

MEDICAL CONSULTANCY



Medical Consultancy

Project Report Submitted In Partial Fulfillment Of The
Requirement For The Award Of The Diploma In Computer Engineering
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ABSTRACT

The Main Motive Of This Project Is To Provide A One Place For All Medical Related Entities. Right Now Whole World Is Becoming Digital And Everything From Payments, Online Shopping To Any Government Schemes Are All Now Digitalized. So, Medical Field Also Need Some Digitalization. We Are Providing A Feature By Which We Can Get Expert Consultancy Of Qualified Doctors By Video Conference. It Is Not Possible In Every Condition To Solve It Online By Video Calling So, We Are Providing A Different Section In Which Patient Can Book The Appointment Of Particular Doctor.

Affected Sector: Healthcare.

Functionalities :

1. Online Consultancy From Any Doctor In Personal.
2. Booking Appointment Of Doctors In Selected City.
3. Providing Home Consultancy By Nearby Doctors In Your Area.
4. Online Payment Method (UPI, Net Banking, Credit/Debit Card).

Now-A-Days Due To Covid-19 It Is not advisable To Go Out Of Our Resident Is covid V, So This Will Be A Effective Solution Of Related Medical Entities Even After Covid- 19.

Tools & Technologies:-

Front-End:- HTML5, CSS, Java Script ,bootstrap.

Back-End:- PHP,MySql.

1. INTRODUCTION

1.1 CHARACTERISTICS OF EXISTING SYSTEM:-

In Existing System, There Is No Feature Where Patient Can Check Consultancy Charges Of Particular Doctor. And If The Behavior Of Doctor Or Treatment Given By Them Isn't So Recommendable Then Also Patient Can't Do Anything And This Is The Main Drawback Of Existing System.

Patient Or Their Familiars Have To Go To The Doctor For Getting Appointment. And Sometimes They Have To Wait In Long Queue To Get The Treatment Done. If Patient Need That Treatment Of Doctor Is To Be Done Outside The City, State Or Country Then Patient Have To Go At That Place And Then They Can Book The Appointment Of The Doctor.

1.2 OVERVIEW OF PURPOSED SYSTEM WITH ADVANTAGES:-

In Our System, Patient Can Check The Consultancy Charges Of Doctor By Just Searching Their Name In Search Bar. If Patient Have No Idea Which Doctor Is Better For Them, Then They Can Just Enter Their Symptoms In Search Box And On The Basis Of Ratings Filter The Name Of The Doctor Will Be Shown.

Patients Or Their Familiars Don't Have To Wait In Queue They Can Book The Appointment Of Doctor From Website. Patient Can Also Book The Appointment Of Doctor Outside The City Or Country Plus, If They Don't Like The Treatment Given By The Doctor They Can Mention All That Things In Review/Feedback Section Of Particular Doctor And Can Also Give The Ratings(Out Of 5) Which Will Help Other Visitors Book The Appointment Of Doctor Wisely.

1.3 SCOPE (SCOPE – LIST OF MODULES AND THEIR FUNCTIONS):-

Sign Up:-

It Is Used To Register User In Website. It Is Very Important Part Of Website It Register User In Website And Save Information Of User In Data Base.

Login:-

Once Signup Is Completed Then Login Come In Picture. Here Registered User How Has Already Signed Up You Can Login Inside With Users Id And Password.

Search Bar:-

In this you can search about the related information on our website.

Navigation Bar:-

This Provides Various Categories By Selecting Into One Of Them You Can Select Your Specific Branch Of Your Concern.

Appointment Booking:-

This Section Includes Booking Appointment In Your Selected Location And Then You Can Proceed Further For Payment.

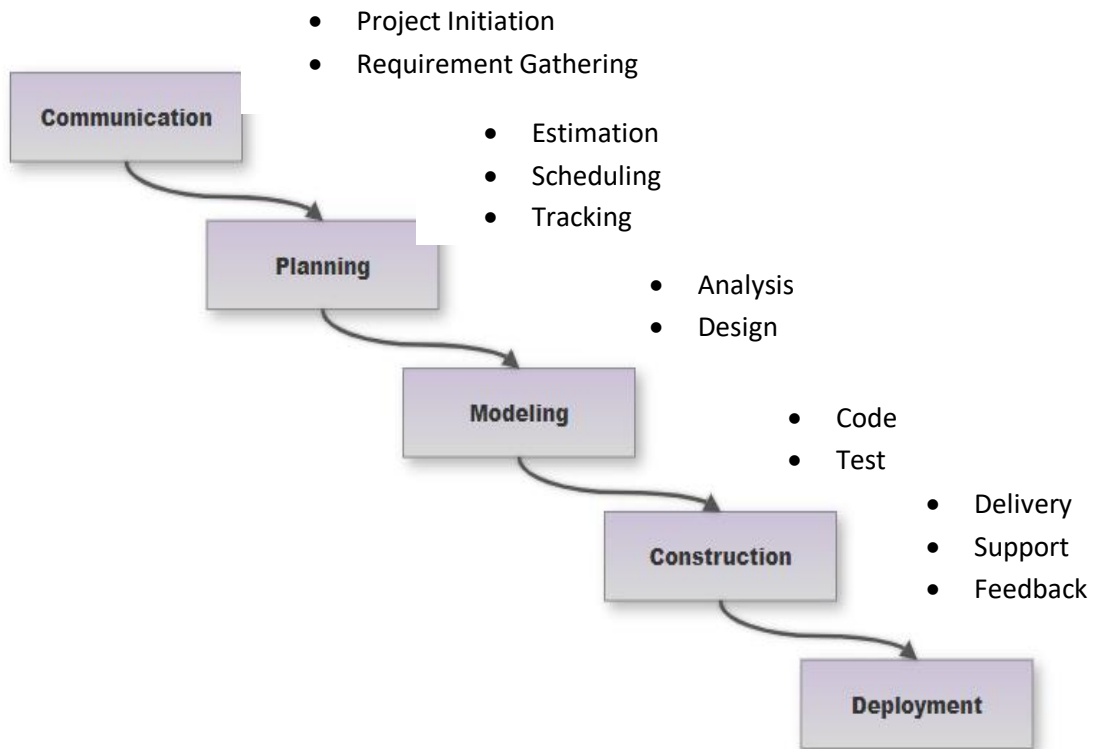
Video Conference:-

This Feature Helps In One To One Interaction Through Video Call Mode With Your Selected Doctor.

About Us:-

This Section Provides The Details About Us Like About Our Team , Mission , Project Developers Etc.

