

MindSpace AI Mental Wellness Platform

An AI-powered mental wellness solution designed to support youth mental health with confidential, empathetic guidance.

Project Overview

MindSpace is a mobile-first platform that helps young people overcome mental health stigma and access support through:

- AI-powered chat personas (Arjuna and Maya) trained on mental health data and the Bhagavad Gita
- Detection systems for monitoring mental wellbeing
- Anonymous peer community
- Guided wellness tools and journaling
- Crisis detection and intervention

Tech Stack

Frontend

- React Native with Expo SDK
- TypeScript
- React Navigation
- NativeBase/Tamagui UI components

Backend

- Node.js with Express
- TypeScript
- JWT Authentication
- Google Gemini API for AI chat
- Socket.io for real-time communication

Database

- MongoDB/PostgreSQL (configurable)
- Redis for caching

Project Structure

```
mindspace/
├── mobile-app/      # React Native Expo app
├── backend/         # Node.js Express server
├── shared/          # Shared types and utilities
└── docs/            # Documentation
```



Getting Started

Prerequisites

- Node.js 18+
- npm or yarn
- Expo CLI
- MongoDB or PostgreSQL
- Google Gemini API key

Installation

1. Clone the repository

```
git clone https://github.com/yourusername/mindspace.git
cd mindspace
```

2. Install dependencies

```
# Install backend dependencies
cd backend
npm install

# Install mobile app dependencies
cd ../mobile-app
npm install
```

3. Set up environment variables

- Create `.env` files in both backend and mobile-app directories
- Add required environment variables (see `.env.example` in each directory)

4. Start the development servers

```
# Start backend server
cd backend
npm run dev

# Start Expo development server
cd ../mobile-app
npm start
```



Core Features

- **User Authentication:** Secure registration and login system
- **AI Chat System:** Two personas (Arjuna and Maya) offering different support styles
- **Crisis Detection:** Automatic detection of crisis situations with immediate intervention
- **Wellness Tools:** Breathing exercises, journaling, meditation guides
- **Community Support:** Anonymous peer matching and forums
- **Analytics Dashboard:** "Wellness Wrap" visualizing mental health progress



Privacy & Security

MindSpace is built with privacy as a priority:

- End-to-end encryption
- Anonymous user options
- Compliance with data protection regulations
- Secure data storage and processing



License

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