*LLM PROMPT ENGINEERING
TRACK*

1.   LunaCare: Women's Reproductive Health Assistant

Description of Idea:

LunaCare is an AI-powered medical chatbot specializing in **Polycystic Ovary Syndrome (PCOS)** and **women's reproductive health**. Leveraging the BioMistral-7B model with Retrieval-Augmented Generation (RAG), it provides accurate, personalized, and culturally sensitive information. The system integrates advanced technologies like LangChain for conversational pipelines, Sentence-Transformers for embeddings, and Chroma for efficient vector storage.

Designed to address the stigma surrounding **women's health in India**, LunaCare offers a **safe, private**, and **accessible platform** to raise awareness and empower users with reliable **healthcare information.**

Prompt Construction:

Research Phase: Begin by exploring credible sources on PCOS and women's reproductive health. Focus on key areas such as symptoms, diagnosis, treatment options, lifestyle management, mental health impact, and cultural stigmas, especially in countries like India. Include resources from medical journals, health organizations (e.g., WHO, Mayo Clinic), and culturally relevant articles that address privacy, safety, and taboo topics. Document the nuances of user concerns, such as seeking non-judgmental advice, confidentiality, and ease of access to accurate information.

Initial Context & Background Setting: Build a knowledge base emphasizing PCOS basics, culturally sensitive communication, and personalized advice. Include guidance on managing symptoms, lifestyle changes, and creating a non-judgmental, private support environment.

Test & Refine: Simulate diverse user scenarios (e.g., teens, working women, mothers) to assess response accuracy and empathy. Identify and address gaps, ensuring cultural relevance, privacy, and comprehensive advice.

Finalization: Refine and finalize LunaCare's settings to deliver empathetic, accurate, and culturally sensitive support, fostering trust and improving user experience. Ensure privacy safeguards are integrated before deployment.

Submission:
Iterative Prompt Development Process Iterative Prompt Development Process Example.pdf
Link to the Chat History Example Link
Link to the Chatbot Example Link