1.4 PROCESS MODEL – (DESCRIBE THE PROCESS MODEL WITH REASON):-



1. Communication:-

In This Phase, Requirements Are Gathered From Customers And Check By An Analyst Whether Requirements Will Fulfill Or Not. Analyst Checks That Need Will Achieve Within Budget Or Not. After All Of This, The Software Team Will Proceed To The Next Phase.

2. Planning:-

In This Phase, Development Team Will Work On Total Estimation Whether This Is Feasible To User Or Not.

3. Modeling:-

In This Phase, Team Design The Software By The Different Diagrams Like Data Flow Diagram, Activity Diagram, Class Diagram, State Transition Diagram Etc.

4. Construction:-

In The Construction, All The Requirements Are Written In Coding Language And Transformed Into Computer Programmes Which Are Software. After Completion Of Coding Phase, Software Testing Starts Using Different Test Methods. There Are Many Test Methods, But The Most Common Are White Box, Black Box And Grey Box Test Methods.

5. Deployment:-

After Completion All The Phases, Software Is Deployed To Its Work Environment. In The Maintenance Phase, After Deployment Of The Software In The Working Environment There May Be Some Bugs, Some Errors Or New Updates Are Required. Maintenance Involves Debugging And New Addition Options.

2. SYSTEM REQUIREMENTS SPECIFICATION

2.1 USER CHARACTERISTICS:-

Three Types Of Users Are Going To Use This System.

1. Development team
2. Doctor
3. Patient

1. Development Team:-

Development Team Can Modify Or Update The Database, Can Grant Or Revoke The Access To Other Users, Can Modify Or Update The Designing Of Web App. In Short, They Are The Supers Users They Can Make Changes According To User Conveniency.

2. Doctor:-

At First Doctor Have To Upload Their Profile And Can Modify It Later At Any Time. Doctor Have To Mention Their Working Hours/Days And From Which Time To Which Time They Have Another Appointment. And Can Also Accept Or Reject Other Patient's Appointment.

3. Patient:-

First Patient Have To Verify Them By Signing Up, And Then They Can Search Doctor And Can Book Their Appointment Or Contact Them Through Video Call.

2.2 FUNCTIONAL REQUIREMENTS:-

2.2.1 Sign Up:-

First Patient Have To Sign Up Using This Module, Patient Have Already Sign Up Then They Can Directly Sign Up By Using Their Username And Password.

2.2.2 Search Bar:-

Patient Can Search Doctor By Searching Their Name Or By Symptoms Of Disease They Have.

2.2.3 Appointment Booking:-

Patient Can Book The Appointment Of Doctor And Can Check Their Rating And Reviews Given By Other Patients, Also They Can Their Experience, And Degrees.

2.2.4 Active Appointments:-

In This Module Appointments Booked By Patient Will Be Show Here So That It Will Be Easy For The Patient To Check On Which Day They Have Appointment And On Which Time.

2.2.5 Video Call:-

If Patient Have Medical Emergency And Couldn't Go To Doctor's Hospital Then They Can Communicate To Doctor On Video Call.

2.2.6 Ratings And Reviews:-

This Is The Most Important Module Patient Can Give Ratings(Out Of 5) And Reviews To Doctor Of Whom They Had Taken The Appointment.

2.2.7 Payment:-

Patient Have To Pay The Consultancy Charges Of Doctor For Booking Their Appointment And Then They Will Get Consultancy Receipt.

2.3 NON-FUNCTIONAL REQUIREMENTS:-

- 1gb Hard Disk
- 512mb Ram
- 32-Bit Operating System(Windows XP ,Windows 7/8 Etc.)
- Portability
- Accessible From Remote Or Portable Device
- Browser:-Internet Explorer, Google Chrome, Mozilla Firefox, Etc.

3.0 SYSTEM ANALYSIS MODELING – USER-BASED

3.1 FEASIBILITY STUDY OF THE NEW SYSTEM:-

3.1.1 Technical Feasibility, Time Feasibility, And Cost Feasibility:-

➤ Technical FEASIBILITY :-

In This, One Has To Test Whether The System Can Be Developed Using Existing Technology Or Not. It Is Evident That Necessary Hardware And Software Are Available For Development And Implementation Of Proposed System We Acquired The Technical Knowledge Of Working In Language And Then Only We Have Started Designing Our Project.

➤ TIME FEASIBILITY :-

This System Will Take One Year For Development, In First Six Months We Are Going To Prepare Documentation Of System Then After We Will Perform Coding Of The System Which Will Take Four Months Then After We Will Test The System In Next One Month.

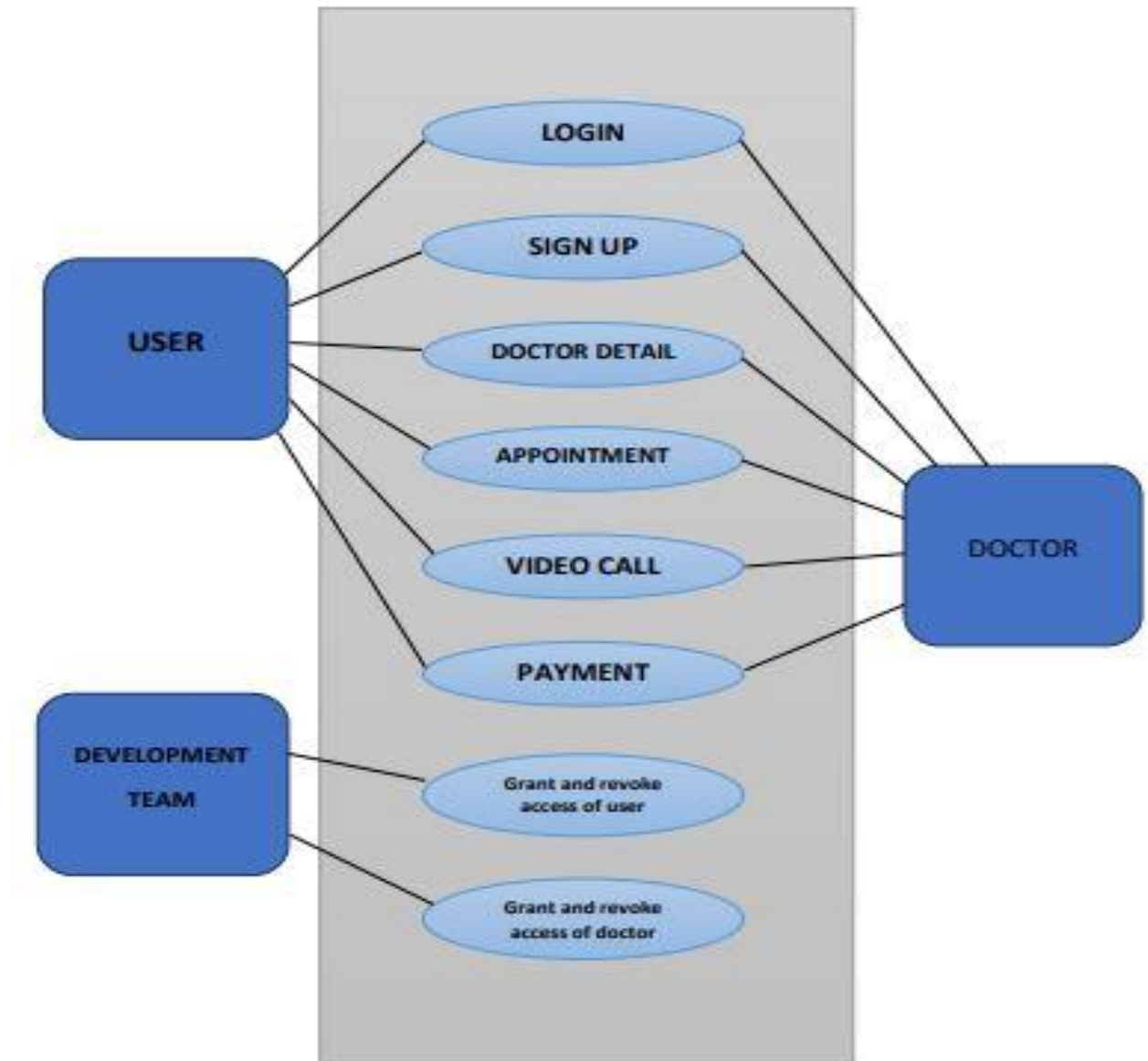
A Project Will Fail If It Takes Too Long To Be Completed Before It Is Useful. Typically This Means Estimating How Long The System Will Take To Develop, And If It Can Be Completed In Some Time Period Some Methods Like Payback Period.

