AUTOMATION OF MOBILE MEDICAL UNIT

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LABORATORY MODULE

USER MANUAL

VERSION 1.0

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1. Introduction

The overall objective of the laboratory module is to follow a comprehensive approach to manage the sample and result validation against lab investigation. This module manages the lab process against the patient's investigation which has been advised by doctor during OPD consultation. The lab process involves the sample collection, sample validation, result entry against the validated sample and result validation. It allows the user to view the lab history and download it in PDF format.

2. Brief Overview

2.1 Features

This module manages the following features:

- Pending for sample collection and validation
- Pending for result entry and validation
- Lab history

2.2 Target Users

The following users can access the reception and registration module:

1. Lab technician
2. Doctor

3. Detailed requirement

3.1 Pending for sample collection and validation

3.1.1 Description

This functionality allows the user to capture and validate the sample collection details of the patient who has been advised for laboratory investigation by doctor during OPD consultation. It captures the order details, patient details and sample details. The user can also search the individual patient based on different search option including patient name or mobile number.

3.1.2 Prerequisites

1. The user is logged-in into the application and is having access to "Pending list of sample collection and validation" page

2. Lab investigation is advised by doctor during OPD

3.1.3 Screenshot

Pending For Sample Collection and Validation

| Patient Name | Enterable | Mobile No | Enterable | Search | Show All |

2 matches   Go To Page [ ] [Go] << < Page 1 of 1 > >>

Order Date	Patient Name	Mobile No	Age	Gender	Department
05/10/2021	Amit	9971182412	21 years	MALE	GENERAL OPD
05/10/2021	Astha	1111111111	32 years	FEMALE	GENERAL OPD

3.1.4 Field Description

S. No	Field Name	Description
Search		
1	Patient Name	It refers to the name of patient whose details need to be searched for sample collection and validation.
2	Mobile No.	It refers to the mobile number of the patient whose details need to be searched for sample collection and validation.
Table		
3	Order Date	It refers to the date when doctor has advised for laboratory investigation during OPD
4	Patient name	It refers to the name of the patient
5	Age	It refers to the age of the patient
6	Gender	It refers to the gender of the patient
7	Mobile number	It refers to the mobile number of the patient
8	Department	It refers to the department name where OPD is completed
Main page		
9	Order Date	It refers to the date on which the doctor advised for laboratory investigation during OPD consultation for patient. it is displayed in read only mode
10	Order Time	It refers to the time at which the doctor advised for laboratory investigation during OPD consultation for patient. It is displayed in read only mode
11	Sample ID	It refers to the sample ID number generated against the patient's investigation during OPD.
12	Department name	It refers to Department name where OPD is completed. It is displayed in read only mode
13	Patient name	It refers to the name of the patient. It is displayed in read only mode
14	Age	It refers to the age of the patient. It is displayed in read only mode
15	Gender	It refers to the gender of the patient. It is displayed in read only mode

16	Mobile number	It refers to mobile number of the patient. It is displayed in read only mode
17	Date	It shows the date when the sample is collected and validated. it is displayed in read only mode
18	Time	It shows the time when the sample is collected and validated. it is displayed in read only mode
19	Collected/ Validated By	It refers to the name of lab technician who has collected and validated the sample. it is displayed in read only mode
20	Investigation	It refers the investigation name entered by the doctor during OPD. It is displayed in read only mode
21	Sample	It refers to the sample name against investigation name. it is displayed in read only mode
22	Container	It refers to the name of the container in which sample is collected. it is displayed in read only mode
23	Collected/ Validated	It defines whether the sample, is collected or not. If sample is collected and validated, the checkbox needs to be marked.
24	Remarks	It refers to the remarks entered by lab technician against sample collection and validation

PENDING FOR SAMPLE COLLECTION AND VALIDATION form contains following **BUTTONS:**

SEARCH: This button allows the user to search the record based on any of the search parameters (patient name and mobile number)

SHOW ALL: This button allows the user to display the list of all patients whose sample collection/ validation is pending

