# Hospital Management System Project.

Technology used: HTML, CSS, JAVASCRIPT, ELECTRON JS, NODE JS AND MONGO DB.

## Rationale for The Project

In recent times, due to covid, most companies are transferring their day-to-day activities onto a virtual platform. This project was to simulate the daily routine works of a hospital to a virtual platform: from registering patients all the way to handing over medicine to patient.

## WORK FLOW OF THE SYSTEM.

The system seeks to encompass the basic routines undergone in a hospital. In a **non-emergency case**, the patient first attends to the receptionist. The receptionist then searches if the patient has already been to the hospital. If not, the patient is directed to the finance department to pay for registration. From the finance department, the patient is then registered and then assigned to a doctor.

When the patient attends to the assigned doctor, the doctor examines him or her. If there is the case for a lab test, the doctor assigns the patient to the laboratory else the doctor prescribes medicine for the patient.

In the case where the patient is assigned to the lab, the data or tests to run is sent to the lab technician(s), however, the patient has to go to the finance department to pay for the lab tests.

When the patient pays for the lab tests, the lab technicians then gain access to view the tests to run. The results of the tests are then sent back to the doctor. Based on the outcome of the results, the doctor prescribes medicine for the patient.

Now, the patient goes to the pharmacy to take the drugs or prescribed medicines, however, payment must be made for the drugs before they are handed over to the patient.

When the drugs are handed over to the medicine, the patient’s profile is removed from the system and the same process is repeated in his or her next visit.

It is the admin who checks the progress of the hospital, and also registers workers into the department. The admin is the only one who can edit or delete a worker’s profile.

## VARIOUS COMPONENTS / DEPARTMENTS OF THE SYSTEM.

1. Reception
2. Finance
3. Consultation
4. Laboratory
5. Pharmacy
6. Administration

## Reception

The reception is the first department one will meet when he or she enters the hospital. The receptionist performs most of the basic roles in relating to a patient.

Roles of the reception.

1. Registers a patient.
2. Assigns a patient to a doctor.

## Finance

The finance department handles the money aspect from the patient to the hospital. The finance department is the at the heart of the hospital since almost all departments depends on data from the finance department to reach their maximum functionality.

Roles of the finance department.

1. Handles all money from the patient.
2. Set the respective profile of a patient in other to have access to certain paid services of the hospital.

## Consultation

The consultation department has to do mostly with the doctors. They are responsible for the diagnosis of the patient. A patient is assigned to a member of consultation department.

Roles of the consultation department

1. Diagnoses a patient
2. If needed, assigns a patient to the laboratory
3. Prescribes medicine to patients.

## Laboratory

The laboratory department is responsible for running lab tests assigned to patients by the doctor. Results from the tests are the sent back to the doctor.

Roles of the laboratory department.

1. Runs lab tests sent by the doctor.

## Administration

The administration is the heart of the hospital. The admin supervises the all the departments.

Roles of the administration department

1. Registers the workers of the hospital.
2. Views the progress of the department.
3. Has access to all the patients and workers in the hospital.

## Shortcomings of This System

Like said by Mark Zuckerberg, “*ideas do not come fully formed*” this project is not up to its maximum potential. With time, many advancements will be made to this system to help it reach close its maximum potential.

### Short Comings.

1. For an emergency situation, this system may not be helpful since doctors or nurses attend to such a person before even registering the patient.
2. Data sent between departments are only seen when the page is refreshed.

### Future of this project

1. Connect the whole system together in other to make the system work without refreshing it. On further research, it was seen that socket io can do that.
2. Provide room for an emergency case to have access to all the services without payment.