

Project Title: Easymed (Remote Healthcare Solution)

Submitted By

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A thesis submitted in partial fulfillment of the requirement for the degree of Bachelor of Science in Software Engineering

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APPROVAL

This project titled on "Easymed: Remote Healthcare Solution", submitted by Md. Saif Islam (ID: 171-35-1926) to the Department of Software Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Software Engineering and approval as to its style and contents.

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Declaration

I hereby declare that this project (Easymed: Remote Healthcare Solution) has been completed by me, Md. Saif Islam (ID:171-35-1926) under the supervision of Mr. A.H.M Shahariar Parvez, Associate Professor, Department of Software Engineering, Daffodil International University. I also declare that any part of this project has never been submitted to anywhere else or any other educational institution for the purpose of any academic degree awarded.

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iii

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Table of Contents

CHA	APTER 1: INTRODUCTION	. 1
1.1	PROJECT OVERVIEW	. 1
1.2	PROJECT PURPOSE	
1.2.1		
CHA	APTER 2: SYSTEM ANALYSIS	.3
	FEASIBILITY ANALYSIS	
	MARKET FEASIBILITY	
	2 Technical Feasibility	
	OPERATIONAL FEASIBILITY	
	FUNCTIONAL REQUIREMENTS	
2.2.1	USER REGISTRATION	4
2.2.2	LOGIN	. 4
	PROFILE UPDATE	
2.2.4	DOCTOR SERVICE CREATION	4
	VIDEO CALL CREATION	
	MAKE E-PRESCRIPTION	
	' NOTIFY PATIENTS	
	PASSWORD RESET	
	SEARCH DOCTORS	
	0 BOOK ONLINE APPOINTMENT	
	1 PAY APPOINTMENT FEES	
	2 UPLOAD MEDICAL HISTORY	
	3 LEAVE FEEDBACK	
	4 CREATE MEDICINE INVENTORY	
	5 Order medicine	
	6 PROCESS AND DELIVERY MEDICINE	
2.3 N	NON-FUNCTIONAL REQUIREMENTS	8
CHA	APTER 3: SYSTEM DESIGN	. 9
3.1 U	JSE CASE DIAGRAM FOR EASYMED	.9
3.1.1	USE CASE DIAGRAM FOR DOCTOR	.9
3.1.2	USE CASE DIAGRAM FOR PATIENTS	10
3.1.3	USE CASE DIAGRAM FOR PHARMACIST	11
3.1.4	USE CASE DIAGRAM FOR ADMIN	11
3.2 U	JSE CASE DESCRIPTION	12
3.2.1	REGISTRATION	12
3.2.2	LOGIN	12
	CREATE AND UPDATE PROFILE	
	CREATE SERVICES	
	CREATE VIDEO CALL	
	MAKE E-PRESCRIPTION	
	SEARCH DOCTOR	
3.2.8	PAY FEES ONLINE	15

3.2.9 JOIN VIDEO CALL	15
3.2.10 UPLOAD MEDICAL RECORD	15
3.2.11 CREATE MEDICINE INVENTORY	16
3.2.12 Order medicine	16
3.2.13 RECEIVE AND PROCESS ORDER	17
3.2.14 MANAGE USERS	17
3.2.15 MANAGE VIDEO CALL	17
3.3 ACTIVITY DIAGRAM	18
3.3.1 ACTIVITY DIAGRAM FOR DOCTOR	18
3.3.2 ACTIVITY DIAGRAM FOR PATIENT	19
3.3.3 ACTIVITY DIAGRAM FOR PHARMACIST	20
3.3.4 ACTIVITY DIAGRAM FOR ADMIN	21
3.3.5 ACTIVITY DIAGRAM FOR CREATE PROFILE	22
3.3.6 ACTIVITY DIAGRAM FOR CREATE SERVICES	22
3.3.6 ACTIVITY DIAGRAM FOR ACCEPTING APPOINTMENT AND CREATE VIDEO CALL	23
3.3.7 ACTIVITY DIAGRAM FOR CREATE PRESCRIPTION	24
3.3.8 ACTIVITY DIAGRAM FOR PATIENT	25
3.3.9 ACTIVITY DIAGRAM FOR UPLOADING MEDICAL RECORD	26
3.3.10 ACTIVITY DIAGRAM FOR ORDER MEDICINE	27
3.3.11 ACTIVITY DIAGRAM FOR CREATE MEDICINE	
3.3.12 ACTIVITY DIAGRAM FOR RECEIVE AND DELIVERY ORDER	
3.3.13 ACTIVITY DIAGRAM FOR ONLINE PAYMENT	30
3.4 SEQUENCE DIAGRAM	31
3.4.1 SEQUENCE DIAGRAM FOR PATIENT	
3.4.2 SEQUENCE DIAGRAM FOR DOCTORS	
3.4.3 SEQUENCE DIAGRAM FOR PHARMACIST	
3.4.3 SEQUENCE DIAGRAM FOR ADMIN	34
3.5 ERD DIAGRAM	
	35
3.5 ERD DIAGRAM	35
3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY	35 36
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE)	35 36 36
3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY	35 36 36
 3.5 ERD DIAGRAM	35 36 36 36
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE)	35 36 36 36
 3.5 ERD DIAGRAM	35 36 36 36
 3.5 ERD DIAGRAM	35 36 36 36 37
3.5 ERD DIAGRAM	35 36 36 36 37
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY	35 36 36 36 37 37 37
 3.5 ERD DIAGRAM	35 36 36 36 37 37 37 38
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) 4.2 TECHNOLOGIES CHAPTER 5: SYSTEM TESTING 5.1 TESTING FEATURES 5.1.1 SYSTEM FEATURES TO BE TESTED 5.1.2 TECHNICAL FEATURES TO BE TESTED 	35 36 36 36 37 37 37 38 38
3.5 ERD DIAGRAM	35 36 36 37 37 37 38 38 38
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) 4.2 TECHNOLOGIES CHAPTER 5: SYSTEM TESTING CHAPTER 5: SYSTEM TESTING 5.1 TESTING FEATURES 5.1.1 SYSTEM FEATURES TO BE TESTED 5.1.2 TECHNICAL FEATURES TO BE TESTED 5.2 TESTING STRATEGIES 5.2.1 TEST APPROACHES 	35 36 36 36 37 37 37 38 38 38 39
 3.5 ERD DIAGRAM	35 36 36 36 37 37 37 37 38 38 38 39 39
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) 4.2 TECHNOLOGIES CHAPTER 5: SYSTEM TESTING 5.1 TESTING FEATURES 5.1.1 SYSTEM FEATURES TO BE TESTED 5.1.2 TECHNICAL FEATURES TO BE TESTED 5.2 TESTING STRATEGIES 5.2.1 TEST APPROACHES 5.2.2 PASS/FAIL CRITERIA 5.2.3 TESTING SCHEDULE 	35 36 36 37 37 37 37 38 38 38 38 39 39 39
3.5 ERD DIAGRAM	35 36 36 37 37 37 38 38 38 39 39 39 39 39 39 39
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) 4.2 TECHNOLOGIES CHAPTER 5: SYSTEM TESTING SI TESTING FEATURES 5.1 1 SYSTEM FEATURES TO BE TESTED 5.1.2 TECHNICAL FEATURES TO BE TESTED 5.2 TESTING STRATEGIES 5.2.1 TEST APPROACHES 5.2 PASS/FAIL CRITERIA 5.2 TESTING SCHEDULE 5.3 TEST CASES 5.3.1 USERS REGISTRATION AND AUTHENTICATION 	35 36 36 37 37 37 38 38 38 39 39 39 39 39 39 39
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) 4.2 TECHNOLOGIES CHAPTER 5: SYSTEM TESTING CHAPTER 5: SYSTEM TESTING 5.1 TESTING FEATURES 5.1.1 SYSTEM FEATURES TO BE TESTED 5.1.2 TECHNICAL FEATURES TO BE TESTED 5.2 TESTING STRATEGIES 5.2.1 TEST APPROACHES 5.2.2 PASS/FAIL CRITERIA 5.3 TEST CASES 5.3.1 USERS REGISTRATION AND AUTHENTICATION 5.3 ORDER MEDICINE AND GET DELIVERY 	35 36 36 37 37 37 37 38 38 38 39 39 39 39 39 39 39 39 39
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) 4.2 TECHNOLOGIES CHAPTER 5: SYSTEM TESTING SI TESTING FEATURES 5.1 1 SYSTEM FEATURES TO BE TESTED 5.1.2 TECHNICAL FEATURES TO BE TESTED 5.2 TESTING STRATEGIES 5.2.1 TEST APPROACHES 5.2 PASS/FAIL CRITERIA 5.2 TESTING SCHEDULE 5.3 TEST CASES 5.3.1 USERS REGISTRATION AND AUTHENTICATION 	35 36 36 37 37 37 37 38 38 38 39 39 39 39 39 39 39 39 39
3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) 4.2 TECHNOLOGIES CHAPTER 5: SYSTEM TESTING 5.1 TESTING FEATURES 5.1 SYSTEM FEATURES TO BE TESTED 5.1.2 TECHNICAL FEATURES TO BE TESTED 5.2 TESTING STRATEGIES 5.2.1 TEST APPROACHES 5.2.2 PASS/FAIL CRITERIA 5.2.3 TEST MG SCHEDULE 5.3 TEST CASES 5.3.1 USERS REGISTRATION AND AUTHENTICATION 5.3.3 ORDER MEDICINE AND GET DELIVERY CHAPTER 6: USER MANUAL	35 36 36 37 37 37 37 38 38 39 39 39 39 39 39 39 39 39 39 39 39 39
 3.5 ERD DIAGRAM CHAPTER 4: DEVELOPMENT TOOL & TECHNOLOGY 4.1 INTEGRATED DEVELOPMENT ENVIRONMENT (IDE) 4.2 TECHNOLOGIES CHAPTER 5: SYSTEM TESTING CHAPTER 5: SYSTEM TESTING 5.1 TESTING FEATURES 5.1.1 SYSTEM FEATURES TO BE TESTED 5.1.2 TECHNICAL FEATURES TO BE TESTED 5.2 TESTING STRATEGIES 5.2.1 TEST APPROACHES 5.2.2 PASS/FAIL CRITERIA 5.3 TEST CASES 5.3.1 USERS REGISTRATION AND AUTHENTICATION 5.3 ORDER MEDICINE AND GET DELIVERY 	35 36 36 37 37 37 37 38 38 39 39 39 39 39 39 39 39 39 39 39 39 39