SUBMIT: This button allows the user to submit the sample collection/ validation details

RESET: This button allows the user to clear the entered data

Back: This button allows the user to redirect to previous page (pending for sample collection and validation) from current page (sample collection and validation)

Back to List: This button allows the user redirect to pending for sample collection and validation list from sample collected/validated

3.1.5 Flow

Steps of process flow:

1. Click on "Laboratory → Pending for sample collection and validation" link
2. Enter any of the search parameter (Patient name, Mobile number)
3. Click on search button, Record will filter down based on search parameter
4. Click on the record to get sample collection and validation details as shown below:

5. Check/ uncheck the checkbox and enter remarks (if any)
6. Click on submit button to submit the sample collection and validation details
7. Click on Reset button to clear the entered data
8. Click on back button to redirect pending for sample collection/ validation page from sample collected/ validated page

3.1.6 Messages

S. No.	Message	Reason	Expected Action from the user
1.	At least one option must be entered	This message indicates that the nothing has been entered for search	User needs to enter any of the search parameters (patient name, mobile number) before clicking on submit button.
2.	No record found	The message indicates that wrong search details are entered before clicking on Search button	User needs to enter the valid search parameter for search

3.2 Pending for result entry and validation

3.2.1 Description

This functionality allows the user to capture and validate the sample result details of the sample collected and accepted against individual patient. The result is entered and validated against those patient records which are displaying in the waiting list. The specific patient record can be identified by using the search parameter like patient name or mobile number. It captures the patient details and result entry details of the patient.

3.2.2 Prerequisites

1. The user is logged-in into the application and is having access to "Pending for result entry and validation" page
2. Sample of patient should be collected and validated

3.2.3 Screenshot

3.2.4 Field Description

S. No.	Field Name	Description
Search		
1	Patient Name	It refers to the name of patient whose details need to be searched for result entry and validation.
2	Mobile Number	It refers to the mobile number of the patient whose details need to be searched for result entry and validation.
Table		
3	Sample ID	It refers to the unique system generated number while sample collection
4	Patient Name	It refers to the name of patient
5	Age	It refers to the age of patient
6	Gender	It refers to the gender of patient
7	Mobile Number	It refers to the mobile number of the patient for communication purpose
8	Sample collected/ validated by	It refers to the name of person who has collected and validated the same of patient

Main page		
9	Collection Date	It refers to the date on which sample is collected and validated. It is displayed in read only mode
10	Patient name	It refers to the name of the patient. It is displayed in read only mode
11	Age	It refers to the age of the patient. It is displayed in read only mode
12	Gender	It refers to the gender of the patient. It is displayed in read only mode
13	Date	It refers to the date on which result details needs to be entered and validated. It is displayed in read only mode
14	Time	It shows the time at which result details needs to be entered and validated. It is displayed in read only mode
15	Entered/ Validated by	It refers to the name of person who has entered and validated the result details
16	Sample ID	It refers to the unique system generated number while sample collection .it is displayed in read only mode
17	Investigation	It shows the investigation name against which the sample result is entered/ validated. It is displayed in read only mode
18	Sample	It refers to the sample name mapped with the investigation name
19	Result	It refers to the result to be entered and validated against the investigation name
20	Units	It refers to the unit name against sample name
21	Normal range	It refers to the normal range of the investigation. It is fetched from backend and is displayed in read only mode.
22	Remarks	It refers to the remarks(opinion) given by the lab technician against sample result entry/ validation

PENDING FOR RESULT ENTRY AND VALIDATION FORM contains following **BUTTONS:**

SEARCH: This button allows the user to search the record based on search parameters (Patient name, Mobile number)

SHOW ALL: This button allows the user to display all the list of patient's investigations whose result entry/ validation needs to be entered

SUBMIT: This button allows the user to submit the form

RESET: This button allows the user to clear the entered data

View Report: This button allows the user to download lab investigation report in PDF format

