Open Brief Proposal: Mental Health Support Platform
Name: Safe Space (WIP)

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Table of Contents

Problem Statement

Problem Definition:

The prevalence of mental health issues is rising. However, access to mental health resources is limited due to stigma, cost, and availability. Numerous individuals face difficulty locating a secure, confidential, and supportive environment to articulate their emotions or seek assistance.

Significance of the Problem:

Mental health is a crucial component of holistic well-being. The absence of readily available and cost-effective mental health assistance can result in grave outcomes such as anxiety, depression, and potentially, suicide. Through establishing a digital platform that promotes user engagement in sharing their perspectives, gaining access to resources, and connecting with experts confidentially, this application caters to the demand for accessible mental health aid.

Solution:

The proposed platform will offer a secure environment for users to confidentially record their thoughts, access mental health resources, and engage with professionals. The platform's emphasis on confidentiality and user-friendliness will enable individuals to initiate the initial actions towards overseeing their mental well-being.

Target Audience

Primary Users:

- People experiencing mental health challenges who seek anonymity.
- Young adults, students, and professionals experiencing stress, anxiety, or depression.
- Individuals unable to cover standard counselling costs or who favour self-guided materials.

Benefits to Users:

- Anonymity enables individuals to freely express themselves without apprehension of criticism.
- Access to a curated selection of articles, videos, and self-help resources.
- Direct engagement with mental health professionals for guidance.

Technology Stack

Chosen Stack:

MERN (MongoDB, Express, React, Node.js)

Justification for MERN:

- **React:** Provides a dynamic, responsive front-end experience, enhancing user interaction.
- **Node.js & Express:** Facilitates efficient back-end development, handling API requests and data processing.
- **MongoDB:** Offers flexibility in storing unstructured data, such as journal entries and chat logs, and scales easily.

Component Usage:

- **MongoDB:** Stores user data, journal entries, resources, and chat logs.
- **Express:** Manages routing and middleware for the backend.
- **React:** Delivers an interactive front-end with real-time updates.
- **Node.js:** Handles server-side operations, ensuring smooth communication between the client and server.

Application Features

Anonymous Journaling:

- **CRUD Operations:** Users can create, read, update, and delete journal entries.
- **Implementation:** Data is stored anonymously, linked only to user IDs to maintain privacy.

Resource Library:

- **CRUD Operations:** Admins can add, update, or remove resources; users can view and save them.
- **Implementation:** Articles, videos, and tips curated by professionals.

Professional Chat:

- **CRUD Operations:** Users can create chat sessions, read messages, and delete conversations.
- **Implementation:** Secure, end-to-end encrypted chat functionality to maintain user confidentiality.

Community Support Forum (Optional Feature):

- **CRUD Operations:** Users can post, comment, and interact with others in moderated forums.

- **Implementation:** Moderated (Open AI API allows for AI moderation on message content) to ensure a safe and supportive environment.

Database Design

Collections:

- **Users Table:** Stores user IDs, encrypted login credentials, and preference settings.
- **Journal Entries Table:** Contains user journal data, timestamps, and tags for categorization.
- **Resources Table:** Houses articles, videos, and other mental health materials, categorized by type and topic.
- **Chat Logs**: Stores chat history between users and professionals, ensuring data security and anonymity.

Data Modeling Considerations:

- Ensure data integrity and privacy by encrypting sensitive information and minimizing personally identifiable data storage.

User Interface and Experience

UI/UX Approach:

- **Intuitive Design:** Simple, clean, and calming UI with a focus on user comfort and minimalism to reduce cognitive load.
- **Accessibility:** Features including text resizing, dark mode, and voice-to-text for inclusivity.
- **Anonymous Interactions:** Clear messaging to reinforce the anonymity and confidentiality of the platform.

Design Elements:

- Calming colour schemes such as blues, greens, and off-whites and gentle animations create a supportive atmosphere.
- Clear navigation and easy access to key features like journaling, resources, and chats.

Security Considerations

Potential Risks:

- Data breaches and unauthorized access to sensitive user information.
- Inappropriate or harmful content in community spaces.

Mitigation Strategies:

- Implement SSL encryption for all data transmission.
- Use secure password hashing and two-factor authentication for user accounts.
- Content moderation and AI-powered content filtering in community spaces.

Project Timeline

Development Phases:

Planning (Week 9):

Finalize requirements, project scope, and rough wireframes.

Design (Weeks 10):

Finalise High Fidelity Designs and predevelopment set-up (creating API keys, illustrating logo, etc.).

Development (Weeks 11-12):

Code the front-end appearance with minor back-end functionality needed to flow through entire website pages (ie. login / sign up)

Development (Week 13-14):

Code the back-end functionality in its entirety ie. implementing features like moderating/ checking posts.

Testing (Weeks 15):

Conduct thorough testing for bugs, security vulnerabilities, and usability.

Deployment (Week 16):

Deploy the platform to a live server and perform final checks.

Milestones:

- **End of Week 10:** UI/UX design completed.
- **End of Week 14:** Core features fully developed and integrated.
- **End of Week 15:** Successful testing and ready for deployment.

Challenges and Risks

Potential Challenges:

- Ensuring data privacy and meeting legal compliance for mental health platforms.
- Managing user-generated content to prevent harmful interactions.
- Achieving a balance between providing professional support and maintaining the platform as a safe space.

Overcoming Strategies:

- Invest in robust data protection measures and regular security updates.
- Make use of Open AI moderation models for content moderation and provide clear reporting mechanisms.
- Collaborate with mental health professionals to ensure the platform adheres to best practices.

Conclusion

Expected Impact:

This platform aims to create a safe, supportive environment for individuals struggling with mental health issues. By offering anonymity, accessible resources, and professional guidance, it seeks to reduce the barriers to seeking help and encourage more open conversations about mental health.

Importance:

The platform’s potential to reach individuals who might otherwise avoid traditional mental health services highlights its societal value, promoting overall well-being and contributing to a broader effort to destigmatize mental health care.