



Final-Project-Report

Computer Application (Tribhuvan University)



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BUTWAL MULTIPLE CAMPUS

Tribhuvan University

Department of Information Communication & Technology



Project Report

On

“Broiler Poultry Info System”

(Course Code: ICT. Ed. 486)

**In partial fulfillment of the requirements for the Bachelor’s Degree in Information
Communication and Technology (BICT)**

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Submitted to

BUTWAL MULTIPLE CAMPUS

Department of Information Communication & Technology Education

Golpark, Butwal

September, 2022

DECLARATION BY CANDIDATES

We, the final year BICTE students (eighth semester) of Butwal Multiple Campus, hereby declare that the project report entitled "Fee Payment System" is an online fee payment system project carried out by us under the guidance and supervision of Kamal Thapa Sir, of Butwal Multiple Campus. We assure that this project work showed the result of our original work and the contents of the project have not been submitted to anybody else for the award of degree. This project is purely of academic interest. We have followed the guidelines provided by the Tribhuvan University in writing this report.

Date: September 20, 2022

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SUPERVISOR'S CERTIFICATE

This is to certify that the project entitled "Broiler Poultry Info System" is an online fee payment system done by Prakash Chaudhary (7450017), Susma Puri (7450022), Sanjay Bhujel (7450019), and Anil KC (7450004) of BICTE students 2074 Batch, Butwal Multiple Campus. It is an original project carried out under my guidance and supervision towards the partial fulfillment of Bachelor's degree of Information Communication & Technology.

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EVALUATION COMMITTEE

This is to certify that the project entitled "Broiler Poultry Info System" is an online free informative system for broiler poultry done by Prakash Chaudhary (7450017), Susma Puri (7450022), Sanjay Bhujel (7450019), and Anil KC (7450004) of BICTE students 2074 Batch, Butwal Multiple Campus. It is an original project carried out under my guidance and supervision towards the partial fulfillment of Bachelor's degree of Information Communication & Technology.

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Abstract

With the development of information and communication technology, the world's economy is changing every second. The poultry marketing is also increased day by day due to changed food habit of eating meat and egg. The main objective of broiler poultry info system is to design and develop an online system through which the farmers and peoples will be able to see about broiler poultry information like temperature, climate, medicine, feeding food etc from virtually anywhere. It helps of this more and more people are oriented towards using digital platforms for efficient and effective information on broiler poultry.

We hope broiler poultry info system will finds its way on the revolutionary change of poultry habits of people involved in the field and assists them in every possible way to reach the potential of broiler poultry development in the country.

Broiler Poultry Info System is a system designed for poultry farmers of Nepal and is capable of managing each and every data and information regarding registered farmers. The farmers registered in this system can gain knowledge, notice, information about poultry etc.

This project is developed using HTML/CSS as a frontend and PHP programming language as a Backend.

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LIST OF ABBREVIATIONS

S. No	Abbreviations	Description
1	PHP	Hypertext Pre-processor
2	HTML	Hypertext Markup Language
3	CSS	Cascading Style Sheets
4	SQL	Structured Query Language
5	DFD	Data Flow Diagram
6	RAM	Random Access Memory

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CHAPTER 1

INTRODUCTION

4. Introduction

4.1 Introduction

Broiler Poultry info system is the system which helps to farmer by providing all kind of information on the website. Which helps farmer to give the best practice for the broiler poultry process? Nepal is mostly known for as an agricultural country. Agriculture is the backbone and major source of income so for them broiler poultry farm is the best option among different field inside agriculture. Broiler farming is the most demanding profession among the people and short production cycle. Broiler farming is the most profitable agro-industries which can effectively tackle the problem of unemployment. Broiler farming needs very little investment since they can be grown and marketed within six weeks. Today's world, electronic media is booming and most of the people have electronic device called smart phone laptops etc by using them farmers can easily read farming blog and good knowledge in broiler poultry farming on this site. Here we can get all kind of farming tools methodology and good knowledge about broiler poultry farming. It's completely free to use and no any hidden cost are included. We can read online. It purely focuses only broiler farming.

4.2 Problem Statement

In the context of Nepal, the farmers are facing many problems while farming and they do not achieve their business idea and good income, due to lack of poultry training and support. The most important approach the farmers doesn't know harsh environmental conditions and heat stress which lead to oxidative stress impairs glucose metabolism, protein's efficiency and decrease production performances, many of farmers doesn't know about technical knowledge. Many farmers are following traditional suggestions and invest money without knowledge and the bears high lost

4.3 Objectives

The main objectives of this project are listed below:

- To identify the strength and weakness of the current system and to assist to improve their production performances and encourage people to take interest on poultry.
- The articles and blogs section helps farmers to improve their poultry farming style and profitability.

