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**Design and Development of a Web Application  
for Medical Clinic Management**

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### **Introduction**

Effective management of healthcare institutions is crucial for ensuring optimal care and efficient utilization of resources. With this objective in mind, this thesis focuses on the development of a user-friendly web-based application dedicated to clinic management. Technological advancements have provided innovative solutions to address the challenges faced by clinics. This application offers user-friendly tools and specific features tailored to the needs of administrators, doctors, and patients, facilitating appointment scheduling, medical record management, resource coordination, and much more. This thesis presents the design and development of a clinic management system based on a web application, with a focus on improving efficiency and quality of care.

### **Problem Statement**

The management of information and processes in healthcare facilities can often be inefficient, leading to delays, poor coordination, and lower quality of care. Traditional management systems can be complex and user-unfriendly, resulting in difficult usage and user resistance. There is, therefore, a critical need to develop a modern and user-friendly solution that facilitates information management and enhances communication among stakeholders in a clinic environment.

### **Objectives**

The objectives of this thesis are as follows:

1. Design and develop a user-friendly clinic management system based on a web application.
2. Improve the efficiency of management processes in healthcare institutions by automating administrative tasks and facilitating access to relevant information.
3. Facilitate coordination and communication among administrators, doctors, and patients.
4. Optimize appointment scheduling, medical record management, and resource utilization in a clinic environment.

This thesis has presented the design and development of a user-friendly web-based application dedicated to clinic management. By improving the efficiency of management processes, the system aims to enhance the quality of care provided. It offers specific features and functionalities that cater to the needs of administrators, doctors, and patients, facilitating information management and streamlining various tasks. The user-friendly interface ensures easy usage and a positive user experience. This system has the potential to significantly improve the efficiency and quality of care in a clinic environment.

**Chapter I :**  
**Context and state of art**

### **1. Introduction**

In this chapter, we embark on a journey through the realm of healthcare technology, exploring existing applications and solutions in the context of medical clinic management. With a focus on improving patient care and enhancing the efficiency of healthcare processes, we present a comprehensive overview of innovative web applications designed to revolutionize the way medical clinics operate.

### **2. Context of study**

The healthcare industry is constantly evolving, driven by advancements in technology and the need for more efficient and patient-centric care. As we delve into the state of the art in medical clinic management, we aim to understand the challenges faced by healthcare professionals and patients alike, and identify opportunities for our own web application to make a meaningful impact.

### **3. Research aims**

Our primary aim is to develop a robust and intuitive web application for medical clinic management, catering to the needs of both patients and healthcare professionals. To achieve this aim, our objectives include assessing the functionalities and features offered by existing applications, understanding the requirements and expectations of users, and designing a solution that addresses key challenges in clinic management. To guide our research, we will explore questions such as: How can technology be leveraged to enhance the efficiency and effectiveness of appointment scheduling and management in medical clinics? What are the essential features and functionalities required for efficient medical record management, ensuring easy access and secure storage of patient information? How can communication between patients and healthcare professionals be facilitated effectively, promoting timely and accurate information exchange?

By achieving these objectives and answering these research questions, the study aims to develop a user-friendly web application that transforms clinic management, enhances the patient experience, and elevates the overall quality of healthcare delivery.



## 4. Some existing solutions

### 4.1.DZDOC



**Figure 1: DZDOC logo**

DZDOC is a multi-service medical platform created by Khidma Tech, a computer engineering service company that benefits from extensive know-how in the field of information technology. In May 2015, DZDOC launched the first online appointment booking service in Algeria to offer Algerian doctors and patients a simple, efficient and comfortable solution for managing their medical appointments.

DZDOC is a user-friendly healthcare application designed to enhance the patient experience and streamline healthcare services in Algeria. The app aims to connect patients with doctors, making it convenient to schedule appointments, view doctor profiles, and access essential healthcare information. With DZDOC, patients can search for doctors based on specialties, view their availability, and book appointments with just a few clicks. The app also provides features such as real-time notifications for appointment reminders, secure messaging between doctors and patients, and access to electronic medical records. The objective of DZDOC is to improve access to quality healthcare services, reduce waiting times, and empower patients to take control of their health.<sup>1</sup>

### 4.2.ESSIHA FI EL MANZIL



<sup>1</sup> Tech, K. (n.d.). DZDOC · Trouver un médecin en Algérie et prenez rendez-vous en ligne. <https://dzdoc.com/>

**Figure 2 : essiha fi al manzil logo**

ESSIHA FI EL MANZIL is a comprehensive healthcare management system designed to facilitate the operations of healthcare clinics and hospitals. The primary objective of the system is to streamline administrative tasks, optimize patient care, and enhance overall operational efficiency. With ESSIHA FI EL MANZIL, healthcare providers can manage patient appointments, maintain electronic health records, generate reports, and handle billing and insurance processes. The system also includes features such as inventory management, resource allocation, and integration with laboratory and pharmacy systems. By automating various processes, ESSIHA FI EL MANZIL aims to improve the overall quality of patient care, reduce administrative burdens, and enhance the efficiency of healthcare organizations.<sup>2</sup>

**4.3.ETabib**



**Figure 3: eTabib logo**

ETabib is a platform allowing the Algerian citizen to consult a doctor free of charge by an online video call, was launched with the aim of limiting the spread of Covid-19. ETabib is a comprehensive healthcare app that aims to provide a holistic approach to healthcare management. The app offers a range of features and services to support both patients and healthcare providers. Users can search for doctors, view their profiles, and book appointments based on their specialties and availability. ETabib also provides users with access to their medical records, allowing them to track their health history and share information with healthcare professionals. Additionally, the app offers features such as medication reminders, health tips, and telemedicine consultations. ETabib strives to empower patients with the tools and information needed to actively manage their health and well-being.<sup>3</sup>

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<sup>2</sup> Manzil, S. E. F. E. (n.d.). TÉLÉ-MÉDECINE | essiha Fi El Manzil. <https://www.essihafielmanzil.com/>

<sup>3</sup> MM DIGITAL. (2022, April 29). Algérie Eco, toute l'actualité de l'économie en Algérie - Algeria Eco. <https://www.algerie-eco.com/>

#### 4.4.eSiha



*Figure 4: eSiha logo*

eSiha is a comprehensive healthcare platform that aims to empower patients with access to reliable health information and a range of healthcare services. The platform provides users with the ability to search for doctors, view their profiles, and book appointments based on their specialties and availability. Additionally, eSiha offers features such as personalized health records, medication reminders, and health tips to support users in managing their health. The platform also facilitates telemedicine consultations, enabling patients to connect with healthcare providers remotely for medical advice and follow-ups. eSiha's objective is to promote patient engagement, enable proactive healthcare management, and provide convenient access to healthcare services anytime, anywhere.<sup>4</sup>

#### 4.5.Beesiha



*Figure 5: Beesiha logo*

Beesiha is a user-centric healthcare app that focuses on providing personalized healthcare services and empowering patients to make informed decisions about their health. The app offers a range of features, including a comprehensive directory of healthcare providers, doctor profiles with patient reviews and ratings, and the ability to book appointments directly through the app.

