



**GUJARAT
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Chandkheda, Ahmedabad



Affiliated

GANDHINAGAR INSTITUTE OF TECHNOLOGY

A Report on

Labs and Services

**Under the subject of
Design Engineering – 1A
B.E. II, Semester-III
(Computer Engineering Department)**

Submitted By

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Abstract

If a person needs a blood test that is not available at the right time because of Time management or in an emergency, what should the person do?

With this domain, the blood tests can be scheduled in any nearby laboratory and the people will be notified about the reports when they will be generated. People can check out the nearby laboratories for giving their blood samples anytime or in case of emergency as well. Old-age people or patients who cannot reach the laboratory can explore and book a blood test in a laboratory and they will reach their specified destination to take the sample.

Index

1. Introduction	1
1.1. About Domain/Area	
1.2. About the Definition	
1.3. Users	
1.4. Modules and Functionalities	
2. Literature Review	2
2.1. Existing System	
2.1.1. Working of Current System	
2.1.2. Shortcoming of Current System	
2.1.3. Needs of new system	
3. System Design	4
3.1. AEIOU	
3.2. Mind map	
3.3. Empathy	
3.4. Product Development Canvas	
3.5. Ideation Canvas	
3.6. Rough Prototype	
3.7. Learning Needs Matrix	
4. Conclusion and Future Scope... ..	11
4.1. Limitations of our Project	
4.2. Conclusion	
4.3. Future Scope	

1. Introduction

1.1. About Domain/Area

- The Domain is targeted to better the convenience of the Blood test System.
- The aim of the idea is to save patient time and get fast treatment as they can.
- This system will decrease time and give efficient service.

1.2. About Definition

- This is an online website mainly used for online booking for blood test, to receive reports online and to pay fees online.
- People can book the appointment easily and make sure that at that time of period they are free.

1.3. Users

- Medical Laboratory Scientist (MLS)
- Patient
- Receptionist
- Lab Administrator

1.4. Module and Functionality

- Any Time
- Any Place (Home/office/Laboratory)
- Get their Report Online
- Online Payment
- They can select any nearby laboratory for blood test

2. Literature Survey

2.1. Existing System

- In existing system, there is very high cost for a blood test.
- There is not an option for the choice any laboratory for the blood test there is only one laboratory which is connected with the existing system
- Like PharmEasy, Medlife, TATA 1mg, etc.

2.1.1. Working of the current system

- They will book the time slot and collect blood sample from the home only.
- Sometimes they are gives report of blood test as per time but sometimes they don't give blood test report as per time.

2.1.2. Shortcomings

- In Current System, there are no option to choose different laboratory.
- What if laboratory don't give blood test as per time.
- The current system dose not deal with the emergency cases.

2.1.3. Needs of a new System

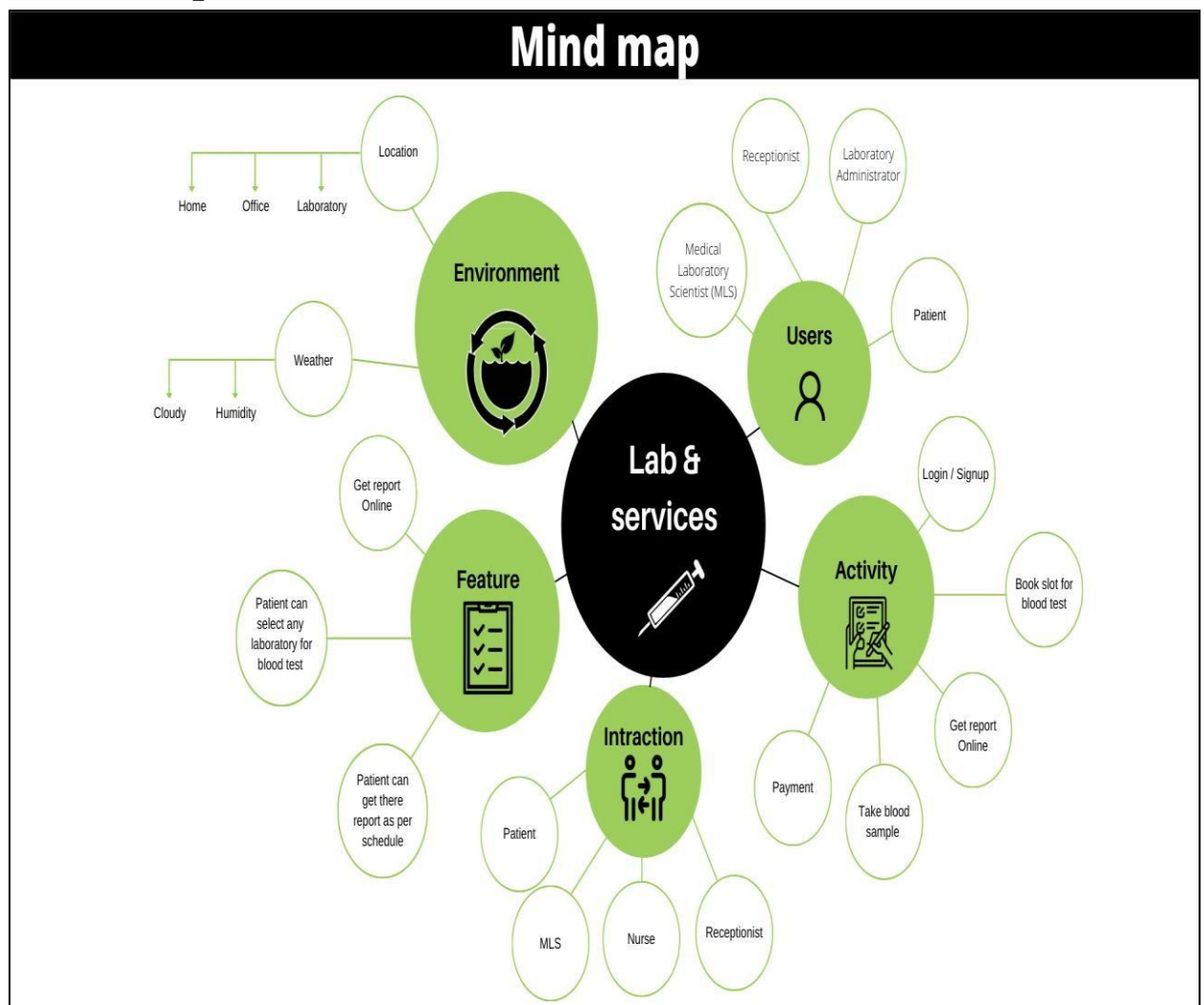
- To Enhance the Existing System, New system does not need any operator
- The system is fully automatic.
- Dynamically changing of Laboratory duration Using Traffic Density analysis
- In emergency cases blood test are required

