



“Khamari Sheba” is a Smart Web Application for farm keeper to find immediate solution for cattle.

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

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DAFFODIL INTERNATIONAL UNIVERSITY

December -20

APPROVAL

This thesis titled on “**KHAMARI SHEBA**”, submitted by **Jahid hossain, ID: 142-35-671 and Faez Bin Farooque, ID: 142-35-748** 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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ACKNOWLEDGEMENT

First of all, we are grateful to The Almighty Allah for making us eligible to complete this project. Then we would like to thank our supervisor **Tapushe Rabaya Toma, Lecturer**, Department of Software Engineering. We are extremely grateful and indebted to her for her expert, sincere and valuable guidance and encouragement extended to motivation, enthusiasm and immense knowledge. We wish to express our sincere thanks to Dr. Touhid Bhuiyan, Professor and Head, Department of Software Engineering for his constant encouragement. Lastly, we would like to thank to our parents, for their unconditional support, love and without this we would not have come so far.

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ABSTRACT

“Khamari Sheba” is a smart web based application for farm keeper to give immediate service and support. It will assist in managing for helpline service and support. There is a small number of organizations working in our country in this farming sector. None of these center, use online platform to make a better helpline servicing and supporting system. Our application will create this opportunity to keep all the doctors and farm keeper closer. This web application will save time, save money, you can post easily at home. This web application is very easy to find a good farming website. We used Laravel 5.7 (PHP framework), HTML 5, CSS 3, and Bootstrap for this website. We also used Client side scripting language: JavaScript to make it more user friendly.

CHAPTER: 1

INTRODUCTION

1.1 Project Overview

This project entitled “Khamari Sheba” is a smart web based application for farm keeper to give immediate service and support. It will assist in managing for helpline service and support. There is a small number of organizations working in our country in this farming sector. None of these center, use online platform to make a better helpline servicing and supporting system. Our application will create this opportunity to keep all the doctors and farm keeper closer. This web application will save time, save money, you can post easily at home. This web application is very easy to find a good farming website. We used Laravel 5.7 (PHP framework), HTML 5, CSS 3, and Bootstrap for this website. We also used Client side scripting language: JavaScript to make it more user friendly.

1.2 Project Purpose

A reliable documentation should always be considered for a good structure project. The presence of documentation helps to keep track of all aspects of an application and it improves the quality of a software product.

This document marks all the distributive identifiers of khamari Sheba, a web application for managing Farm. This document provides software requirements specifications (SRS), software design, image, test case, proposed system testing report and other necessary supplies.

1.2.1 Background

“Kamari Sheba” is a farm based organization which will work under the department of Livestock all over in Bangladesh. Nowadays dairy farm and poultry farm has become a core agricultural venture with big demand. As a result to maintain the stability of this sector it is very much essential to make the firm secure and prevent animal from various diseases. But it is not possible in all circumstances. For this reason facing the emergence of the internet we want to integrate our office system into a web portal which will provide a user essential knowledge about animal common diseases, symptoms and prevention steps needed to be taken. Here in this system user can also share his problem via chat box. The expert helpdesk will provide the best possible solution on the basis of the problem. If a user wants the helpdesk service he must have to register first. There will be information available about

Animal Resource Officer in the site. There will be an admin who will control the whole system.

To give idea about this system, main features are mentioned below:

- Diseases description
- Doctors info
- Create post
- Create advice
- Helpline through chat box
-

1.2.2 Benefit

Before setting up our mind to go for this system, we noticed some problems in existing farm based organization. We thought to bring mobility in this system process.

- Reduce Communication gap
- Reduce time
- Reduce cost
- Create easy communication way
- Visualize organization's activity
- Keep in touch with website from far away
- Easily chatting system

1.2.3 Goals

Recently there has been a lot of investment in this farming sector. Nowadays, Dairy farm and cattle farm has become a core agricultural venture with big demand supply gap and space for adding value in the product chain. As a result it is very much essential to make the firm secure and prevent animal from various diseases but it is not possible in all circumstances.

Many organizations are working in this sector, but a user have to go far away from their area for solving their problem. Besides there is not enough sufficient doctors is available in the rural area and also a user can not get immediate solution for his problem if a farm keeper faces any emergency. So limitations of web platform are a big fact in this sector. Facing this type of problem in this sector, we want to integrate this web application.

By using our website, a farm keeper can know all the necessary things he needs. Also he can get immediate service and support whenever he wants.

1.3 Stakeholders

A person who involves in this project, and he is not a developer. According to project a project manager, the project partner " a person, group or organization, shall be influenced or affected by any decision, activity, or outcome of the project. We have admin, farm keeper and doctor. Below discuss about of stakeholders:

Admin: The person who have all right to do everything except commenting institute section and changing log history. Admin also can action to against any users if they do anything wrong.

Farm keeper: All types of user like registered or unregistered can view the activities of the website and can get knowledge from the website.

Doctor: The person who is involved with the helpline services will give farm keeper's problem solution through online via chat box.

1.4 Project Schedule

Table 1.4: Initial Project Schedule Table

Serial	Work Description	Start (date)	End (date)	Total day
1	Idea Finding	01/07/2018	08/07/2018	7
2	Feasibility study	08/07/2018	12/07/2018	4
3	Available Source Check	13/07/2018	18/07/2018	5
4	Mind Mapping	19/07/2018	26/07/2018	7
5	Similar site analysis	27/07/2018	30/07/2018	3
			Total Days	26

Table 1.4.1: Idea Proposal

Serial	Work Description	Start (date)	End (date)	Total day
1	Idea Finding With Supervisor	01/08/2018	04/08/2018	3
2	Feasibility study With Supervisor	05/08/2018	07/08/2018	2
3	Feature Discussion With Supervisor	08/08/2018	10/08/2018	2
4	Work Flow maintenance	11/08/2018	16/08/2018	5
5	SDLC Selection	17/08/2018	19/08/2018	2
Total Days				14

Table 1.4.2: Requirement Gathering

Serial	Work Description	Start (date)	End (date)	Total day
1	System Flow sketch	20/09/2018	28/09/2018	8
2	Requirement gathering for proposed system	29/09/2018	05/09/2018	7
3	Requirement Collection	06/09/2018	08/09/2018	2
4	SRS	09/09/2018	11/09/2018	2
5	all requirement and Information	12/09/2018	16/09/2018	4
Total Days				23

Table 1.4.3: Physical System Design

Serial	Work Description	Start (date)	End (date)	Total day
1	Designing Prototype	17/09/2018	22/09/2018	5
2	GUI (Graphical user Interface)	23/09/2018	05/10/2018	12
3	Process Design	06/10/2018	08/10/2018	2
Total Days				19

1.5 Gantt Chart

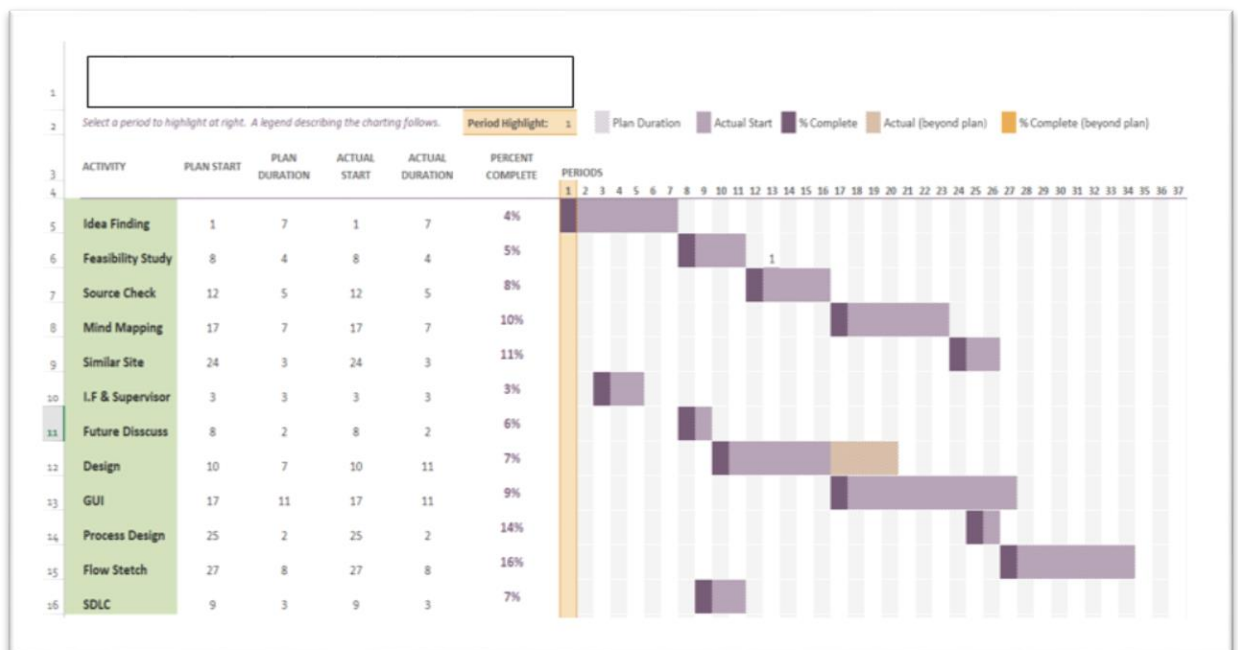


Figure 1.5 Gantt chart

CHAPTER: 2

Software Requirement Specification

A system specification specification (SRS) (also known as software requirements specification) is a document or document set that describes the characteristics and behavior of a system or software application. It includes various elements (see below), which attempts to define the necessary functionality requirements to Satisfy their user.