➤ COST FEASIBILITY:-

In Economic Feasibility Client Have To Give Estimation Cost Of Their Project And Then After They Can Need To Checkout Users Requirements. First Of All Client Will Check Man Power Require In The Project. Then After Client Will Calculate All The Machinery Requirements And Send It To User, If User Accepts The Estimation Then The System Is Cost Wise Feasibility.

3.2 USER-BASED MODELING :-

3.2.1 Use Case Diagrams:-



4.0 SYSTEM ANALYSIS AND DESIGN – DATA-BASED

4.1 DATA MODELING :-

4.1.1 Data Dictionary (List of Database Tables included in the system):-

1. ADMIN DATABASE:

- **Login :-**

Field	Data Type	Constraint	Description
Admin_Id	Varchar2(20)	Primary Key	Login Id
Admin_Username	Varchar2(20)	Not Null	Username
Admin_Password	Varchar2(20)	Not Null	Password
Admin_Name	Varchar2(10)	Not Null	Name
Admin_Contact_no	Varchar2(10)	Not Null	Contact Number

2. PATIENT DATABASE:

- **LOG_IN :-**

Field	Data Type	Constraint	Description
Patient_Id	Number(10)	Primary Key	Doctor Id
Patient_Username	Varchar 2(20)	Not Null	Name Of Patient
Patient_Password	Varchar2 (20)	Not Null	Password Of Patient

- **Patient_Personal_details:-**

Field	Data Type	Constraint	Description
Patient_ID	Number(10)	Foreign Key	Id of Patient
Patient_Name	Varchar2 (30)	Not Null	Name of Patient
Date_Of_Birth	Date	Not Null	Birthdate of Patient
Gender	Varchar2 (10)	Not Null	Gender of Patient
Address	Varchar2 (80)	Not Null	Address of Patient
Email_ID	Varchar2(20)	Not Null	Email-Id of Patient
Contact_No.	Number	Not Null	Contact Number of Patient

3.DOCTOR DATABASE:

- **LOG_IN**

Field	Data Type	Constraint	Description
Doctor_Id	Number(10)	Primary Key	Doctor Id
Doctor_Username	Varchar 2(20)	Not Null	Username of Doctor
Doctor_Password	Varchar2 (20)	Not Null	Password of Doctor

- **Doctor_Personal_details:-**

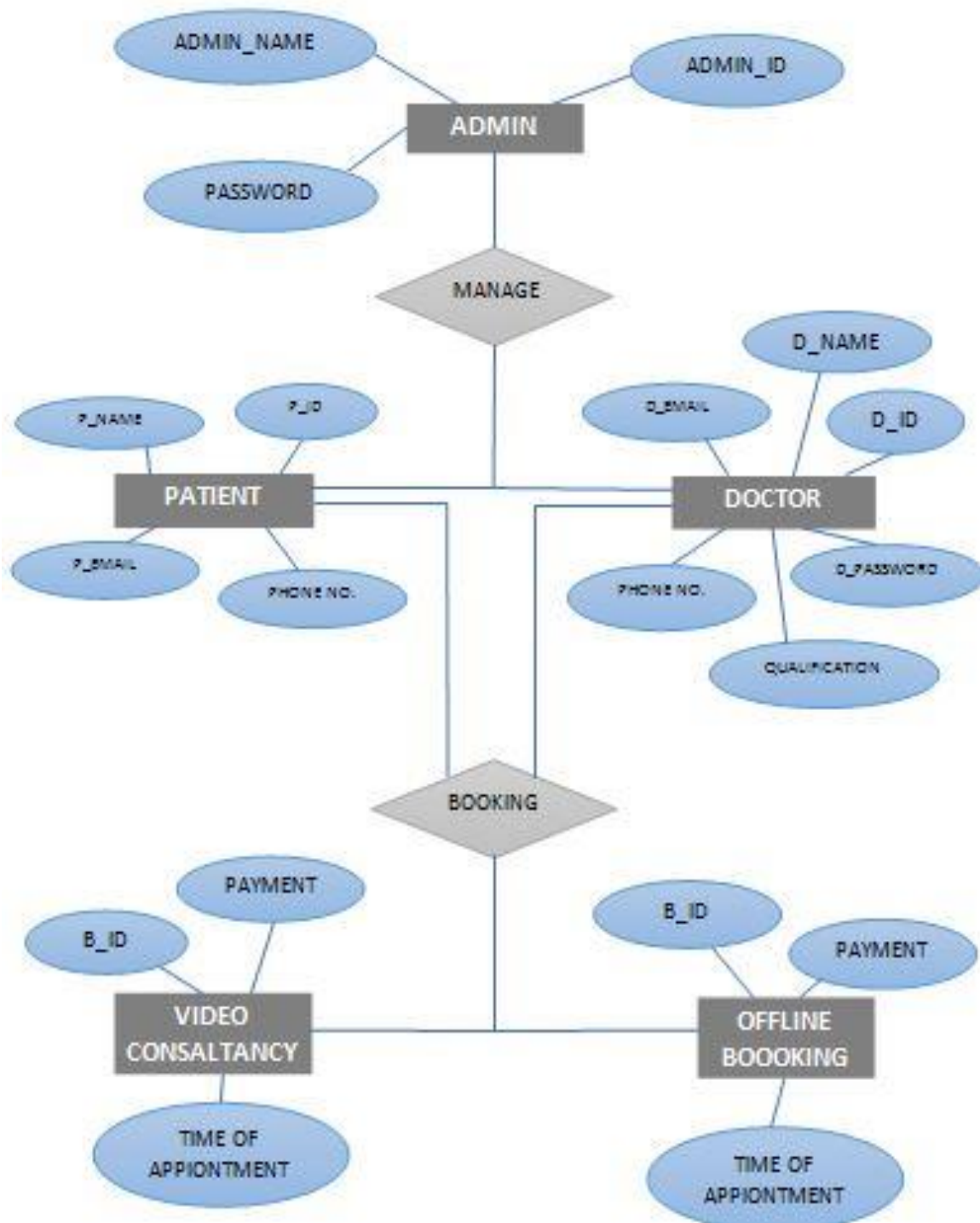
Field	Data Type	Constraint	Description
Doctor_ID	Number(10)	Foreign Key	Id of Doctor
Doctor_Name	Varchar2 (30)	Not Null	Name of Doctor
Date_Of_Birth	Date	Not Null	Birthdate of Doctor
Gender	Varchar2 (10)	Not Null	Gender of Doctor
Address	Varchar2 (80)	Not Null	Address of Doctor
Email_ID	Varchar2(20)	Not Null	Email-Id of Doctor
Contact_No.	Number	Not Null	Contact Number of Doctor

