

Report on Soft Skills & Mental Health Healing Bot

Introduction

The Soft Skills & Mental Health Healing Bot is a dual-purpose solution designed to address the soft skills assessment in professional settings and mental health support for individuals facing emotional or mental health challenges. The tool leverages a combination of emotion recognition, speech sentiment analysis, and real-time feedback to assist in two core areas:

1. **Mental Health Monitoring and Support:** The bot provides a compassionate, anonymous environment where individuals can express themselves, helping them track their emotions and mental health. With the user's permission, the data can be shared with trusted partners (e.g., NGOs, and counsellors) to offer additional support.
2. **Soft Skills Assessment for Recruitment:** Companies can use this tool to assess candidates' soft skills, such as confidence, empathy, communication, and emotional intelligence, during video interviews. This solution aids in streamlining the recruitment process by providing more objective data-driven insights into these often subjective qualities.

The bot functions by utilizing real-time video feedback for emotion detection and soft skills analysis. With advanced speech recognition, it transcribes verbal communication to further analyse sentiment, tone, and language used, providing detailed emotional insights and soft skills reports.

Current Functionality

1. Mental Health Support Features

The bot acts as a healing assistant for individuals experiencing mental health issues, including but not limited to:

- Anxiety
- Depression
- Stress
- Grief
- Loneliness

In its current iteration, the bot provides several key features for individuals who wish to monitor their emotional well-being:

- **Emotion Tracking:** As users engage with the bot, their facial expressions and speech patterns are continuously analysed. This data helps to detect emotions such as **happiness, anger, sadness, fear, neutrality**, and more. The bot displays these emotions in real-time on the user's screen, helping them become more attuned to how they are feeling at that moment.
- **Speech Analysis:** The bot transcribes spoken words and evaluates the sentiment (positive/negative), tone, and emotional undertones of the responses. This helps to identify shifts in mood or underlying emotions that the individual may not be aware of.
- **Real-Time Feedback:** The bot provides continuous feedback during the interaction by displaying the dominant emotion and tracking changes over time, helping the user

gain awareness of their emotional state (which can be shared with NGOs in future updates)

2. Soft Skills Assessment Features

The bot also functions as a soft skills evaluation tool for recruitment and training purposes:

- **Confidence Analysis:** The bot assesses the level of confidence a candidate demonstrates through eye contact, speech clarity, and overall demeanour.
- **Communication Skills:** The bot tracks speech clarity, the flow of ideas, and language complexity, as well as the tone used during communication.
- **Emotional Intelligence:** The bot identifies empathy through the individual's responses to hypothetical emotional situations, assessing their ability to connect with others and understand different perspectives.
- **Sentiment Analysis:** The bot applies sentiment analysis to gauge whether the individual is responding with optimism, negativity, or neutrality, helping identify whether they are solution-focused or overly pessimistic.

Both soft skills and emotional health are tracked in parallel, allowing for a holistic view of an individual's overall mental and emotional wellness.

Use Case: Mental Health Monitoring

For individuals facing mental health challenges, the bot offers a supportive tool for self-reflection and monitoring. It allows users to talk freely and express concerns about their emotional state, giving them an objective reflection of how they feel at the moment through emotion recognition. This feature can help users feel heard, validated, and motivated to seek professional help when necessary.

- **Daily Emotional Tracking:** Over time, users can track patterns in their emotions, such as recurring sadness, stress, or anxiety. The bot can flag concerning emotional trends and offer early intervention suggestions.
- **Healing Process Support:** As users continue interacting with the bot, they receive positive reinforcement and suggestions to engage in therapeutic actions. For example, the bot might recommend relaxation techniques, and meditative exercises, or even suggest speaking with a mental health professional or counsellor.

This tool can be used by individuals in private, without the need for sharing personal details with friends or family, which may be a barrier for some in seeking help. This increases access to mental health support in a confidential and non-judgmental environment.

Future Plans

The bot's future development will include the integration of additional features, which are designed to support mental health healing and enhance recruitment assessments:

1. Linking to NGOs for Mental Health Support

- **Mental Health Consultations:** The bot will be integrated with various NGOs and mental health organizations, enabling users to opt-in for consultations or counselling services. When the bot identifies a potential issue (e.g., increased sadness or anxiety over time), it will notify the user that they have the option to share their data with trusted mental health professionals, who can then offer direct support.
- **Data Sharing with Consent:** Users will have control over whether or not to share their emotional and speech data. With their consent, the bot will allow data sharing with professionals who can help guide them through their emotional healing process.
- **Self-Help Resources:** The bot will include access to a knowledge base of self-help materials such as articles, videos, and exercises related to emotional well-being, depression management, and anxiety reduction.

2. Enhancement of Soft Skills Evaluation for Recruitment

- **Company-Specific Soft Skills Evaluation:** Companies will be able to customize the bot to align with specific soft skills relevant to their organization's culture or role requirements. For instance, a company looking for leaders might focus on decision-making ability and resilience, while a customer service-oriented company might focus on empathy and active listening.
- **Integration with ATS (Applicant Tracking Systems):** The bot can be linked to Applicant Tracking Systems (ATS) to streamline the recruitment process, enabling real-time soft skill assessments during candidate interviews and automatically generating reports on the candidate's emotional intelligence, confidence, and communication style.

3. Expanded Emotional Analysis

The bot will extend its emotional analysis to track more detailed emotional states, such as mood swings, stress levels, or depression markers, enabling it to better identify when professional help might be needed. Additionally, it will provide therapeutic suggestions tailored to the user's current state.

- **Compassionate Conversations:** Through natural language processing and sentiment analysis, the bot can engage in dialogue that provides a safe space for individuals to express themselves, share concerns, and receive encouraging feedback

Conclusion

This Soft Skills & Mental Health Healing Bot serves as a valuable tool for individuals looking to monitor and improve their emotional health and for companies seeking to evaluate candidates' soft skills more accurately and objectively. It can provide compassionate support for those suffering from mental health challenges and at the same time enhance hiring accuracy by assessing non-technical skills in candidates.

Through continuous updates and partnerships with NGOs, this bot can evolve into an even stronger support system for individuals dealing with emotional challenges. It will not only track and analyse soft skills but also play a proactive role in healing by offering emotional support, self-awareness, and access to professional help when needed.

The future holds exciting possibilities for this tool, including deeper integration into mental health care systems and the recruitment industry, making it a holistic solution for emotional well-being and professional success.