2.1 Software Requirement Specification

Table 2.1: Requirement Specification table

SRS Id	SRS Name	SRS Description	Priority
FR_01	Farm based website	This is a farming website, where farm keeper can know the information about farm.	High
FR_02	Registration process	Farm keeper have to complete registration form if he wants helpline service	High
FR_03	Login process	Only registered user can login to the system for getting access to helpline	High
FR_04	Search	Farm keeper can search for doctors and remedies.	High
FR_05	Diseases description	Farm keeper can get knowledge about diseases and symptoms description.	Medium
FR_06	Advise	Doctors can create, update & delete post at the website.	Medium
FR_07	Helpline Chat Box	Farm keeper can share about their problem and get services from helpline via chat box.	High

2.2 Data Requirement

Information requirements generally refer to the various information items. When we look at a table, we typically have at least four types of data items, (1) columns, (2) rows, (3) schemas, and (4) table / spreadsheets itself.

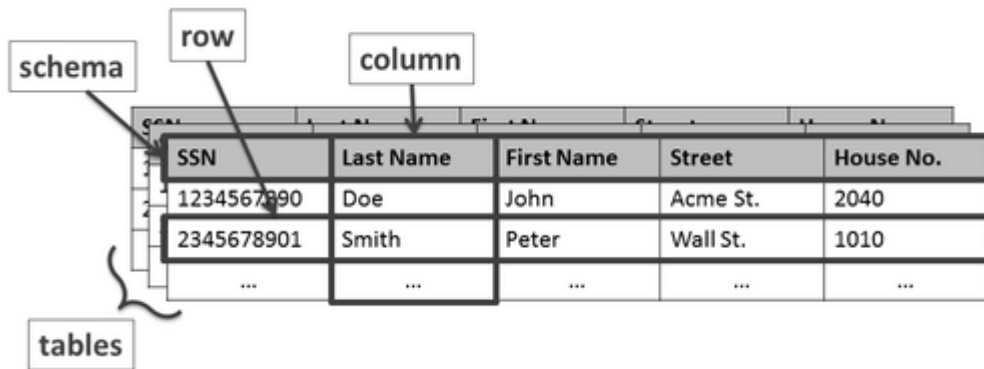


Figure 2.2 Data Requirements

In traditional web environments, we can compare the properties of columns, compare rows in illustrations, sketches in antigens and tables in classes. Information needs may be related to one of these elements. Especially, there are

- ✓ Data requirements related to single asset values (column)
- ✓ In one example, data requirements related to multiple attributes (multiple columns in queue)
- ✓ Information about the entire class (table) example
- ✓ Information requirements related to antioxidants (schema)

With DQM-Vocabulary, you can model the first three types of requirements. Schema / Anthology requirements are not currently part of the vocabulary, but may be added in future publications. At the bottom, we explain how property, multi-asset, class- and custom-needs can be modeled with the current version of the DQM-Vocabulary.

2.3 Performance Requirements

- ✓ Easy to use. Comfortable for various devices and browsers.
- ✓ Default hosting capability
- ✓ During the process, it will not be more than two seconds to update the data response time of any kind.
- ✓ Passwords pick hash, SQL query with pdf format, SQL injection, CSRF, encryption protection.

Table 2.3: Performance Requirements

SRS Id	SRS Name	SRS Description	Priority
NFR_08	Usability	Easy to use. Comfortable for various device & browsers.	High
NFR_09	Capacity	MySQL default capacity!!	High
NFR_10	Performance	During the process, to update any type of data response time will not more than two second.	High
NFR_11	Security	Password sorting hash, SQL query with pdo format, protect SQL injection, CSRF, Encryption.	High

2.3.1 Speed and Latency Requirements

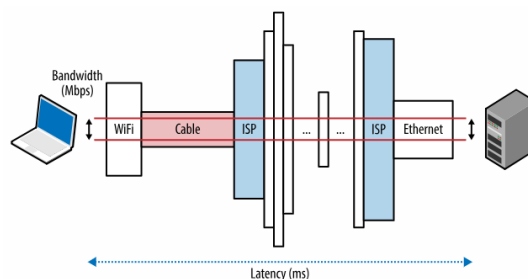


Figure 2.3.1: Latency Requirement

Time from a source sending a packet from the source and It is not only a mental need for our speed and speed of the connected world, but a requirement driven by the result of experience as measured by low-line performance in many online businesses:

- ✓ Faster sites tend to be good user engagement.
- ✓ Quick sites lead to better user concepts.
- ✓ Quick site leads to high conversion.
- ✓ Quick response like less than 2 seconds.

2.3.2 Precision or Accuracy Requirements

One cannot accurately measure a test (even the nuclear watch is not correct: it loses a second every 15 billion years). How far away from your "sign" is described by accuracy and how much measurement is described by the precision.

Table 2.3.2: Accuracy Requirements

Type of Error	Example	Corrective Action
Personal Error	Pressure to quickly	Training and skill testing for accuracy and accuracy
Method error	The poor accuracy from the use of a variable volume	Need to method test more and more for removed any method error.
Instrumental error	Delivering inaccurate volume	Clean and check regularly

2.3.3 Capacity Requirements

Capacity requirement is the most important for any project if you want to develop. That's why we first discuss about this capacity requirement and finally create a capacity planning for make our project with removing capacity error.

- Budget extraction is often the reality for projects
- Waste Property Inadequate Power Plans Another reality.
- Timing and dependencies
- Other active or planned projects

2.4 Dependability Requirement

Dependability requirement need to make a good project not only good project its help us to detect and remove error, avoid mistakes and limit damage caused by failure. Dependability requirement has four dimensions:

1. Availability
2. Reliability
3. Safety and
4. Security

In our project we used this dependability requirement with carefully. We use all the dimension for user friendly. Users can easily use our project safely with 2 step security.

2.4.1 Reliability Requirement

Reliability is the most effective for each project otherwise no one can use web application if there have no reliability requirement. In our web application give more secure and exact information to help users.

Anonymous users are not use the functionality things in our web application. The system provides the right tools for discussion, to solve the problem, it must be sure that the system is reliable to protect its operation and sensitive details.

2.4.2 Availability Requirement

When the users send request and Internet service is interrupted. Then sending information to the server, information can be sent again for verification. But in our web application still performance well in this availability zone.

2.4.3 Security

The main security concerns should be used for proper accounting to avoid hacking for user accounts. The way to check spam for tablet ID registration increases. Therefore, security accreditation software is supplied from unwanted use. And in our web application have 2 step security system with email verification system. If any user can forget his/her password then no problem easily can recover password for the login.

2.4.4 Safety

Information transmission information should be securely transmitted to the server without any changes. Our web application fully safe and here all the information is real because anonymous users are do not anything like functionality. And our security system is high and better than others farming web application.

2.5 Maintainability and Supportability Requirements

The Maintainability and Supportability Requirements process is an overall translation one of the important tasks in our Khamari Sheba. Its physical requirements Performance, power consumption, cost, reliability relationship, Maintenance, Reliability, etc. Reliability, Maintenance and The justification should be designed in the product.

2.5.1 Maintenance Requirement

We're building web applications here for the long-term. Our Khamari Sheba system requires web applications to have any kind of software maintenance, but as an art, it is not something that we can highlight. As a result, we release a real risk to our clients as well as release money on the table.

2.5.2 Supportability Requirements

The advanced source code for this system will be maintained in Configuration Management Tools. Like searching system give the exact doctors info in small time, so searching system is the supportability requirements in our Khamari Sheba website.

2.5.3 Scalability Requirements

Easy to use for different devices and browsers is easy. During processing, updating data response times will not take more than two seconds. By increasing the number of users by request more users are standing online. Khamari Sheba application is measurable, that is, the number of incremental numbers that can be processed faster than before. This means adding more hardware in an active way so that proper scaling and architecture are transferred and ready to handle increased load.

2.6 Security Requirements

To avoid hacking for user accounts, major accounting concerns should be used for proper accounting. Increase the way to check spam for tablet ID registration. Therefore, security accreditation software is supplied from unwanted use. And in our Khamari Sheba the web application has 2-step security system with email verification. If a user forgets his or her password, then a password cannot be easily retrieved for a password.

2.6.1 Access Requirements

Our Khamari Sheba has 3 types of users in the web application, such as administrators, farm keeper and doctors. This access is different from each other. Admin control or control all things from the backend. Admin control the whole system and also add doctors in the system. But the farm keeper or doctor will not be able to access the admin panel. Other site farm keeper can know the diseases description and also registered for helpline service. And doctors can create advise post also can update or delete post.