6.2 REGISTRATION PAGE	45
6.3 LOGIN PAGE	45
6.4 PASSWORD RESET	45
6.5 SEARCH DOCTOR	46
6.6 DOCTOR PROFILE DETAILS	46
6.7 MEDICINE SEARCH	47
6.8 CHECKOUT AND PAYMENT PAGE	47
6.9 ONLINE PAYMENT GATEWAY	48
6.10 PAYMENT CONFIRMATION AND VIDEO CALL URL	48
6.11 VIDEO CALL SESSION WITH DOCTOR AND PATIENTS	49
6.12 DOCTORS PANEL BACK ADMIN VIEW	49
6.13 DOCTOR PROFILE DETAILS	50
6.14 DOCTOR ON DEMAND VIDEO CALL CREATION	50
6.15 INITIAL VIDEO CALL JOINING SCREEN	51
6.16 VIDEO CALL FINISH SCREEN	51
CHAPTER 7: PROJECT SUMMARY	52
7.1 SUMMARY	52
7.2 LIMITATIONS	52
7.3 REFERENCES	53

Chapter 1: Introduction

1.1 Project Overview

According to World Health Organization(WHO) Bangladesh had a density of 9.9 doctors and nurses per 10000 people, a figure much lower than the global median of 48.6. As a result a large number of people are being deprived of proper health care treatment and consultation of experienced doctors in our country. Due to country's communication, transportation and accommodation systems, village peoples are often consulted by rural areas inefficient doctors. We are having insufficient medicine supply, medical equipments compared to town areas on emergency basis. Here our aim is to provide a platform to get easy access to doctors, find medicine from the nearest pharmacy to the village areas and maintain proper treatment of health.

Easymed is a web application that focus to benefit people from all over the country in case of medical treatment and medicines. A lot of people are using smartphone and many of them also familiar with devices like Laptop, Desktop. Besides WIFI is also available from the town areas to rural village now a days. By using the devices and internet, people from anywhere in the country can join Easymed, register themselves and take services from their own place. They can search and see details of any doctors and pay fees online. System will have integrated videocall, messaging and file sharing options. Apart from taking online consultation from the doctors, Easymed will provide online medicine order and delivery services. It is common not to have all the medicine and medical equipment now a days. People need to go town areas and buy them. Using Easymed people can search their medicine online. Pharmacist from the local areas can also be a part of that to ensure faster medicine delivery.

1.2 Project Purpose

The only purpose of Easymed is to establish a connection between doctor and patients in terms of consultation and health guidance. It is not always required to visit to the hospital physically because it takes time to move from rural village to a good quality hospital. Transportation and communication are not appropriate for all the areas. For consultation and health guidance, people can use Easymed easily from their own places.

1.2.1 Proposed System

Easymed will have three type of user registration process including doctors, patients, and pharmacist. Doctor can create different services based on price and availability. Patients can see their services and pay appointment fees online via SSLCommerz (Payment gateway) and receive video call url to join. Patient can upload their previous medical history documents like prescription, test report that is relevant to their services. Video call will be controlled by the doctor and system admin. In case of system failure, admin or doctor can create new video session url and send them to the patient for further activities. Pharmacist can have access to the system and have their own medicine inventory that will be available to the website. Patient can order and get their required medicine from there. Some system generated report will be available like appointment details, fees receipt, and medical transcript that will be provided by the doctor after a successful consultation if necessary. All the data will be secure and electronically recorded for historical data analysis and forecasting.

Chapter 2: System Analysis

2.1 Feasibility analysis

2.1.1 Market Feasibility

As the number of smartphone users and availability of WIFI from town to rural areas fair enough, so the number of users can be extensive. People from any places can be benefited using Easymed. Due to increment of online activities and remote facilities this type of services will be more demandable day by day.

2.1.2 Technical Feasibility

The technical infrastructure will be feasible as it is a web app and compatible for all the devices like smartphone, desktop, and laptops. Integration of videocall, messaging and file sharing options are feasible across the platform using open-source libraries and frameworks. Secure and online payment integration will be feasible using SSLCommerz which a renowned and available payment gateway and will be integrated with the system. Due to the modem and responsive UI, Bangla language option it will be feasible for all kind of users to easily operate.

2.1.3 Operational Feasibility

Collaboration of doctors from different hospitals or retired person will have more impact on this application. Willingness of providing services online and help patient from all over the countries will be a vital role for the success of Easymed implementation. Along with the existing delivery partner, it will be feasible to process easy medicine delivery to the patient location.

2.2 Functional Requirements

Functional requirements mean the functionality and must do things for this web application. These are the following lists of functional requirements for Easymed for different stakeholders and priority. The stakeholder must need to follow these requirements in terms of accessibility of this application.

2.2.1 User registration

FRQ-1	User registration
Description	Both doctors, patients and pharmacist can register through web application
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.2 Login

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.3 Profile update

FRQ-2	Profile update
Description	Both doctors, patients and pharmacist can update their profile after first login
	from their profile menu
Stakeholder	Doctor, patient, pharmacist
Priority	Medium

2.2.4 Doctor service creation

FRQ-2	Doctor service creation
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.5 Video call creation

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.6 Make e-prescription

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.7 Notify patients

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.8 Password reset

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.9 Search doctors

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.10 Book online appointment

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.11 Pay appointment fees

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.12 Upload medical history

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.13 Leave feedback

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.14 Create medicine inventory

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.15 Order medicine

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.2.16 Process and delivery medicine

FRQ-2	User login
Description	Both doctors, patients and pharmacist can login through web application and
	find their portal
Stakeholder	Doctor, patient, pharmacist
Priority	High

2.3 Non-Functional Requirements

Non-functional requirements mean the general properties of a system that can also be introduced as quality attributes. Non-functional requirements of Easymed includes,

- Security: System will have 2FA authentication system to enhance the security for all the users
- Availability: The system should function 24/7 and server response to all the users properly
- **Performance:** System should be operated and execute every process within 5 seconds
- Accuracy: Data must be accurate on the terms of video call schedule, payment transaction and all the operational data
- Maintenance: It will be easy to maintain with a single point of integration
- User experience: System UI, functionality and process will be smooth for the users

2.4 Performance

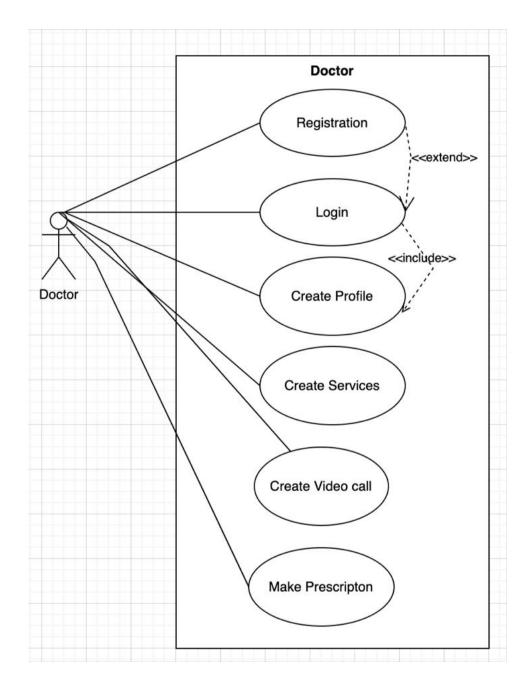
System will have options to track the performance for the following terms,

