



COVID-19 TESTING MANAGEMENT SYSTEM

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ABSTRACT

Nowadays, COVID19 Management System is one of the most essential tools that are mostly used in Testing Lab; it is mostly used to manage COVID19 medical lab related activities. In this project we tried to develop a computerized and web based COVID19 Testing management system. Our main intention is to allow this application to be used in most retailing COVID19 lab, where a small point of customization will be required to each COVID19 lab in the implementation period. This system is designed to overcome all challenges related to the management of diagnostic that were used to be handled locally and manually.

1) INTRODUCTION

COVID19 Testing Management System is web-based technology which brings up various diagnosis works online. Here patients are first allowed to register on the website and provide personal, test information. Once registered with their address and contact details, the patients may now see a variety of tests conducted by the lab. The patient will select the required test and book appointment after that lab center send a lab boy at registered address to collect a sample. After successful sample collection patient can track their test history using the name, order and registered mobile number. The system allows admin to attach a copy of the report into the system and automatically shown on user side so user can download report. In COVID19 Testing Management System we use PHP and MySQL database. It has two modules i.e.

1. **Admin.**
2. **User (Patient)**

Admin Module

- The admin can see all detail in brief like the total, assigned and the sample collected and completed tests.
- Manages Phlebotomist (add, update, delete).
- Manages all the tests like assign the test to Phlebotomist and update the history.
- Two types of report will be generated. One is between dates reports and another one is by search. Admin can search the report by order number, name and mobile number.

User (Patients) Module

- New user needs to provide testing Information. A registered user needs to provide test information
- Users can also search their test report using order number, name and registered mobile number.

2) PURPOSE

The main purpose of COVID-19 Testing Management System to provide a platform where patient can book the test online and get their COVID-19 test done at home. With the help of this project we are bringing the use of technology in the field of medical diagnosis where patients can avail all the diagnosis facilities at their door steps. Another purpose for developing this application is to generate the report automatically at the end of the session or in the between of the session.

3) SCOPE

Today also we have to go to the COVID19 Test Lab center, wait in the queue to get our COVID19 test done. As Technology is growing rapidly, we are also moving to a technical world where everything we want to be online. So, with the help of this project we are bringing the use of technology in the field of medical diagnosis where patients can avail all the diagnosis facilities at their door steps. This project makes the diagnosis process easy and reduces the burden of patients. At a same time, its help the diagnostic center to track all their patients details with their test reports. This access friendly software provides quick and effective services which helps the diagnostic center to increase their sales and profit.

ADVANTAGES

- The system allows automate diagnosis system. Allows for faster service.
- Allows increased sales and profits for diagnostic labs.
- Report generation will help made it easy to analyze the performance.

DISADVANTAGES

- NOT USER FRIENDLY: The present system not user friendly because data is not stored in structure and proper format.
- MANUAL CONTROL: All report calculation is done manually so there is a chance of error.
- LOTS OF PAPER WORK: Visitors maintain in the register so lots of paper require. storing details.

4) DESIGN AND ANALYSIS

Today also we have to go to the diagnostic center, wait in the queue to get our COVID-19 test done. As Technology is growing rapidly, we are also moving to a technical world where everything we want to be online. So, with the help of this project we are bringing the use of technology in the field of medical diagnosis where patients can avail all the diagnosis facilities at their door steps. This project makes the diagnosis process easy and reduces the burden of patients.

5) FACILITIES REQUIREMENTS

Hardware Requirements	
Processor:	Intel core i5
Hard Disk:	1 TB HDD
RAM:	8GB
Network Connection:	WIFI

SOFTWARE REQUIREMENT	
Output Software	Google chrome
Designing Languages	CSS
Designing Framework	BOOTSTRAP
Back end tool	MYSQL
Server Side Language	PHP 5.5
Code Editors	Sublime text

