



Sri Lanka Institute of Information Technology

Information Technology Project

Year2, Semester 2 - 2023

Project Charter

Title of the Project :	Laboratory Information Management System for Medi Line	
Campus & Batch :	Malabe-2023-Feb-Y2.S2.WD.8.2	Group No: T104
Development Technology :	Mongo DB, Express, React, Node Js	

Description of the Project:

Medi Line is a small, independently owned and operated laboratory located in Athurugiriya. The laboratory was founded in 2016. The laboratory focuses on providing routine clinical laboratory services such as hematology, biochemistry, and clinical chemistry to locals.

The need for building a Laboratory Information Management System (LIMS) for Medi Line arose as the laboratory is currently using a file-based system to track and manage most of their information.

Our LIMS is designed to manage and organize laboratory data and workflows. The system typically includes features such as data collection, data storage, data analysis, and reporting capabilities.

The LIMS is important to the laboratory because it is specially curated for their requirements. It helps to improve the efficiency and accuracy of laboratory operations. By providing a centralized location for data storage and management, the LIMS makes it easier to access and analyze data, which can help to improve decision-making and research outcomes.

Details of the Group Members: *(Provide the details of the group leader in the first row)*

	Name with Initials	Registration Number	Contact Phone Number	Email
1.	Gunawardana.U.G.C.D	IT21237904	0771504890	it21237904@my.sliit.lk
2.	Gunathilaka.L.P.N	IT21286414	0713197055	it21286414@my.sliit.lk
3.	Surendra.D.M.B.G.D	IT21273230	0766564391	it21273230@my.sliit.lk
4.	Wijerathne.B.N.B	IT21216046	0701803202	it21216046@my.sliit.lk
5.	Gunasekara.G.G.K.T.A.V	IT21268694	0706646000	it21268694@my.sliit.lk
6.	Perera.M.A.S.S	IT21214752	0714282414	it21214752@my.sliit.lk
7.	Senadheera.S.A.A.D	IT21219252	0725060868	it21219252@my.sliit.lk
8.				



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List of Functions Developed by the Group Members:

	Name with Initials	Brief Description of the Function
1.	Gunawardana.U.G.C.D	<p>Sample and Test Results:</p> <p>This function allows users to manage tests that have been ordered. This includes collecting and labeling samples, recording results, and the ability to search for specific samples or test records. Furthermore, it should generate reports on test results. Additionally, it includes a feature that notifies patients once the test report is ready.</p>
2.	Gunathilaka.L. P. N	<p>Registration and Billing:</p> <p>This function allows users to manage patient registration and billing information. Patient demographics and contact information is stored and managed. Then patients could be billed on available tests on the system. It also includes searching for specific patient records. Additionally, it should generate reports on bills and invoices.</p>
3.	Surendra.D.M.B.G.D	<p>Income and Expenses:</p> <p>This function allows users to manage the financial aspect of the system. It provides the ability to perform crud operations on income and expense records, and finally calculate income from sales and search records based on date. Additionally, the function provides the ability to generate reports on trends and patterns in sales.</p>
4.	Wijerathne.B.N.B	<p>Dashboard and Login:</p> <p>This function allows user access and authentication (login). This includes creating and managing user accounts, setting user privileges, password management, searching for specific system logs, and generating reports on system usage.</p> <p>Also, there will be a dashboard summarizing information that is important to the user.</p> <p>Additionally, it provides a backup and restore option to back up the database and export files and restore them.</p>



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5.	Gunasekara.G.G.K.T.A.V	<p>Inventory:</p> <p>This function allows users to manage inventory items. This includes managing lab equipment and chemicals, reordering supplies, and tracking inventory levels. Users can also search for specific items. Additionally, it should have the ability to generate reports on inventory levels and usage.</p> <p>Additionally, it will have a feature to notify when the inventory is low.</p>
6.	Perera.M.A.S.S	<p>Machines:</p> <p>This function allows users to manage machines in the laboratory. It includes maintaining a record of all the machines available in the laboratory. Records are saved based on quality control, machine service and maintenance. It also includes a search for specific machines. Additionally, it should have the ability to generate reports on machine service and maintenance.</p>
7.	Senadheera.S.A.A.D	<p>Test Data:</p> <p>This allows users to manage information on tests in the system. It includes the ability to perform crud operations on tests, test subcategories, and reference ranges. Furthermore, it allows users to manage outsourced company information. Users can also search for specific tests. Furthermore, it should generate reports on available tests.</p> <p>Additionally, there will be feature to save the details of the courier who takes samples to outsourced labs.</p>
8.		<p>Staff:</p> <p>This function allows users to manage the laboratory staff and their roles. It should include the ability to perform crud operations on staff records, search for specific staff members, record staff attendance, calculate their pay, and generate reports on staff performance.</p>