Sri Lanka Institute of Information Technology

Information Technology Project

Year2, Semester 2 - 2023

Project Charter

Title of the Project:	Hospital management System	
Campus & Batch:	Weekend	Group NO :TW2
Development Technology:	Mern Stack Technology	

Description of the Project:

The implementation of a hospital management system is crucial in today's healthcare industry which is particularly important during a pandemic like COVID-19. The system can assist in managing inventory and supplies, including personal protective equipment, which is crucial during a pandemic to ensure that healthcare professionals have the necessary resources to provide care safely. And the manual handling of records and day-to-day operations can be both time-consuming and prone to errors. The aim of this project is to automate and digitize these processes, including minor staff management, inventory management, patient admission and discharge, doctor assignment, and billing. While it may not be a complete solution, the ultimate goal of this project is to streamline hospital operations and reduce the potential for errors through the use of technology. This will ultimately lead to improved efficiency and better patient care.

This system enables the secure management of user accounts and permissions, ensuring that only authorized individuals have access to sensitive patient information. Responsible for managing the stock of the organization using technology. It helps to keep track of the stock levels, reorder products when needed, and generate reports on inventory status. The billing and invoicing system helps the hospital to maintain a clear record of patient charges and ensure accurate billing, resulting in improved financial management and revenue tracking. Helps to keep all patient medical records organized and accessible, improving the efficiency of patient care and facilitating better communication among healthcare professionals. The system can facilitate communication between different departments and healthcare professionals, allowing for more efficient and effective patient care. Allows the recording of attendance, updating of personal details, and tracking of overtime hours for staff members. It also enables the recording of when staff members start and end their shifts, including the date and time. This system improves the organization and coordination of patient care by allowing patients to schedule their appointments in advance, and it helps the hospital to manage the appointments and ensure that patients are seen in a timely manner. Responsible for determining staff member's salary and tracking working hours. It helps to manage payroll effectively, ensure accurate and timely payment, and comply with labor laws.

The proposed software product is a Hospital Management System that can be used in any hospital, clinic, dispensary, or pathology lab. The system aims to digitize the process of gathering patient information and storing it for future use, replacing the current paper-based system. The current system is slow and does not provide updated lists of patients in a timely manner. The intention of the HMS is to improve efficiency by reducing overtime pay and increasing the number of patients that can be treated accurately. The system has been designed to meet both functional and non-functional requirements, providing a comprehensive solution for managing hospital operations.

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.	Kulasekara M P G G	IT21279898	0766481411	it21279898@my.sliit.lk
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3.	Jayasinghe J.I.B	IT21306518	0771893910	it21306518@my.sliit.lk
4.	Abeywickrama W.N.V	IT21473524	0701539773	it21473524@my.sliit.lk
5.	Harischandra D.P.N.B	IT21248030	0715235925	it21248030@my.sliit.lk
6.	Samarakoon S.M.S.C	IT21072888	0763435633	it21072888@my.sliit.lk
7.	Perera B.A.D.K.S	IT21202254	0773087693	it21202254@my.sliit.lk
8.	De Silva G.H.G.T.S	IT21219702	0710137323	it21219702@my.sliit.lk

List of Functions Developed by the Group Members:

	Name with Initials	Brief Description of the Function
1.	Kulasekara M P G G	**Inventory management system (IMS)** is one of the main parts of this system. This function refers to the system and processes to manage the stock of organization with the involvement of Technology system. This function can be used to stock add inventory details, update the inventory based on the sales details, store the details of the inventory, delete existing inventory details, and view inventory report daily or weekly based.
2.	Senarathne E O P	**Billing & Invoicing System** is a key component of a healthcare management system. This is used to keep a record of treatments, medicine, equipment issued to the customer and the individual/ total cost of those elements. This will also help in generation backend reports for payroll and admin purposes.
3.	Jayasinghe J.I.B	**Patients Medical Records Management System (PMRMS)** Major functionality of the healthcare management which provides collection of information of a patient. Manage and store all patient's personal information, contact details, and details about their medical illnesses, medications, treatment and complaints. Act as a digital document and display all patient records. Can updates the document with adding new record, deleting existing records according to the advices of doctors.

4.	Abeywickrama W.N.V	**User Registration & Login Management System** User management is an important part of healthcare management system where users can create their account and manage. The users are allowed to register their account using providing personal information and login to their account. The users are also managed by administrator to allow certain roles or update users info.
5.	Harischandra D.P.N.B	**Communicating System** is one of the foundational elements of a hospital management System. This is the way of communicating between all the staff (doctors, nurses, admin, etc.) This function is used for sending messages, editing messages, viewing the history of the messages, and deleting the sent messages.
6.	Samarakoon S.M.S.C	**Minor Staff** in healthcare management gives you the skills to positively impact healthcare systems. "Minor staff" has the ability to record the attendance of the staff, update their personal details, and update and keep records of their OT hours. This can also be used to keep records of the staff when they are done and leave their shifts. (Ex: date and time)
7.	Perera B.A.D.K.S	**Appointment Schedule(patients)** is one of the most critical parts of a healthcare management System. The appointment Scheduling begins with understanding the patient requirements by asking the right questions and determining the right strategies for the delivery of care. In this system patients can submit, delete and update appointments. And those appointments can be viewed by the concerned doctor and Admin.
8.	De Silva G.H.G.T.S	**Payroll management system** is one of the major components in healthcare management system. It is important in determining the monthly salaries of the stuff members and also keep track of employee's working hours. This function can be used to update the additional payments to the salary, delete existing details when an employee gets retired and view salary updates weekly.