. 2320030374 - Akshita Kiran [Poster]
4. 2320030273 - N. Raahul Datta [Team Lead and Frontend Develop]

2. Problem/Opportunity Domain

Domain of Interest:

Mental Health and Wellness Technology.

Description of the Domain:

This domain focuses on supporting mental and emotional well-being through tools and services. Key challenges include limited access to mental health professionals, stigma surrounding mental health, and the need for personalized support. However, there's an opportunity to use technology, like chatbots, to provide accessible and immediate mental health assistance.

Why did you choose this domain:

We chose this domain because mental health is a growing concern, and many people struggle to access timely support. A chatbot can offer a convenient, anonymous, and supportive resource for managing mental health challenges.

3. Problem/Opportunity Statement

Problem Statement:

Many individuals struggle to access timely, affordable, and confidential mental health support, which can negatively impact their emotional well-being.

Problem Description:

The challenge is to create a chatbot that provides accessible, non-judgmental, and personalized mental health support, addressing the barriers of cost, availability, and stigma.

Context (When does the problem occur):

The problem arises when individuals face mental health challenges, such as anxiety, stress, or depression, and are unable to access professional help quickly due to long wait times, high costs, or social stigma.

Alternatives (What does the customer do to fix the problem):

Customers may try self-help methods, such as using meditation apps, seeking advice from friends, or reading online articles, but these may not provide the personalized or professional support needed.

Customers (Who has the problem most often):

The problem most often affects young adults, professionals facing work-related stress, and individuals with mild to moderate mental health concerns who are seeking accessible and confidential support.

Emotional Impact (How does the customer feel):

Customers often feel overwhelmed, isolated, anxious, or hopeless when they cannot access timely help for their mental health challenges.

Quantifiable Impact (What is the measurable impact):

Measurable impacts include reduced productivity, increased absenteeism from work or school, and higher medical costs for untreated mental health issues.

Alternative Shortcomings (What are the disadvantages of the alternatives):

Existing alternatives lack personalization, professional guidance, and the ability to respond in real-time, making them less effective for individuals in immediate need of support.

4. Stakeholders

1. Who are the key stakeholders involved in or affected by this project?

Key Stakeholders:

- Development Team: Backend developer, frontend developer, documentation specialist, team lead.
- End Users: Young adults, mental health enthusiasts, and individuals seeking support.
- Mental Health Professionals: To provide insights or content validation.

2. What roles do the stakeholders play in the success of the innovation?

Roles in Success:

- Development Team: Drives technical execution.
- End Users: Use and provide feedback for improvements.
- Mental Health Professionals: Validate and provide expertise.

3. What are the main interests and concerns of each stakeholder?

Main Interests and Concerns:

- Development Team: Creating an effective, user-friendly product.
- End Users: Accessing effective, private support.
- Mental Health Professionals: Ensuring the content's accuracy.

4. How much influence does each stakeholder have on the outcome of the project?

Influence on Outcome:

- Development Team: High
- End Users: Medium
- Mental Health Professionals: High

5. What is the level of engagement or support expected from each stakeholder?

High engagement from all stakeholders.

6. **Are there any conflicts of interest between stakeholders? If so, how can they be addressed?**

- Potential conflict between user privacy needs and content accuracy. This can be managed through data privacy standards.

7. **How will you communicate and collaborate with stakeholders throughout the project?**

Regular meetings and feedback sessions with all stakeholders.

8. **What potential risks do stakeholders**

Risk of user data exposure. Mitigate with strict data security measures.