4.BOOKING DATABASE:

- **Visits**

Field	Data Type	Constraint	Description
Booking_Id	Number(10)	Primary Key	Notice id
Doctor_Id	Varchar2(10)	Foreign Key	Doctor id
Patient_Id	Varchar2(10)	Foreign Key	Patient Id
Date & Time	Date	Not Null	Date time of consultancy
Disease	Varchar2(10)	Not Null	Disease
Type of Booking	Varchar2(10)	Not Null	Booking Type(Video calling or Offline appointment)

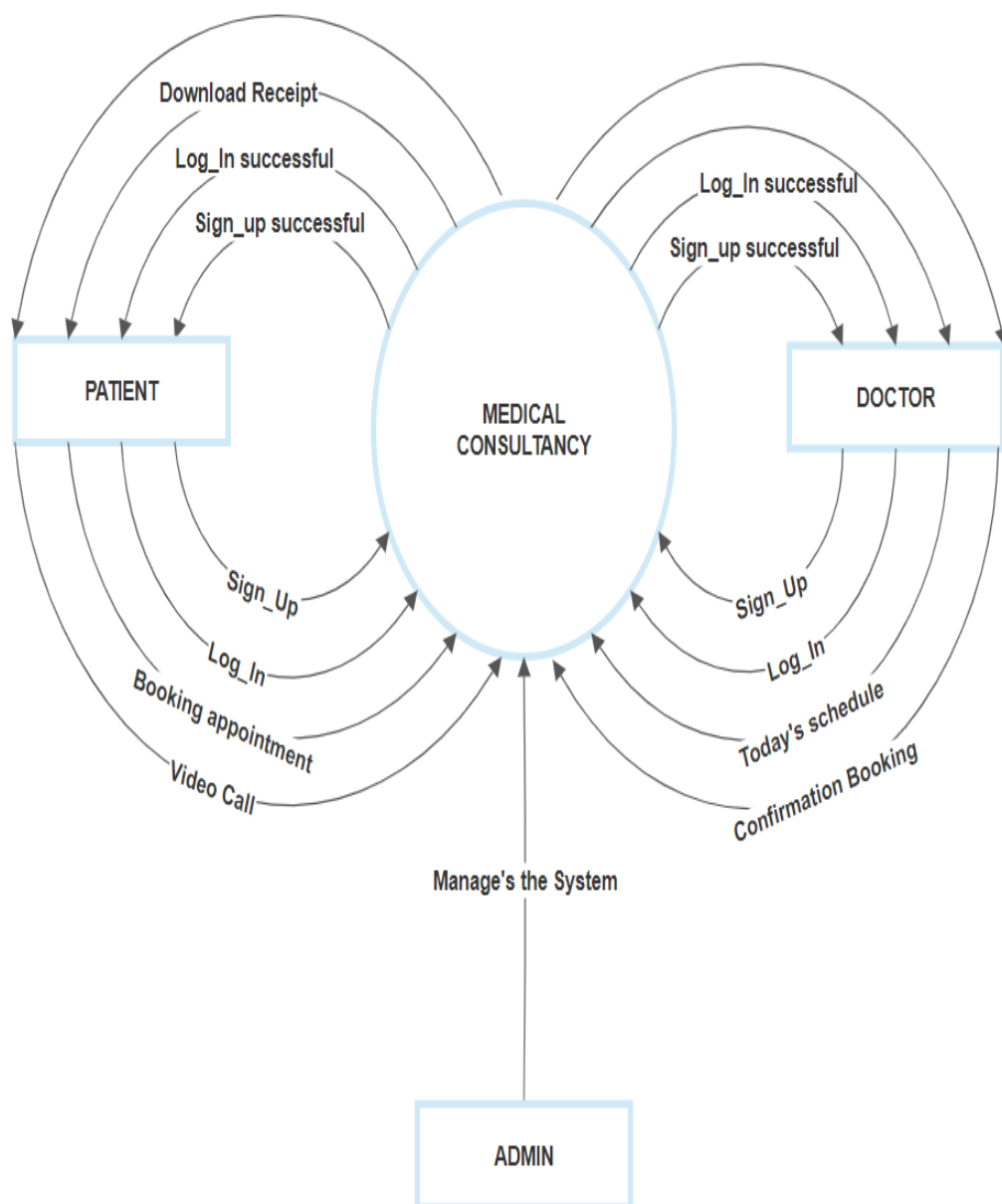
4.1.2 E-R (Entity-Relationship) Diagram:-



