AI-Powered Report Summary & Chat in Krsnaa App

**Objective**

To help patients easily understand their medical reports by providing simplified, human-friendly explanations and interactive chat support through an AI assistant.

**Target User**

End-users of the mobile healthcare application—primarily patients who receive diagnostic reports (e.g., X-ray, CT, or lab reports) and may struggle to interpret medical jargon.

**Input & Output**

* Input: Patient's diagnostic report in text format (via API).
* Output:
  + Simplified summary explaining report findings in layman's terms.
  + Interactive AI chat responses for user queries about the report.

**Functionality**

* Parses the uploaded report text.
* Identifies positive or negative findings.
* Translates complex medical language into clear, basic explanations.
* Enables follow-up question answering via integrated AI chat.

**Workflow Integration**

1. User receives a diagnostic report in the mobile app.
2. App calls backend API to send report to the AI engine (Ollama LLM).
3. AI analyzes and generates a simplified summary.
4. Summary is sent back via API and displayed in the app.
5. Optional: User chats with the AI for further clarity.

**System Architecture Overview**

* Frontend: Mobile App (UI for reports and chat)
* Backend APIs:
  + Report parser and handler
  + Communication with Ollama LLM
* LLM Engine: Ollama (deployed locally or via container)
* Data Flow: App → API → LLM → API → App

**Benefits / Impact**

* Enhances patient engagement and understanding.
* Reduces dependency on clinical staff for basic queries.
* Builds trust by making health information accessible and friendly.
* Scalable solution for multiple report types.

**Summary**

This project integrates an open-source language model (Ollama) with our mobile app to deliver clear, conversational explanations of medical reports. It bridges the communication gap between clinical data and patient understanding—supporting a more informed and empowered patient experience.