1.4 Scope and Limitation

1.4.1 Scopes

- Farmers as well as others people also can use this site and gain knowledge about broiler poultry.
- Veterinarian and professional person who belongs on it they can make use of it for providing information about poultry farming content of this system.
- Farmers will be provided with latest broiler poultry farming news and information.

1.4.1 Limitation

- In this system peoples will access only broiler poultry farm related information not for other farming system.
- Internet connection required.

1.5 Development Methodology

We have used Waterfall Model for the development of this system.

1.6 Report Organization

The report is organized into seven chapters. Chapter 1 includes description Broiler poultry info system, problem statements, objectives, scopes and limitations. Chapter 2 contains literature review about the previous work done in related fields. Chapter 3 comprises of requirement analysis, feasibility analysis of the system. The requirements analysis further consists of functional and non-functional requirements. Economic, technical and operational feasibilities are listed. Chapter 4 consists of system design which includes use UML diagram, and consists of methodology that consist of system architecture. Chapter 5 includes implementation and testing of the system. Testing further comprises of unit testing, system testing. Chapter 6 includes conclusions and future enhancement.

CHAPTER 2

BACKGROUND STUDY AND LITERATURE REVIEW

5. Background Study and Literature Review

2.1 Background Study

Nepal is known for an agricultural country. Poultry farming is integral part of agriculture in Nepal. Due to the lack of training and support in poultry farming, farmers are facing many problems while farming and they are not able to have business thinking and good income. Many farmers are following conventional tips and investing money without knowledge and they have huge losses. This will help in reducing the various problems and challenges associated with traditional methods of broiler poultry info system. Therefore, it has become necessary to implement broiler poultry info system to overcome the shortcomings of the traditional system.

Moreover, our Broiler Poultry Information System focuses on providing a safe and easy way to gain knowledge, good income. The project will conduct an economic analysis of prevailing production constraints, characteristics of poultry farming and on-site research.

2.2 Literature Review

The main purpose of our project is in broiler poultry farming system and it has potential to overcome broiler poultry farming-related information and knowledge. There are different web applications and website Facebook pages available. In the context of Nepal, most of these are not providing all the necessary information about the broiler poultry farming that is critical to the farmers. These applications and sites are missing important factors like temperature maintenance, medicinal so hence we with the intent of providing information that is not yet within the reach of people so we think the concept of the broiler poultry farming system is in existence in this sector. The data are collected from agricultural news sites, Smart Krishi, field visits, Krishi dairy, krishify etc.

CHAPTER 3

SYSTEM ANALYSIS

6. System Analysis

6.1 Requirement Analysis

i. Functional Requirements

Functional Requirement defines the function of the system where functions are collective set of input, their behaviors and their output.

The system must provide following functionalities:

- User friendly efficient and simple system
- Register new users
- User Login
- Storing users details and fee details
- Able to question on broiler poultry
- Generate the answer of question

ii. Non Functional Requirement

These requirements are implicit to the system and may be so fundamental that the relevant people do not explicitly state them. Non-functional requirements of this project are:

- **Usability**
The system allows the user to access the system from the internet. The system is user friendly and online help makes using the system easy and efficient.
- **Performance**
The information is refreshed at regular interval depending upon whether some updates have occurred or not.
- **Reliability**
The system will run 7days a week, 24 hours a day.
- **Maintainability**
Changes like new user addition, password changes, database change must be verified once per day at least.

6.2 Feasibility Analysis

The feasibility study concludes that the project would be able to be implemented to success as it was carefully planned.

i. Technical Feasibility

The system is technically feasible to implement. The technology used guarantees the reliability, accuracy and data security. The technical aspects of the system can easily cover cross-platforms like mobile, desktop, web etc. and is easily scalable. The technical manpower is also easily available.

ii. Operational Feasibility

It is operational feasible because people can easily read information and gain knowledge. It is a measure of how well the solution will work in organization.

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iii. Economic Feasibility

The System is economically feasible to implement. There is no need of extra hardware components and paid software to build the system.

iv. Schedule Feasibility

Time Schedule / Gantt chart according to the methodology used for development, the project is estimated to be fully developed in 12 weeks. The total project development task is sub-divided into various phases and allocated time schedule as per requirements.