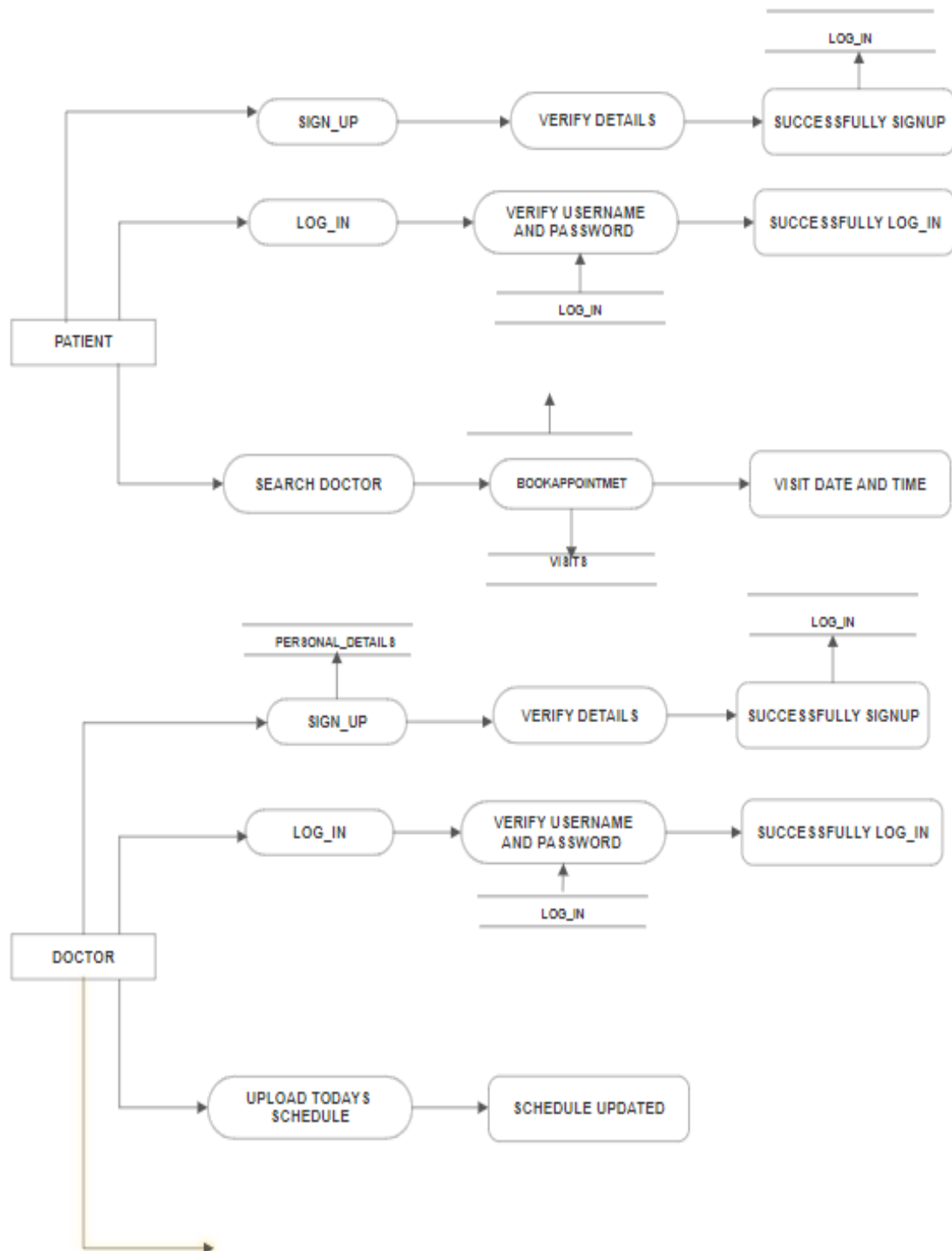
4.2 BEHAVIORAL MODELING

4.2.1 DATA FLOW DIAGRAM :-

4.2.1.1 Context Level Diagram (Level 0) :-



4.2.1.2 Dfd – Level 1:-



5.1 SEQUENCE DIAGRAMS:-

```

sequenceDiagram
    participant User
    participant Controller
    participant Service

    User->>Controller: LOGIN
    Controller->>Service: Validate detail
    Service-->>Controller: YES/NO
    Controller-->>User: LOGIN/SIGN IN

    User->>Controller: LOGIN
    Controller->>Service: Validate detail
    Service-->>Controller: VERIFIED
    Controller-->>User: Login complete

    User->>Controller: Enter time
    Controller->>Service: Save time
    Service-->>Controller: Saved
    Controller-->>User: Time slot

    User->>Controller: Fees
    Controller->>Service: Fees detail
    Service-->>Controller: update
    Controller-->>User: Fees saved