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<sup>4</sup> eSiha | Trouver un médecin, centre d'analyse ou radiologie et paramédical en Algérie et prendre un rendez-vous (rendez-vous / rdv) en ligne, dossier medical et téléconsultation. (n.d.). eSiha. <https://www.esiha.net/>

Beesiha also provides users with access to their medical records, enabling them to track their health history, view test results, and share information with healthcare professionals. The app further offers health-related articles, tips, and reminders to support users in managing their well-being. The goal of Beesiha is to improve the patient experience, enhance healthcare accessibility, and promote proactive engagement in personal health management.<sup>5</sup>

## 5. Comparison of existing solutions

Feature/Aspect	DZDOC	ESSIHA FI EL MANZIL	eSiha	Bessiha
Availability	24/7	Limited	24/7	24/7
Appointment scheduling	Yes	Yes	Yes	Yes
Teleconsultation	Yes	No	Yes	Yes
Prescription	Yes	Yes	Yes	Yes
Medical record	Yes	Yes	Yes	Yes
Insurance acceptance	Yes	Yes	Yes	No
Languages supported	Arabic, French, English	Arabic, French	Arabic, English	Arabic
User ratings	4.2/5	3.9/5	4.3/5	3.5/5

***Table 1: Comparative table***

## 6. Conclusion

In conclusion, our web-based application for efficient medical practice management is designed to streamline the operations of a medical clinic. With users including administrators, doctors, and patients, the system aims to enhance the overall patient experience and improve workflow efficiency.

By analyzing existing solutions in the market, we have identified key features and functionalities that are crucial for effective medical practice management. Our application offers a comprehensive set of features, including patient management, appointment scheduling, medical record access, and prescription management. The ability for doctors to easily add patients, conduct consultations, and issue prescriptions ensures a seamless and efficient workflow.

<sup>5</sup> Bee-Solutions. (n.d.). Beesiha. اعرثر على طبيبك. حدد موعدًا. Beesiha. <https://www.beesiha.com/>

# **Chapter II :**

# **Conception**

## 1. Introduction

In the process of designing a web application, the utilization of various modeling techniques is crucial to ensure a well-structured and efficient system. For the development of a clinic management application, this chapter focuses on the application of Unified Modeling Language (UML) and the integration of a data dictionary for designing the system.

By incorporating UML diagrams, such as class diagrams, use case diagrams, and sequence diagrams, along with a comprehensive data dictionary, the design phase ensures a clear and complete representation of the clinic management system. This facilitates effective communication, collaboration, and documentation among stakeholders, developers, and designers.

In the following sections, we will explore the creation and analysis of UML diagrams, as well as the integration of the data dictionary, to design a robust and efficient clinic management application.

## 2. Dictionary table

Table	Column	Designation	Type
Appointment	Id_app (Pkey)	Appointment identifier	INTEGER
	Name	Sender name	VARCHAR
	From	Sender's code	VARCHAR
	Phone	Sender phone number	VARCHAR
	Message	Accordination message	TEXT
	Too	Receiver's code	VARCHAR
	CTime	For the time	VARCHAR
Patients	Id_patient (Pkey)	Patient identifier	INTEGER
	Name	Patient name	VARCHAR
	Location	Patient address	VARCHAR
	Age	Patient age	VARCHAR
	Gender	Patient gender	VARCHAR
	Phone	Patient phone number	VARCHAR
	DateOfBirth	Patient date of birth	VARCHAR
	CTime	For the time	VARCHAR
	Diagnosis	Patient diagnosis	TEXT

	Prescription	Patient prescription	TEXT
	Token	For the authentication	VARCHAR
	Doctor	For the coordination	VARCHAR
	Number	Patient's code	VARCHAR
	PCondition	Inpatient or outpatient	VARCHAR
Users	Id_Users (Pkey)	Users identifier	INTEGER
	FirstName	Users first name	VARCHAR
	SecondName	Users last name	VARCHAR
	Email	Users email	VARCHAR
	Password	Users password	VARCHAR
	Token	For the authentication	VARCHAR
	Status	Users status	VARCHAR
	Phone	Users phone number	VARCHAR
	Profile	Users profile	VARCHAR
	Gender	Users gender	VARCHAR
	Role	Admin or doctor	VARCHAR

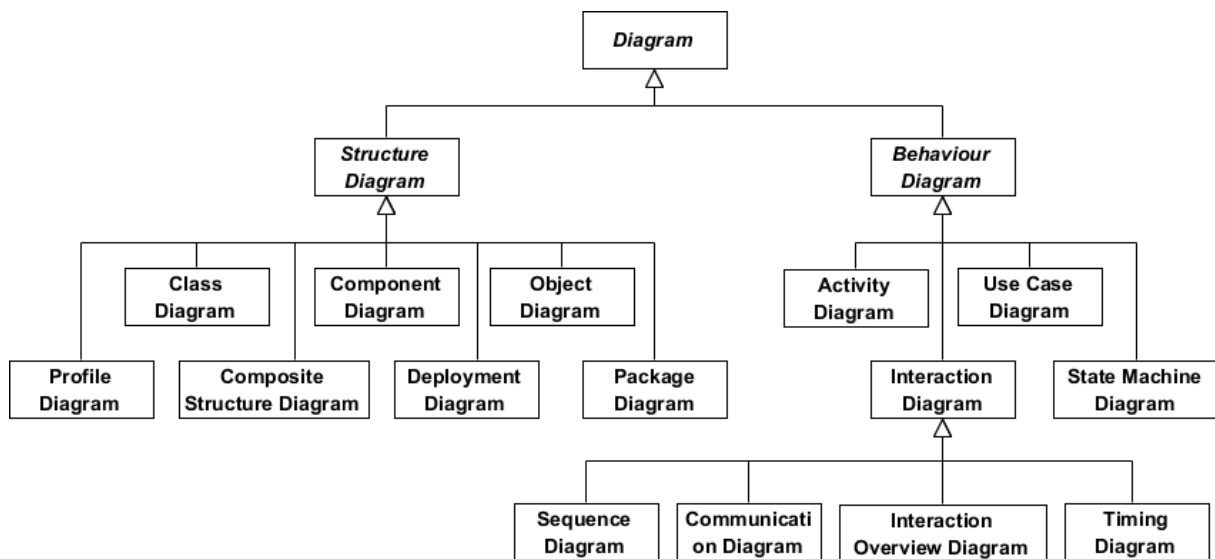
**Table 2: Dictionary table**

### 3. UML (Unified Modeling Language)

#### 3.1.UML Definition

UML, short for Unified Modeling Language, is a standardized modeling language consisting of an integrated set of diagrams, developed to help system and software developers for specifying, visualizing, constructing, and documenting the artifacts of software systems, as well as for business modeling and other non-software systems. The UML represents a collection of best engineering practices that have proven successful in the modeling of large and complex systems. The UML is a very important part of developing object oriented software and the software development process. The UML uses mostly graphical notations to express the design of software projects. Using the UML helps project teams communicate, explore potential designs, and validate the architectural design of the software.

## 3.2.UML diagrams



**Figure 6: UML diagrams**

### 3.2.1. Class Diagram

**Definition:** The class diagram is a central modeling technique that runs through nearly all object-oriented methods. This diagram describes the types of objects in the system and various kinds of static relationships which exist between them.