CHAPTER 4

SYSTEM DESIGN

7. System Design

7.1 Database Design

Database Design

Table 4.1: User/Admin Login

S.N	Attribute	Datatype	Constraints
1	Id	Int	Not Null
2	Email	Varchar (255)	Not Null
3	Password	Varchar(16)	Not Null

Table 4.2: User Register

S.N.	Attribute	Data type	Constraint
1	Id	Int	Not null
2	Name	Varchar(255)	Not null
3	Email	varchar(255)	Not null
4	Phone	varchar(20)	Not null
5	Password	varchar(16)	Not null

7.2 System Design

4.2.6 Use Case Diagram

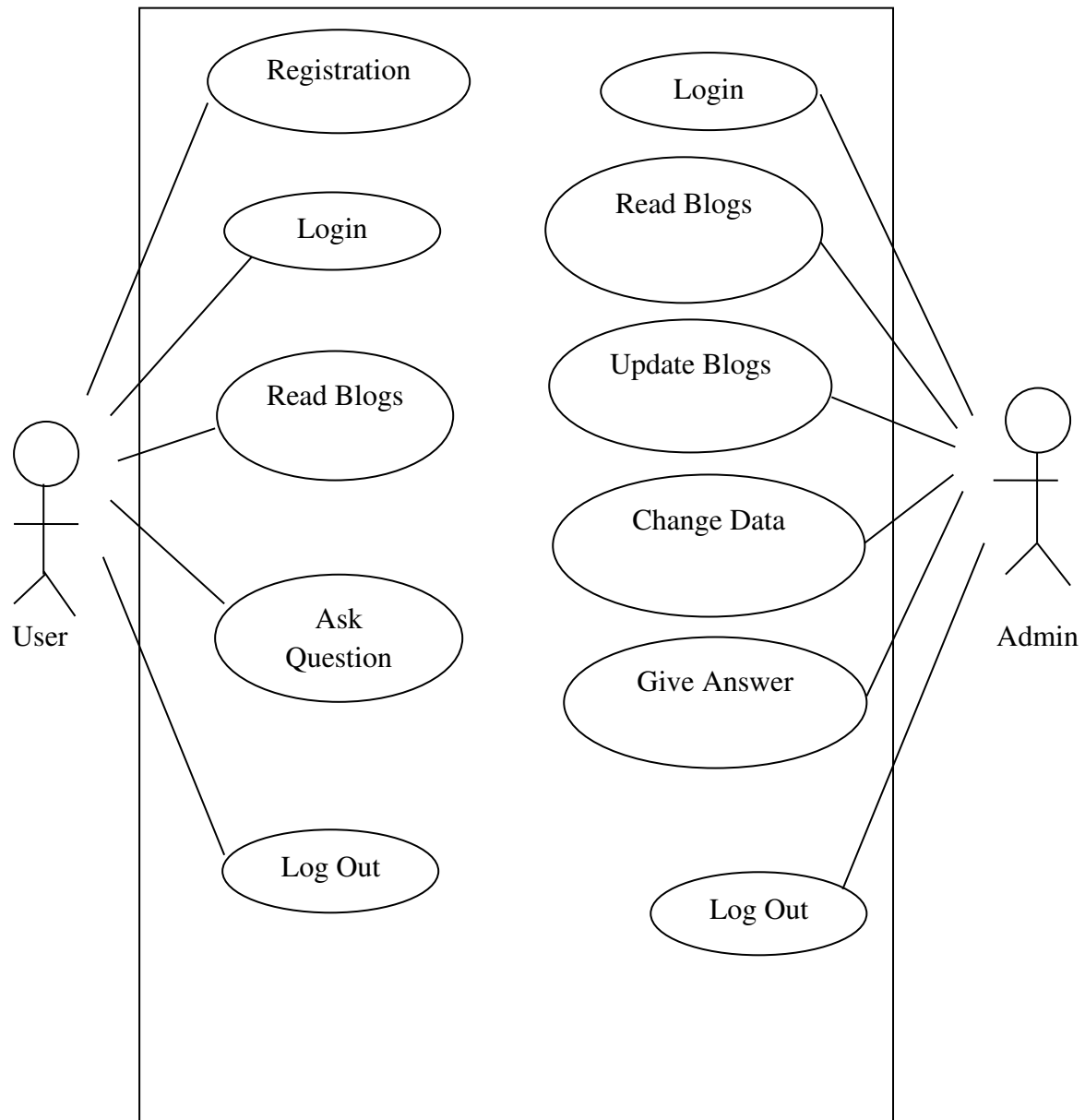


Fig 4.2.1: Use Case Diagram of Broiler Poultry Info System

4.2.6 Sequence Diagram

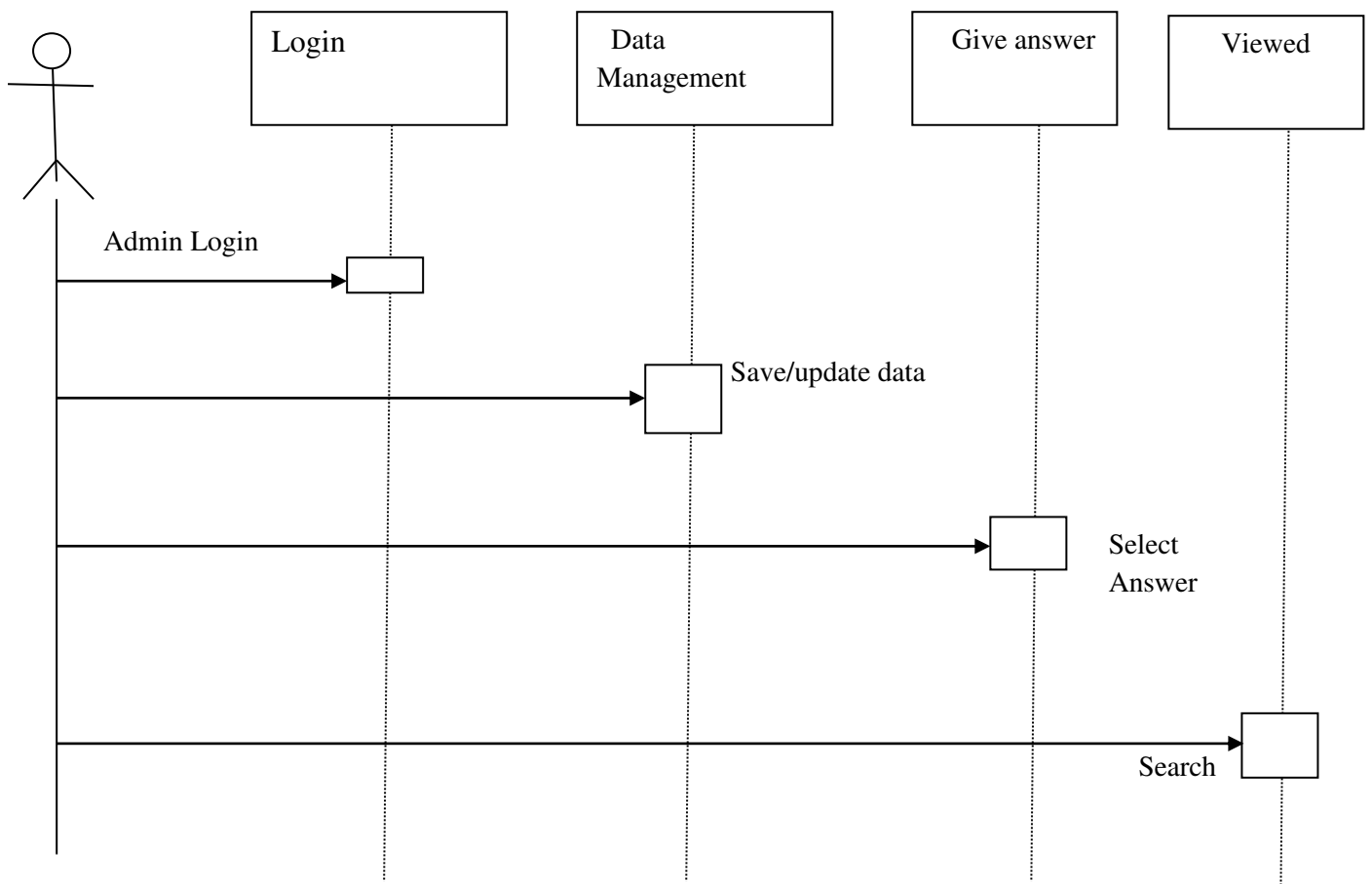


