**Project Title**

Smart Physician Assistant Application for Optimized Patient Care

**Overview:**

The proposed application is an innovative, AI-driven assistant designed to enhance the workflow of physicians by integrating an intelligent, large language model (LLM). The application will allow physicians and their administrative assistants to manage patient profiles and appointments efficiently while using advanced AI capabilities to assist in diagnosis and treatment suggestions. The final treatment plan will be made by the physician, leveraging both the AI's recommendations and their expertise.

**Key Features:**

1. **Physician Profile Management:**

Physicians can register and create their profiles, which include details like specialization, clinic address, availability, and contact information. This profile will be used for appointment scheduling and patient management.

1. **Patient Profile and Appointment Management:**
   * Both the physician and the administrative assistant can create and manage patient profiles. These profiles will store basic patient information, medical history, and appointment history.
   * The app will provide a seamless interface for scheduling, canceling, and managing patient appointments. Patients can contact the clinic for appointment bookings, which the physician or assistant can manage through the app.
2. **AI-Driven Symptom Analysis and Diagnosis Suggestions:**

During patient visits, the physician will input the patient's symptoms into the app. The integrated LLM will analyze the symptoms and:

* + Generate a list of possible diagnoses.
  + Rank the possible causes based on severity and likelihood.
  + Suggest potential treatment plans for each condition.

1. **Physician’s Decision-Making Support:**

While the AI will provide data-driven insights and recommendations, the final decision on the diagnosis and treatment plan remains with the physician. The physician can use the AI's suggestions to make informed, efficient medical decisions.

1. **Prescription Management:**

The app will allow physicians to create digital records of prescribed medicines for each patient. This record will be stored in the patient’s profile for future reference, reducing paperwork and improving the quality of care.