**The Functional and Non-Functional Requirements of a Hospital Management System**

*Functional Requirement of the Hospital Management System*

1. Adding Patients: This hospital management system will enable staff to include new patients into the system.
2. Assigning an ID to the patients: This hospital management system will enable the staff specifically the administrator to provide a unique ID to each patient and then add them to the record sheet of the patient. This will enable the patient to utilize the ID throughout his or her stay in the hospital.
3. Mandatory Patient Information
4. Updating information of the patient: This hospital management system will enable users to update the information of the patient when deemed necessary.
5. Deleting Patient ID: The administrator can delete the patient ID from the system when the patient’s checkout from the hospital.
6. Availability of the Bed: The Hospital Management System will generate reports on the availability of the bed regarding the information like bed number occupied or unoccupied, ward name and many others.
7. Generating data from patients’ information which will aid in making it easy to identify patterns, trends, and outliers in large data sets.
8. The administrator of the hospital should be able to create departments.
9. The administrator should be able to send messages to the various users registered on the system.
10. The administrator should be able to add events to an exclusive calendar.
11. The administrator should be able to generate medical reports based on medical records.
12. The administrator should be able to set appointments between doctors and patients.
13. The administrator should be able to view all the patients that visited the hospital on that day.
14. The nurse and the doctor should be able to enter and update patient vitals.
15. The nurse and the doctor should be able to archive only patient vital sign records.
16. The nurse and the doctor should be able to view a progress table showing the patient’s visit progress.

*Non-Functional Requirement of the Hospital Management System*

1. Login ID: Any user who needs to get access into the system needs a Login ID and a password for security reasons.
2. Modifications: Any modifications like insert, delete, and update for the database can be synchronized quickly and executed by the administrator of the hospital.
3. Response Time: The system provides acknowledgement in a few seconds once the patient’s information is checked.
4. Availability: The system will be available all the time.

**Project Scope**

Dansoman Polyclinic is a government polyclinic in Dansoman, Ghana that has been accredited by the National Health Insurance Scheme (NHIS). Over the years, it has faced a lot of challenges in relation to customer services, hospital management systems, low resources and many others that have led to the poor performance of the hospital. It is known to be a hospital that the people of the vicinity heavily rely on. However, due to its insufficiency, they are made to travel longer distances to seek proper medical care.

Hence, the purpose of this online hospital management system is to help manage patient’s information, aid in the swift transfer of medical records for hospitals on the same medium and to be able to generate data from patients’ information which will aid in making it easy to identify patterns, trends, and outliers in large data sets. This database management system is to be mainly used by low resource hospitals like the Dansoman Polyclinic. This system is to help curb the use of hardcopies or the paper medical record system they are used to. This system seeks to make distance communication and data exchange more accessible, improve internal communication, improve medical treatment quality, and eliminate the outdated paper-based approach. In the era of the COVID-19 pandemic, it is expected that all work processes that make use of paperwork will be automated to reduce the spread of the virus. Furthermore, while the solution focuses on a hospital's internal operations, it also consolidates all hospitals and allows them to share medical records. With such a dedicated system in place, hospitals can better connect with their patients, improve the speed with which medical records are transferred, and increase patient happiness.

The system is based on a relational database with its hospital management and appointment functions.