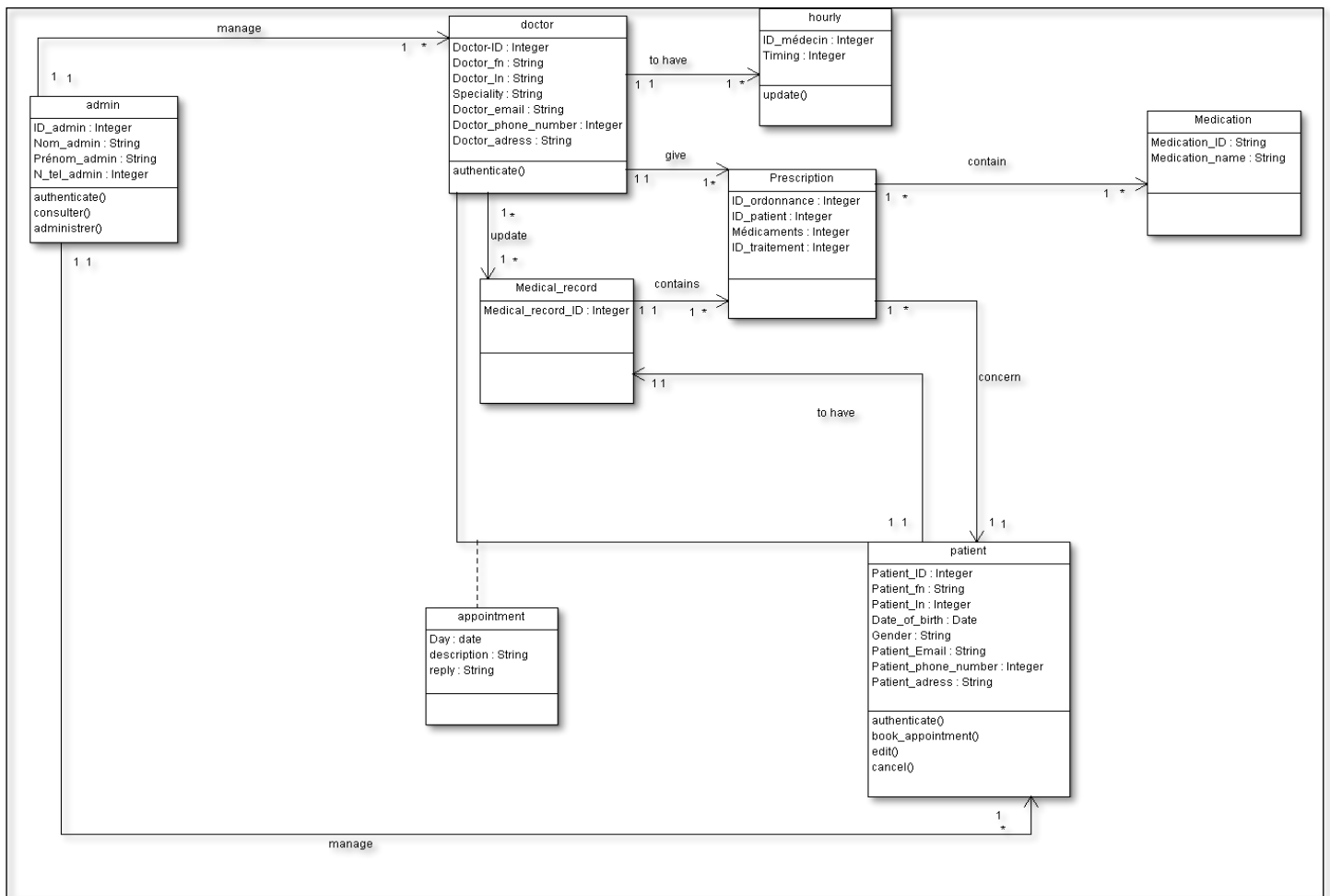
There are three principal kinds of relationships which are important:

Association: represent relationships between instances of types (a person works for a company, a company has a number of offices).

Inheritance: the most obvious addition to ER diagrams for use in OO. It has an immediate correspondence to inheritance in OO design.

Aggregation: a form of object composition in object-oriented design.





**Figure 7: Class diagram**

### 3.2.2. Use Case Diagram

**Definition:** A use-case model describes a system's functional requirements in terms of use cases. It is a model of the system's intended functionality (use cases) and its environment (actors). Use cases enable you to relate what you need from a system to how the system delivers on those needs.

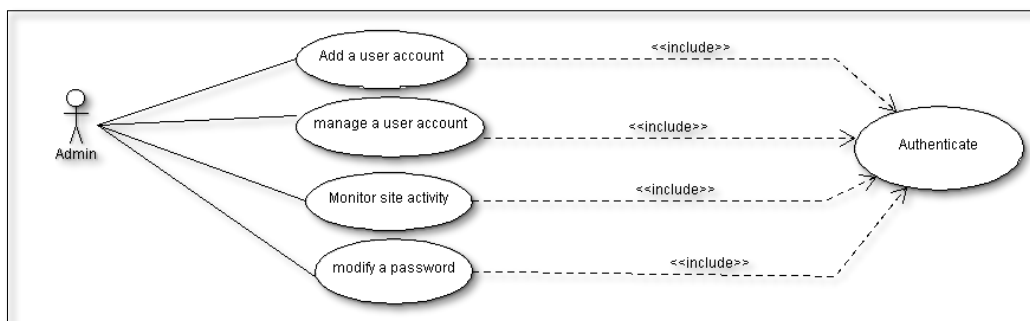
Think of a use-case model as a menu, much like the menu you'd find in a restaurant. By looking at the menu, you know what's available to you, the individual dishes as well as their prices. You also know what kind of cuisine the restaurant serves: Italian, Mexican, Chinese, and so on. By looking at the menu, you get an overall impression of the dining experience that awaits you in that restaurant. The menu, in effect, "models" the restaurant's behavior.

Because it is a very powerful planning instrument, the use-case model is generally used in all phases of the development cycle by all team members.

### 3.2.2.1. Actor: Admin

- "Manage user accounts": The Admin has the authority to access all user accounts on the site. They can create new accounts for doctors and patients, update information in existing accounts, and delete accounts if necessary. The Admin can also assign roles and permissions to site users.

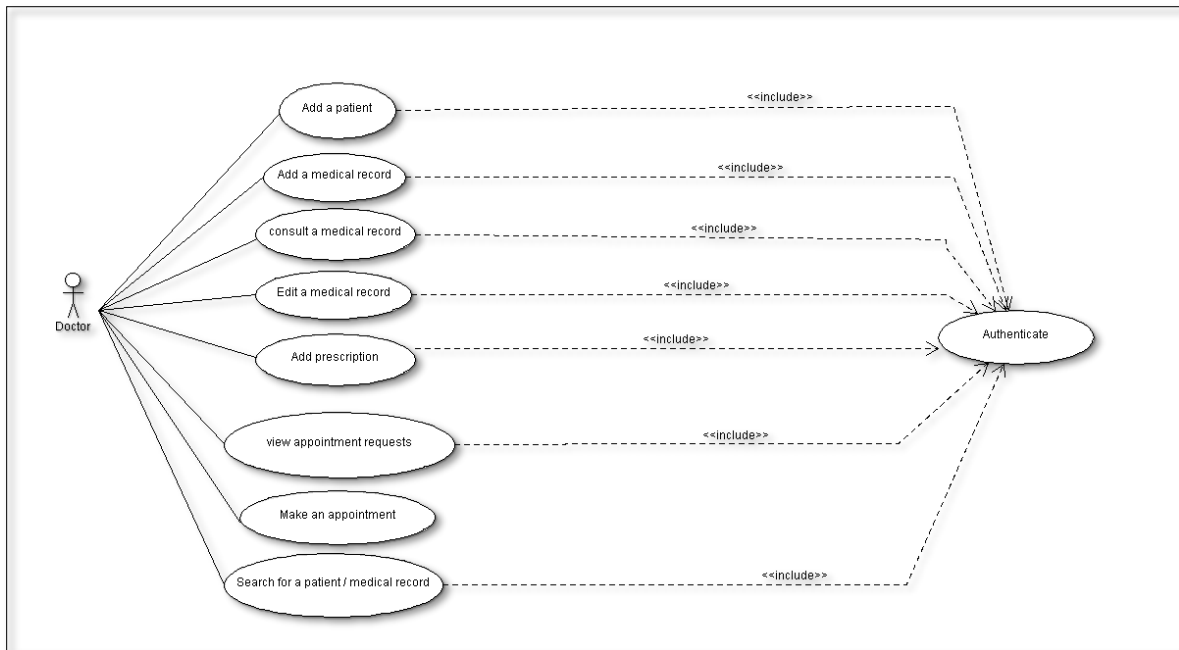
- "Monitor site activity": The Admin has the privilege to monitor the overall activity of the site. This includes viewing access logs, usage statistics, and reports to ensure the smooth operation of the site and identify any potential issues or anomalies.