3. System Design.

3.1. AEIOU

AEIOU Summary:		Group ID:	Date:
		Domain Name:	Version:
Environment: Location :- (1) Home (2) Office (3) Laboratory Weather :- (1) Cloudy (2) Humidly	Interactions: Patient MLS Nurse Receptionist	Objects: Get Report Online Patient Can Select Any Laboratory For Blood Test Patient Can Get There Report as Per Schedule.	
Activities: Login / Sign up Book Slot for Bblood Test Get Report Online Tack Blood Sample Payment		Users: Patient Laboratory Administrator Receptionist Medical Laboratory Scientist (MLS)	









3.2. Mind map



3.3. Empathy





Design For	Design By
Date	Version
USER Medical Laboratory Scientist (MLS) Patient Receptionist Lab Administrator	STAKEHOLDERS Lab Owner Patient Lab Administrator Medical Laboratory Scientist (MLS)
ACTIVITIES Online Appointment For Blood Test At Any Availabble Time And Place (Home Or Laboratory). Patient Can Also View Different Type Of Lab And It'S Profile And Can Also Give Feedback To The Hospital And Also View The Previous Feedback Given By The Other Patients. The Patients Can Also Directly Pay For The Appointment Via Any Payment Gateway. They Can View And Download Their Reports.	

3.4. Product Development Canvas

Product Development Canvas		Team/Date/Version: / /
Purpose  To Provide Fast Blood Testing To Get Fast Blood Test Report Or To Get Blood Test Report As Per Time In Serious Conditions.	Product Experience  Feeling Comfortable Good Service	Customer Revalidation  Easy For Patient Easy For Laboratory Employee Patient Satisfied
	Product Functions  To Book A Slot For Blood Testing Where Patient Want	
	Product Features  Get Reports Online User / Patient Can Select In Which Laboratory They Want To Call A Nuser For A Blood Report. Any Place	
People  Medical Laboratory Science (MLS) Patient Labb Owner Lab Administrator Receptionist	Components  Internet Smartphone	Reject, Redesign, Retain  Make Quick Responses Verified Reports

