

### Requirements Specification

The Clinical Laboratory Management System is design based on computer applications students in order to illuminate the problem of the current system which provided by the system involved all the laboratory employees of this system. This accessibility of the information will be great advantage as it reduced further medical errors associated with physicians and nurses.

The system handles all aspects of storing Appointment and Sample Pickup information. It allows the lab in-charge to receive new batches of patients. Furthermore, the system eases the process of managing data in database.

On the other hand, CLMS enables dispensation process. It stores all the information about the tests available at the laboratory. A summarized list of patient's appointments, sample pickup can be viewed for monitoring purposes.

With the proposed system, the lab in-charge will be able to monitor the movement of the test with ease. The system is design to track the entry of refresh batches of patient's requesting appointments, sample pickup. It also monitors the test's list updating, thus leads to enabling the user to checkout various new tests available at the laboratory. Compared to the current manual system, the implementation of clinical laboratory management system will reduce the time spent for paperwork, leading to concentration on improving care of patients, especially emphasis on patients' counseling and patient medication monitoring. It will be greatly embraced by the laboratory profession.

### Overview

The Clinical Laboratory Management System provides functions on identify new patient booking appointment, requesting sample pickup, minimize human errors in managing

records, facilitate accessibility of test's information and information management among employees, providing tests update enable users with in significantly short period of time with showing the information about the new tests available at laboratory on services webpage, despite simultaneous usage of database for the purpose stated above.

The system will solve the problem of the current system by minimizing time wastage and reduce resources which simply change manual based system to computerized system.

## **4.1 Functional Requirements**

There are functions done by the system such as: store the necessary information of patient's appointments booking details, sample pickup details, showing tests available at laboratory and also providing forms for the patients to fill their details in for booking appointments, sample pickup or enquiry.

- **Appointment Booking:** Web Application should have a make appointment page in which patient will book appointments by providing their personal data Name, E-Mail, Phone and will select time slots morning and evening and Rs.50 will be charged extra for making an appointment online and a unique Appointment Id to be assigned to the patient booking appointment.
- **Sample Pickup Booking:** System should have a sample pickup page in which patient will book sample pickup by providing their personal data Name, E-Mail, Phone and will select test as Haematology, Serology, Urology or can select all the three tests and Rs.50 will be charged extra for Sample Pickup Booking and a unique Pickup Id to be assigned to the patient booking pickup.
- **Tests View Facility:** Patients can view various tests provided by laboratory and information about test includes: Category of Test, Name of Test, Specimen, Cost.

- Enquiry Facility: Patients can post queries to laboratory by providing their Name, E-Mail, Message.

## **4.2 Non-Functional Requirements**

This Laboratory management system is able to operate in the following characteristics.

- Usability: Any familiar in using windows operation can operate the system since it has user friendly user interface.
- User Interface: The user interface is friendly which is easy to use. And having attractive frame structure which is prepared in assumption with other related systems.
- Operation: The Laboratory management system is operated and controlled by the lab in-charge for safe work.
- Support-ability: This Laboratory management system operates in any version of windows operating system, web browser. Such as Google Chrome, Apple Safari, Mozilla Firefox, Internet Explore and other related versions. The system can be easily maintained by the admin.