**Figure 8: Use case diagram for Admin**

### 3.2.2.2. Actor: Doctor

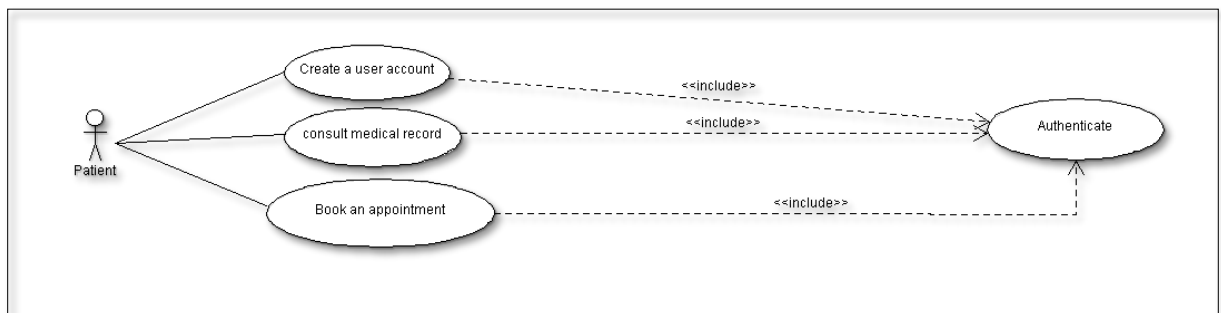
- ✓ “Add a patient”: The Doctor has the ability to add new patients to the site’s database. This allows the Doctor to create a profile for a new patient so that they can perform consultations and provide prescriptions.
- ✓ “Access medical records”: Once a patient is added, the Doctor can access the patient’s medical record. This includes accessing medical history, previous consultations, test results, past prescriptions, etc.
- ✓ “Make an online appointment”: The Doctor can schedule online appointments with patients. This facilitates the appointment booking process and optimizes the management of the Doctor’s schedule.
- ✓ “Validate appointments”: After a patient makes an online appointment, the Doctor needs to validate or confirm the appointment. This ensures that the appointment is officially booked and that the Doctor is available for the scheduled consultation.



**Figure 9: Use case diagram for Doctor**

### 3.2.2.3. Actor: Patient

- ✓ "Access medical records": The patient can access their own medical records through the website. This allows them to review their medical history, test results, past prescriptions, etc.
- ✓ "Make an online appointment": The patient has the ability to book appointments online through the website. This enables them to choose an available time slot for a consultation with the Doctor.
- ✓ "View appointment status": Once an appointment is made, the patient can check the status of the appointment, including the date, time, and confirmation from the Doctor. This allows the patient to stay informed and prepare for the visit accordingly.



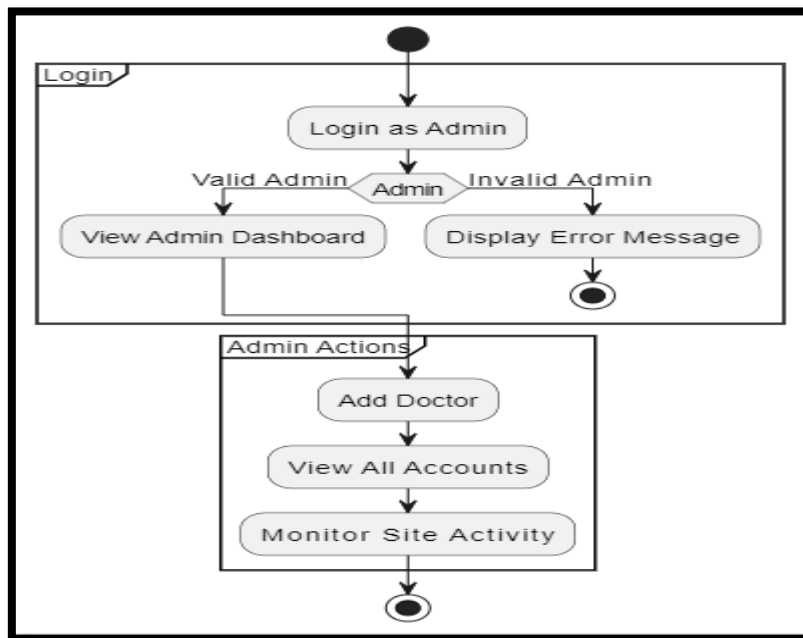
**Figure 10: Use case diagram for Patient**

### 3.2.3. Activity Diagram

**Definition:** Activity diagrams are graphical representations of workflows of stepwise activities and actions with support for choice, iteration and concurrency. It describes the flow of control of the target system, such as the exploring complex business rules and operations, describing the use case also the business process. In the Unified Modeling Language, activity diagrams are intended to model both computational and organizational processes (i.e. workflows).

#### 3.2.3.1. Activity Diagram for Admin

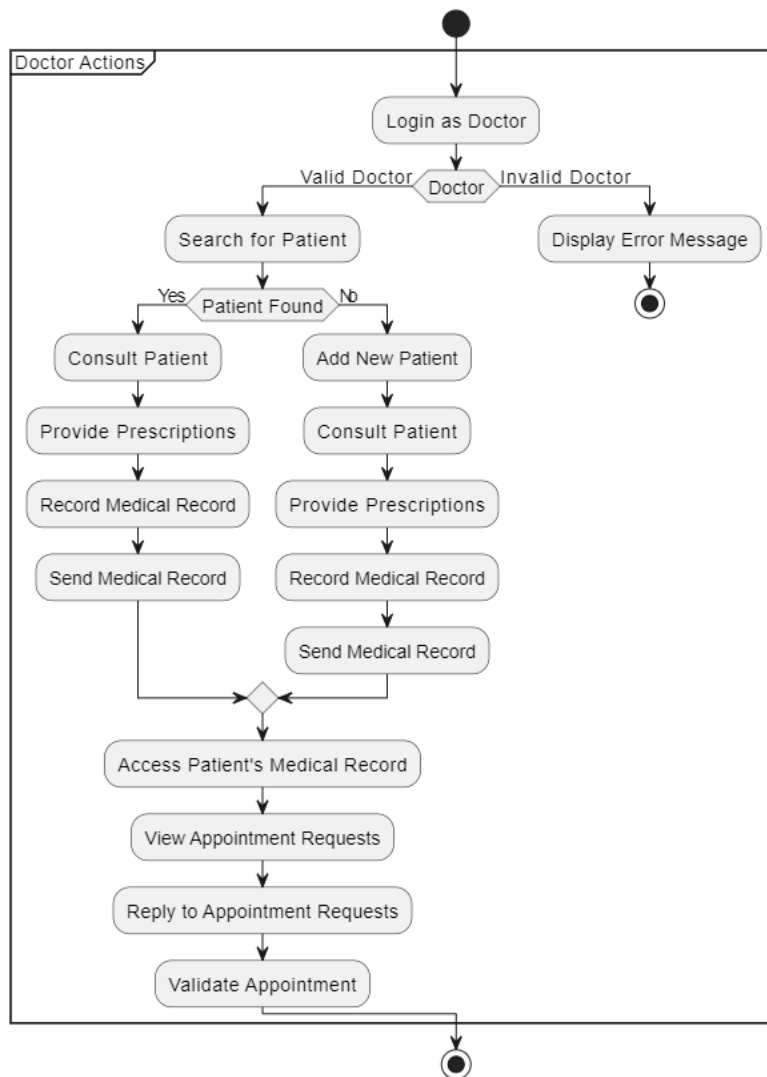
The activity diagram for the Admin represents the actions and responsibilities of the administrator in the website for efficient management of a medical clinic. The Admin starts by logging into the system using their email address and password. If the login is successful, they are directed to the Admin Dashboard, where they can view an overview of the system's activities. From the dashboard, the Admin has the authority to add new doctors to the system, view all user accounts, and monitor the site's activity. The diagram showcases the flow of actions for the Admin, emphasizing their role in managing the system and performing administrative tasks.