Server software	XAMPP
Database	MYSQL 5.X
BrowserScripting Languages:	JavaScript

6) CASE DIAGRAM

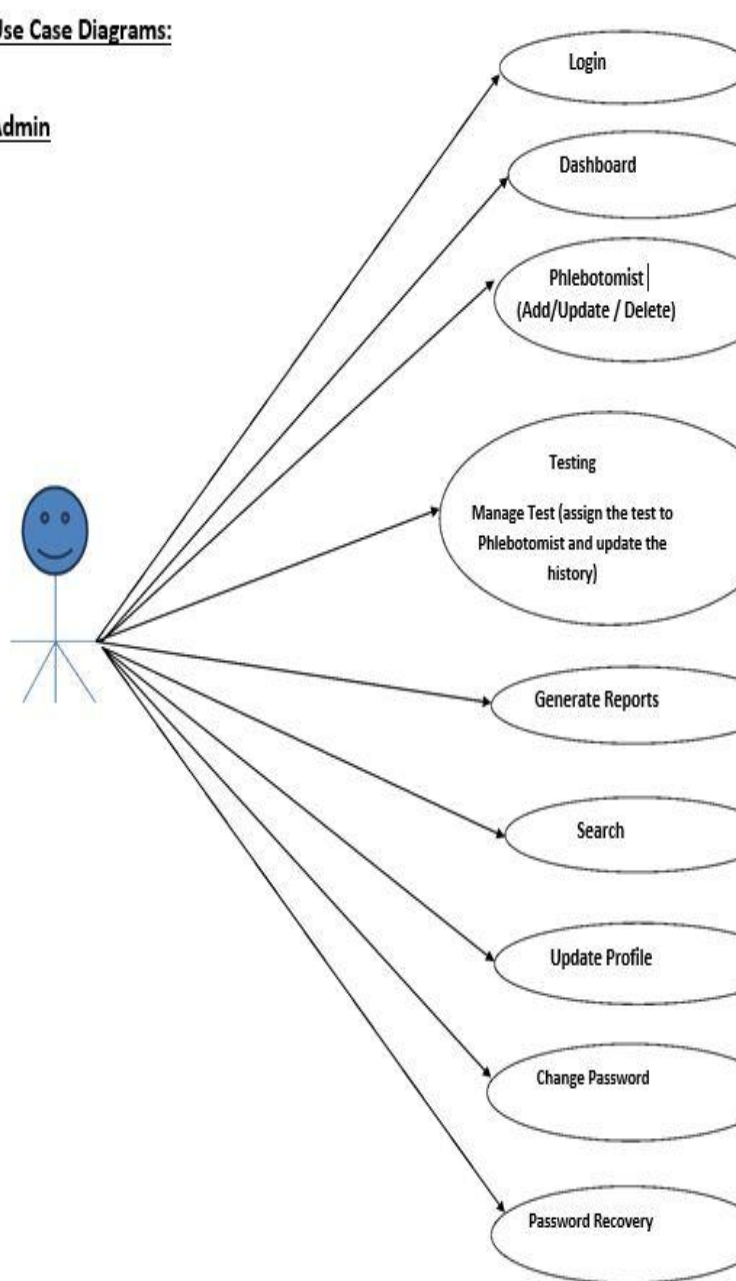
Use case diagrams model behavior within a system and helps the Developers understand of what the user require. The stick mans represents what's called an actor.

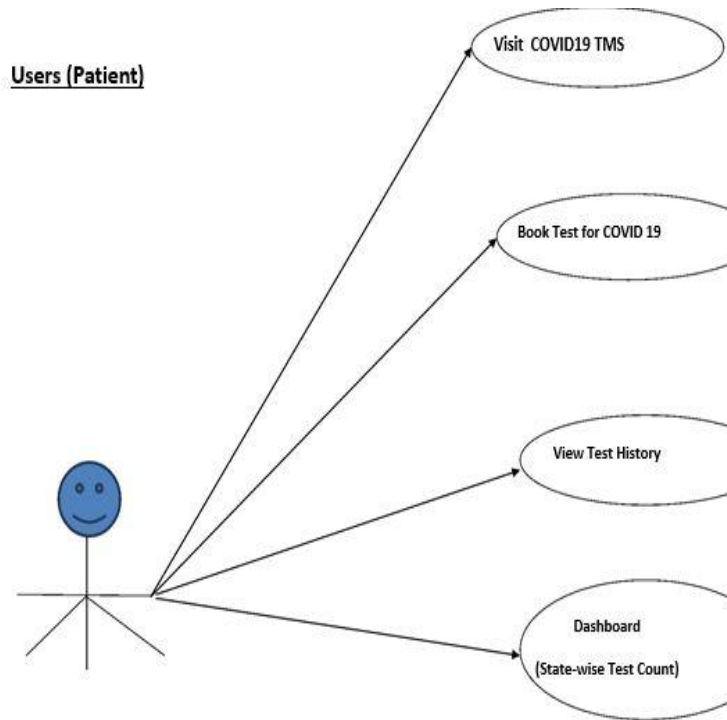
Use case diagram can be useful for getting an overall view of the system and clarifying that can do and more importantly what they can't do.

Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.

Use Case Diagrams:

Admin

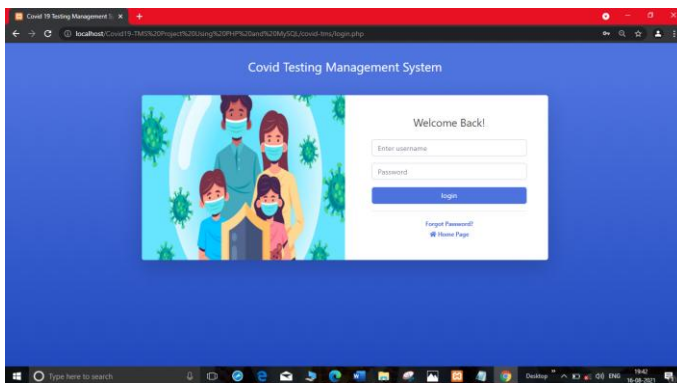
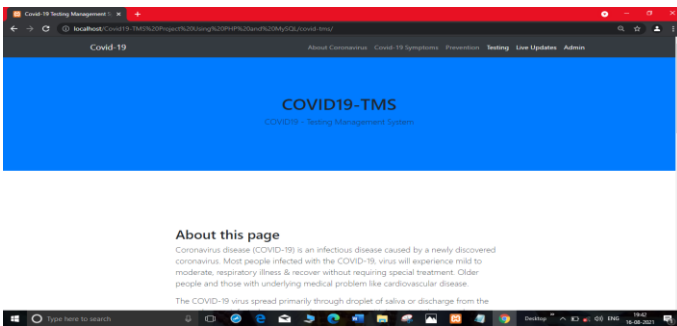




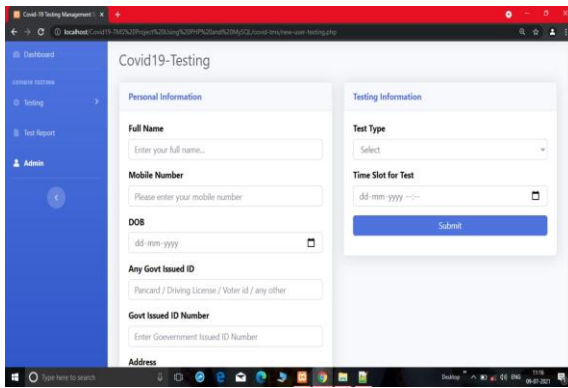
7) EVALUTION:

Project URL: <http://localhost/c19tms>

HOME PAGE



NEW USER (PATIENTS) TEST BOOKING



The screenshot displays a web browser window titled "Covid 19 Testing Management". The main content area is titled "Covid19-Testing" and contains a registration form. The form is divided into two columns: "Personal Information" and "Testing Information".

Personal Information:

- Full Name:** A text input field with the placeholder "Enter your full name..".
- Mobile Number:** A text input field with the placeholder "Please enter your mobile number".
- DOB:** A date selection field with the format "dd-mm-yyyy".
- Any Govt Issued ID:** A text input field with the placeholder "PanCard / Driving License / Voter id / any other".
- Govt Issued ID Number:** A text input field with the placeholder "Enter Government Issued ID Number".
- Address:** A text input field.

Testing Information:

- Test Type:** A dropdown menu with "Select" as the current value.
- Time Slot for Test:** A date and time selection field with the format "dd-mm-yyyy --:--".
- Submit:** A blue button.

8) CONCLUSION

COVID19 Testing Management System is very much graceful and lively. Users have to register to the portal by giving their details and then they can take appointment through online with minimal effort. The Phlebotomist comes to patient address to collect the sample. Once test is done and test report is generated patient can download the report by logged in to the portal. This system can be implemented in diagnostic labs and clinics.

REFERENCES

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