    User->>Controller: Days
    Controller->>Service: Working detail
    Service-->>Controller: Updated
    Controller-->>User: Detail saved

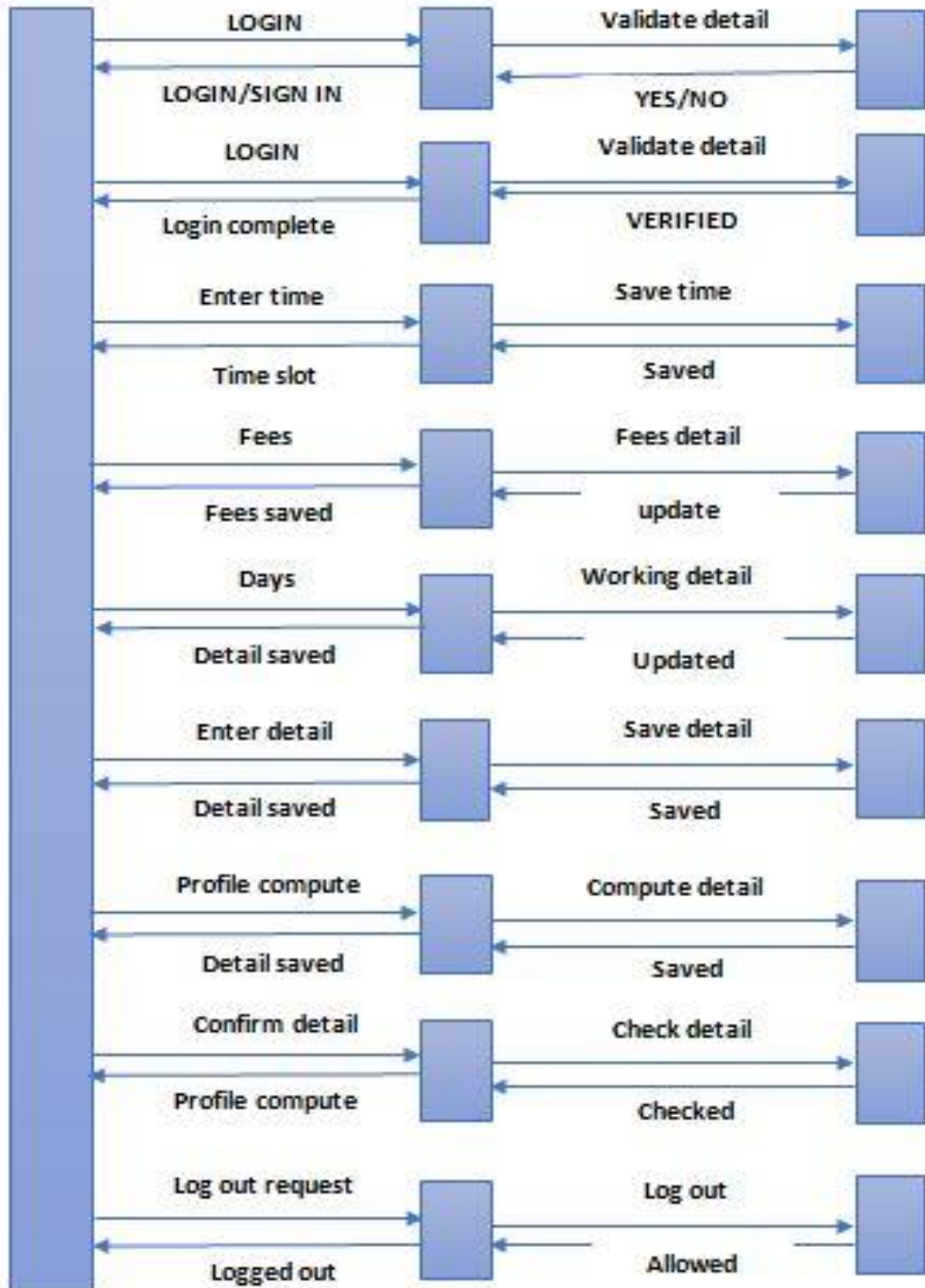
    User->>Controller: Enter detail
    Controller->>Service: Save detail
    Service-->>Controller: Saved
    Controller-->>User: Detail saved

    User->>Controller: Profile compute
    Controller->>Service: Compute detail
    Service-->>Controller: Saved
    Controller-->>User: Detail saved

    User->>Controller: Confirm detail
    Controller->>Service: Check detail
    Service-->>Controller: Checked
    Controller-->>User: Profile compute

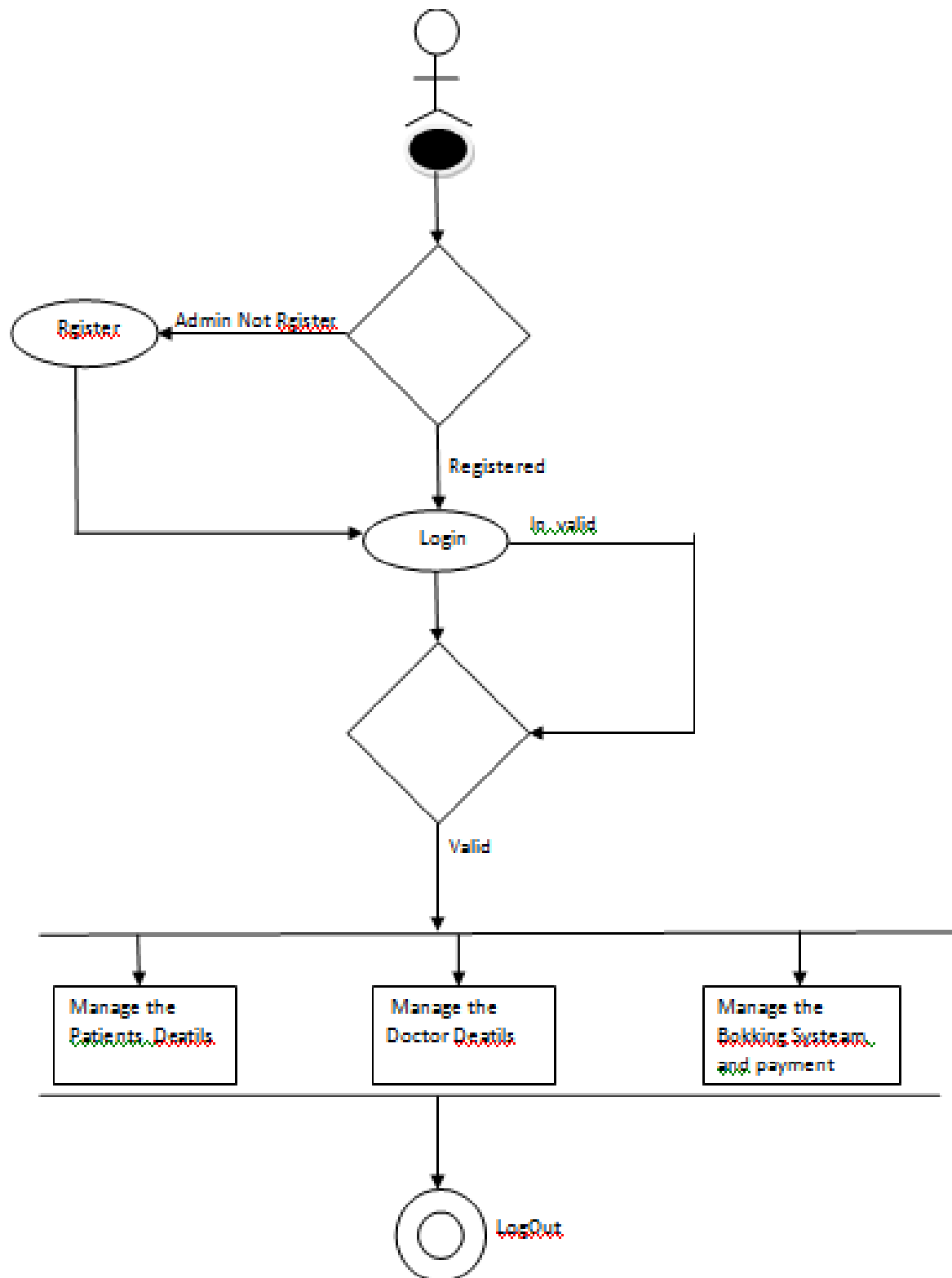
    User->>Controller: Log out request
    Controller->>Service: Log out
    Service-->>Controller: Allowed
    Controller-->>User: Logged out
  