Fig 4.2.2: Sequence Diagram of System

4.2.6 Activity Diagram

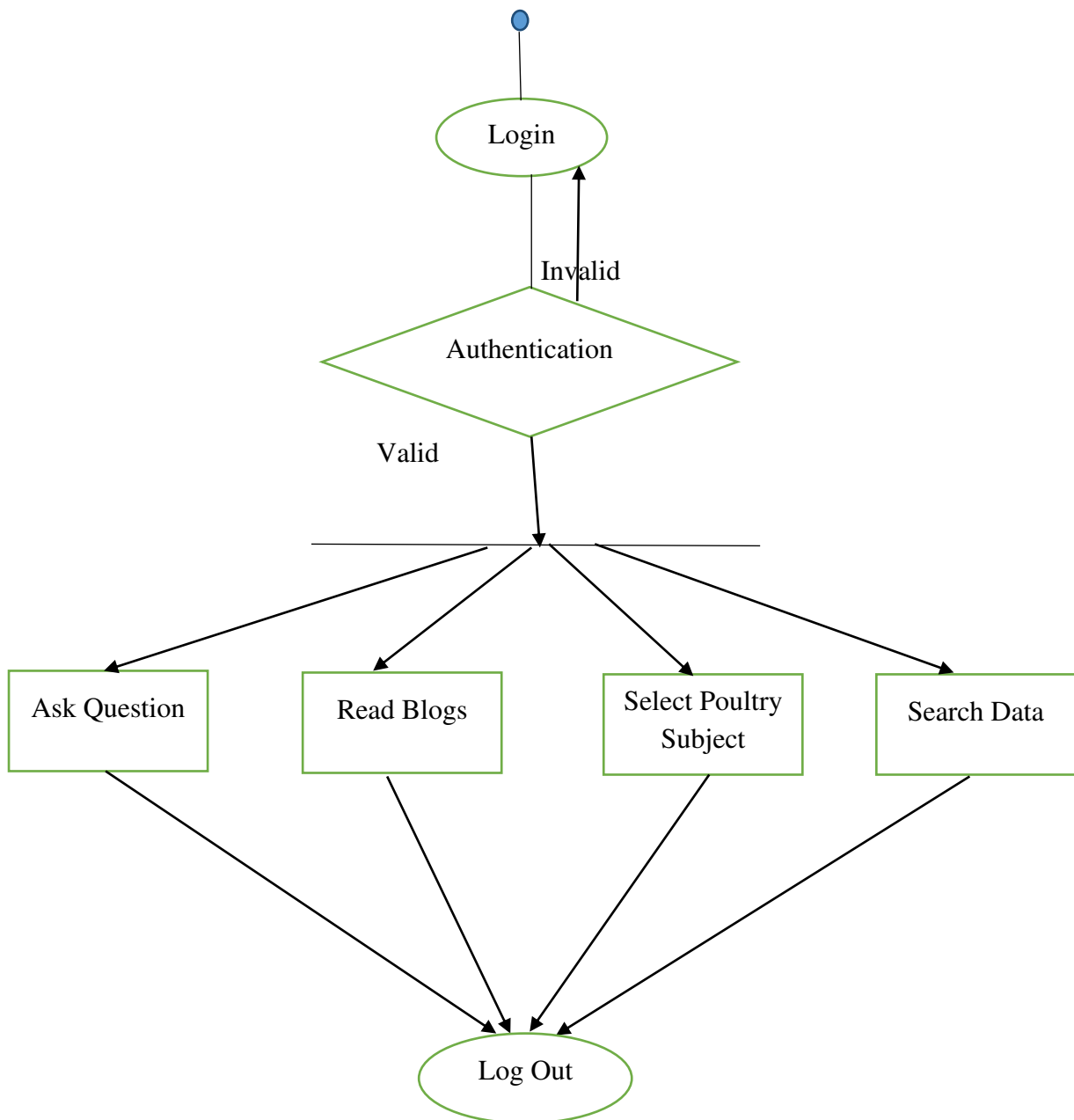


Fig 4.2.3: Activity Diagram of the system

4.2.4 Class Diagram

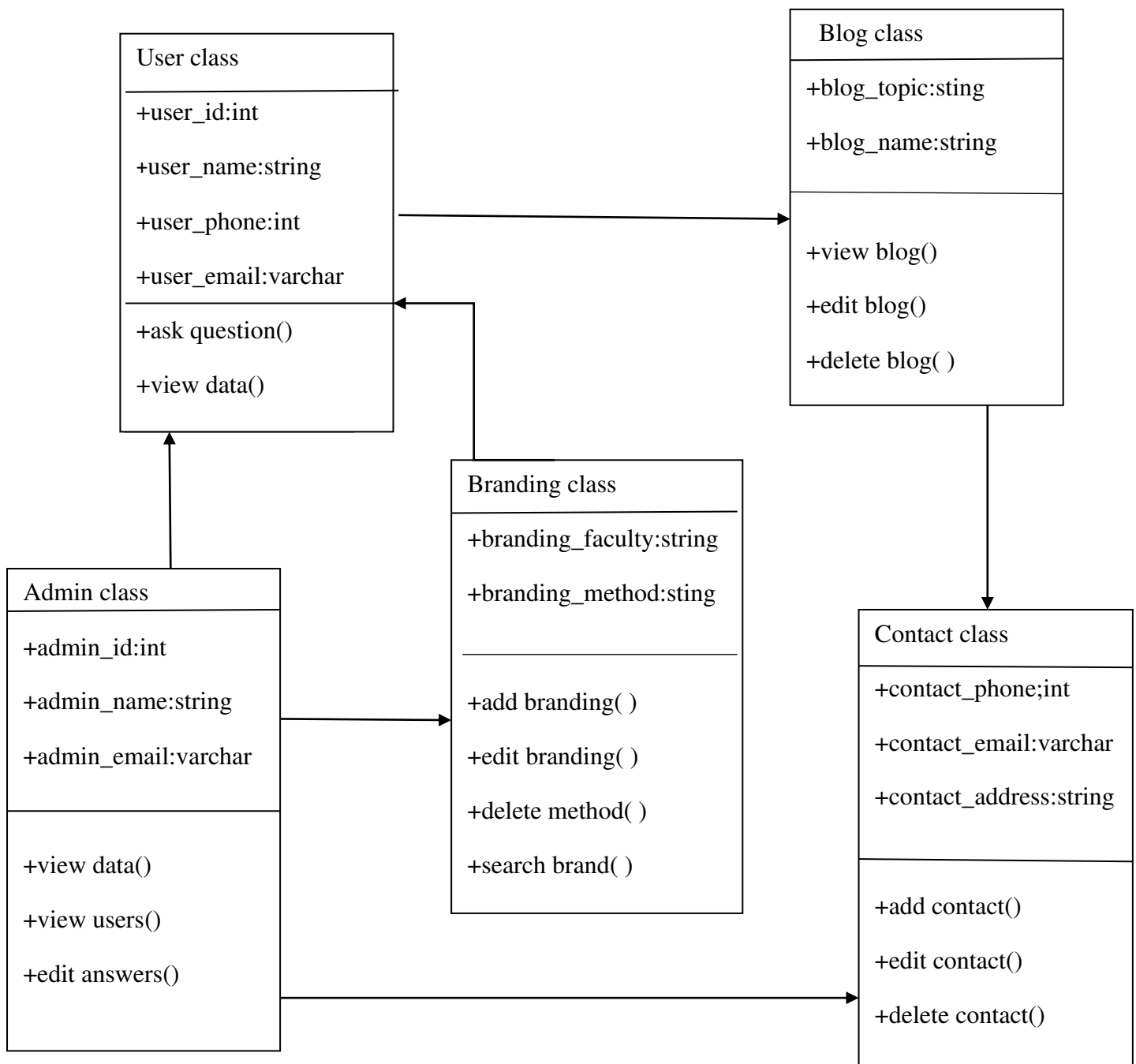


Fig 4.2.4: Class Diagram of System

4.2.6 Component Diagram

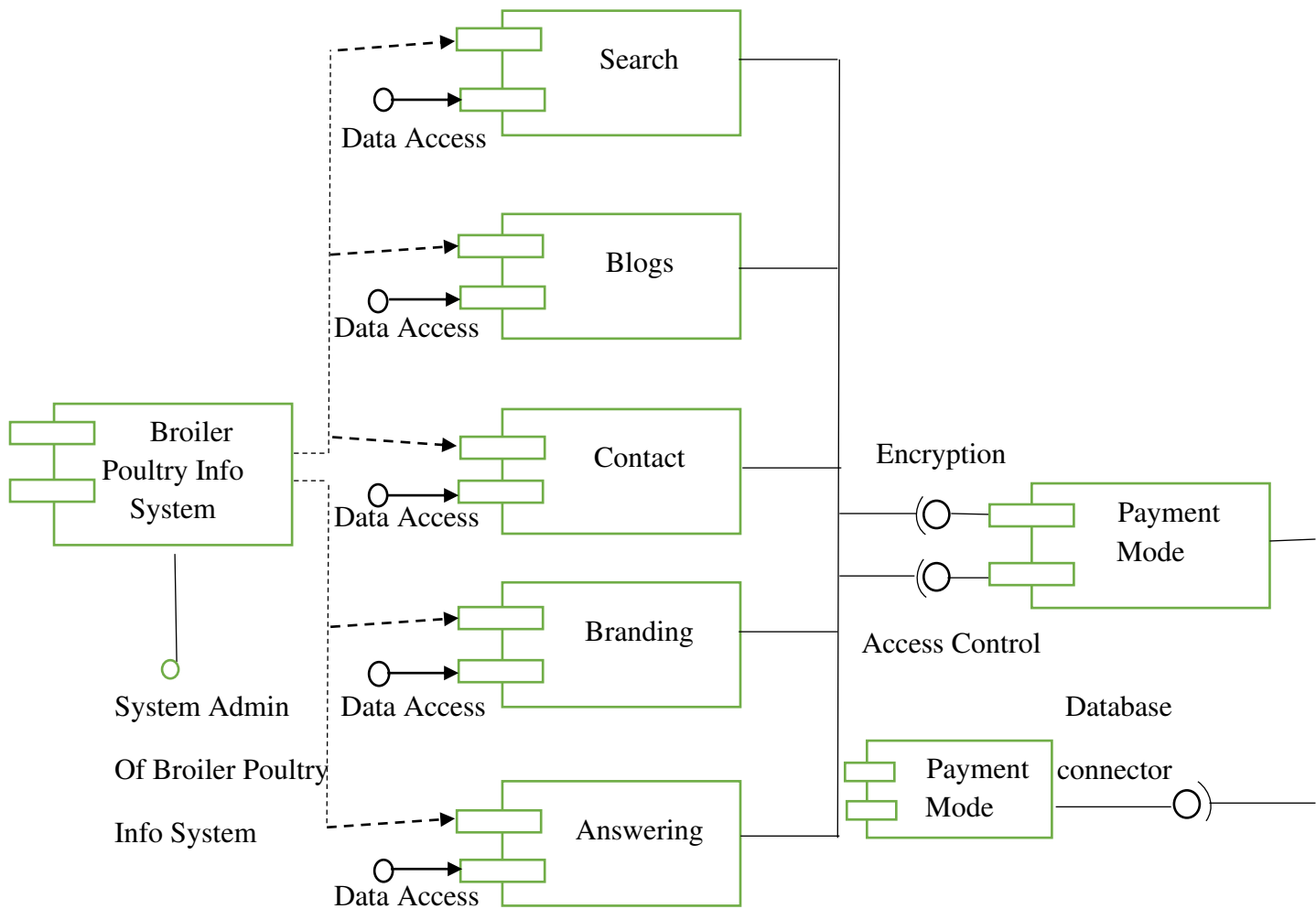