1. Empathetic Interviews

I need to know (thoughts, feelings, actions)	Questions I will ask (open questions)	Insights I hope to gain
Thoughts	<ul style="list-style-type: none"> - "What comes to mind when you think about seeking mental health support?" - "What do you think about using technology for mental health support?" - "How do you currently manage your mental well-being?" 	Understand users' attitudes and beliefs about mental health and the idea of using technology (like chatbots) for support.
Feelings	<ul style="list-style-type: none"> - "How do you feel when you think about sharing your mental health concerns?" - "What emotions do you experience when you face mental health challenges?" - "How would you feel if a chatbot could provide personalized support?" 	Discover the emotional barriers or positive feelings users may associate with using a chatbot for mental health.
actions	<ul style="list-style-type: none"> - "What do you usually do when you feel stressed or anxious?" - "What steps do you take to find mental health resources?" - "If you had easy access to mental health support, how would you use it?" 	Identify common actions users currently take for mental health, which can guide chatbot features to support their existing behaviours.

SKILLED INTERVIEW REPORT

User/Interviewee	Questions Asked	Insights gained (NOT THEIR ANSWERS)
Abhishek Verma, Student	"How do you usually handle stress from your studies?"	Many students feel stressed about academic performance and want private, accessible mental health support.
Srinivasan P., Parent	"What resources would you find helpful for managing family stress?"	Parents often seek affordable, non-intrusive mental health resources for themselves and their families.
Nikita R., Young Professional	"How do you manage work-related stress on a daily basis?"	Young professionals desire immediate support to manage work stress, as they find traditional resources time-consuming or costly.

Key Insights Gained:

1. Privacy and confidentiality are crucial to users' acceptance of a mental health chatbot.
2. Users prefer quick, accessible mental health resources over traditional methods due to time and cost constraints.
3. Young adults and professionals see value in an anonymous, supportive tool to manage daily stress.

2. Empathy Map

a. Who is your customer?

Description: The primary customer is a young adult, typically aged 18-35, who may be a student or early-career professional. This group often experiences stress, anxiety, or other mental health challenges due to academic or work pressures and is looking for a private, convenient way to manage their well-being.

- **Customer Profile:** Young adult, student or early-career professional, interested in personal growth and mental health management.
- **Goals and Needs:** Their goal is to manage stress and anxiety in a way that is confidential, affordable, and easily accessible.
- **Context of Interaction:** The user will access the chatbot primarily on a mobile device, likely during moments of stress or at the end of a long day when they need relief but lack time or resources to seek professional help.

b. Who are we empathizing with?

Description: We empathize with young adults experiencing mental health challenges, who may feel uncertain or hesitant about traditional mental health options due to stigma or cost.

- **User Characteristics:** Values privacy and convenience, feels a sense of responsibility for mental well-being but may be cautious about seeking help publicly.
- **User Goals and Challenges:** The user aims to maintain emotional balance and productivity while navigating academic or work-related pressures, often without access to consistent support.
- **Broader Situation:** Professionally or personally, users feel isolated in their challenges, wishing for support that doesn't require public acknowledgment of their struggles.

c. What do they need to DO?

- **Tasks/Actions:** Users need to quickly access mental health support without scheduling or waiting.
- **Decisions:** Users choose to engage with the chatbot in private moments, deciding how much they want to share based on their comfort level.
- **Success Definition:** Success is achieving a sense of relief, feeling understood, or gaining actionable advice to manage their mental state more effectively.

d. What do they SEE?

Description: Users see in their environment that shapes their perception of mental health support.

- **Physical and Digital Environment:** They see their peers or colleagues sometimes discussing mental health online but not often seeking professional help due to stigma or high costs.
- **Trends and Competitors:** Users may notice mental wellness apps like meditation platforms but find them lacking in personalized, real-time support.
- **Influence on Behavior:** Seeing others face similar struggles without formal support may reinforce the user's preference for a private, digital solution.

e. What do they SAY?

Description: This section captures the user's public expressions about their mental health needs or concerns.

- **Public Expressions:** Users might mention feeling overwhelmed or "burned out" on social media, or they may discuss mental health with friends but stop short of seeking therapy.
- **Goals and Frustrations:** They often say they want a quick way to manage stress and feel less alone but express frustration with the complexity or cost of traditional mental health services.
- **Interview/Feedback Words:** In interviews, users might express a desire for non-judgmental support that respects their privacy.

f. What do they DO?