2.6.2 Integrity Requirements

Information transmission should be transmitted safely to the server without any change. Our Khamari Sheba has 3 types of users in the web application, such as administrators, farm keeper and doctors. To avoid hacking for user accounts, major accounting concerns should be used for proper accounting. Increase the way to check spam for tablet ID registration.

Easy to use for different devices and browsers is easy. During processing, updating data response times will not take more than two seconds.

2.6.3 Privacy Requirements

Our Khamari Sheba has 3 types of users in the web application, such as administrators, farm keeper and doctors. This access is different from each other. To avoid hacking for user accounts, major accounting concerns should be used for proper accounting. Advanced source code configuration management tools for this system will be maintained.

2.7 Usability Requirements

Information transmission information should be transmitted safely to the server without any change. Our Khamari Sheba has 3 types of users in the web application, such as administrators, farm keeper and doctors. Easy to use for different devices and browser is

easy. During processing, updating data response times will not take more than two seconds. We are building web applications for long term here.

2.7.1 Ease of Use Requirements

Easy to use for different devices and browsers is easy. Create a partner, post and easily advertise this system and users will want to easily search for something. Information transmissions information should be transmitted safely to the server without any change. Admin control all things from the backend. But farm keeper can't access to admin panel.

2.7.2 Personalization and Internationalization Requirements

Personalization is done by the used system. We set up the system to identify users and distribute content, experiences, or functionality that identify their role. Personalization can be done at the individual level. The main goal of personalization is to provide content and functionality that match the needs or interests of a particular user, which is not intended to target users without any effort. The system makes the user profile and coordinates the interface according to that profile. Encouraging personal information or strengthening specific information, restricting access to access to certain tools, or giving access to information about users, making transactions and procedures easier.

2.7.3 Accessibility Requirements

Our Khamari Sheba website has three types of users in the web application, such as administrators, farm keeper and doctors. This access is different from each other. Admin control or control all things from the backend. Admin control the whole system and also add doctors in the system. But the farm keeper or doctor will not be able to access the admin panel. Other site farm keeper can know the diseases description and also registered for helpline service. And doctors can create advise post also can update or delete post.

2.7.4 User documentation requirements

Easy to use for different devices and browsers is easy. Create a partner, post and easily advertise this system and users will want to easily search for something. Information transmissions information should be transmitted safely to the server without any change. Admin control all things from the backend. But farm keeper can't access to admin panel.

2.7.5 Training Requirements

Our Khamari Sheba website is too much easiest to use that is why no need to training requirements in our project. But some teams of training may need to be defined and divided into smaller numbers (for example, for staff training , farm keeper training, line and administrative staff can have different training requirements; Application programmers may require different training as technical staff training teams In the database Opposed to the ruling).

2.8 Look and Feel Requirements

Our project describes the style of attitude, mood or product appearance that describes the need for appearance and feeling. These requirements refer to the intent of attendance, and an interface is not a detailed design.

- ✓ Simple to use
- ✓ People do not hesitate to use it
- ✓ Users think that they can rely on and believe in it
- ✓ People are not aware of it.

2.8.1 Appearance Requirements

Our Khamari Sheba is too much easiest to use that's why no need to training requirements in our project. These requirements refer to the intent of attendance, and an interface is not a detailed design. Our Khamari Sheba has 3 types of users in the web application, such as administrators, farm keeper and doctors.

2.9 Operational and Environmental Requirements

Our Khamari Sheba website is too much easy to use that's why no need to training requirements in our project. Operation Requirements starts with the concept of concept evaluation (CONOPS) and mission's performance estimation and the limitations and corrections required for operation and mission success or a larger level detail for current crisis detection. Operation requirements are the basis for system requirements.

2.9.1 Release Requirements

Our Khamari Sheba Requirements, Release and Release Plans help you manage the delivery of projects, services, products, programs, applications and features. The CAPM requirements plan provides a framework for defining and tracking the delivery requirements of your

business. As a product owner or partner, use the necessary plans to achieve the following goals:

- Providing intelligent requirements of team members.
- Cooperation the requirements with other investment and initiatives flowing into other release planning circles.

2.10. Legal Requirements

Khamari Sheba website's requirements for a logical database are changed by size and design parameters. A logical database should be able to access and detect all the files in the storage system to handle properly in Khamari Sheba, when a physical database data handles a small area. Sometimes, a physical database stores only a single file with a value or word. A logical database can expand multiple physical hard disks and data files. Data storage unit is still a single database intended for data recovery. There is a logical database, all the hard disks and data files must be accessible from a single source.

2.10.1 Standards Requirements

Personalization is done by the used system. We set up the system to identify users and distribute content, experiences, or functionality that identify their role. Personalization can be done at the individual level. Our khamari Sheba has 3 types of users in the web application, such as administrators, farm keeper and doctors.

CHAPTER 3

System Analysis

3.1 Use case Diagram

In the Unified Modeling Language (UML), a use case diagram is a dynamic or behavior diagram. It summarizes the details of system's users and their interactions with the system. Here, a "system" is that thing which is being developed or operated, such like web site. The "actors" are the entities of the system.

System boundary boxes: Rectangle shape that contains use cases. The actors have to place outside the system's boundaries.

Use Case: Horizontally shaped ovals are used for use cases. Label of the ovals represent the system's functions. Labels are written with verbs.

Relationships : A simple line use to show relationships between an actor and a use case

Actors : Actors are the users of a system. Stick figures that symbolize the people, employing the use cases.

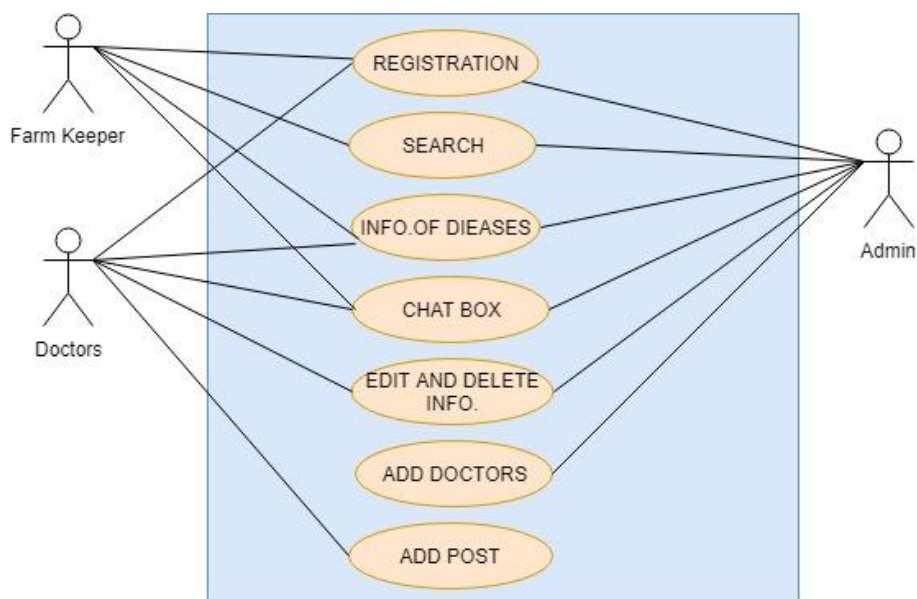


Figure: 3.1 Use case diagram

3.2: Case description

1. Registration:

Use-Case: Registration and validation.

Goal: Complete registration and login.

Pre-condition: Go to website homepage.

Post-condition: Fill up registration form.

Success End: Actors are registered for the site.

Actor: User, Helpdesk service, Animal resource officer.

Trigger: Fill up registration form and submit.

Main process: 1. Actor go to home page.
 2. Fill up registration form .
 3. Submit.

Alternative flow: 4. Actor doesn't go to home page.
 5. Doesn't fill up registration form.
 6. Doesn't submit form.

Quality request: Actor must have to complete the registration form.

2. Search

Use-Case: Search and select doctor.

Goal: Find out and select the doctor.

Pre-condition: Go to home page.

Post-condition: Open doctors list.

Success End: User find his desired criteria doctor.

Actor: User, Admin.

Trigger: User go to doctor page.

Main process: 1. User go to home page.

2. Search doctor in the list.

3. Select the doctor.

Alternative flow: 4. User does not go to the home page.

5. Does not search the doctor list.

6. Does not select the doctor.

Quality request: User must have to search and select doctor among of the list.

3 Info of Diseases:

Use-Case: Animal diseases information.

Goal: To know about animal diseases, symptoms and prevention step.

Pre-condition: Go to homepage.

Post-condition: Select diseases info option.

Success End: User will get knowledge about diseases and symptoms .

Actor: User.

Trigger: Select diseases info option.

Main process: 1. User go to home page.

2. Select diseases info option.

3. Get knowledge about common diseases and symptoms.

Alternative flow: 4. User does not go to home page.

5. Does not select diseases info option.

6. Does not get knowledge.

Quality request: User must have to go to the option of diseases info.

4. Chat Box:

Use-Case: Helpline service via chat box.

post edit and delete website info.

Alternative flow: 3. Actor doesn't go to homepage.

4. Doesn't select the advise option.

Quality request: Actor must have to go to the website info option for customization.

6. Add Doctor:

Use-Case: Add doctor info.

Goal: Customization of doctors information.

