

THE DEVELOPMENT OF MANAGEMENT INFORMATION SYSTEM  
FOR W. RAMOS DIAGNOSTIC LABORATORY WITH SCHEDULING  
SYSTEM

A Capstone Project  
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## INTRODUCTION

The main objective of this study is to develop a management information system for laboratory tests with a scheduling system to enhance laboratory management. The calendar in the admin dashboard is for viewing of patients who booked on specific dates. The system allows patient to create an account and the admin and cashier account are provided by the developer. Reschedule feature can be used by the patients if they cannot go to their appointment and they want to move their schedule. The Cashier Interface can only be used for confirming a patient's payment. Scheduling an appointment is a process that shows a calendar and its function. A deeper understanding of administrative dynamics can optimize resource utilization and improve decision-making processes. This research will be a useful reference for the researchers who would plan to make any related study. It is located near the emergency hospital in Valenzuela City, some patients havenoticed the facilities and services that it offers. The information system with a Scheduling Information System will help improve operational transparency through facilitating improved resource5.

## METHOD

The system is now already good to operate for private sector use and with the smooth execution of the system. The system uses SQL for data management, viewpoints for appointment requests and information of the user that integrates to the database. HTML language was used for the whole ridges and infrastructure of the the system web codes. The patient can plan an appointment for his/her check-up and lab on the website. Every appointment transaction that the patient makes will be documented by the system and can be accessed by the user. The flowchart is arranged with a box on the left representing the user. The flow of actions is illustrated by arrows linking the boxes representing the various steps. The user will be able to edit his/her personal data on the system. The users can also add multiple services to their appointment if required. It demonstrates the many processes a user can take to schedule an appointment, select services, make payments and make payments. The researchers present the system to the respondents to evaluate its acceptability. The W was developed by a researcher to help with database design, planning, and optimization. The researcher has made everything to make the navigation around the system as clear as possible. The system also has a button wherein patients will see the gcash payment to reserve their slot. The W was designed to be used for Healthcare and Diagnosis. It also demonstrates how an administrator and a cashier can participate in the process. The researchers have also created a walkthrough of the system to allow the attendees to examine it deeper and utilize it. The researchers used the Agile Software Development Model due to its representing broad principles and values. The user is required to enter a valid password. The system's appropriateness was assessed using a 4-point Likert Scale. The data flow diagram (DFD) is used to show the existing processes and how data is being used. The users can modify their password by clicking next to it. The web page was designed using the Agilite Method. The code was written using CSS and JavaScript.

## RESULTS

Click ?Add Patient? to add patient to the Appointment page. Click ?View? to show a bipartisan summary of the users. Click ?Manage? ?Read Queries? and in the action click ?View? ? ?File?. Click the ?Admin? Manage Users and Manage Patients. Click ?Add a services to the ?System89?s ?Service? page. The following are the capabilities of the developed web-based system. The system is for the use of W. The web hosting system is depicted in the image below. The following figures present the different web interfaces of the Client Project Management. The website allows administrator to view the past appointments to accommodate to the administrator. The site allows the user to contact the admin to submit their questions and requests. The user can also add walk-in patients to their profile. The Cashier Dashboard shows the status of the patient if it is Paid, Pending, and Canceled. The system is capable of an online payment system via gcash and paymaya using qr code. The system does not have a managing laboratory supplies. The researchers evaluated the web-based system's functionality, compatibility, and usability through a defined procedure. The results are shown in the table that follows. the results shown in the table that following. The function of this is to show users available time that they can choose then they can choice what available time is available on that day.

## **DISCUSSION**

The evaluators rated the web-based system as 'Strongly agree'. The design of user interfaces and functionalities should be based on user requirements. The web application is compatible with an array of web browsers. The management information system can access admin, cashier, and user accounts, schedule, show availability, laboratory test management, payment system, appointment, revenue report, reschedule, and calendar admin dashboard. The system was successfully designed to have the following: Usability Usability Security Reliability Portability Maintainability Based on the ISO 25010 criteria for Functional compatibility and Accessibility it was evaluated to be Very Good.