Description: This focuses on the user's observable behaviors, routines, and actions related to managing mental health.

- **Actions:** Users frequently turn to passive solutions like meditation apps, exercise, or brief online articles for quick relief.
- **Habits and Routines:** They might integrate mental health apps as part of a daily routine, but they rarely commit to longer-term, professional interventions due to cost or time.
- **Problem-Solving Behaviors:** Users try self-help strategies but may abandon them if they don't see quick results, highlighting the need for a tool that provides immediate feedback or relief.

g. What do they HEAR?

Description: This section covers the influences surrounding the user, including peers, media, and industry trends.

- **Influences:** Users hear about mental health awareness from peers, social media, or influencers who advocate for mental wellness.
- **Media Exposure:** They encounter media promoting mental health apps, mindfulness practices, and self-care strategies but also highlighting the limitations of these options.
- **Influencers:** Certain influencers or mental health advocates encourage seeking support, but there's still a strong push for private, non-traditional methods due to stigma.

h. What do they THINK and FEEL?

Description: This is the most introspective part of the empathy map, exploring the user's internal emotions and motivations.

- **Fears, Worries, and Anxieties:** Users fear being judged, having their mental health struggles publicly exposed, or feeling too dependent on outside support.
- **Motivations and Desires:** They are motivated by the desire for mental stability, personal growth, and a way to manage stress without judgment.
- **Alignment of Thoughts and Actions:** Users' thoughts of privacy and convenience align with their preference for a digital, anonymous chatbot, emphasizing the importance of a non-judgmental experience.

i. Pains and Gains

Description: This section outlines the user's pain points and the benefits they hope to gain from the chatbot.

- **Pain Points:** Users struggle with the high cost and stigma of traditional mental health services, lack of immediate support, and difficulty in accessing professional help.
- **Desired Solutions:** An ideal solution would provide easy, immediate, and private mental health support that fits into their schedule.
- **Benefits Expected:** Users hope to achieve stress relief, emotional support, and mental clarity without needing to leave home or openly disclose their struggles.

9. Persona of Stakeholders

Stakeholder Name: *Maya*, the Young Professional

- **Demographics:**
 - Age: 25
 - Gender: Female
 - Income: Moderate income, early-career professional
 - Location: Urban area, works in a fast-paced corporate environment
- **Goals:**
 - Maya wants quick, affordable, and private access to mental health support to help manage work stress and maintain her overall well-being.
 - She seeks a tool that integrates easily into her daily routine without requiring extensive time commitments or additional expenses.
- **Challenges:**
 - Time constraints due to a demanding work schedule make it difficult for her to attend traditional therapy sessions.
 - High costs and stigma surrounding mental health services prevent her from seeking regular professional help.
 - Maya also feels hesitant to openly discuss mental health concerns, valuing privacy and confidentiality in any mental health solution.
- **Aspiration:**
 - Maya dreams of achieving a balanced life where she can manage stress effectively and stay mentally resilient, enabling her to advance in her career while maintaining a healthy lifestyle.
 - She hopes for a mental health resource that is accessible and tailored to her specific needs, helping her to grow personally and professionally.
- **Needs:**
 - A private, affordable, and accessible mental health resource.
 - Easy-to-use support that provides immediate, helpful responses when she needs a quick mental health check-in.
 - Reliable, evidence-based advice to ensure the resource is both professional and trustworthy.
- **Pain Points:**
 - Maya feels that traditional mental health services are too expensive and not always accessible in a convenient way.
 - She dislikes that many well-being apps lack the personalization she craves, making her feel her unique concerns are not addressed.
 - The stigma around seeking mental health support often makes her hesitate to explore available resources openly.

10. Look for Common Themes, Behaviours, Needs, and Pain Points among the Users

Common Themes:

- **Privacy and Confidentiality:** Users highly value privacy and are hesitant to seek mental health support that might expose their struggles to others.
- **Accessibility:** Many users feel that traditional mental health resources are either too expensive or inconvenient, leading them to look for alternatives.
- **Desire for Non-Judgmental Support:** Users often seek support without the fear of judgment, emphasizing the importance of a neutral, understanding resource.
- **Mental Health Awareness:** There is a growing awareness among users about the importance of mental health, yet they struggle to find approachable and affordable resources to act on this awareness.