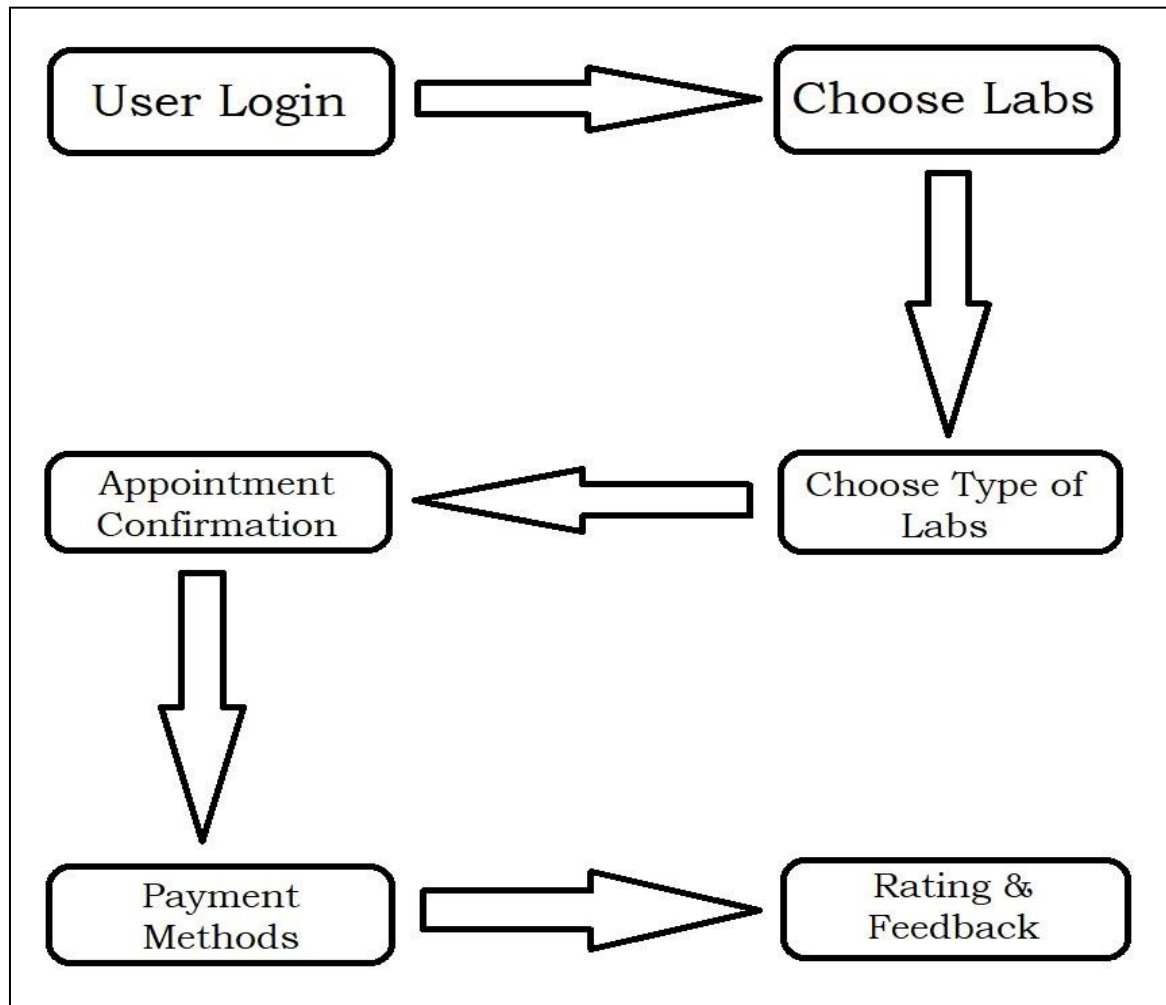
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3.5. Ideation Canvas

The Ideanaut: <i>Ideation Canvas</i>		Project:	Team :
 People Patient Who Want To Test Team Blod Or Who Wants There Full Body Checkup.			
 Activities Time Allotment Reservation Appointment Confirmation	 Situation/Context/Location Situation :- Emergency Like Covid Or Any Unpleasant Situation. Context :- Helth , To get proper Treatment. Location :- Home , Laboratory , Office		
 Props Laboratory Equipment Internet Pacient MLS			

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3.6. Rough Prototype



3.7. Learning Needs Matrix

Learnings Need Matrix		Group ID: _____	Date: _____
<i>Tools/ Methods/ Theories/ Application Process involved</i>	During BE IV / Stage III	<i>Applicable standards and design specifications/ Principles & Experiments</i>	
<div style="border: 1px dashed gray; padding: 10px; margin: 10px auto; width: 80%;"> <p style="text-align: center;">During BE III / Stage II</p> <div style="border: 1px dashed gray; padding: 10px; margin: 10px auto; width: 60%;"> <p style="text-align: center;">During BE II / Stage I</p> <div style="border: 1px solid gray; padding: 10px; margin: 10px auto; width: 40%;"> <p style="text-align: center;">Finding Requirments</p> <p style="text-align: center;">Building Basic Prototype</p> <p style="text-align: center;">Purpose / Product concept</p> <p style="text-align: center;"><i>Labs & Servives</i></p> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">Data Analysis</div> <div style="text-align: center;">Canvas</div> </div> </div> </div>			

4. Conclusion and Future Scope

4.1. Limitation of our project

- In some weather condition our software and laboratory may not give proper result or proper service.
- Maintenance required
- The system will handle emergency cases in better way.

4.2. Conclusion

At the end of this project, we design software that vary duration of signal timing as signal timing as per this Website is implemented in real life, we save time of all people and also save the patient life and patient can get the treatment as soon as possible in emergency, The cost of the test will be compared to low from other laboratory .

4.3. Future Scope

Future Enhancement of This project is:

- We will make an application for it.
- We improve the performance and Security.
- We create an application for every person in the world can use this application at any place in the world.