MINDSCOPE

A MENTAL HEALTH SENTIMENT ANALYSIS DASHBOARD

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INTRODUCTION

Mental health discussions are increasing on platforms like Twitter and Reddit.

MindScope captures sentiment trends to support awareness and interventions.

DATA SOURCE

PUBLIC DATA FROM REDDIT & TWITTER

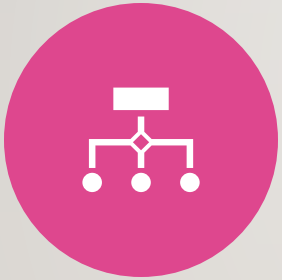
REAL-TIME COLLECTION VIA APIS

NLP-BASED PREPROCESSING AND SENTIMENT LABELING

FEATURES

- Sentiment Dashboard: View overall sentiment trends and shifts over time
- Keyword & Theme Analysis: Highlights commonly discussed mental health topics
- Emotion Mapping: Graphical breakdown of emotions
- Crisis Detection: Flags posts with potential crisis language

TOOLS USED



DATA COLLECTION: TWEEPY, REDDIT API

NLP & SENTIMENT ANALYSIS: SCIKIT-LEARN, VADER

DASHBOARD & VISUALIZATIONS: PLOTLY, DASH / STREAMLIT

VISUALIZATION TECHNIQUES

- Line Charts: Track sentiment trends over time
- Bar Charts: Show sentiment distribution by topic or keyword
- Word Clouds: Highlight most discussed mental health terms
- Heatmaps: Visualize intensity of emotions across time or categories
- Pie Charts: Illustrate sentiment ratios (positive, negative, neutral)
- Interactive Filters: Explore data by date, keyword, or platform

IMPACT & APPLICATIONS

- Support for mental health orgs in tailoring outreach
- Crisis intervention and policy insights
- Academic research into real-time mental health trends

TIMELINE

Week 1: Collect data using Twitter and Reddit APIs. Clean and preprocess text data.

Week 2: Train sentiment analysis model using labeled datasets. Begin basic visualizations.

Week 3: Build interactive dashboard with sentiment graphs, filters, and keyword analysis.

Week 4: Test functionality, polish UI, add real-time updates, and deploy the dashboard.

THANK YOU

QUESTIONS?