- Active users: Measure the number of active users based on authentication and access
- Number of registered doctors: Find the number of registered doctors and their services based on uses of the system
- Consultation volume: Monitor the number of consultation and video call session
- Patient engagement: Identify patient registration and consultation booking frequency
- Patient satisfaction: Collect data and insight from patient's feedback based on their services and doctors' consultation
- System availability: System availability will be a key option to find the system performance

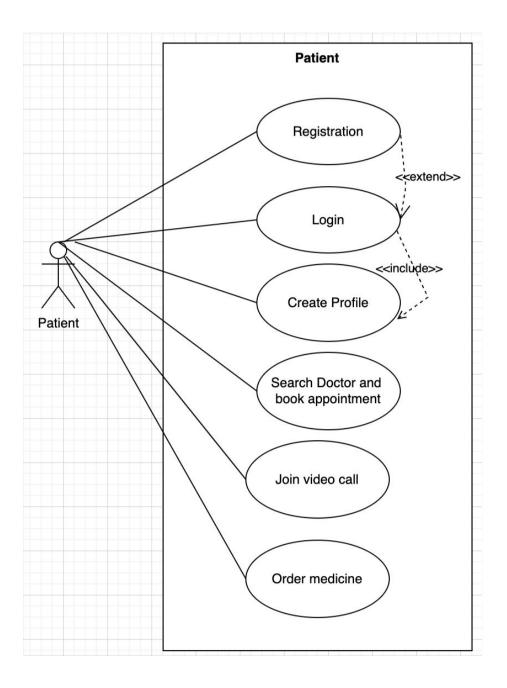
Chapter 3: System Design

3.1 Use case diagram for Easymed

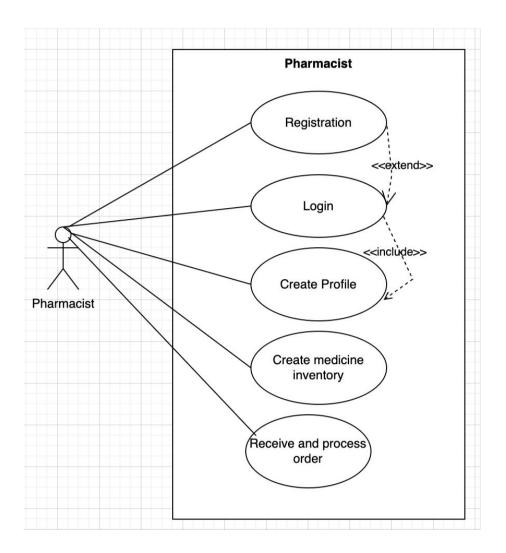
3.1.1 Use case diagram for doctor



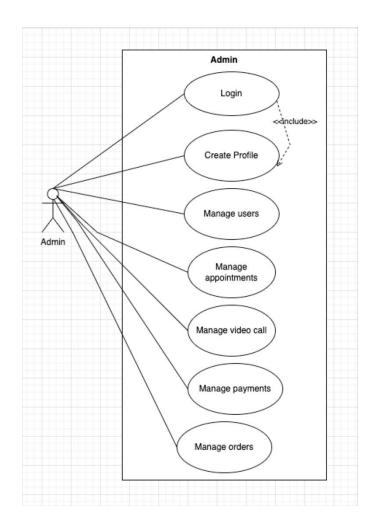
3.1.2 Use case diagram for patients



3.1.3 Use case diagram for pharmacist



3.1.4 Use case diagram for admin



3.2 Use case description

3.2.1 Registration

Use case	Registration
Use case no.	01
Goal	Create the user account into the system
Pre-condition	User must have to fill-up the basic information
Primary actor	Doctor, Pharmacist, Patient
Secondary Actor	No
Description	User will navigate to the signup page and fill up all the information to do
	a successful registration
Expectation	If everything is correct, the user account will be created
Priority	High

3.2.2 Login

Use case	Login
Use case no.	02
Goal	Login to the system
Pre-condition	User must have to be registered
Primary actor	Doctor, Pharmacist, Patient, Admin
Secondary Actor	No
Description	User will navigate to the login page and fill up all the information to do a
	successful login
Expectation	If everything is correct, the user be logged in successfully
Priority	High

3.2.3 Create and update profile

Use case	Create profile
Use case no.	03
Goal	Create and update users' profile by their own permission
Pre-condition	User must have to login first
Primary actor	Doctor, Pharmacist, Patient, Admin
Secondary Actor	No
Description	After login, user will find see profile option to update data
Expectation	If everything is correct, the user profile will be updated
Priority	Medium

3.2.4 Create services

Use case	Create services
Use case no.	04
Goal	Doctor can create services with price and details
Pre-condition	User profile must have to create for that
Primary actor	Doctor
Secondary Actor	Admin
Description	Doctor will find their own profile and create services from their
Expectation	If services are created and published, then it will visible to website
Priority	High

3.2.5 Create video call

Use case	Create video call
Use case no.	05
Goal	Create video call session using jitsi and share
Pre-condition	Doctor must have permission or should have an online payment first
Primary actor	Doctor, Patient
Secondary Actor	Admin
Description	Doctor will fill up all the information and create the video call from system tray
Expectation	If everything is correct, a video call url will be generated
Priority	High

3.2.6 Make e-prescription

Use case	Make e-prescription
Use case no.	06
Goal	Create an e-prescription for the patients
Pre-condition	Doctor should have created an e-prescription for a booked appointment
Primary actor	Doctor, Patient
Secondary Actor	Admin
Description	Doctor will write the medicine info and dose details for the patient
Expectation	After all the information is provided, patient will receive an e-prescription
Priority	High

3.2.7 Search doctor

Use case	Search doctor
Use case no.	07
Goal	Patient will search doctor and see details
Pre-condition	User must have to visit the website first
Primary actor	Patient
Secondary Actor	No
Description	User will go to the landing page and search doctor details
Expectation	Patient will find a doctor for online consultation
Priority	High

3.2.8 Pay fees online

Use case	Pay fees
Use case no.	08
Goal	Patient will make online payment for consultation
Pre-condition	Patient must have to visit a doctor profile first
Primary actor	Patient
Secondary Actor	No
Description	Patient will select a doctor and proceed to pay the consultation fees
Expectation	If everything is correct, the payment will be processed, and patient will
	receive a video call url
Priority	High

3.2.9 Join video call

Use case	Join video call
Use case no.	09
Goal	Patient will join the video call using the video call url
Pre-condition	Patient must have to pay first before receiving and join to the video call
Primary actor	Doctor, Patient
Secondary Actor	Admin
Description	Patient will join to the video call with doctor using the provided link
	during payment
Expectation	If the video call server is okay, patient will be able to join
Priority	High

3.2.10 Upload medical record

Use case	Upload medical record
Use case no.	10
Goal	Patient can upload their previous medical history to the system
Pre-condition	User must have to sign up and logged in to the system
Primary actor	Doctor, Patient
Secondary Actor	Admin
Description	User will have option to upload data from their profile and doctor can
	check that

Expectation	If the file type and size is correct, then the data will be uploaded in to the
	system
Priority	Medium

3.2.11 Create medicine inventory

Use case	Create medicine inventory
Use case no.	11
Goal	Pharmacist will create medicine product from their profile
Pre-condition	Pharmacist must have permission and option to create product
Primary actor	Pharmacist
Secondary Actor	Admin
Description	Pharmacist will create the medicine with all the details
Expectation	If the medicine is created and published, then it will be visible to the
	website.
Priority	Medium

3.2.12 Order medicine

Use case	Order medicine
Use case no.	12
Goal	Patient will search and order medicine online
Pre-condition	User must have to fill-up the basic information
Primary actor	Patient
Secondary Actor	Pharmacist, Admin
Description	User will navigate to the medicine page and add to cart
Expectation	If everything is correct, the order will be placed, and pharmacist can
	check then
Priority	Medium

3.2.13 Receive and process order

Use case	Receive and process order
Use case no.	13
Goal	Pharmacist will create delivery and process the order
Pre-condition	Pharmacist must have to confirm and check stock
Primary actor	Pharmacist, Patient
Secondary Actor	Admin
Description	Pharmacist will go to patient order and create delivery based on patient
	address.
Expectation	After confirmation, a delivery will be created for the medicine.
Priority	Medium

3.2.14 Manage users

Use case	Manage users
Use case no.	14
Goal	Admin will manage all type users
Pre-condition	Admin must have to login into the system first
Primary actor	Admin
Secondary Actor	No
Description	Admin will manage all the user's information, and take steps if necessary
Expectation	Admin can save and update any data if necessary
Priority	Low

