■ Dream Journal NLP — Progress Report

1. Project Overview

The Dream Journal NLP project is an AI-powered tool that analyzes personal dream entries to uncover hidden psychological and emotional patterns. It uses Natural Language Processing (NLP) and visualization techniques to provide insights into mood trends, recurring themes, and symbolic meanings in dreams.

2. Work Completed So Far

- ■ Project Setup: Organized structure, sample dataset (200+ dreams), dependencies installed.
- ■ Streamlit Application: CSV upload, search, date filtering, summary metrics, and previews.
- ■ Analysis Features: Sentiment analysis, emotion detection, keyword extraction, topic modeling, and dream dictionary.
- ■ PDF Report Generation: Automated report export with sentiment/emotion charts, keywords, topics, symbol summary, and applied filters.

3. Planned Next Steps

- ■ Add AI-generated narrative summaries to reports.
- ■■ Deploy on Streamlit Cloud for online demo.
- ■ Expand Dream Dictionary with richer symbolic mappings.
- ■ Add clustering & similarity search to find related dreams.

4. Current Status

■ A working prototype is complete with:
- Full Streamlit interface
- NLP analysis pipeline
- Visualization and PDF reporting
- Ready-to-demo functionality with sample dataset

■ The project is in a functional state and ready for evaluation, while enhancements can continue in upcoming weeks.