**Figure 11: Activity diagram for Admin**

### 3.2.3.2. Activity Diagram for Doctor

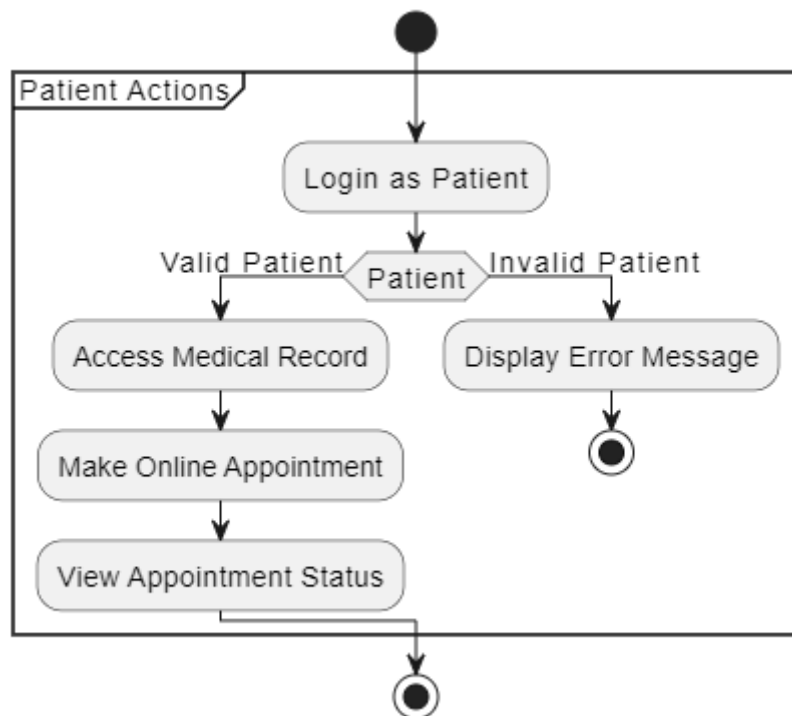
The activity diagram for the Doctor illustrates the actions and tasks performed by a doctor using the website. The Doctor begins by logging into the system using their email address and password. After successful login, they have the ability to search for existing patients. If the patient is found, the Doctor can proceed with the consultation, providing prescriptions, recording the patient's medical history, and sending the medical record to the patient. If the patient is not found, the Doctor can add a new patient to the system and perform the necessary consultation and record-keeping tasks. Additionally, the Doctor can access a patient's medical record, view appointment requests, reply to appointment requests, and validate appointments. The diagram outlines the flow of actions specific to the Doctor's role in managing patients and appointments.



**Figure 12: Activity diagram for Doctor**

### 3.2.3.3. Activity Diagram for Patient

The activity diagram for the Patient focuses on the actions and interactions of the patient within the website. The Patient starts by logging into the system using their unique ID and phone number. Once logged in, they can access their medical record, which contains information about their previous consultations, prescribed medications, and medical history. The Patient can make online appointments through the website and view the status of their appointments to stay informed about the scheduled date and time. The diagram showcases the flow of actions for the Patient, highlighting their ability to manage their medical information and appointments efficiently.

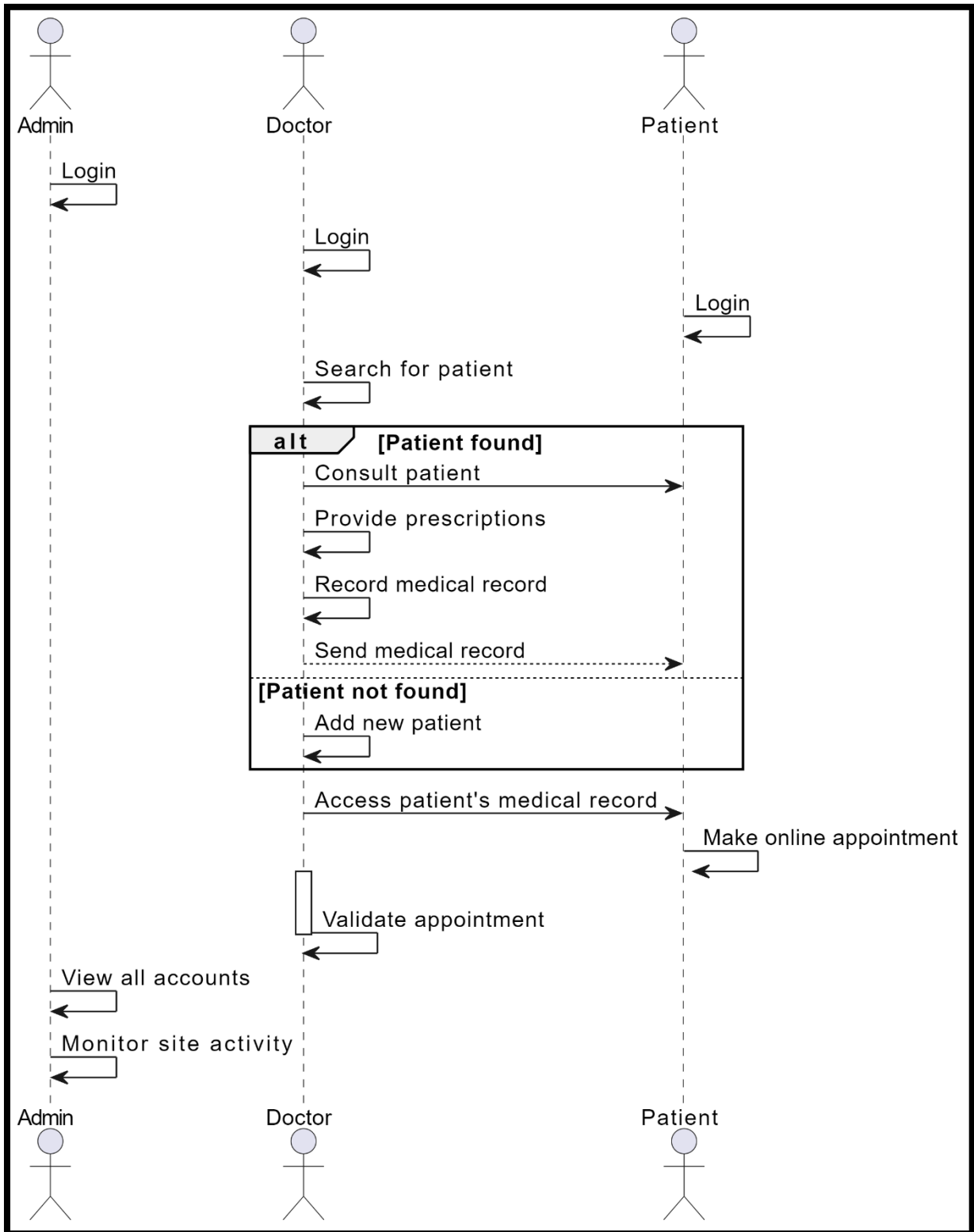


***Figure 13: Activity diagram for Patient***

### 3.2.4. Sequence Diagram

**Definition:** The Sequence Diagram models the collaboration of objects based on a time sequence. It shows how the objects interact with others in a particular scenario of a use case. With the advanced visual modeling capability, you can create complex sequence diagram in

few clicks. Besides, some modeling tool such as Visual Paradigm can generate sequence diagram from the flow of events which you have defined in the use case description.