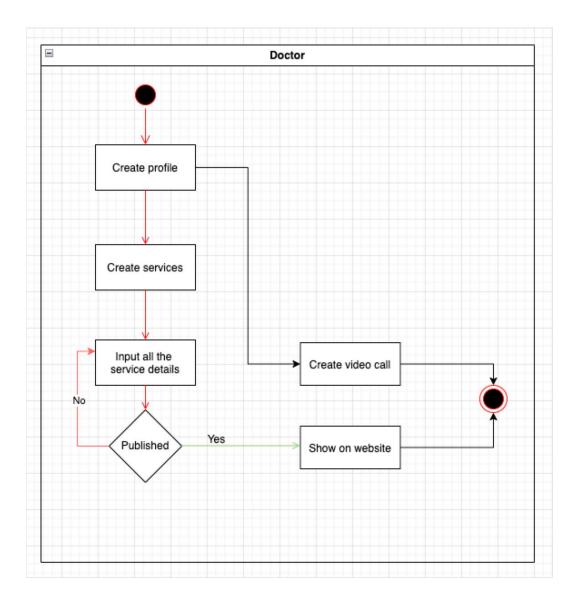
3.2.15 Manage video call

Use case	Manage video call
Use case no.	15
Goal	Admin can manage video call
Pre-condition	Admin must have to login to the system
Primary actor	Admin
Secondary Actor	No
Description	Admin can go the video call module and monitor all the system
Expectation	If necessary admi can edit the session details

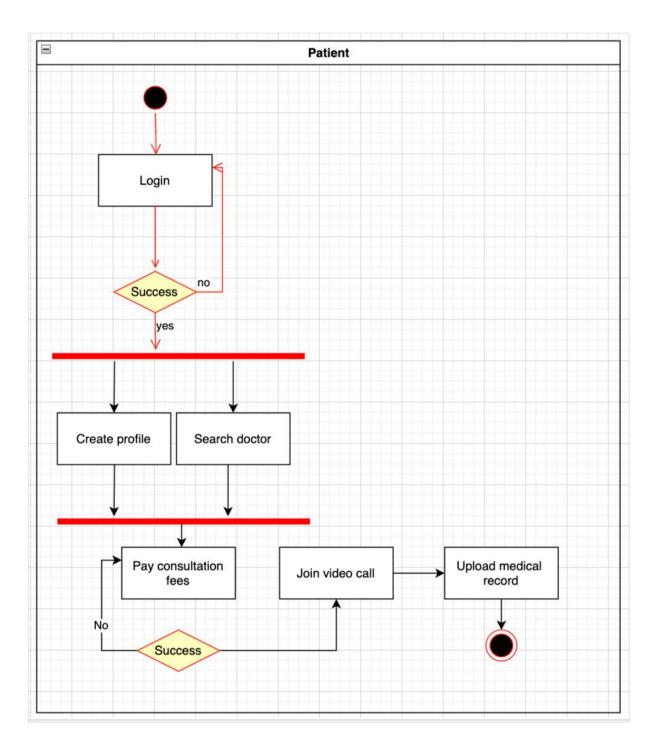
Priority	Low

3.3 Activity diagram

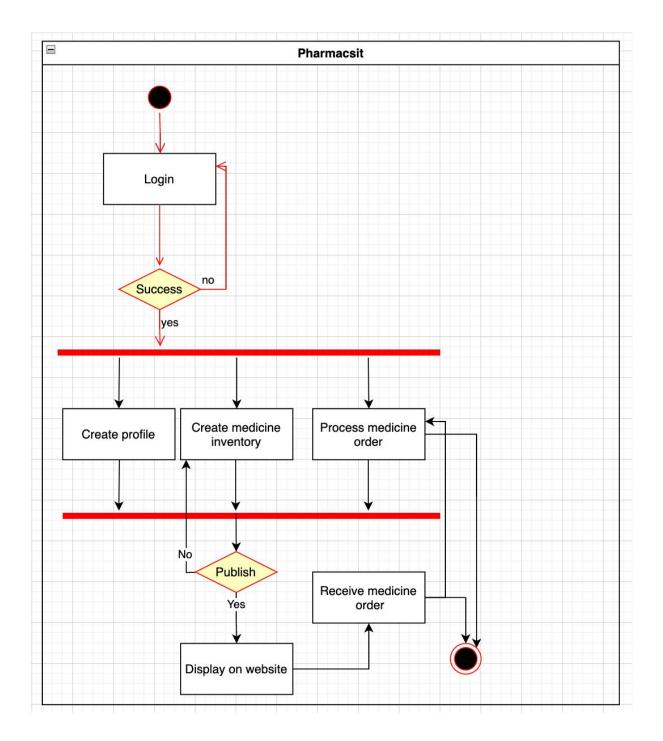
3.3.1 Activity diagram for doctor



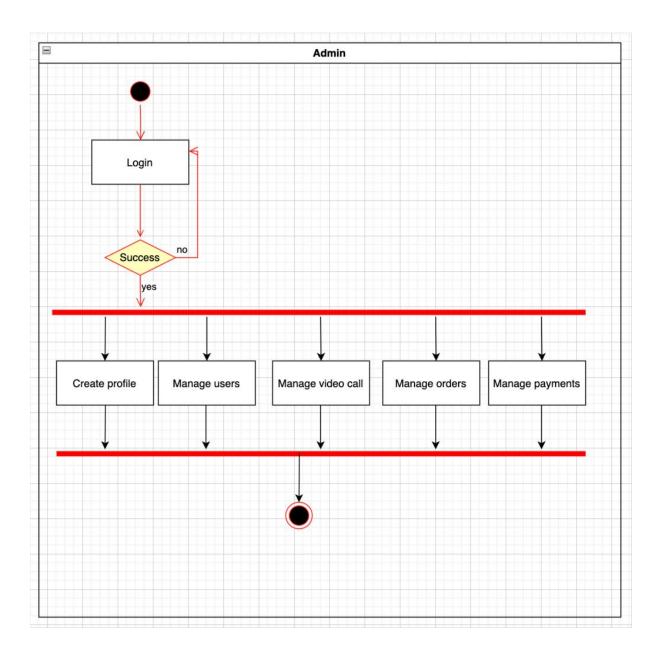
3.3.2 Activity diagram for patient



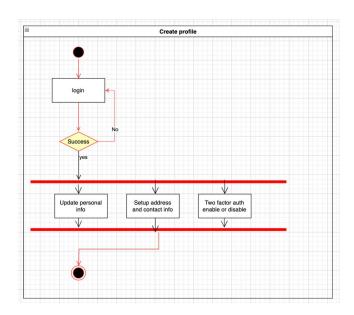
3.3.3 Activity diagram for Pharmacist



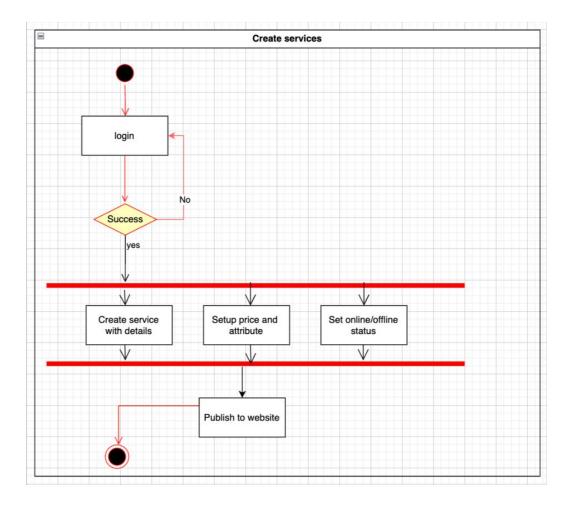
3.3.4 Activity diagram for admin



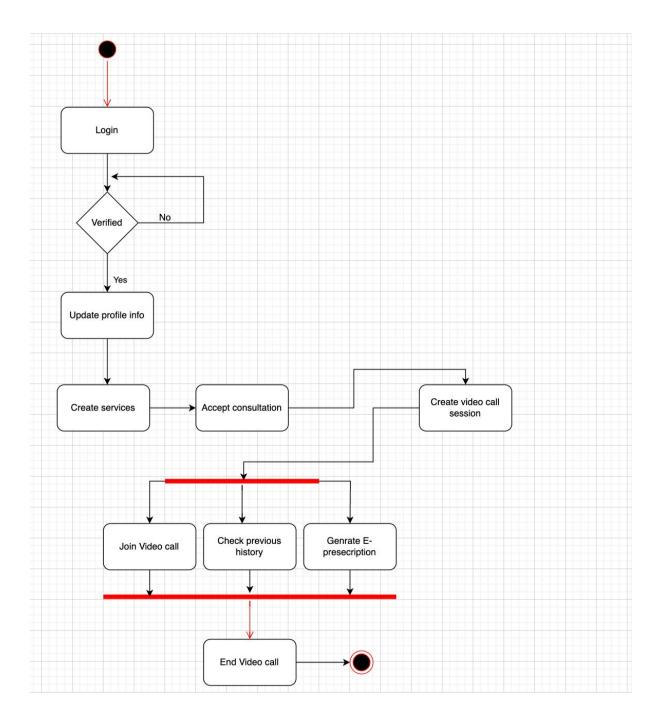
3.3.5 Activity diagram for create profile