Pre-condition: Go to admin homepage.

Post-condition: Select the option of add doctor.

Success End: Actor can add doctors all info.

Actor: Admin.

Trigger: Go to admin panel.

Main process: 1. Actor goes to admin homepage.

2. Select add doctor option and can do the work of added doctor in the website.

Alternative flow: 3. Actor does not go to admin homepage.

4. Does not select the add doctor option.

Quality request: Actor must have to go to admin menu bar for adding doctors.

3.3 Activity Diagram

Activity diagram is another important diagram in UML to describe the dynamic aspects of the system. Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. The control flow is drawn from one operation to another. This flow can be sequential, branched, or concurrent. Activity diagrams deal with all type of flow control by using different elements such as fork, join, etc.

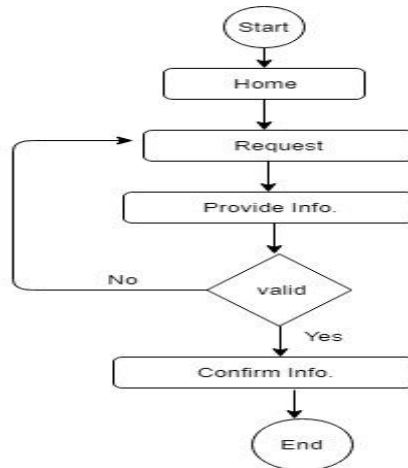


Figure 3.3.1 Activity Diagram for Registration

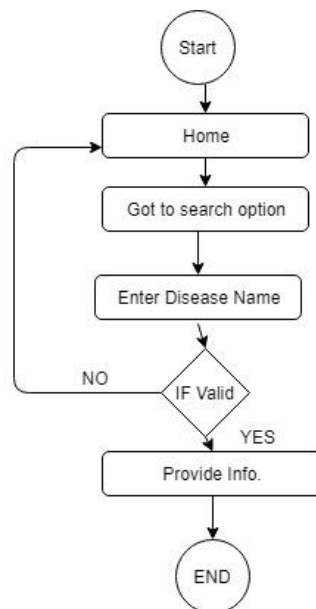


Figure 3.3.2 Activity Diagram for Search

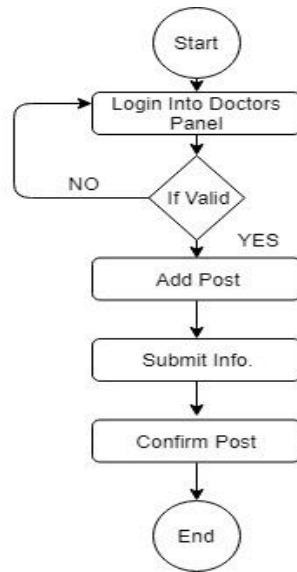


Figure 3.3.3 Activity Diagram for Add Post

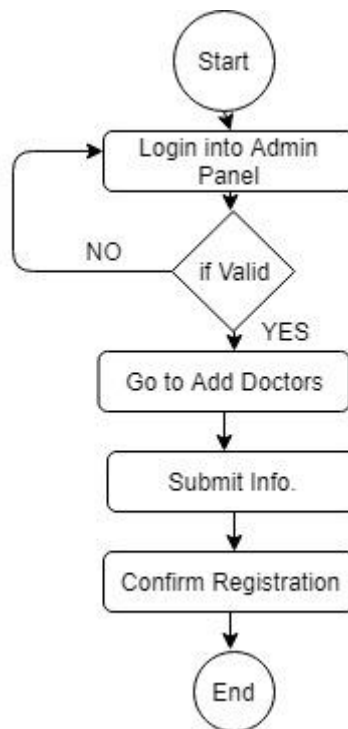


Figure 3.3.4 Activity Diagram for Add Doctors

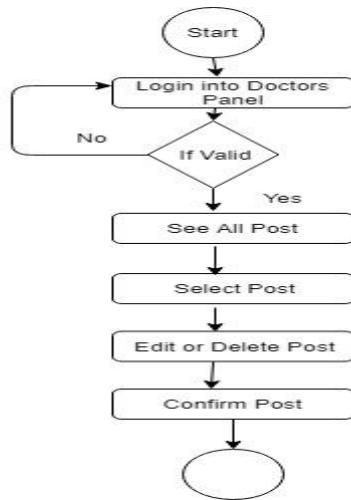


Figure 3.3.5 Activity Diagram for Edit or Delete post

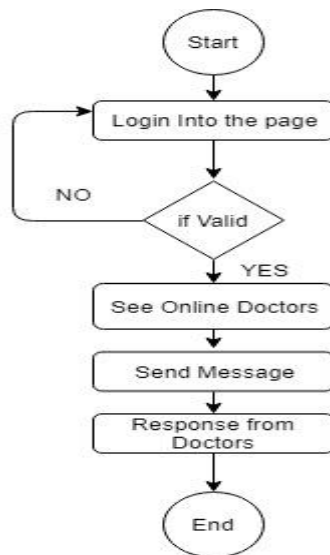


Figure 3.3.6 Activity Diagram for Chat Box

3.4 System Sequence Diagram

A sequence diagram shows object interactions arranged in time sequence. It depicts the objects and classes involved in the scenario and the sequence of messages exchanged between the objects needed to carry out the functionality of the system. Sequence diagrams are typically associated with use case realizations in the Logical View of the system under development.

A sequence diagram shows, as parallel vertical lines, different processes or objects that live simultaneously, and, as horizontal arrows, the messages exchanged between them, in the order in which they occur. This allows the specification of simple runtime scenarios in a graphical manner.