Common Behaviours:

- **Use of Self-Help Resources:** Users frequently turn to self-help resources, such as meditation apps, online articles, or wellness videos, but often find them insufficient for addressing deeper concerns.
- **Reluctance to Seek Professional Help:** Many users avoid traditional therapy or counselling due to high costs, social stigma, or limited availability.
- **Preference for Digital Solutions:** Users are comfortable using digital tools and apps and prefer solutions they can access on their own schedule without needing to make appointments.

Common Needs:

- **Immediate Access to Support:** Users want a resource that provides immediate responses and guidance, especially during moments of high stress or anxiety.
- **Affordability:** Many users are young adults or early-career professionals who need budget-friendly options for mental health support.
- **Personalized Advice and Resources:** Users seek solutions that feel tailored to their unique challenges, rather than generic advice.
- **Emotional Relief and Resilience:** Users desire tools that help them manage stress, build emotional resilience, and improve their overall mental well-being.

Common Pain Points:

- **High Costs of Traditional Mental Health Services:** Therapy and counseling can be prohibitively expensive, especially for students and young professionals.
- **Lack of Personalization in Existing Solutions:** Current self-help apps and resources often fail to address users' specific mental health challenges, leading to dissatisfaction.
- **Social Stigma:** The fear of judgment or stigma associated with mental health struggles discourages users from seeking traditional forms of help.
- **Inconsistent Availability:** Users find it challenging to access timely support, with many mental health resources requiring scheduled appointments or long wait times.

11. Define Needs and Insights of Your Users

User Needs

1. **Privacy and Confidentiality:** Users require a private, confidential resource for mental health support, one they can access without fear of judgment or exposure.
2. **Accessibility and Convenience:** Users need a solution that is readily available at any time, allowing them to access support without needing to schedule appointments or wait for help.
3. **Affordability:** Cost is a significant barrier, so users need an affordable or low-cost alternative to traditional therapy.
4. **Emotional Relief and Support:** Users seek tools that can help them manage stress, anxiety, and other emotions, providing them with practical guidance or exercises for emotional relief.
5. **Personalization:** Users desire personalized support that can adapt to their unique mental health needs and provide relevant advice or activities tailored to their specific challenges.

User Insights

1. **Privacy Concerns Drive Behaviour:** Many users avoid traditional mental health support because they fear stigma or judgment, which is why they prefer anonymous, private digital solutions.
2. **Self-Reliance with Digital Tools:** Users often attempt to manage their mental health independently through meditation apps or online resources, even if they find these options inadequate, indicating a preference for self-guided tools.
3. **High Sensitivity to Cost:** Young adults, particularly students and early-career professionals, avoid therapy due to high costs, making affordability a key factor in their decision-making.
4. **Immediate Need for Support During Stressful Moments:** Users typically seek help during moments of high stress or emotional difficulty, showing a strong need for immediate, on-demand access to mental health resources.
5. **Frustration with Generic Solutions:** Many users feel that general mental health apps lack the personalization needed to address their specific concerns, creating a demand for a more tailored and responsive approach.

12. POV Statements

POV Statements:

PoV Statements	Role-based or Situation-Based	Benefit, Way to Benefit, Job TBD, Need (more/less)	PoV Questions (At least one per statement)
As someone experiencing stress, I need a way to track my daily stress levels so I can identify patterns and manage my stress more effectively.	Managing stress	Identify patterns and manage stress	What can we design to help users track their stress levels and identify patterns over time?
I need a way to access calming techniques quickly when I start feeling overwhelmed so I can regain control of my emotions.	Anxiety management	Access to calming techniques	What can we design to help users access calming techniques quickly when they are feeling anxious?
I need a way to monitor my clients' emotional well-being between sessions so I can provide better, more personalized support.	Mental health professional	Better support between sessions	What can we design to help mental health professionals monitor their clients' emotional well-being outside of therapy sessions?
I need a way to receive advice and tips on improving my sleep habits so I can get better rest and feel more energized.	Managing insomnia	Improve sleep habits	What can we design to help users with insomnia improve their sleep habits and get better rest?