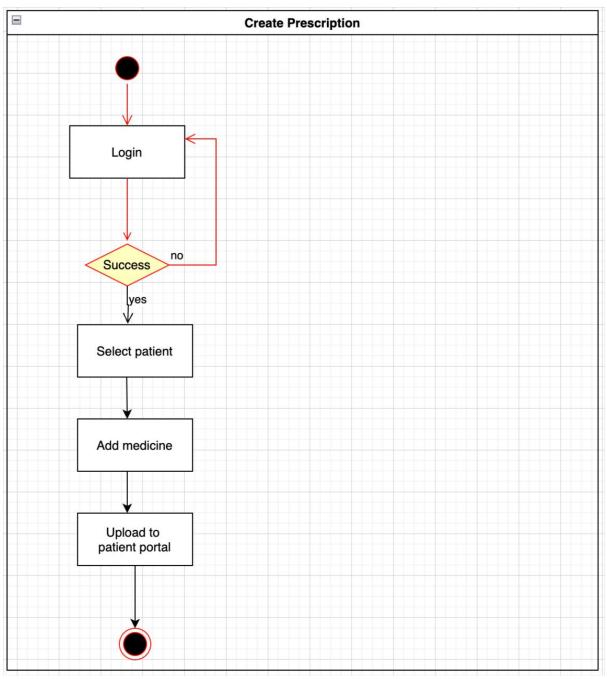
3.3.6 Activity diagram for create services



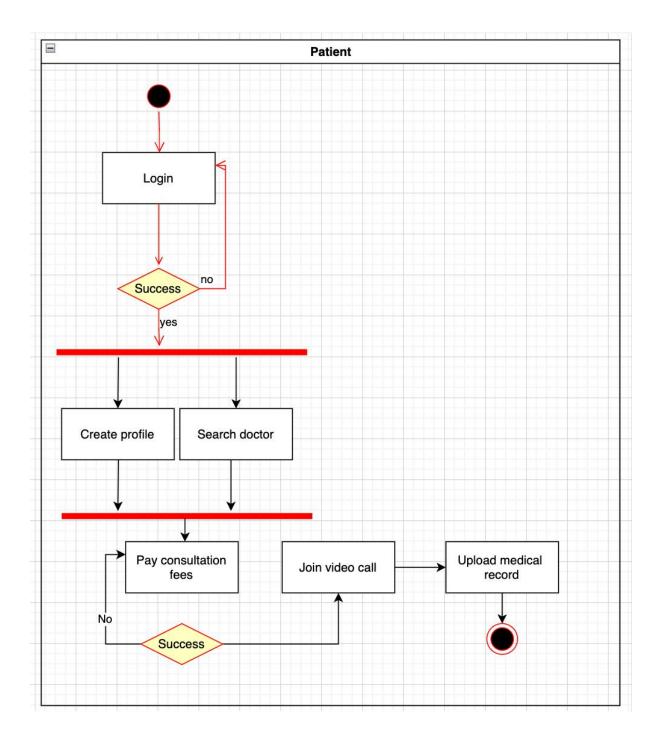
3.3.6 Activity diagram for accepting appointment and create video call



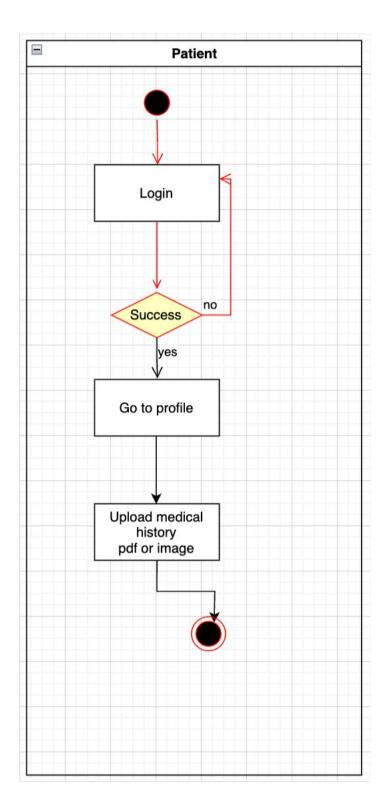
3.3.7 Activity diagram for create prescription



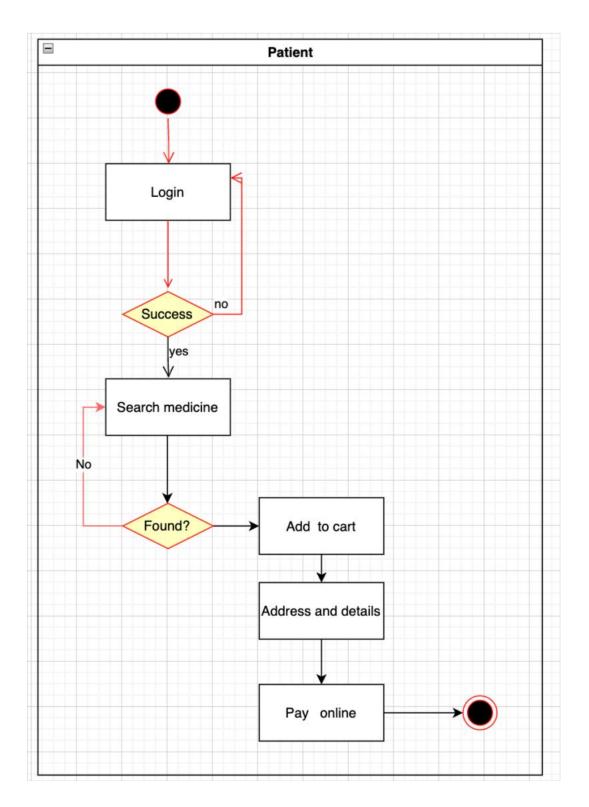
3.3.8 Activity diagram for patient



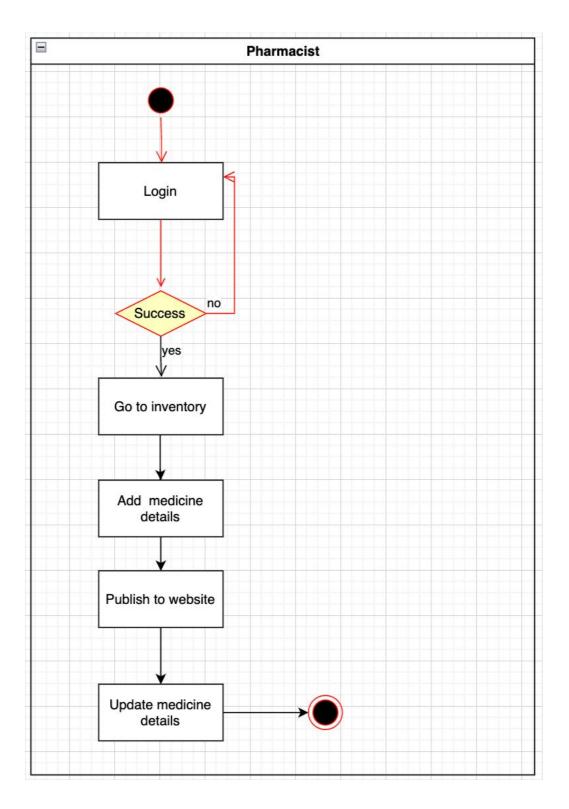
3.3.9 Activity diagram for uploading medical record