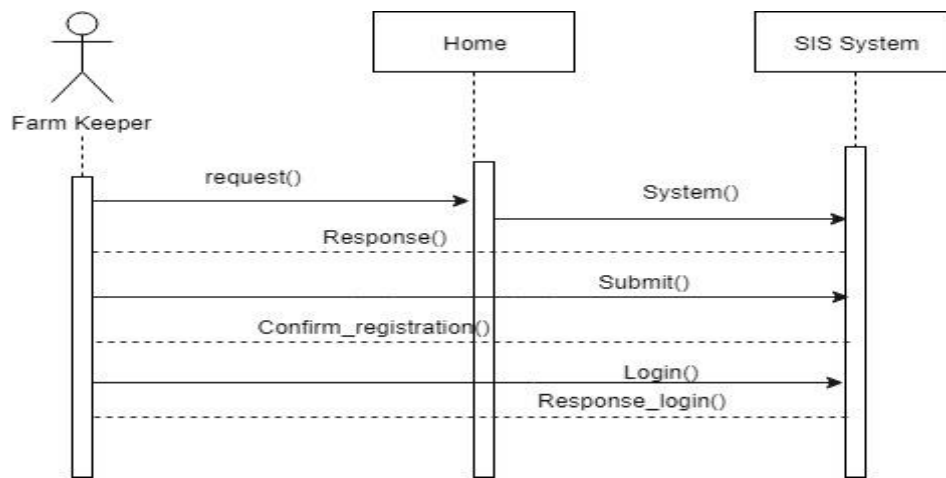


Figure: 3.4.1 Sequence diagram For Registration

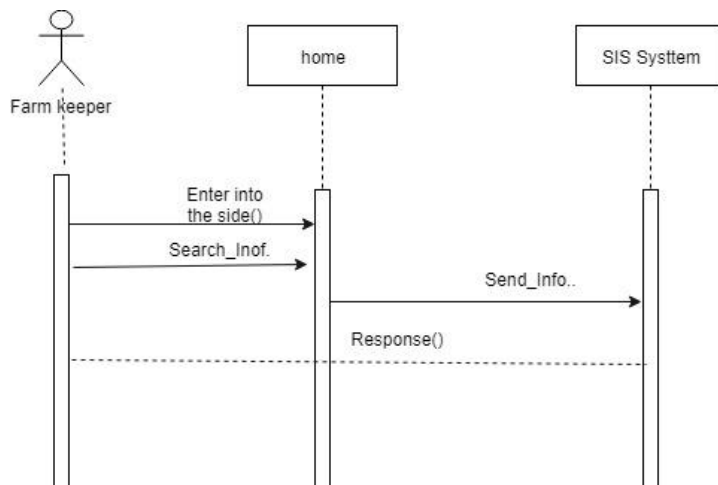


Figure: 3.4.2 Sequence diagram For Search

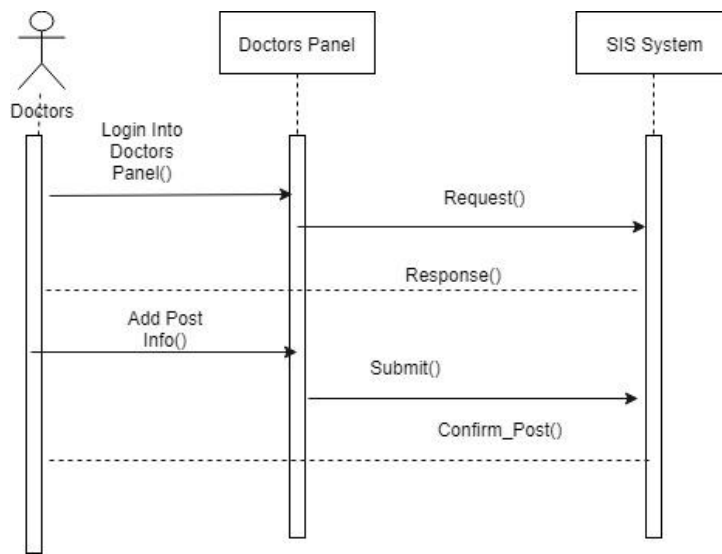


Figure: 3.4.3 Sequence diagram For Add Post

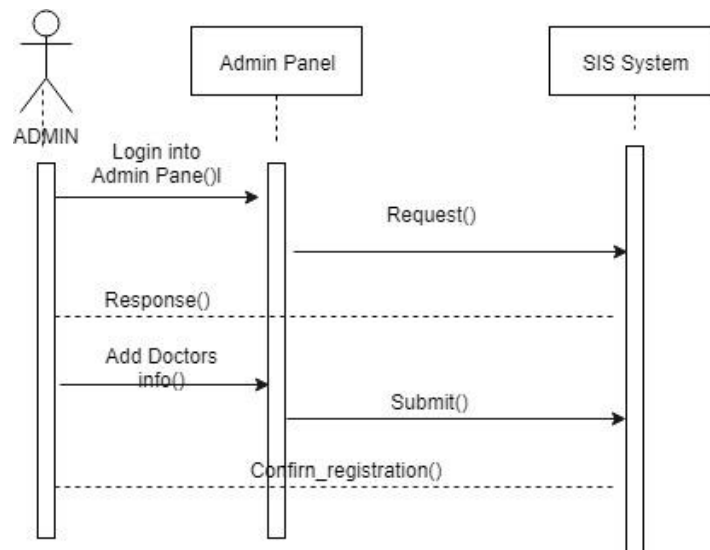


Figure: 3.4.4 Sequence diagram For Add Doctors

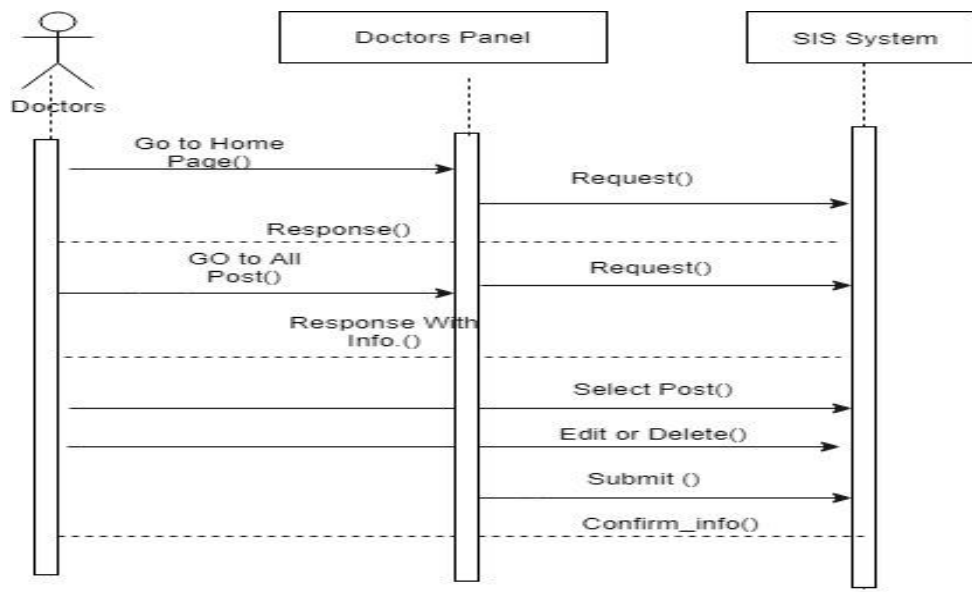


Figure: 3.4.5 Sequence diagram For Edit and Delete

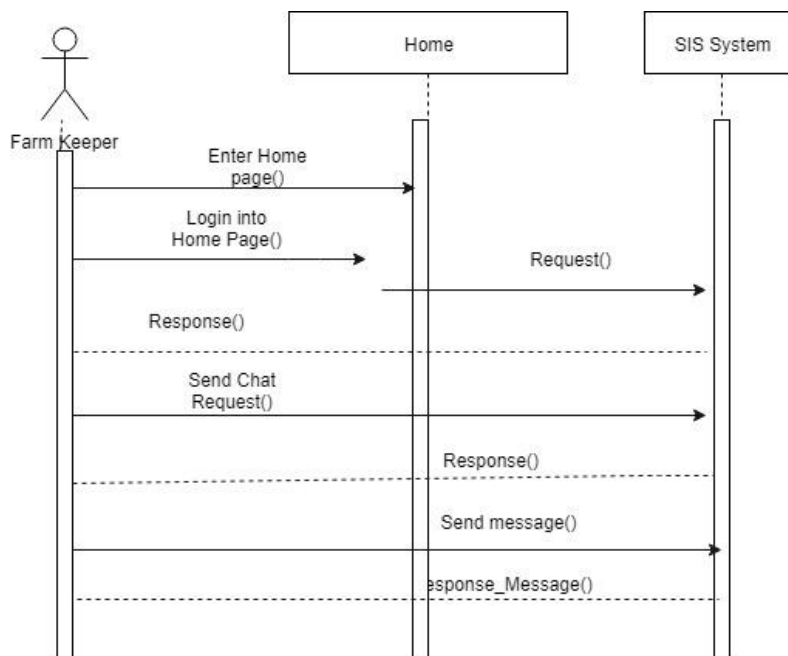


Figure: 3.4.6 Sequence diagram For Chat Box

CHAPTER 4

System Design Specification

A design specification is a detailed document providing information about a planned product or process. For example, the design specification should include all the drawings, dimensions, environmental components, damage, aesthetic material, maintenance needed, etc. It can give specific examples of how the design should be implemented and help others to work properly. A guide for what a person should do.

4.1 Class Responsibilities Collaboration (CRC)

Class Admin	
Name Password Email Address Manage Approve	Approve post Manage registration Manage post Approve doctor's information. Approve and manage users information

Class Doctors	
Name Email Phone no Area Designation	Create post Update post Check post Chat with Users Give immediate solution

Class User	
Name Email Password District Category Phone no.	Browse site See diseases information. Chat with doctors.

Figure: 4.1 Class Responsibilities Collaboration (CRC)