13. Develop POV/How Might We (HMW) Questions to Transform Insights/Needs into Opportunities for Design

1. User Need: "Users need a way to track their daily stress levels."

- **Insight:** "Users often don't realize when their stress is building up until it's overwhelming."
- **HMW Question:** "How might we create a simple and intuitive way for users to track their stress levels throughout the day to prevent it from becoming overwhelming?"

2. User Need: "Users want quick access to calming techniques when feeling anxious."

- **Insight:** "Users often feel that their anxiety is hard to manage without immediate, easy-to-access tools."
- **HMW Question:** "How might we design an easy-to-access library of calming techniques that users can use immediately when they feel anxious?"

3. User Need: "Users need a safe space to express their feelings without judgment."

- **Insight:** "Users may feel uncomfortable or vulnerable discussing their mental health with others."
- **HMW Question:** "How might we create a safe and non-judgmental space within the AI bot where users feel comfortable expressing their emotions openly?"

14. Crafting a Balanced and Actionable Design Challenge

Design Challenge:

"Create a mental health AI bot that helps users track their daily emotional well-being, access personalized coping strategies, and feel supported through a non-judgmental, easily accessible platform, ultimately reducing user stress and anxiety by at least 30% over a 4-week period."

This design challenge is actionable, includes a clear goal (reducing stress and anxiety by 30%), and combines insights from the PoV questions, focusing on tracking emotional well-being, offering personalized suggestions, and ensuring the platform feels supportive and non-judgmental.

15. Validating the Problem Statement with Stakeholders for Alignment

Validation: A validation plan template is used for gathering stakeholder feedback on your problem statement

Stakeholder/User Feedback:

Stakeholder/User	Role	Feedback on Problem Statement	Suggestions for Improvement
Mental Health Professional	Psychologist	The problem resonates, as many clients benefit from daily emotional tracking and quick access to coping tools.	Consider adding components for professional oversight or integration with therapy sessions.
Therapist Group	Group Feedback	They appreciate the emphasis on non-judgmental support, which they feel is often lacking in mental health tech.	Suggest incorporating options for guided self-reflection and mindfulness exercises.
Community Support Group Leaders	Mental Health Group Leaders	The focus on personalized coping strategies is highly relevant to their members' needs.	Recommend adding a "community check-in" feature for peer support integration.
End User (Group of Young Adults)	Target User Group	They find the goal of reducing stress helpful and feel a non-judgmental bot would be valuable.	Suggest a feature for mood-specific affirmations to increase personalization.

16. Ideation

Ideation Process:

Idea Number	Proposed Solution	Key Features/Benefits	Challenges/Concerns
Idea 1	Non-Judgmental Chat Companion	Provides a safe, empathetic space for users to freely express emotions without judgment and receive reflective responses	Avoiding dependency on AI for emotional support; training AI to respond empathetically
Idea 2	Personalized Coping Strategy Generator	Uses AI to suggest coping mechanisms tailored to user preferences and recent mood patterns	Ensuring AI's coping suggestions are accurate and safe, maintaining diversity in coping suggestions
Idea 3	Mood Tracking with Adaptive Insights	Daily mood tracker with prompts to record emotions and provide personalized insights based on patterns	Maintaining user engagement in logging moods regularly; ensuring privacy and sensitivity in mood analysis
Idea 4	Goal Tracking for Emotional Health	Allows users to set and track mental health goals, with prompts to check progress and celebrate achievements	Risk of overwhelming users with goal setting; balancing goals to be achievable without added stress
Idea 5	Real-Time Calming Techniques Library	Offers immediate access to calming activities (breathing exercises, guided meditation, etc.) based on user's current mood.	Designing effective prompts for emotional states; ensuring accessibility and ease of use