**Figure 14: Sequence diagram**

This sequence diagram illustrates the sequence of interactions between the actors and the system. It highlights the login processes for the Admin, Doctor, and Patient, as well as the actions related to searching, consulting, adding patients, accessing medical records, making appointments, and performing administrative tasks.

1. Admin Login: The Admin actor (A) initiates the sequence by logging into the system using their email and password.
2. Doctor Login: The Doctor actor (D) also logs into the system using their email and password.
3. Patient Login: The Patient actor (P) performs a login action by providing their ID and phone number.
4. Doctor Searching for Patient: The Doctor (D) searches for a specific patient.
5. Patient Found: If the patient is found, the sequence follows the "Patient found" branch:
  - ✓ Consultation: The Doctor (D) proceeds to consult the patient (P).
  - ✓ Provide Prescriptions: The Doctor (D) provides prescriptions to the patient (P).
  - ✓ Record Medical Record: The Doctor (D) records the medical record of the patient (P).
  - ✓ Sending Medical Record: The Doctor (D) sends the medical record to the patient (P).
6. Patient Not Found: If the patient is not found, the sequence follows the "Patient not found" branch:
  - ✓ Add New Patient: The Doctor (D) adds a new patient to the system.
7. Accessing Patient's Medical Record: The Doctor (D) accesses the medical record of a patient (P).
8. Patient Makes Online Appointment: The Patient (P) makes an online appointment.
9. Doctor Validates Appointment: The Doctor (D) validates the appointment made by the patient (P).
10. Admin Actions: The Admin (A) performs administrative tasks:
  - ✓ View All Accounts: The Admin (A) views all user accounts.
  - ✓ Monitor Site Activity: The Admin (A) monitors the activity on the site.

#### **4. Functionality Overview**

The developed clinic management system, referred to as "Clinic Management System," is a comprehensive web application designed to streamline and enhance the management processes in healthcare clinics. Leveraging technologies such as PHP, MySQL, Bootstrap,



HTML, CSS, and Ajax the system offers a range of functionalities that cater to administrators, doctors, and patients.

One of the key features of the system is its robust user management capability. Administrators have the authority to efficiently manage user information, allowing them to update, delete, and add new users as needed. This functionality ensures that user records are accurate and up-to-date, facilitating smooth operations within the clinic.

Another crucial aspect of the system is appointment management. Doctors can easily schedule and modify appointments with patients, optimizing clinic workflow and reducing waiting times. By providing a centralized platform for appointment management, the system promotes better organization and coordination between doctors and patients, ultimately leading to improved patient satisfaction.

The system also incorporates an effective medical record management component. Doctors can securely access patient medical records, make necessary updates, and add relevant information. This functionality enhances the continuity of care, ensuring that doctors have access to the most recent and accurate patient data, ultimately contributing to better diagnosis and treatment decisions.

A significant emphasis has been placed on creating a user-friendly interface for the application. The system's interface is designed to be intuitive, offering easy navigation and user-friendly features. This approach promotes quick adoption and seamless user experience for administrators, doctors, and patients alike.

By addressing the specific needs and challenges of the clinic management domain, the Clinic Management System contributes to improving the efficiency and quality of care within healthcare clinics. With its comprehensive set of functionalities, user-friendly interface, and focus on user management, appointment management, and medical record management, the system empowers clinics to optimize their operations and deliver enhanced healthcare services to patients.

# **Chapter III :**

## **Realization**

## 1. Introduction

In this chapter, we will delve into the realization of the Clinic Management System, discussing the implementation details, technologies used, and the key functionalities achieved. We will explore how the system leverages PHP and MySQL to handle data storage and retrieval, and how the combination of Bootstrap, Modal, HTML, CSS, and Ajax ensures an appealing and interactive user interface. Furthermore, we will showcase the user-friendly features that have been incorporated to enhance usability and simplify the management tasks for administrators, doctors, and patients.

## 2. Definition of Web-application

A web application is a client-server computer program that utilizes a web browser to provide specific functionality. It operates within a client-server environment, where the client side is the program accessed by users and the server side processes the necessary data. An example is a database, where the client program allows users to input data, and the server application stores and manages that information.

Web applications are commonly hosted on websites, enabling visitors to perform various actions while browsing. For instance, a shoe company's website may feature an online store application, enabling customers to add items to their carts and make payments.

The website's administrator has the authority to select and customize web applications based on the customers' requirements. Multiple applications can be hosted on a single website, such as chat modules, payment pages, and interactive product customization tools.



***Figure 15: Web application***

### 3. The programming languages used

#### 3.1. PHP (Hypertext Preprocessor)

PHP is a server-side scripting language commonly used for web development. It is primarily used for handling server-side logic and data manipulation in applications.



#### 3.2. MySQL

MySQL is a relational database management system (RDBMS) used for storing and managing the data in the hospital management system. It is often used in conjunction with PHP for database management.



#### 3.3. HTML (HyperText Markup Language)

HTML is the markup language used for structuring the content of web pages. It defines the structure and layout of elements in the hospital management system.



#### 3.4. CSS (Cascading Style Sheets)

CSS is used for the visual presentation of web pages. It is used to define the styles, colors, fonts, and other aspects of the layout in the hospital management system.



#### 3.5. Bootstrap

Bootstrap is a popular CSS framework that simplifies the process of creating responsive and visually appealing user interfaces. It is used to enhance the design and user-friendliness of the hospital management system.



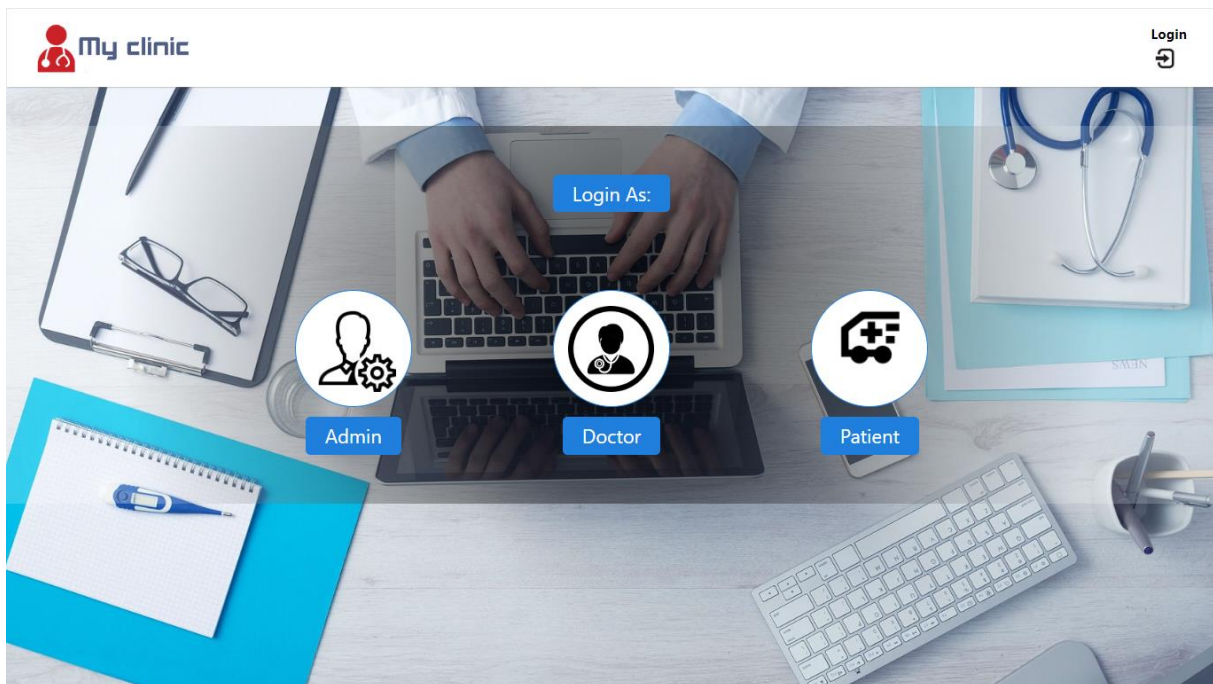
### 3.6. JavaScript (with Ajax)