4.3:Class Diagram

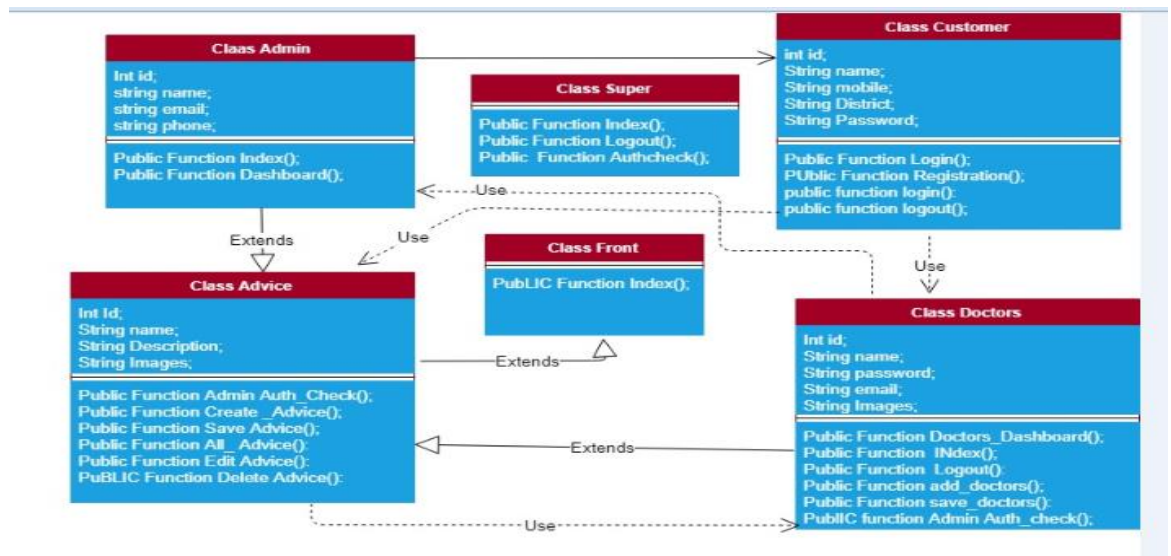


Figure 4.3 Class Diagram

4.4 Entity Relationship diagram (ERD)

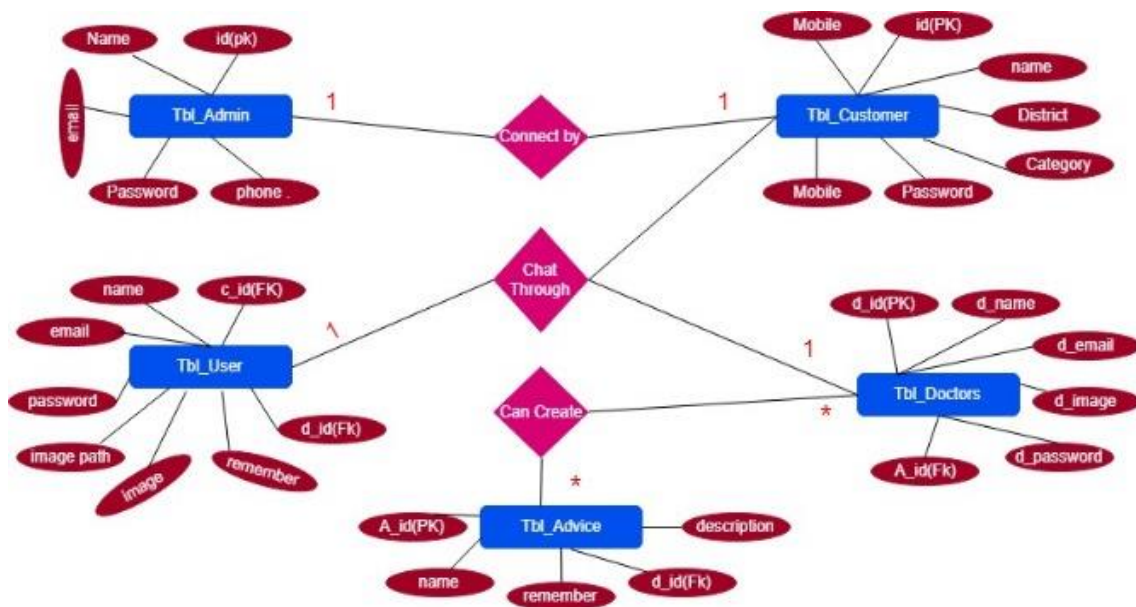


Figure 4.4: Entity Relationship diagram (ERD)

4.5 Data Flow Diagram

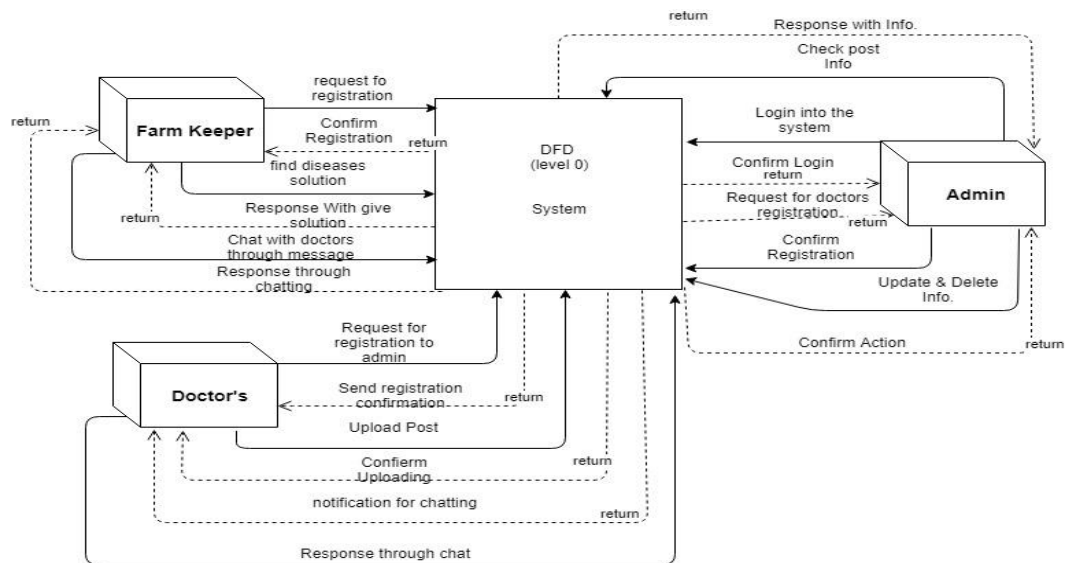


Figure 4.5: Data Flow Diagram(DFD)

4.5: Development Tools & Technology

Development tools help to make a web application like our “advertising training center”.

- ❖ Operating system: windows 8/10, Linux
- ❖ Programming language: PHP 7.2
- ❖ Framework: Laravel 5.7
- ❖ Design: HTML5, CSS3 ,Bootstrap 4, Bootstrap material
- ❖ Client side scripting language: JavaScript ,vue.js ,Ajax
- ❖ Database : MySQL
- ❖ Web server: Apache.
- ❖ IDE: VS code, Sublime Text 3

4.5.1 User Interface Technology

Information Technology In, User Interface (UI) everything is designed on an information device with which a person can interact. It may include the display screen, keyboard, mouse, and desktop presence. This is the way by which a user communicates with an application or a website.

- ❖ Framework: Laravel 5.7
- ❖ jQuery UI and Angular js
- ❖ Twitter Bootstrap
- ❖ Font Awesome

- ❖ Visual Styles
- ❖ Windows Ribbon Framework
- ❖ Desktop Window Manager
- ❖ Windows Automation API

4.5.1.1 Laravel Framework

Laravel is a MVC PHP framework design for developers who need a simple and elegant toolkit to create fully featured web applications. Larvae was created by Taylor Owle. This is a short tutorial that explains the basics of the Laravel structure. Laravel is a powerful framework and Laravel framework has lot of power for settle others language framework. And those both of framework can work with together.

Some of the features of Laravel are:

- ❖ Modular packaging system
- ❖ Entirely new directory structure
- ❖ Multiple file system support
- ❖ Improved method injection
- ❖ Route caching

Installation Server Requirements:

- ✓ PHP >= 5.5.9
- ✓ OpenSSL PHP Extension
- ✓ PDO PHP Extension
- ✓ Mbstring PHP Extension
- ✓ Tokenizer PHP Extension

4.5.1.2 Vue.js

Vue.js is one of the new software technologies widely used for web development worldwide. Vue.js is actually a JavaScript framework with various optional tools for creating user interfaces. The following web development has the advantage of using Vue.js technology. In our Advertise training center we use vue.js framework for chatting system.

- ✓ Flexibility
- ✓ Focus
- ✓ Simple Integration
- ✓ Simplistic Approach
- ✓ Easy to understand.

4.5.1.3 Twitter Bootstrap

Bootstrap is an open-source framework that allows HTML, CSS, and JavaScript code developers to create web applications. Bootstrap can be used for desktop and mobile development.

- Easy to use
- Responsiveness
- The speed of the development
- Support
- Consistency
- Grid
- Simple integration
- Pre-styled components

4.5.2 Implementation Tools and Platforms

- ✓ Microsoft Visual Studio 2010
- ✓ Apache HTTP Server
- ✓ MySQL Server
- ✓ Sublime
- ✓ MS Word 2013

4.5.2.1 Microsoft Visual Studio

It is used to develop computer programs for Microsoft Windows, as well as web sites, web applications and web services. Visual Studio uses Microsoft's software development platform such as Windows API, Windows Form, Windows Presentation Foundation, Windows Store, and Microsoft Silverlight. We use this software to make exact diagrams for our business advertise training center. There are many diagrams:

- Data flow Diagram
- Activity Diagram
- Sequence Diagram
- Use Case Diagram
- Class Diagram
- Database Design Diagram

4.5.2.2 Apache Server

Apache is the most widely used web server software. Development and Maintenance by the Software Development Software, Apache is a FREE open source software available for free. It runs on 67% of all web servers in the world. It's fast, reliable, and safe.

So basically a web server software that receives your request to access a web page. It runs a few security checks on your HTTP request and takes you to the web page. Depending on the page you request, the page may run some extra modules while creating documents to provide the server with you. It then works on the documents you request. It's not quite awesome.

CHAPTER 5

System Testing

5.1 Introduction

Software testing is a way, to evaluate the functionality of a application with an intent to find whether the developed software assists with the specified requirements or not and to identify the defects to ensure that the product is defect free in order to produce the quality product.

Manual Testing: Manual testing is the way of testing the software manually to find the error. Tester should have the perspective of an end user and to ensure all the features are working as mentioned in requirement document. In this process developer run the test cases and generate the reports manually without using any automation tools.

Automation Testing: Automation testing is the way of testing the software using an automation tools to find the error. In this process, testers execute the test files and generate the test results automatically by using automation tools. Some of the famous automation testing software for functional testing are QTP/UFT and Selenium.

In our case we use manually PHP UNIT TEST. We go through every function which need to be tested. Give assertion and return result.

We also use a tool (test cafe) to final checkup proposed system. Result are included in this section.

5.1 Module 1: Farm keeper

This module describes all test case of farm keeper.

Features should be tested:

- Registration & Login
- Diseases description info
- Helpline chat box

Table 5.1.1 Unit Test Case Module 1

Test name: Registration & Login			
Test procedure	PHP Unit Test		
Test Id	KSUT001		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Form Validation Check	Escape slash, escape special character, File size not more than 5M	OK
2	User existing (registration)	Checking Existing user	OK
3	Secure Logged In	User Session creating	OK

Table 5.1.2 Unit Test Case Module 1

Test name: Diseases Description Info			
Test procedure	PHP Unit Test		
Test Id	KSUT002		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Diseases description	True	OK
2	Information availability	True	NOK, #bug
3	Markdown Formatting	All decorated text are should saved in plane html format.	OK

Table 5.1.3 Unit Test Case Module 1

Test name: Helpline Chat Box			
Test procedure	PHP Unit Test		
Test Id	KCUT010		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Message From	True	OK
2	Message To	True	OK
3	Description	True	NOK, #bug

5.2 Module 2: Doctor

This module describes all test case of doctor.

