Hospital Management System

The project is a Hospital Management System designed to streamline patient care and administration. The hospital comprises 20 specializations, each with 10 doctors. Each doctor is responsible for managing up to 10 patients. Patients are categorized into two types: urgent and regular. Urgent patients are prioritized and placed at the front in the order of their arrival, while regular patients are placed after the urgent ones.

The system requires an admin to log in, with admin credentials securely stored in a file. The admin has a range of capabilities, including:­­­­

* **Managing Patient**: The admin can view the next patient for each doctor, process them, and automatically re-order the patient queue.
* **Adding Patients**: The admin can assign new patients to doctors. If a doctor is at full capacity, the system will automatically assign the patient to another available doctor.
* **Displaying Information**:
  + The admin can view all specializations along with the respective doctors and their patients with the status of each patient (urgent or regular).
  + View all the doctors with their patients in specific specialization.
  + view all patients under a single doctor.
  + display only doctors within a specific specialization.
* **Admin Management**: The system allows the admin to view all existing admins and add new ones as needed.

This system is designed to ensure efficient patient management and provide a comprehensive view of the hospital’s operations at any time.