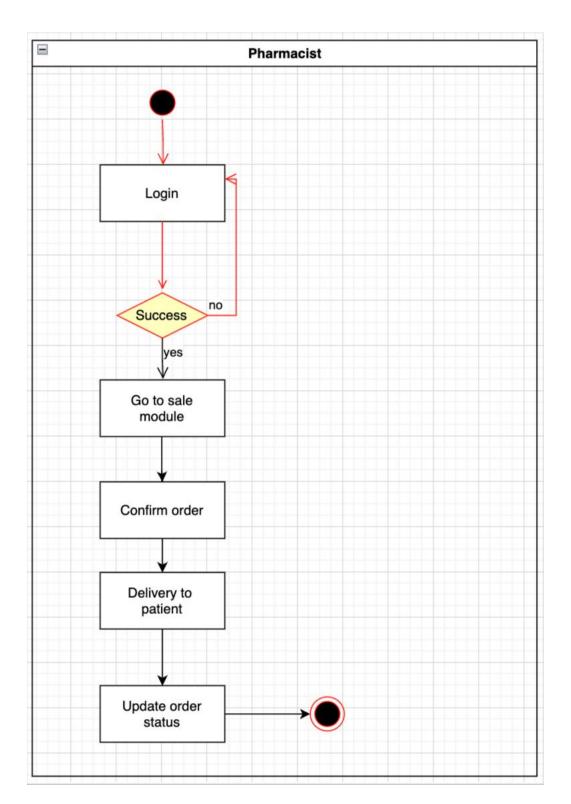


3.3.10 Activity diagram for order medicine



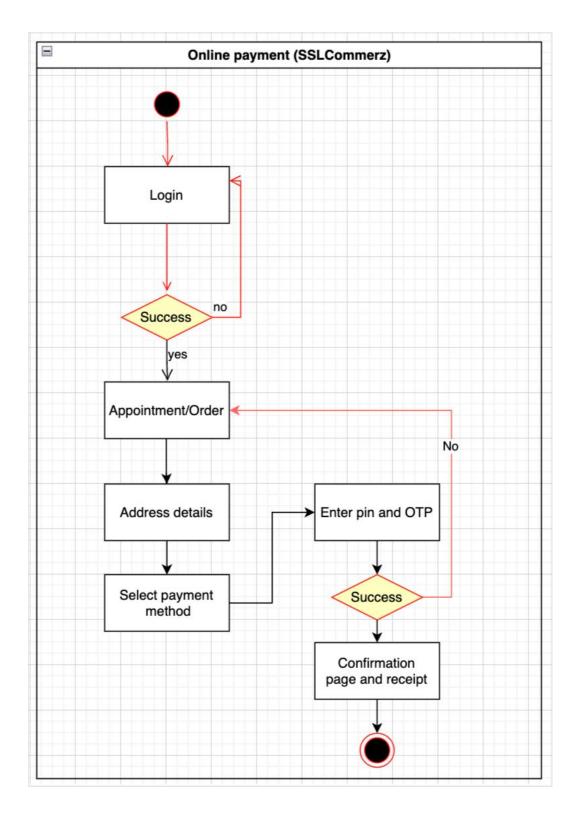
3.3.11 Activity diagram for create medicine





3.3.12 Activity diagram for receive and delivery order

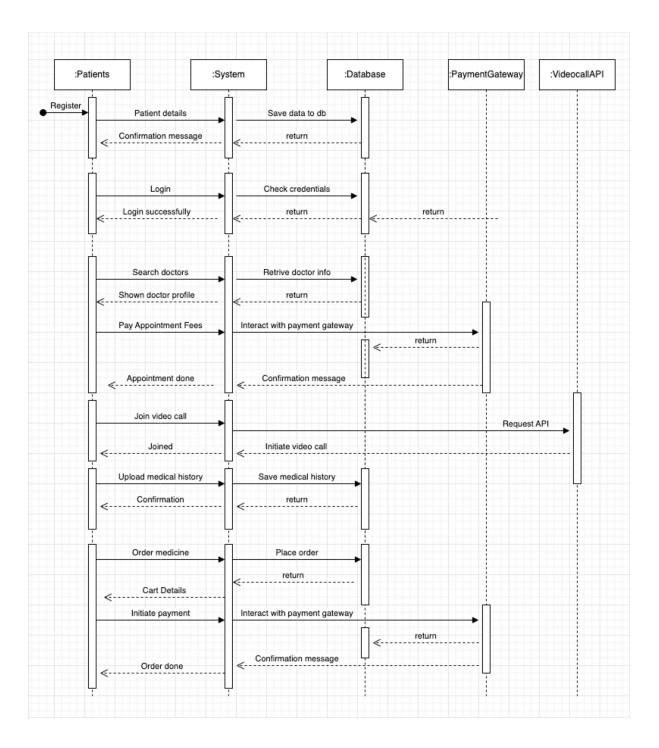
3.3.13 Activity diagram for online payment



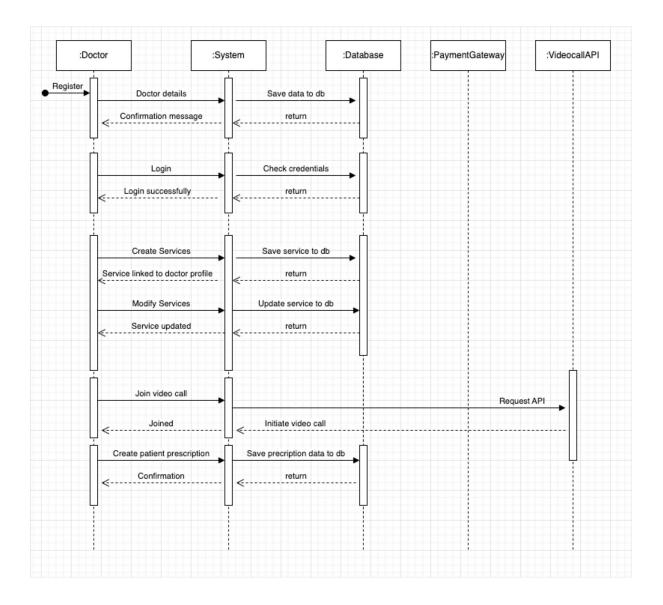
3.4 Sequence diagram

In this phase we will see the sequence diagram for all the stakeholder's journey to the system.

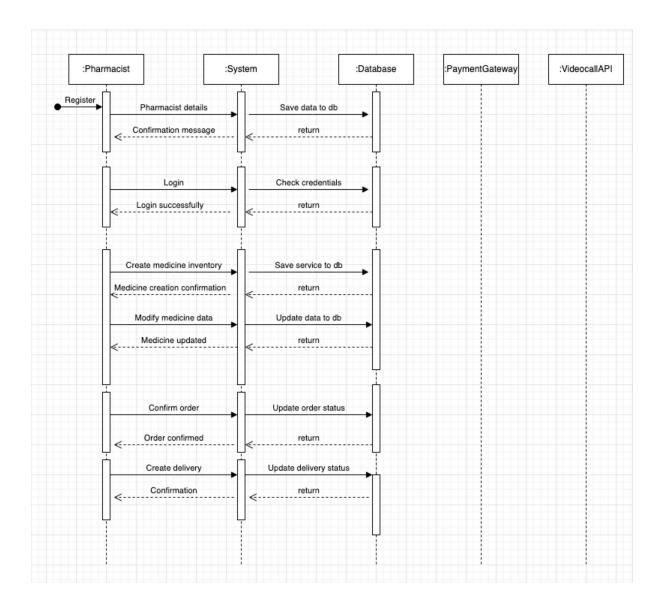
3.4.1 Sequence diagram for patient



3.4.2 Sequence diagram for doctors



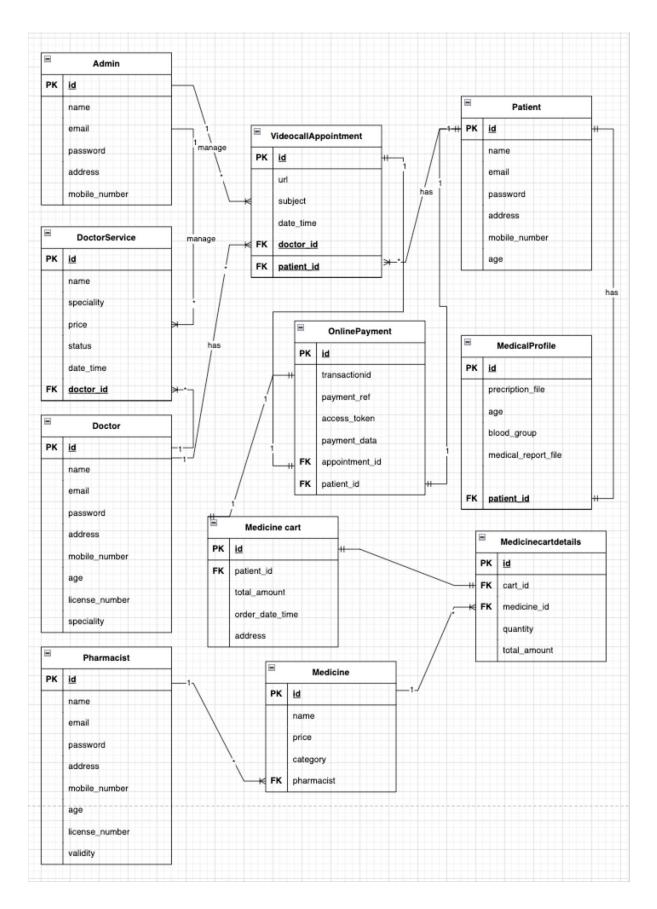
3.4.3 Sequence diagram for pharmacist



3.4.3 Sequence diagram for admin

:Admin	:Syste	m	:Database	:PaymentGateway	:VideocalIAPI
legister	Admin details	Save data to db	→		
<	Confirmation message	(
	Login Login successfully	Check credentials			
 		<			
<u> </u>	Manage doctor services	Update services	→		
<	ata retrieved successfully	<return< td=""><td></td><td></td><td></td></return<>			
	Manage video appointment	Update data to db			
		`			
	Manage medince inventory	Update data to db	-		
	Data updated	<return< td=""><td></td><td></td><td></td></return<>			
<u> </u>	Manage medicine orders	Update data to db	>		
	Data updated	<			

3.5 ERD Diagram



Chapter 4: Development tool & Technology

To develop Easymed, we need to use different tools and technologies for front end, backend, and database development.