Features should be tested:

- Doctor info
- Create post
- Update or delete post

Table 5.2.1 Unit Test Case Module 2

Test name: Doctor Info			
Test procedure	PHP Unit Test		
Test Id	KSUT004		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Doctors List	Chronological Format, all doctors appear for current farm keeper.	OK

2	Linkable List	True	OK
3	Static In Every Profile	Should stay all time.	NOK, #bug

Table 5.2.2 Unit Test Case Module 2

Test name: Post Creation			
Test procedure	PHP Unit Test		
Test Id	KSUT005		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Validate Input Date	All field Required, Special character escape, file size less then 5M	OK
2	Markdown Formatting	True	OK
3	File Attachment	True	OK

Table 5.2.3 Unit Test Case Module 2

Test name: Post Update & Delete			
Test procedure	PHP Unit Test		
Test Id	KSUT006		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Post editing	All field Required, Special character escape, file size less then 5M	OK

2	Markdown Formatting	True	OK
3	File Attachment	True	NOK, #bug

5.3Module 3: Admin

This module describes all test case of admin.

Features should be tested:

- Login
- Add doctor
- Create post

Table 5.3.1 Unit Test Case Module 3

Test name: Login			
Test procedure	PHP Unit Test		
Test Id	KSUT007		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Valid id & pass	Escape slash, escape special character, File size not more than 5M	OK
2	User existing	Checking Existing admin	NOK, #bug
3	Secure Logged In	User Session creating	OK

Table 5.3.2 Unit Test Case Module 3

Test name: Add Doctor			
Test procedure	PHP Unit Test		
Test Id	KSUT008		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Doctor payment status check	True	OK
2	Doctor payment status check	False	OK
3	Adding Doctors Form	All field Required, Special character escape, file size less then 5M.	NOK, #bug

Table 5.3.3 Unit Test Case Module

Test name: Post Creation			
Test procedure	PHP Unit Test		
Test Id	KSUT009		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Validate Input Date	All field Required, Special character escape, file size less then 5M	OK
2	Markdown Formatting	True	OK
3	File Attachment	True	OK

Table 5.3.4 Unit Test Case Module 3

Test name: Insight			
Test procedure	PHP Unit Test		
Test Id	KSUT010		
Step number	Operator actions	Expected result and evaluation criteria	Result
1	Total Post	True	OK
2	Total Farm keeper	True	OK
3	Doctors Info	True	NOK, #bug
4	Graphical Representation	True	NOK, #bug

5.4 Defects Distribution – module wise:

Table 5.3.5 defects distribution

	Module 1 (Farm keeper)	Module 2 (Doctor)	Module 3 (Admin)
Critical	0	1	1
Major	1	0	2
Medium	1	1	2
Cosmetic	1	3	3
Total	3	5	8

Table 5.4 defects distribution

CHAPTER 6

User Manual

Different types of users of this system are divided by their task and responsibilities. The system users can be divided into three types:

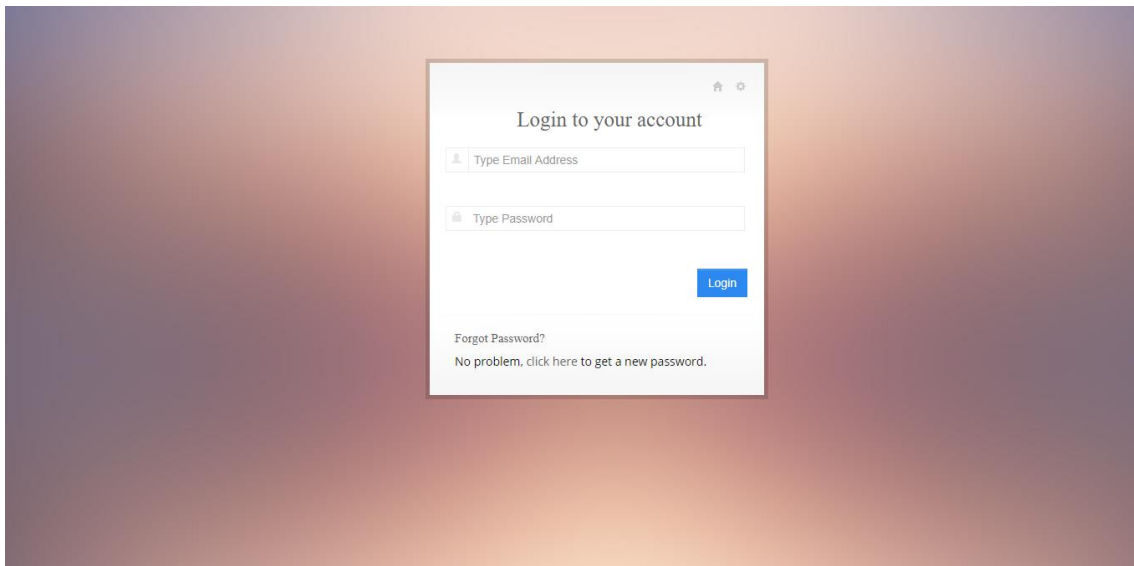
- Farm Keeper
- Doctors
- Admin

Following table will describe about different users with their permission based on different operations.

Table 6.1: Users Type

Users	Description
Farm Keeper	Registered & authenticated farm keeper can view post of diseases. Also they can chat through message with doctors.
Doctors	Registered Doctors can create post and chat with farm keeper. Doctors also edit and delete post and check all post and doctors information
Admin	Admin assign doctors and confirm registration. Admin can delete Post information and doctors profile and also access to the whole system.

6.1 User Admin: Admin have Login into the system for get access to the admin panel. Admin will responsible for all activities done in admin panel.



Admin can see the all user information and admin will create new doctors. Admin can see all post information upload by doctors.

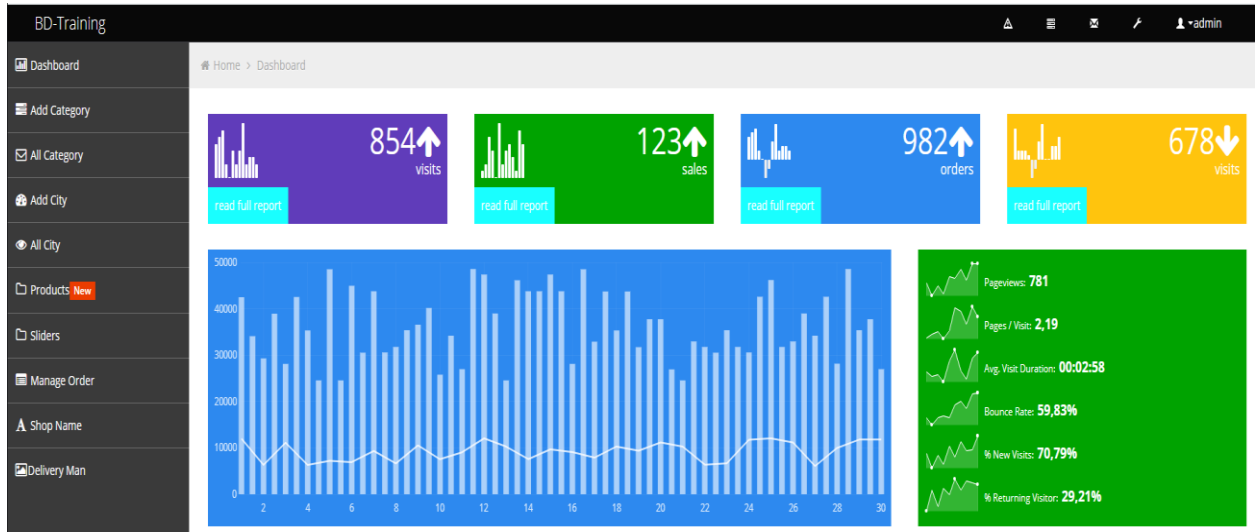


Figure 6.1: Admin Login system and admin panel

6.2 Farm Keeper: Farm keeper enter into the site and get information about diseases. When he will not get the specific diseases information about his cattle then he has to register and login into the system for chat with doctors and expertise. Here is screen short of the pages.