Fig 4.2.5: Component Diagram of System

4.2.6 Flow Chart

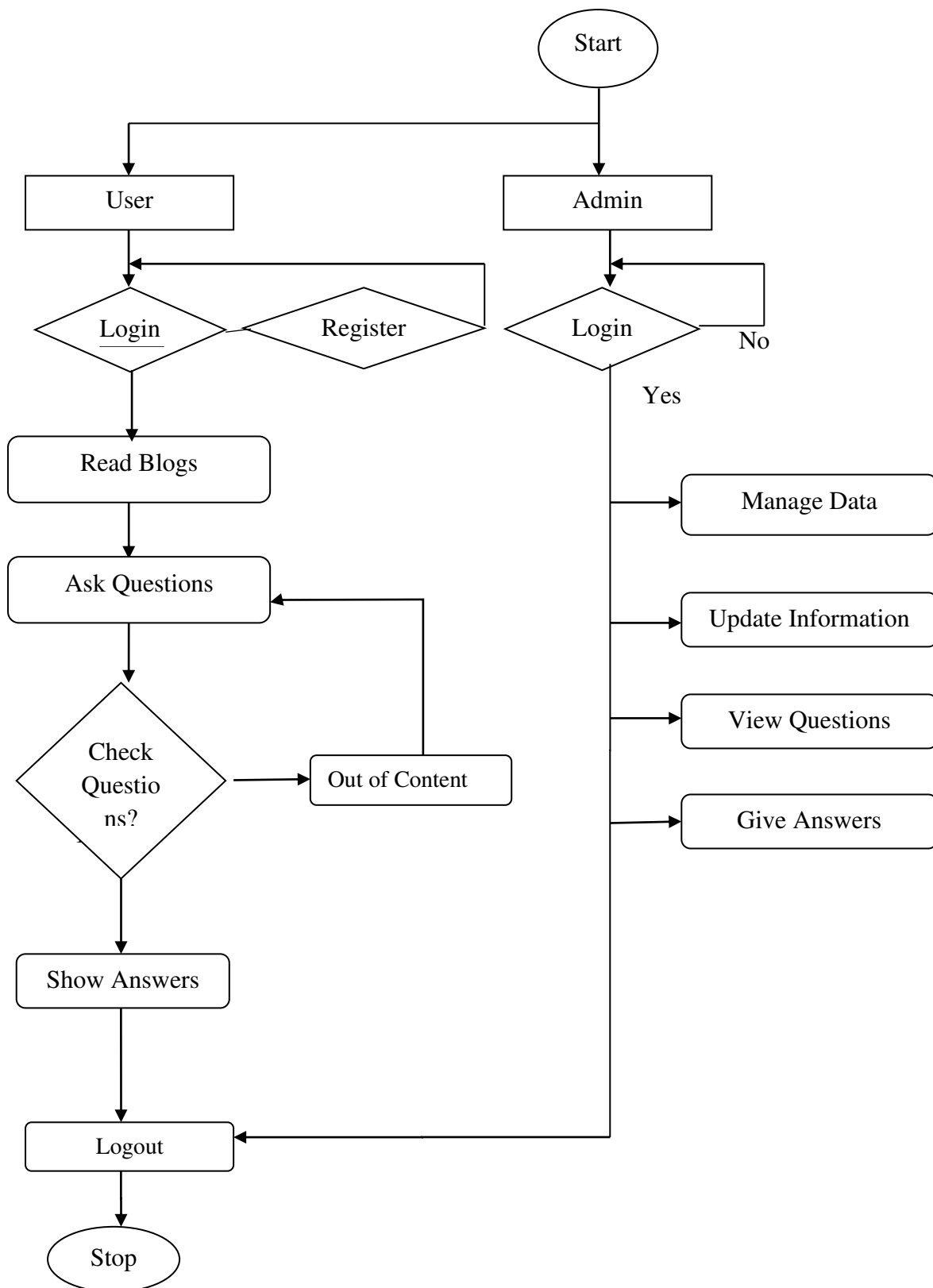


Fig 4.2.6: Flow Chart of Online Fee System

CHAPTER 5

IMPLEMENTATION AND TESTING

5. Implementation and Testing

5.1 Implementation

5.1.1 Tools used

Front end tools

- HTML
- CSS
- Bootstrap
- JavaScript

Back end tools

- PHP
- MySQL

Text Editor

- Sublime Text

5.1.2 Implementation Details of Modules

Modules are the partitions of any project done to ease the task of development. Different modules are designed so that debugging and other development phase gets the easiest implementation. The different pages of the system are:

i. Home Page

Our home page shows the Sign in and Signup options. For new users' signup is necessary to view broiler's details and to ask question about the poultry. The 'Sign in' option is provided on the home page.

ii. User profile page

Admin views the details page, where admin can view, add, delete, and update broiler poultry's details.

5.2 Testing

5.2.1 Test Cases for Unit Testing

Unit Tests reveal a basic understanding of API units or functions to understand the functionality of the code. It is a way to write test cases for all functions and methods so that whenever a change causes a fault then in that case bug quickly identified and fixed. The main purpose behind this is to check that all the individual parts are working as intended.

Table 5.2.1 Test Case for Admin Login and logout

Test Case	Input	Expected Result	Test Result
Successful Admin Login	Username = admin Password = admin	Successful Login of Admin	Admin Successfully Logged in
Admin Login Fail	Username = admin Password = admin123	The user was unable to log into the system. Error message "incorrect username or password"	An error message "Username / Password are Invalid." Is displayed
Successful Admin Logout	Click logout option	The page should be redirected to admin login page	The page redirected to admin login page.

Table 5.2.2 Test Case for User Login and Logout

Test Case	Input	Expected Result	Test Result
Successful User login	Username : abc Password : abc@123	The login page should redirect to homepage with logged in status and a message "You have been logged in!!!" should be displayed.	The login page is redirect to homepage with logged in status and a message "You have been logged in!!!" is displayed.
User Login Fail	Username : abc Password : abc123	A message " login in Error- Please Try Again!!!" should be displayed	A message " login in Error- Please Try Again!!!" is displayed
Successful User Logout	Click logout option	The page should be redirected to Homepage page without login status.	The page is redirected to Homepage page without login status

Table 5.2.3 Test Case for Search

Test Case	Input	Expected	Test Result
Searching	Search data = medicine	All the medicinal information should be displayed according to data.	All the medicinal information should be displayed.
Searching Failed	Search data = Goat	An error message “Incorrect data” should be displayed.	An error message “Incorrect data” is displayed.

Table 5.2.4 Test Case for Add Blogs

Test Case	Input	Expected Result	Test Result
Add student	Click on add blogs button of broiler poultry info system	blogs should be added in the admin panel	blogs is added

5.2.2 Test Case for System Testing

Under system testing, the system was tested as a whole after all the required modules were developed and integrated to ensure that the system was working correctly and efficiently and that it met all the requirements. In this test, the entire application was tested to check for errors. The system was tested by the data supplied by users. System testing reveals errors and omissions in the system requirement definition because the real data exercise the system in different ways from the data presented during the testing phase. From the user perspective, the system testing was done testing by first registering the user. After valid registration, the user was able to login to their account using valid credentials.

5.3 Result Analysis

There have been some difficulties during the development of this project. So we managed to solve the problems by looking more deeply and trying to find solutions through internet and other sources. Fortunately, our team managed to solve such problems during daily project work and we did a lot of research on the internet to finalize the project.

CHAPTER 6

CONCLUSION AND FUTURE RECOMMENDATIONS

6. Conclusion and Future Recommendations

6.1. Conclusion

The project sought to develop Broiler Poultry Info system that addresses the difficulties encountered by farmers, poultry worker and other poultry management regarding poultry information and collections. The study was able to achieve the stated aim. The development of a new system using Hypertext Processor (PHP), Hypertext Markup Language (HTML) and Object Oriented Analysis and Design Methodology (OOADM) was achieved.

The system will provide farmers and their farm to view poultry's details and to ask their questions online. It enables the poultry farmers to know about poultry dues and make easy way accordingly. While Admin can maintain the poultry details of each and every faculty of poultry and also can generate the answer for the farmers.

This new system gives the quick access to gain knowledge, and modification about poultry.

6.2. Future Recommendations

New features could be added to this project for making this project more productive, reusable and flexible. Implement the backup mechanism for taking backup of codebase and database on regular basis of different servers. Enhancements can be done to maintain all the poultry information properly and securely. We have left all the options open so that if there are any other future requirements in the system by the user for the enhancement of the system then it is possible to implement them. We hope that the projects will serve its purpose for which it is develop there by underlining success of process.

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Appendix..