```

Doctor:-

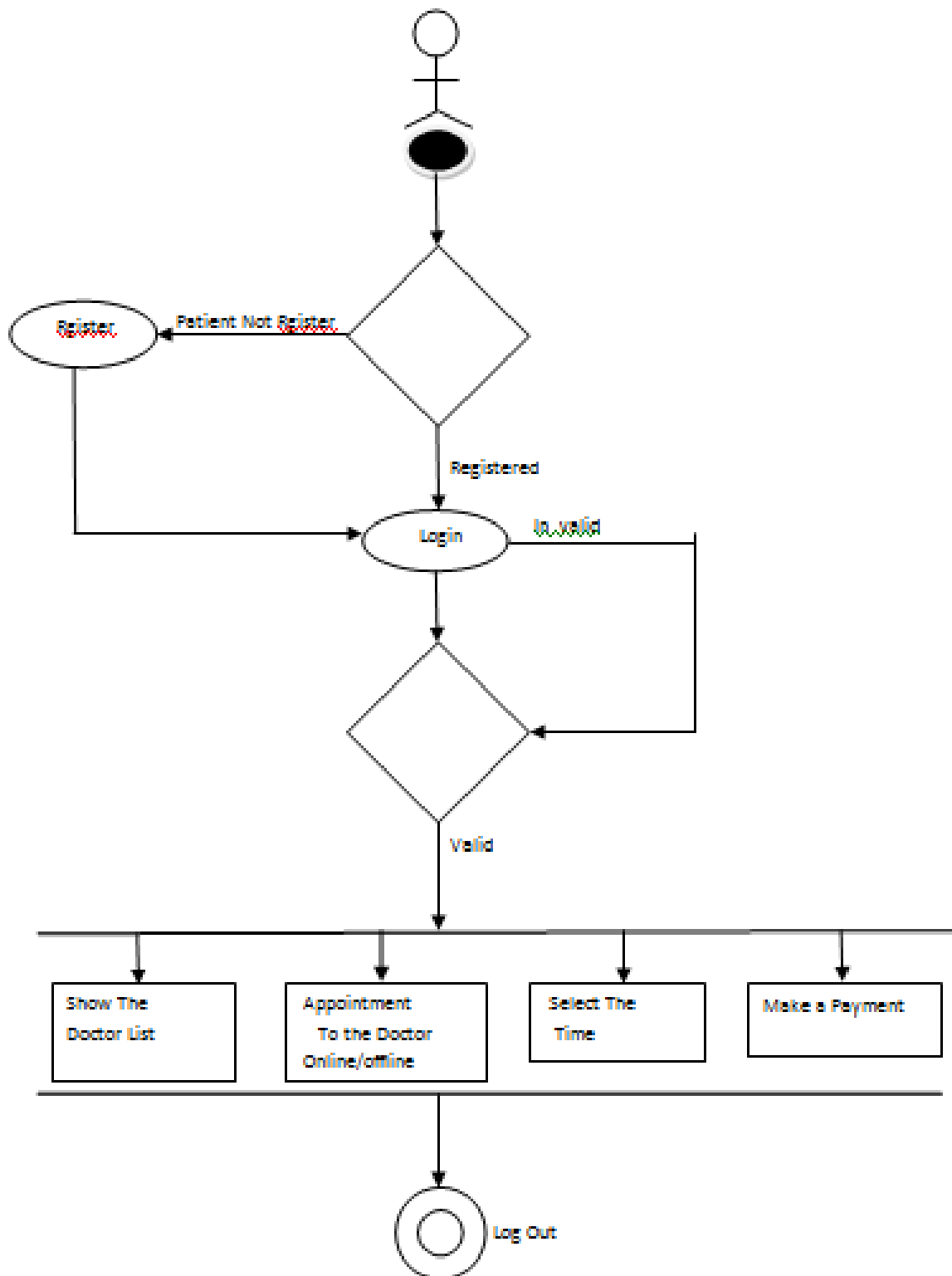


5.2 ACTIVITY DIAGRAMS:-

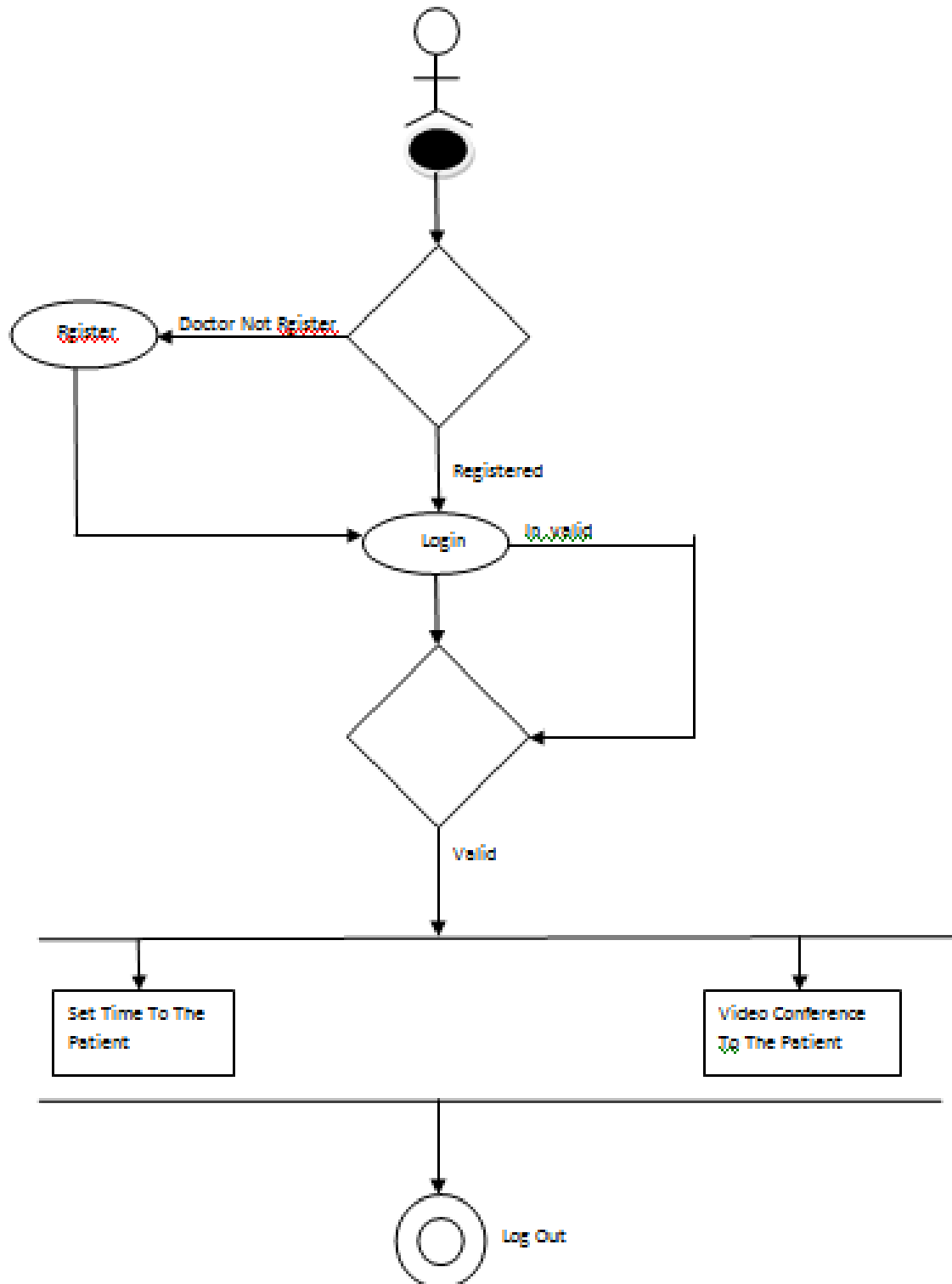
Admin:-



Patient:-

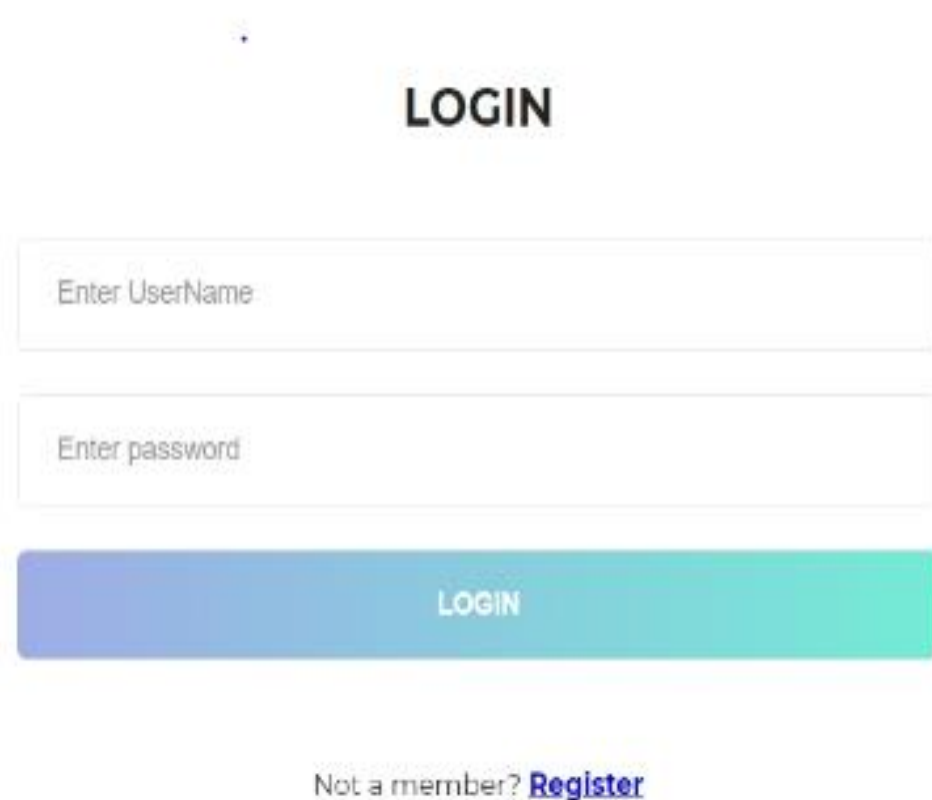


Doctor:-



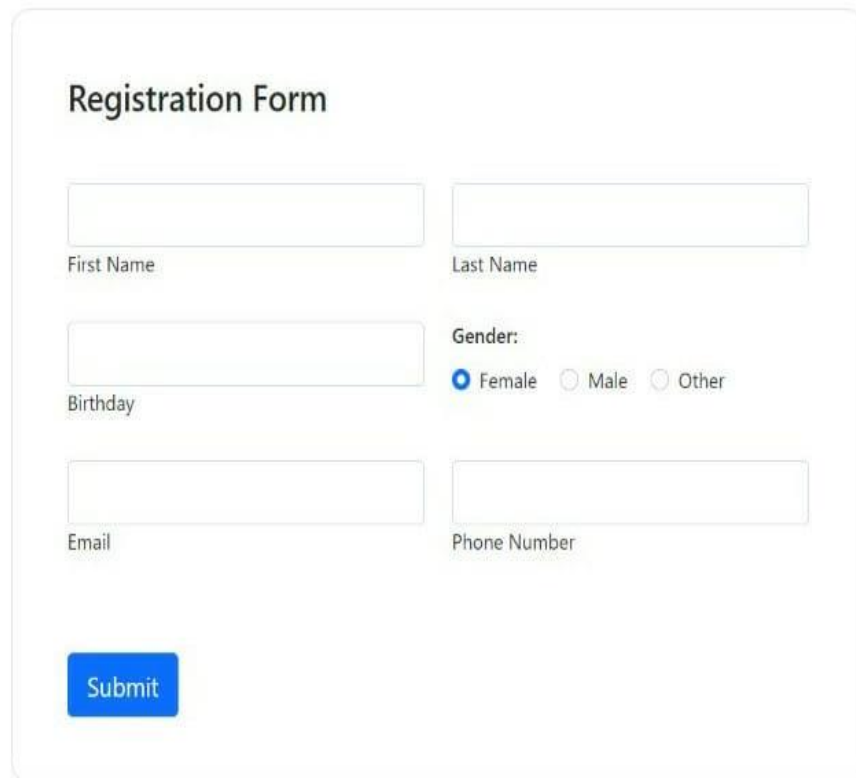
6.0 SYSTEM INTERFACE DESIGN

6.1 INPUT- OUTPUT FORMS DESIGN:-



A login form with a light gray background. At the top, the word "LOGIN" is centered in a bold, black, sans-serif font. Below it are two white input fields with thin gray borders. The first field contains the placeholder text "Enter UserName" and the second field contains "Enter password". Below these fields is a wide, rounded rectangular button with a blue-to-teal gradient and the word "LOGIN" in white, bold, sans-serif font. At the bottom, the text "Not a member? [Register](#)" is displayed, with "Register" as a blue hyperlink.

6.2 GRAPHICAL USER INTERFACE DESIGN :-



The image shows a web form titled "Registration Form" with a light gray border. It contains several input fields and a submit button. The fields are arranged in two columns. The first column has fields for "First Name", "Birthday", and "Email". The second column has fields for "Last Name", "Gender", and "Phone Number". The "Gender" field uses radio buttons with labels "Female", "Male", and "Other". A blue "Submit" button is located at the bottom left of the form area.

Registration Form

First Name

Last Name

Birthday

Gender:

☒ Female ☐ Male ☐ Other

Email

Phone Number

Submit

References (Bibliography And E-Reference) :-

Dictionary:

- Google Translate (<https://translate.google.co.in/>)

Uml Diagram Tool:

- (<https://online.visual-paradigm.com/diagrams/features/uml-tool/>)

Reference:

- www.tatahealth.com