17. Idea Evaluation

Evaluate the Idea based on 10/100/1000 grams

Idea	Impact (10/100/1000 grams)	Feasibility (10/100/1000 grams)	Alignment (10/100/1000 grams)	Total Weight
Idea 1 - Non-Judgmental Chat Companion	1000	100	1000	2100
Personalized Coping Strategy Generator	100	100	1000	1200
Idea 3 - Mood Tracking with Adaptive Insights	1000	1000	100	2100
Idea 4 - Goal Tracking for Emotional Health	100	100	100	300
Idea 5 - Real-Time Calming Techniques Library	1000	1000	100	2100

Idea 5: Non-Judgmental Chat Companion

- **Concept:** A chatbot interface that provides empathetic responses, allowing users to freely express emotions.
- **Strengths:** Highly aligned with the goal of a non-judgmental, supportive mental health tool; direct impact on user comfort and engagement.
- **Challenges:** Requires advanced AI training to respond empathetically; must avoid creating dependence.
- **Next Steps:** Focus on building a secure, sensitive AI interaction; test for ethical and therapeutic safety.

Solution Concept Form

1. Problem Statement:

- A mental health support chatbot, carefully designed to provide empathetic, humanized interactions to help users manage their mental well-being.

2. Target Audience:

- Main users are young adults and professionals who want to manage stress and improve emotional well-being by tracking their mood patterns regularly.

3. Solution Overview:

- A mood-tracking AI bot that prompts users to log their emotions daily, detects mood patterns, and provides adaptive insights based on trends. This tool empowers users to better understand their emotional health and offers guidance to manage stress levels proactively.

4. Key Features:

Feature	Description
Emotion Recognition and Adaptation	Uses natural language processing to detect emotions from user input, adapting responses to provide an empathetic, supportive experience.
Personalized Conversations and Coping mechanisms	Based on emotional input, the AI suggests coping strategies like breathing exercises, mindfulness tips, or journaling prompts tailored to the user's needs.
Mental Health Resources and Self-Care Tip	Provides access to a curated library of self-care tips, mental health resources, and links to relevant articles or videos that support mental well-being.

5. Benefits:

Benefit	Description
Benefit 1: Emotional Support and Connection	Recognizes and adapts to user emotions, creating a compassionate, non-judgmental interaction experience.
Benefit 2: Proactive Coping and Stress Management	Empowers users to manage emotions effectively through personalized coping suggestions based on current mood.
Benefit 3: Holistic Mental Health Resources	Provides a comprehensive suite of self-care tools and resources, helping users access mental health support and guidance when needed.

6. Unique Value Proposition (UVP):

- This AI tool stands out by delivering personalized, empathetic conversations combined with real-time emotion recognition, adaptive coping strategies, and curated self-care resources, offering holistic support for users' mental health journeys.

7. Key Metrics:

Metric	Measurement
Metric 1: User Engagement	Monitor the frequency and duration of user interactions to understand engagement levels.
Metric 2: Emotional Impact	Measure how often users access suggested resources, indicating the relevance and helpfulness of provided tips.

8. Feasibility Assessment:

- This solution is feasible with current AI capabilities, including NLP for emotion detection, rule-based and machine learning algorithms for adaptive responses, and data storage protocols for secure, private handling of sensitive data. A resource library can be created with external links or proprietary content, and personalized suggestions can be adjusted with user feedback to refine the system over time.

9. Next Steps:

- **User Research:** Conduct focus groups to understand desired emotional response types and preferred self-care tips.
 - **Prototype Development:** Build a prototype that integrates basic emotion recognition, response adaptation, and a resource library.
 - **Testing and Iteration:** Test the prototype with a small user base to collect feedback on response accuracy and user satisfaction.
 - **Resource Curation:** Gather and organize a range of mental health resources, self-care tips, and coping mechanisms for diverse user needs.
-