- 4.1 Integrated Development Environment (IDE)
 - Frontend & Backend development: PyCharm, Visual Studio Code
 - Database: Pgadmin4

4.2 Technologies

- Backend: Python, Odoo
- Frontend: Xml, CSS, JS
- Database: PostgreSQL
- Video call api integration: Jitsi Meet (Opensource)
- Deployment and hosting: Cloud based vps and ubuntu os preferable

Chapter 5: System Testing

5.1 Testing Features

5.1.1 System Features to be tested

Features	Priority	Descriptions
Registration and authentication	High	Ensure that all the users can register and
		access to their account securely
Login	High	Ensure that all the existing registered
		users can login to their account securely
Password Reset	Medium	Ensure that users can reset their
		password from system properly
Doctor Services Creation	High	Ensure that doctor can different services
		from their profile
Doctor and medicine list show on	High	Ensure that all the doctor services and
website		medicine are listed properly for patients
Patient online payment	High	Ensure that the online payment of
		patient process securely in the system
Video call generation	High	Ensure that system can generate video
		call session uniquely for patients based
		on payment status
Stream video call	High	Ensure that the video call URL works
		both for patient and doctors, also they
		can join
Upload Medical Report	High	Ensure patient can upload their medical
		record using the system properly
Leave feedback on doctor	Medium	If a patient wants to leave feedback,
		then ensure that the patient can record
		the feedback successfully
Create medicine inventory	High	Pharmacist must have the options to
		create their own medicine inventory
Process order delivery	High	If patient order medicine, then system
		must have the capacity to process for
		delivery
	1	

5.1.2 Technical features to be tested

Features	Priority	Descriptions
Database server integration	High	Ensure that the database server is
		functional 24/7, along with the
		application server
Video call API integration	High	Ensure that the video call API sever is
		reachable and ready to connect
Application server	High	Ensure that all the packages are up to
		date and compatible with application
		server for smooth operations

5.2 Testing Strategies

Testing strategies are one of the most important things to do for a web application development. System testing gives us feedback if the system will be good or bad for different stakeholders. Based on the stake holders there will be various test strategies for the entire system

5.2.1 Test Approaches

- Unit testing: Test individual components and functions of the system in isolation to ensure they work as expected.
- **Integration testing:** Verify the integration between interface such as user interface, database, video call API integration is integrated and work as expected.
- Automation testing: Automation test help to find out the preliminary bugs and redundant issues of the application that can be removed based on the test results.
- **Manual testing:** Manual test indicated a natural process of testing for that application where the stakeholders or tester can test each feature individually and find the test outcomes.
- **Performance testing:** Analyze the system response time, stability, and scalability under different level of user's activity.
- Security testing: Identify and rectify vulnerabilities of the system, ensure the confidentiality and integrity of user's data.
- User acceptance testing (UAT): Engage actual users to validate the overall feature and ensure the system is properly working.

5.2.2 Pass/Fail criteria

Features	Descriptions	Status
User registration and	Users can register and authenticate	Pass
authentication	successfully	
	Errors on registration or authentication	Fail
Online video call consultations	Smooth online video call initiate, stream, and	Pass
	finish	
	Video call URL broken, server is	Fail
	unreachable	
Online payment options	Payment is done successfully and status	Pass
	update on patient's service	
	Error during online payment	Fail
Online medicine ordering	Patient can order, pay and get medicine	Pass
	delivery successfully	
	Error during order processing	Fail

5.2.3 Testing Schedule

Features	Schedule	Resources
User registration and	7 Days	Testers
authentication		• Patients
		Doctors
		Pharmacist
Online Consultation	14 Days	• Testers
		• Patients
		Doctors
Online medicine ordering	7 Days	Testers
		• Patients
		Pharmacist

5.3 Test Cases

According to the test features and users level here I have written all the possible test cases that can be done,

5.3.1 Users registration and authentication

Feature	Test Case ID	Scenario	Test St	eps	Expected	Pass/Fail
					Result	
User	TC001	User will	1.	Navigate to	User	Pass
registration		register to the		the signup	successfully	
and		site		page.	registered	
authentication			2.	Fill up		
				required		
				informatio		
				n		
			3.	Verify and		
				signup		
	TC002	User	1.	User will	User will get	Pass
		registered		enter	wrong opt	
		with wrong		wrong opt	message	
		OTP		during		
				verification		
	TC003	User login	1.	User will	User will be	Pass
		with correct		enter their	logged in	
		credentials		mobile/em	successfully	
				ail during		
				login		
			2.	User will		
				enter their		
				password		
	TC004	User login	1.	User will	User will get	Pass
		with incorrect		enter	wrong login	
		information		wrong	data message	
				email/pass		
				word		
	TC005	User login	1.	User will	User will not	Fail
		with incorrect		wrong	get any error	
		information		email/pass	message	
				word		
				woru		

5.3.2 Online consultation and payment

Feature	Test Case ID	Scenario	Test Steps	Expected	Pass/Fail
				Result	
Online	TC006	User will	1. User	User will	Pass
consultation		search doctor	will	receive	
fees payment		and pay the	search	payment	
		fees	doctor	successful	
			and pay	message and	
			fees for	video call	
			consulta	URL	
			tion		
	TC007	User will pay	1. User	Payment error	Fail
		the fees	will	occurred but	
			receive	no message	
			payment		
			confirm		
			ation		
	TC008	User will join	1. User	User will	Pass
		the video call	will try	enter to the	
			to join	video call	
			the	room	
			video		
			call with		
			the		
			provide		
			d URL		
	TC009	User will try	1. Video	User will see	Pass
		to join the	call is	broken url	

	video call		not	message	
			working		
			with the		
			provide		
			d link		
TC010	Doctor closes	1.	Doctor	Patient can't	Pass
	the		will	join the video	
	appointment		mark the	call url further	
	and video call		video		
	link will be		call		
	finished		option		
			as		
			finished		

5.3.3 Order medicine and get delivery

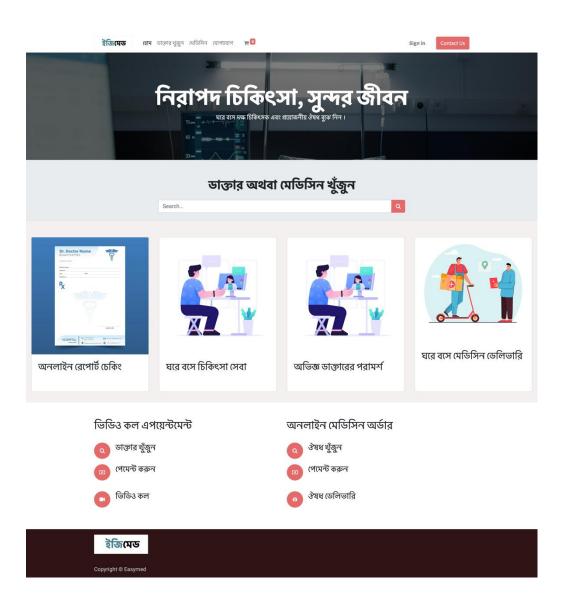
Feature	Test Case	Scenario	Test St	eps	Expected	Pass/Fail
	ID				Result	
Online	TC011	Patient will	1.	Patient	Patient will	Pass
consultation		search		will	receive a	
fees payment		medicine and		search	payment	
		order online		medicine	confirmation	
				and add to	message and	
				cart	receive order	
			2.	Checkout	details	
				and pay		
				online		
	TC012	Patient will	1.	Patients	Patient will	Pass
		update cart		add extra	receive a	
		with an		medicine	payment	
		existing order		with an	confirmation	
				existing	and place	
				cart	order	
			2.	Checkout	successfully	

	and pay	
	online	

Chapter 6: User manual

6.1 Landing page

After visiting Easymed, the users will find a landing page for the introduction and features of the website.