Back to List: This button allows the user redirect to pending for result entry and validation waiting list from result entered details

Back: This button allows the user redirect to pending for result entry and validation waiting list from pending for result entry/ validation details

3.2.5 Flow

Steps of process flow:

1. Click on "Laboratory → Pending for Result Entry and validation".
2. Enter any of the search parameter (Patient name, Mobile number)
3. Click on search button to filter the record
4. Click on the record to get result entry / validation details

5. Enter and validate the result details
6. Click on back button to redirect pending for result entry and validation waiting list from pending for result entry/ validation details
7. Click on submit button to submit the form.
8. After clicking on submit button, now it will redirect to report page as shown below:

9. Click on view report button
10. After clicking on view report button, a popup will open which allows the user to download/print the lab investigation report as shown below:

11.   Click on save button to download the lab investigation report in PDF format and save on user's system

12.   Click on print button to print the lab investigation report

13.   Click on back to list button to redirect pending for result entry and validation waiting list from report page

3.2.6   Messages

S. No.	Message	Reason	Expected Action from the user
1.	No record found	The message indicates that wrong search details are entered before clicking on Search button	User needs to enter the valid search parameter for search
2.	At least one option must be entered	This message indicates that nothing is not being entered for search	User needs to enter the any of the search parameter (patient name, mobile number)

3.3 Lab History

3.3.1   Description

This functionality allows the user to view the laboratory results which are entered or validated of patient. The user can view the lab history based on any of the search parameters like mobile number, patient name, investigation name and date range (From and To date). The user can also download the lab report in PDF format.

3.3.2 Prerequisites

1. The user is logged-in into the application and is having access to "Laboratory →Lab history" page

2. The results are entered and validated

3.3.3 Screenshot

3.3.4 Field Description

S. No.	Field Name	Description
Search		
1	Mobile number	It refers to the mobile number of the patients whose lab result needs to be searched.
2	Patient Name	It refers to the patient name whose lab result needs to be searched.
3	Investigation name	It refers to the investigation name against whom the lab result is entered/validated
4	From and To date	It refers to the date range within which the lab result is entered/validated
Table		
5	Investigation date	It refers to the date when the result is entered and validated in the system
6	Patient name	It refers to the name of patient whose lab history needs to be viewed
7	Mobile number	It refers to the mobile number of the patient
8	Gender/ Age	It refers to the gender/age of patient
9	MMU name	It refers to the name of MMU or camp where lab investigation is advised
10	Investigation name	It refers to the investigation name against whom the lab result

		is validated
11	Unit	It refers to the unit mapped with individual investigation name
12	Result	It refers to the result which is entered and validated in the system against individual investigation name
13	Range	It refers to the range mapped with individual investigation
14	Entered by	It refers to the user who has entered the lab investigation details
15	Validated by	It refers to the user has validated the lab investigation details
16	Action	It allows the user to download the report in PDF format

LAB HISTORY FORM contains following **BUTTONS:**

SEARCH: This button allows the user to search the record based on search parameters (mobile number, Patient name, From and To date)

REPORT: This button allows the user to download the lab investigation report in PDF format

SHOW ALL: This button allows the user to view all records

3.3.5 Flow

Steps of process flow:

1. Click on "Laboratory → Lab history".
2. Enter/Select any of the search parameter (mobile number, patient name, investigation name, From date and To date)
3. Click on search button
4. The system will display the data as follows:

5. Click on Report button
6. After clicking on report button, a popup will open which allows the user to download/print the lab investigation report as shown below:

7.   Click on save button to download the lab investigation report in PDF format and save on user's system

8.   Click on print button to print the lab investigation report

3.3.6 Messages

S. No.	Message	Reason	Expected Action from the user
1.	No record found	The message indicates that no lab history is available against the entered/ selected search parameters	User needs to enter/ select the valid search parameter for search
2.	At least one option must be entered	This message indicates that search parameters is not selected/ entered before clicking on Search button	User needs to enter/ select the search parameter