JavaScript is a programming language used to add interactive and dynamic features to web pages. When used with Ajax (Asynchronous JavaScript and XML), it enables asynchronous requests for improved performance and user-friendliness in the hospital management system.



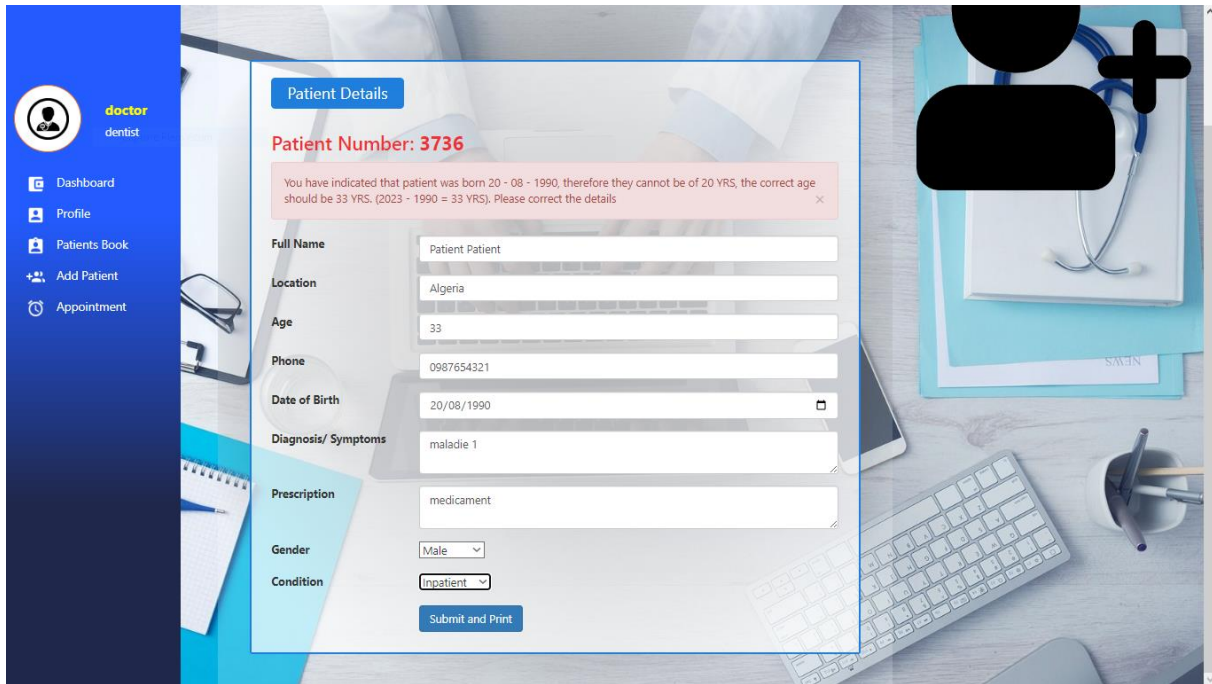
## 4. The application presentation

1. The main home screen: login as an admin, a doctor or a patient.



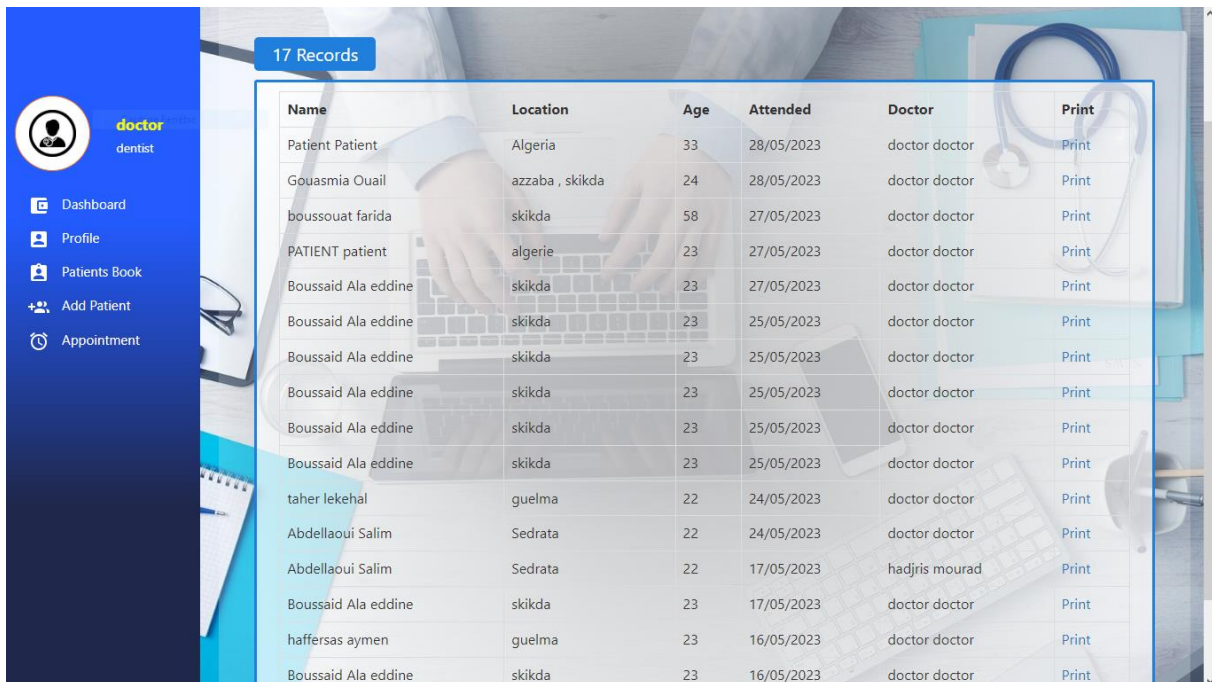
***Figure 16: Home screen window***

2. Patient management: Doctors use the application to add new patients to their medical clinic. They can record patients' personal information such as name, age, gender, etc. Once a patient is added and during the consultation, doctors can record symptoms, perform a medical examination, make a diagnosis, and generate prescriptions. This feature facilitates the management of medical records and ensures accurate tracking of treatments.



