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MENTIS 2026



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VABA
Vaagdevi Incubation & Business Accelerator

- **Problem Statement ID –MENTIS007**
- **Problem Statement Title-SPEECH-ANALYSIS BASED AI SYSTEM FOR SUPPORTING INDIVIDUALS WITH DEPRESSION**
- **Theme-AI for early mental health support and emotional well-being**
- **PS Category- Software**
- **Team Name (Registered on portal)- DIVAS**

AI FOR EARLY MENTAL HEALTH SUPPORT AND EMOTIONAL WELL-BEING

The proposed solution is the development of an AI-powered mental health and support platform that focuses on early identification of stress, anxiety, depression.

Mental health matters-AI makes it accessible

The solutions used for mental health support and emotional well-being

1. Data collection
 - Daily mood checks-in
 - Text-based conversation
2. AI-driven emotion analysis
 - Sad, joy and etc



TECHNICAL APPROACH

FRONTEND(USER INTERFACE)

1. HTML-Structure
2. CSS3-Styling
3. Javascript-client-side interaction

FEATURES

- 1.Voice input/audio upload
- 2.Text display

BACKEND

- 1.Python
- 2.Flask-Web framework
- 3.speech Recognition

FEATURES

- 1.Audio processing module
- 2.NLP&emotion detection module

FEASIBILITY AND VIABILITY

FEASIBILITY

1. Technical feasibility

- AI for algorithms for emotion detection, mood tracking, and chatbots are already available
- it can be integrated by smartphones, wearables devices and online platform

2. Operational feasibility

- users can easily interact with AI via apps or websites
- provide 24/7 support without needing constant human support

VIABILITY

1. Social viability

- Encourage mental health awareness and reduces stigma.

2. Financial viability

- can be offered as a freemium app or through organizations.

3. Practical viability

- AI adapts to users emotional patterns over time.

IMPACT AND BENEFITS

IMPACTS

- 1.Early detection of emotional issues
- 2.Improved mental health awareness
- 3.Reduces burden on mental health professionals
- 4.enhances productivity and performance
- 5.Reduces stigma around mental health
- 6.Encourages positive lifestyle changes

BENEFITS

- 1.24/7 support
- 2.personalized guidance
- 3.confidential and safe
- 4.cost-effective solution
- 5.continuous monitoring
6. Increases attention and awareness, stress management

RESEARCH AND REFERENCES

1. Systematic review on AI in mental health
2. Studies on young adults and AI perceptions
3. Reviews on broader applications

REFERENCES

- 1.Mansoor,M.A.,& Ansari,K.H.
- 2.Basha,S.E.,Gull,M.Alquqa,E.K.,
- 3.The application of artificial intelligence in positive mental health.