6.2 Registration page

ইজিমেড হোম ডাক্তারখুজুন মেডি	ঈন যোগাযোগ 🏾 🗮 🔍	Sign in Contact Us
	মোবাইল নাম্বার	
	ওটিপি কোড	
	ওটিপি রিক্রুয়েস্ট	
	আপনার নাম e.g. John Doe	
	পাসওয়ার্ড দিন	
	পুনরায় পাসওয়ার্ড দিন	
	ইউজার টাইপ	
	ডাক্তার 🗸	
	Sign up	

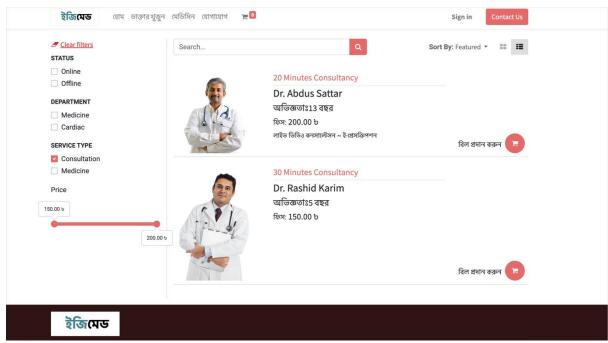
6.3 Login Page

ইজিমেড হোম ডাক্তারখুজুন মে	ভিসিন যোগাযোগ 🌪 🧕	Sign in Contact Us
	Email	
	Email	
	Password	
	Password	
	Log in	
	Don't have an account? Reset Password	
ইজিমেড		
Copyright © Easymed		

6.4 Password reset

ইক্তিমেড হোম ডাক্তারখুজুন মেডিসিন যোগাযোগ 📜 🖸	Sign in Contact Us
Your Email	
Confirm	
Back to Login	
ইজিমেড	
Copyright © Easymed	

6.5 Search doctor



6.6 Doctor profile details

ইজিমেড	হোম ডাক্তারখুজুন মেডিসিন যোগাযোগ 🌪 🧕		Sign in	Contact Us
All Services > 2	20 Minutes Consultancy	admin		a
		20 Minutes Consultancy লাইভ ভিডিও কনসাল্টেসন ~ ই-প্লেসক্রিপশন অভিজ্ঞতাঃ 13 বছর ফিস্স: 200.00 ট লি Pay Fees Status: Online Department: Medicine Service Type: Consultation	f	: У (P) 🔀

6.7 Medicine search

ইন্ডিমেড হোম ডাব্ত	গরখুজুন মেডিসিন যোগাযোগ 🍞 🧕	Sign in Contact Us
Clear filters SERVICE TYPE	admin	Q Sort By: Featured - 📰 📰
 Consultation Medicine 	10 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ba Syrup 100 ML
	নাপা 🦾 35.	00 b
	Hara	
		বিল প্রদান করুন 🧦
ইজিমেড		
Copyright © Easymed		

6.8 Checkout and payment page

Contraction Review Order	Address	Co	onfirm Order
Billing: Test, Test, Dhaka 1217, Bangladesh	C Edit	Product	Quantity Price
Pay with		20 Minutes Consultancy	1.0 200.00 b
		Subtotal	200.00 b
SSLCommerz Test Mode	show more	Taxes	с 0.00 ъ
		Total	200.00 b
Return to Cart	Pay Now >		I have a promo code

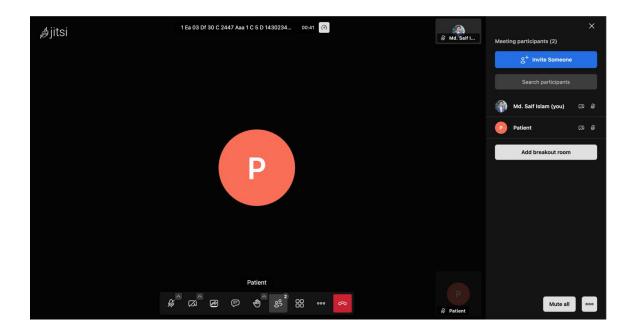
6.9 Online payment gateway

Demo P C C C C C C C C C C C C C C C C C C C
Support FAQ Offers Login
CARDS MOBILE BANKING NET BANKING
VISA 🕕 🔤 Other Cards
Enter Card Number
First digit is 37 or 4 or 5 and rest digits are 1
MM/YY CVC/CVV
Card Holder Name
Save card & remember me
By checking this box you agree to the Terms of Service
PAY 200 BDT

6.10 Payment confirmation and video call url

ট্রান্সেকশন S00011 সফলভাবে সম্পন হয়েছে		
ইজিমেড এর সাথে থাকার জন্য ধন্যবাদ। 🔒 Print	Product	Quantity Price
Payment Information:	30 Minutes Consultancy	1.0 150.00 ъ
SSLCommerz Total: 150.0	0 to Subtotal:	150.00 ъ
আপনার পেমেন্ট সফল হয়েছে। ধন্যবাদ ।	Taxes:	0.00 b
Billing & Shipping: Test, Test, Dhaka 1217, Bangladesh	Total:	150.00 ъ
Video Call URL		
Video Call URL http://localhost:7554/videocall/423090c8bb4448df875239f006fa5fa6		

6.11 Video call session with doctor and patients



6.12 Doctors panel back admin view

EASYMED Doctors Configuration			剌 🖬 📀 🔥 Administrator
Easymed Doctor		Search	۹
Create		▼ Filters ≡ Group By ★ Favorites	1-3/3 < > 🎫 🗮
Name: Dr. Abdus Sattar Department: Medicine Diali Jadus Sattar Diali Jadus Sattar Diali Badus Sattar Diali Badus Sattar Diali Patient: O Conner	Name: Dr. Rashid Karim Department: Cardiae Surgery Disabilit: rashid@easymed.com Mobile: Dis2015608 License Number: MBBS102868 Total Partient: 0	Name: Dr. Fahlm Muntasir Department: Medicine Email: Fahlm@easymed.com Mobile: 01741544166 License Number: MBBS1012347 Total Patient: 0	

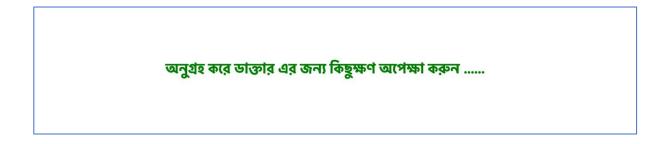
6.13 Doctor profile details

EASYMED D	octors Configuration						🐢 💌 O	A Administrator
Easymed Doctor / Dr	Abdus Sattar							
Edit Create			Action					1/3 < >
			1 Services	Patients	0 Appointments	0 Invoices	O Payments	
	Doctor Name Dr. Abdus Sa	attar						
	Personal Information			Patient Enquiries				
	Degree	(MBBS)(FPS)		Accept Appointment				
	Years of Experience	13		Status	Online			
	Email	abdus.sattar@easymed.com		Department	Medicine			
	Mobile	01313002661						
	License Number	MBBS102867						
	Certificates Upload							
	Certificates	Dairy Card.pdf						
	Previous Work Experien	ce						
	Organization		Start Date	End Date	Currently Working	Department		
	Ibn Sina Medical Colleg	e & Hospital	08/01/2023		\bigcirc	(Medicine)	8	
	Add a line							

6.14 Doctor on demand video call creation

III Video	Call Calls		Video Call					×	🐢 e o	A Administrator
Video Call			Video our							Q
Create 🛓			Subject			Meeting Code	ce918e7a3d6c4f5a8d58cf1eb997578f		1-7 / 7 <	> 📰 📖 🎟
Name	User	Related [Participants		*	Meeting Link	http://localhost:7554/videocall/ce918e7a3			Meeting Status
U VC007	Saif	Dr. Rashi	Date	12/17/2023 21:19:00	-	User	Administrator -		032	Done
D VC006	Admin test	Dr. Abdu:							st - S00030	Planned
U VC005	Public user								slam - S00026	Draft
U VC004	Public user	Dr. Rashi							slam - S00022	Done
C003	Public user	Dr. Abdu							slam - S00020	Draft
UC002	Public user	Dr. Abdu		_					slam - S00020	Draft
D VC001	Administrator		Create Create & Pla	n Cancel			More De	tails		Planned

6.15 Initial video call joining screen



6.16 Video call finish screen

ডাক্তারের সাথে মিটিং সম্পন হয়েছে ।

Chapter 7: Project summary

7.1 Summary

I have been started to develop my project "Easymed" from July. Before starting the project, I sat and discuss with my supervisor about the features and functionalities of my application. After having positive reviews from my supervisor, I have been started to develop. Mainly, the focus of this application is very clear. We will deploy this to any local rural hospital areas. Connect between doctor and patient will be established across the platform. People will start using the system once they will get some benefit and get used to it.

7.2 Limitations

Due to time shortage and some technical aspects, features like IOT integration and automated document scanning can be done. Another limitation can be a mobile app of this web application version that can be featured later.

7.3 References

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171-35-1926 ORIGINALITY REPORT 9% 0% PUBLICATIONS STUDENT PAPERS SIMILARITY INDEX **INTERNET SOURCES** PRIMARY SOURCES dspace.daffodilvarsity.edu.bd:8080 9% 1 Internet Source Submitted to University of Derby 1% 2 Student Paper Submitted to College of Science and 1% 3 Technology, Bhutan Student Paper Submitted to University of Canberra 1% Student Paper pdfcookie.com 1% 5 Internet Source Submitted to HELP UNIVERSITY 1% Student Paper

Submitted to University of Queensland <1%
 Submitted to School of Accounting & <1%
 Submitted to School of Accounting & <1%
 Submitted to Midlands State University

