

We are MindPeers

India's favorite Mental Health Partner



Shark Tank India 2023



And this year being **LinkedIn's Top Startups** on the rise list

Championing mental health worldwide with universities and companies



We take a multilayered approach to help students

- End to end mental well-being support to **students, parents** and **teachers**
- Offline and Online **therapy** sessions
- Awareness workshops
- Wellness Events
- **Digital tools** based on expressive art modalities like **CogniArt**





Objectives –

Participants are tasked with developing a NLP-based solution that automatically extracts, classifies, and performs deeper analysis of mental health concerns from user input. The solution should consist of five main components: polarity detection, keyword extraction (NER), concern classification, intensity scoring, and a timeline-based sentiment shift analysis.

The tasks –

- Polarity Finder
- Keyword Extractor (NER)
- Concern Classifier
- Intensity Scoring
- Timeline-based Sentiment shift analysis



End-to-End Pipeline –

The final solution should integrate the following components:

1. **Polarity Finder:** Detects the emotional polarity and shifts in sentiment over time.
2. **Keyword Extractor (NER):** Extracts concern-related keywords or phrases.
3. **Concern Classifier:** Maps extracted keywords to predefined categories.
4. **Intensity Scorer:** Provides a severity score for each concern.
5. **Timeline Sentiment Analyzer:** Tracks the progression of mental health concerns over multiple inputs.



Expected Deliverables –

Participants must deliver the following components:

1. **Polarity Finder:** A model that detects sentiment and tracks emotional shifts over time.
2. **Extractor:** A functioning Named Entity Recognition (NER) model that accurately extracts mental health concern phrases.
3. **Classifier:** A classification model that maps extracted concerns to predefined mental health categories.
4. **Intensity Scorer:** A scoring system to assess the severity of the concern.
5. **Timeline-Based Sentiment Analyzer:** A component that tracks the progression or improvement of mental health concerns over time.



Evaluation Criteria –

- **Polarity Detection Accuracy:** How well the model identifies the emotional polarity and tracks shifts over time.
- **Extraction Accuracy:** How well the model extracts mental health concern-related phrases from user input.
- **Classification Precision:** The accuracy with which the model maps the extracted concerns to predefined categories.
- **Intensity Scoring:** The accuracy of assigning appropriate intensity levels to concerns.
- **Timeline Analysis:** How well the model tracks and predicts the progression of mental health concerns over time.
- **End-to-End Performance:** The overall efficiency and reliability of the complete pipeline from raw user input to a classified, scored, and timeline-analyzed output.