#### **SYNOPSIS**

#### 1. Title of the project:

**Laboratory Management System** 

#### 2. Introduction and objectives of the project:

The City Laboratory prestigious diagnostic lab is located at CBT, Dharwad. Huge numbers of patients daily visit the laboratory for various medical tests.

The purpose of the laboratory is the commitment to patients Life, Health and Care. Life summarizes their philosophy of protecting our patient's wellbeing and quality of life. Health is the clinical excellence to provide service and facilities to the patient.

#### 3. Objectives:

The main objective of the Laboratory Management System is to manage the complete information about the patient, lab information, testing schedule, test price list, sample collection instruction, online report details, and so on.

The patient can get the appointment and the test reports and guidance (if any) online.

The purpose of the project is to build a website to reduce the manual work for appointments, managing test reports, information of patients, etc.

The patient can visit the website and know which all the pathology tests are conducted and they can easily register themselves to a particular test and schedule their visit. They can also get their test reports online.

Each patient's details should be maintained and send notifications as and when required

#### 4. Modules:

- Login & Registration: User can login or create a new account using email & password
- technician details: user can view the information about the technician
- Online appointment: User can get the appointment online
- Online report: User can get the test report online
- notification: a message is sent to the patient to know appointment date and time
- reports: monthly reports can be generated
- Admin: admin can get the request and give the appointment

#### 5. Input of the project:

- Patient details
- Test details
- Registration details
- Appointment details
- Transaction details

#### 6. Output of the project:

- Notifications
- Test results/reports
- Payment details
- Guidance
- Invoice/Bill

# 7. Tools/platform, hardware and software requirement specification:

#### **Hardware requirements:**

Hard disk : 100 GB or above
Processor : Core i3 or above
RAM : 2GB or above

#### **Software requirements:**

Operating system: Windows 7 or above

• Front End : HTML, CSS

Middleware : PHP

Back End : MySQL

• Scripting : JavaScript

• Server Software :WAMP server

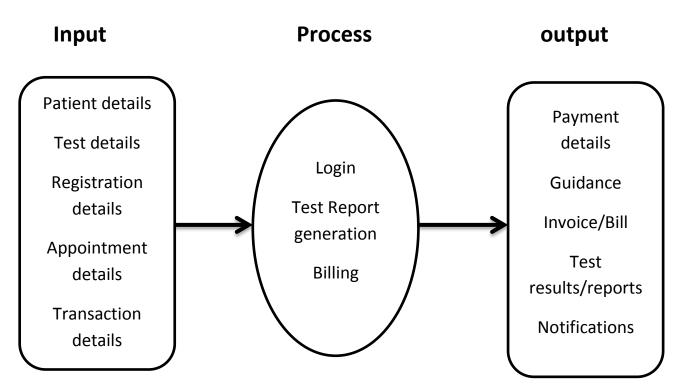
#### 8. Problem definition:

- The problem with the firm is that when a patient needs to get the appointment, he/she needs to visit the laboratory to get an appointment. For many patients, this is time consuming.
- After tests, the patient again has to wait until the testing is done to get the test results/reports.
- Details about the tests and patient records are maintained manually which is a tedious task. Hence there might be data loss as well.
- In emergency, it may take a very long time to search data of a particular patient.

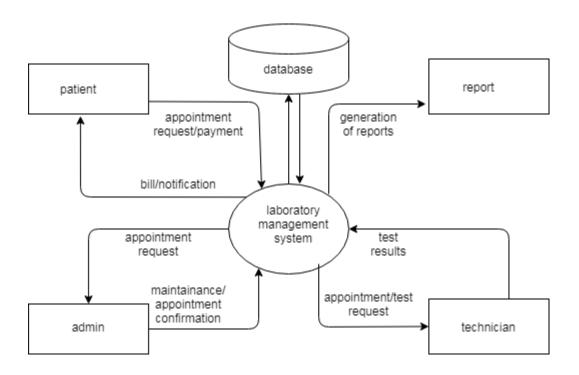
#### 9. Solution:

- The patients can schedule the appointments online. No need to visit the laboratory prior.
- Post testing, the results will be sent to the patient online, and he need not wait at laboratory.
- Reduce manual work and maintain patient details.
- In emergency, data of a particular patient can be retrieved easily.

### 10. Process logic:



## 11. Data flow diagram:



# 12. Members of the project:

- Manjunath M. Hongal (18U11158)
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## 13. Limitations of the project:

- No multi-language support
- There is no live interaction between doctor and patient

## 14. scope of the project:

- Multi-language support can be implemented
- Live interaction between doctor and patient can be implemented