গো বসন্ত	পেট ফুলা রোগ	ক্ষুরা রোগ
<p>প্রথমাবস্থায় কোস্ট কাঠিন্য থাকলেও পরবর্তী অবস্থায় ভীষণ দুগন্ধযুক্ত পাতলা পায়খানা হয়। পায়খানা আম ও রক্তের মিশ্রণ থাকে। এই অবস্থায় জর আস্তে আস্তে কমে এবং ২-৪ দিনের মধ্যেই পশু খুব দুর্বল ও অবস হয়ে পড়ে এবং মারা যেতে পারে। আক্রান্ত পশুর মাড়ি, দাতের গোড়া, জিহ্বা এবং মুখ গহবরে ছোট ছোট ঘা হয়। মারা যেতে পারে। আক্রান্ত পশুর মাড়ি, দাতের গোড়া, জিহ্বা এবং মুখ গহবরে ছোট ছোট ঘা হয়। আক্রান্ত পশুর মাড়ি, দাতের গোড়া, জিহ্বা এবং মুখ গহবরে ছোট ছোট ঘা হয়।</p>	<p>অতিরিক্ত লিগিউম জাতিয় ঘাস খেলে, অতিরিক্ত দানাদার খাদ্য খেলে, অপরিপাক যোগ্য খাবার খেলে, যে কোন কারণে খাদ্যনালীর কথাও ব্লক তৈরি হলে এই সমস্যা হয়ে থাকে। অতিরিক্ত লিগিউম জাতিয় ঘাস খেলে, অতিরিক্ত দানাদার খাদ্য খেলে, অপরিপাক যোগ্য খাবার খেলে, যে কোন কারণে খাদ্যনালীর কথাও ব্লক তৈরি হলে এই সমস্যা হয়ে থাকে। যে কোন কারণে খাদ্যনালীর কথাও ব্লক তৈরি হলে এই সমস্যা হয়ে থাকে। খাদ্যনালীর কথাও ব্লক তৈরি হলে এই সমস্যা হয়ে থাকে।</p>	<p>এ রোগে আক্রান্ত পশুর মুখ দিয়ে প্রচণ্ড লাল ঝরে। লালার সাথে এ রোগের ভাইরাস বেরিয়ে আসে। এ লাল ঝেখানে পড়ে সেখানে ধুলিকনার সাথে মিশে বাতাসে উড়ে বেড়ায় এবং বাতাসের গতি যে দিকে থাকে সেদিকে সংক্রামিত হতে থাকে। আক্রান্ত প্রাণীর সাথে সুস্থ প্রাণী রাখলে বা সংস্পর্শে আসলে সুস্থ প্রাণীটিও আক্রান্ত হয়। প্রাণী রাখলে বা সংস্পর্শে আসলে সুস্থ প্রাণীটিও আক্রান্ত হয়। আসলে সুস্থ প্রাণীটিও আক্রান্ত হয়। আসলে সুস্থ প্রাণীটিও আক্রান্ত হয়।</p>
		

নিবন্ধন করুন

তথ্য গুলো দিয়ে ফর্ম ফিলাপ করুন

ক্যাটাগরী

[বাতিল](#)

লগিন

মোবাইল নাম্বার ও পাসওয়ার্ড দিন

[বাতিল](#)
[নিবন্ধন করুন](#)

Figure 6.2: Farm Keeper registration panel and disease page

User also can chat through chat box and get immediate solution for his or her cattle. Here is the screen short of the chat box:

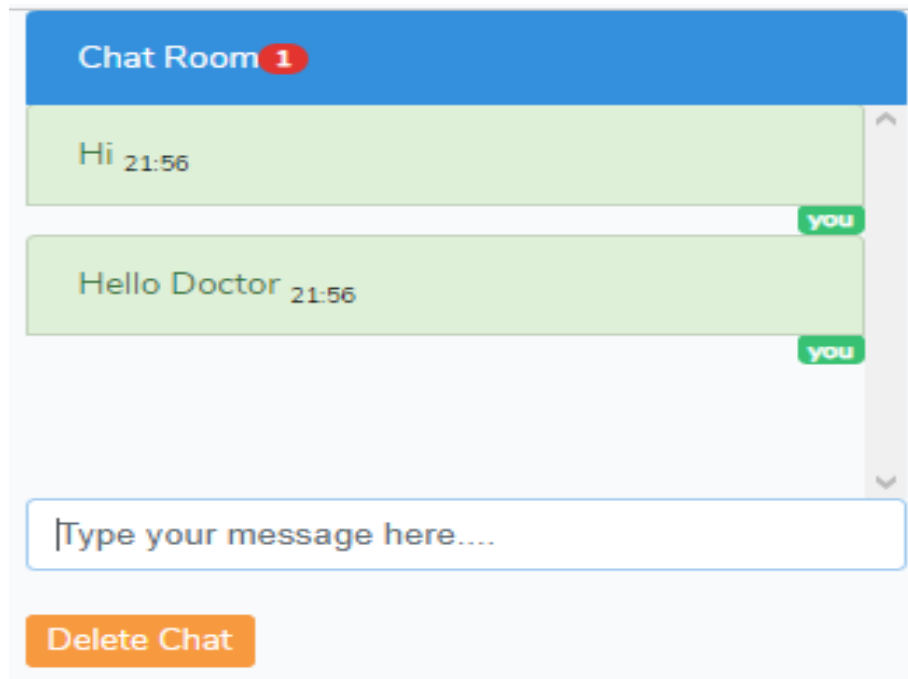


Figure 6.2.1 User chat box

6.3 Doctor: Doctors will request admin for registration and verify doctor's information and confirm registration. Then doctors can create post, update delete post he uploaded in system. Also doctors will response the message which will send by farm keeper.

Name

Description

Image
 No file chosen

Figure 6.3.1 Post Diseases

ALL ADVISES ARE HERE




ID	Name	Image	Action
3	বাদলা		Edit Delete
5	বাদলা		Edit Delete
6	বাদলা		Edit Delete

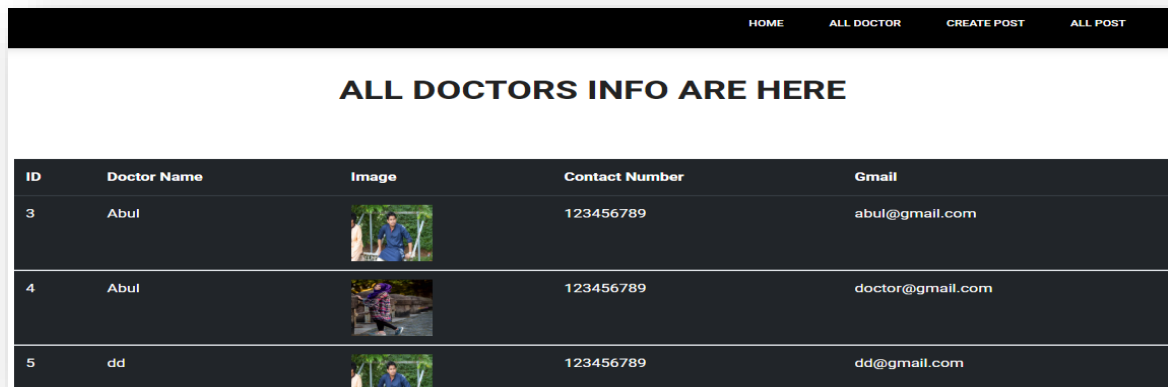
Figure 6.3.2: update and delete post

6.4 Home page: Here is the home page of the site. User can find diseases information from here.



Figure 6.4 Home page

User and can admin can find the doctors information from here. User can also contract with doctors through phone and also send mail to the doctors.






ID	Doctor Name	Image	Contact Number	Gmail
3	Abul		123456789	abul@gmail.com
4	Abul		123456789	doctor@gmail.com
5	dd		123456789	dd@gmail.com

Figure 6.5 Doctors Information

Chapter 7

Project Summary

7.1 Github Link : http://github.com/jjahid/khamari_seba.git

7.2 Critical Evaluation

The World Wide Web has become a major distribution platform for many complex and sophisticated enterprise applications in a number of domains. In addition to their inherent versatile functionality, these web applications display complex behaviors and keep some unique needs for their usability, performance, security and growth and development. In recent years, some developments have been made to address these problems and needs. As a rising discipline, web engineering actively promotes regular, disciplined and measurable approaches towards the successful development of high quality, universally accessible web-based systems and applications.

7.3 Limitations

There have lot of limitations for the web application.

- ❖ Internet Reliance
- ❖ Security
- ❖ Reduced Speed
- ❖ Browser Speed

Internet Reliance: An error with the Internet is not always there, especially in many developing countries. If you go to the internet or you are in an area that is not connected, then you will not be able to access your web application.

Security: There is no denying that your data is less secure while on the cloud, especially when users around the world are accessing the same server hosted by a third party. Although there is a way to reduce your risk, email encryption and SSL implementation are just two examples for secure HTTPS access.

Reduced Speed: A web application is probably slower than an application hosted on your company's server. You have to decide whether a slight reduction in speed is acceptable to worldwide access.

Browser Speed: Unfortunately, we do not use a version of the browser because we are given a choice. This means that your web application is supported in different browsers and different screen sizes.

7.4 Future Scope:

In future we will add some features like video call and image sharing in conversation. Also we have plan to manage a doctor's team in every district to provide better service to the farm keeper. We also manage trainee team for farm keeper who will trine them for operate our website properly and farm keeper can easily use our site and get benefitted by our service. We have plan to provide online medicine prescribed by doctors. In future farm keeper can also get more information about how build a good farm and information about feeding process to the cattle's.

We will create a new section for poultry farm where farm keeper can how poultry farm can make safe from various diseases. Also we will provide the how they get more benefited by their far.