**Figure 17: Adding patients and prescriptions window**

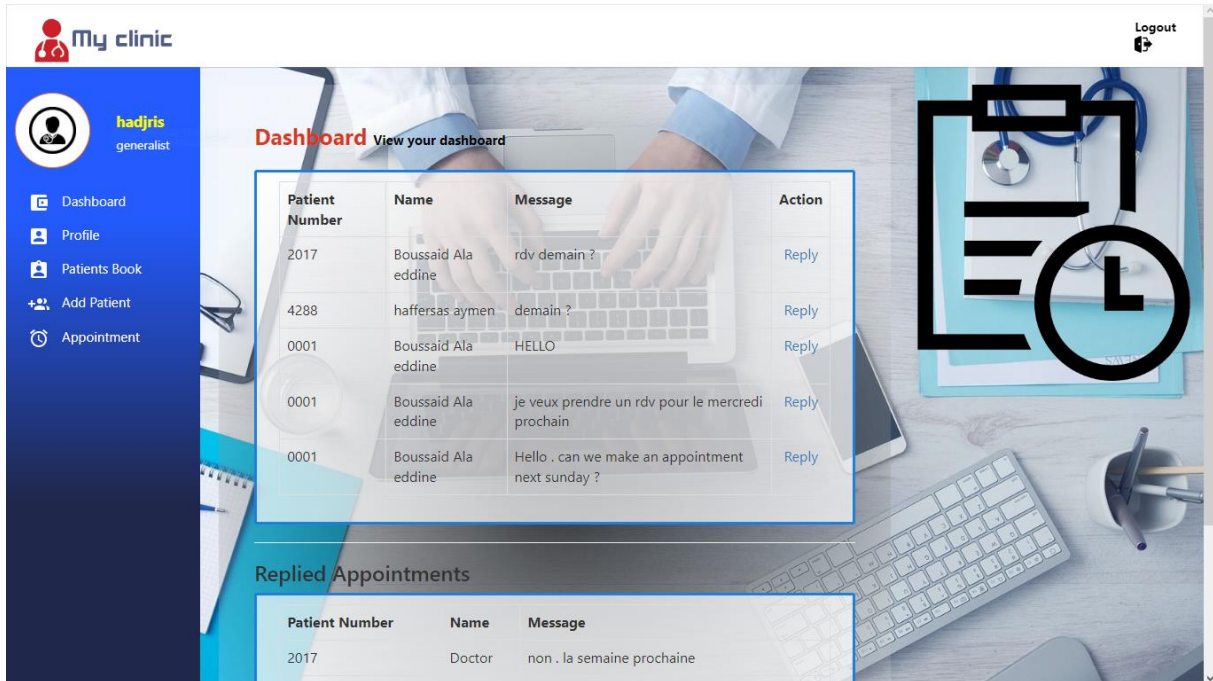
3. Access to medical records: Patients have the ability to access their own medical records through the website. They can view their medical information, including past consultations, test results, prescriptions, etc. And for the doctor they can access to all medical records.



**Figure 18: Accessing all medical records window**

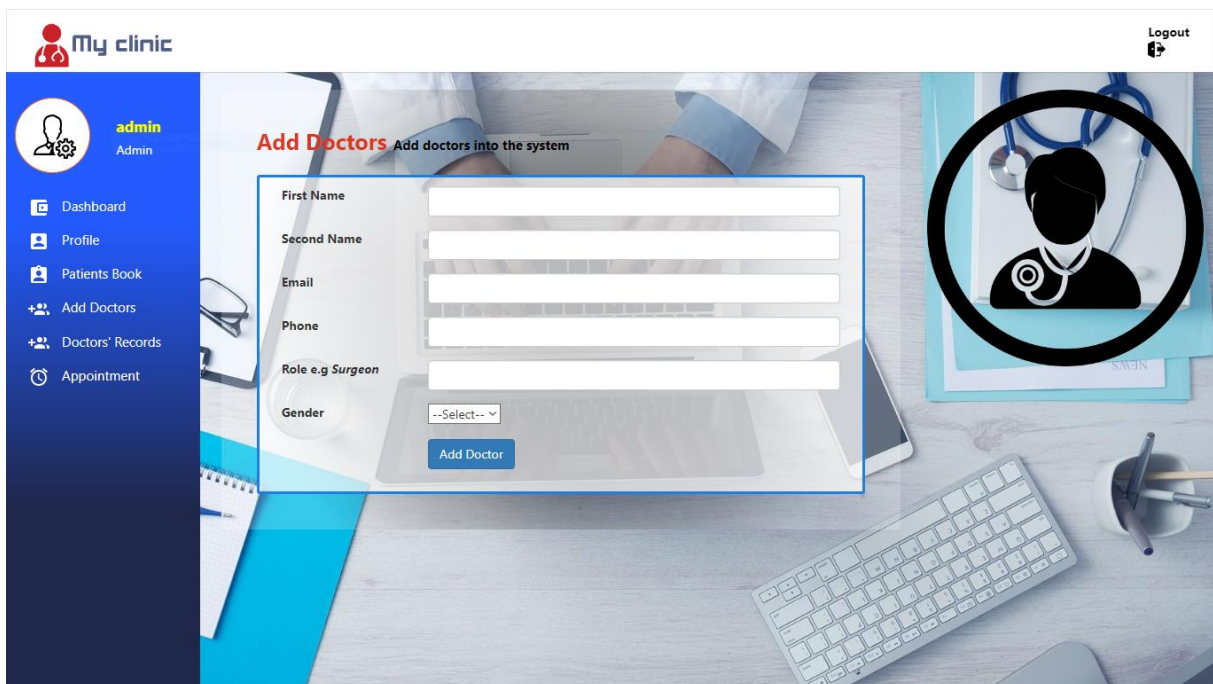
4. Online appointment scheduling: Patients can use the website to schedule appointments online with doctors. They can choose the desired doctor, and book their appointment with just

message. Doctors can then validate and confirm the appointments, streamlining the process of scheduling and organizing consultations.



***Figure 19: Doctor's appointments window***

5. Account management and administrative access: The website's administrator has privileged access and can manage all user accounts, including doctors and patients. The administrator can create new accounts, update user information, manage access permissions, and oversee all activities on the site. This ensures complete control over the functioning of the application.



***Figure 20: Adding doctors window***

## **5. Conclusion**

By integrating these features, our website provides a comprehensive solution for the efficient management of a medical clinic, facilitating appointment scheduling, access to medical records, and communication between doctors and patients.



In conclusion, the development of a website for the management of a medical clinic with the ability for patients to book appointments online and communicate with their chosen doctor, as well as for doctors to add new patients to the system, provide consultations and prescribe medication, is a valuable contribution to the healthcare industry. This project streamlines the process of managing medical records, appointments and communication between patients and their doctors, ultimately improving the quality of care that patients receive.

The website provides a user-friendly interface that enables patients to easily book appointments with the doctor of their choice, reducing the time and effort required in the booking process. Patients can also communicate directly with their doctor through the website, allowing them to receive personalized advice and care that is tailored to their specific needs. This direct communication can also help to build trust and foster stronger relationships between patients and their doctors.

The functionality of the website also allows doctors to add new patients to the system, manage their consultations, and prescribe medication, which is recorded in the patient's medical records. By keeping medical records up-to-date and accessible to both patients and doctors, this project ensures that patients receive the best possible care and treatment.

Furthermore, the development of the website provides an opportunity for the healthcare industry to leverage technology to improve patient care and increase efficiency. As the healthcare industry continues to grow and evolve, the use of technology in healthcare is becoming increasingly important. Our project is an excellent example of how technology can be used to improve patient care and streamline processes in a medical clinic.

In addition, the website's administrator can easily manage the system by adding new doctors to the system and updating their information, making it easier to keep track of the clinic's operations. This ensures that the website remains up-to-date and relevant, providing patients with the most current information about the clinic.

Overall, with the increasing demand for healthcare services and the importance of patient-centered care, this project is a significant contribution to the healthcare industry. It has the potential to revolutionize the way medical clinics operate and provide care to patients, making it an excellent example of how technology can be used to improve patient outcomes.

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