UNIVERSITY SOCIAL NETWORK

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APPROVAL

This Project/internship titled "Web Based University social Network", submitted by Md. Riaz Hossain, ID NO: 172-15-9975 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 8 th October, 2020.

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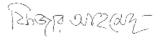
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ABSTRACT

In today's world everybody is used to social media platform for communication. To develop a web Based application or software there are several programming languages that are in use in today's world. Some of them are only used for the front-end and back-end design of the software. For example-HTML5, CSS3, and Bootstrap Framework etc. There are also some other programming languages that are used to develop the dynamic functions of the software or application. For example: PHP JavaScript, jQuery, Ajax, Larval, etc. My project is a web social network system for any user who want to browse social media, Messaging, blogging and multiple purposes. It provides the facilities to connect all the people in a shortest time. This site is allowed open to all the users who are connect with multiple activities. All the members' personal profile and information are able to find who want to make friends with each other. This networking system identifies for suitable place in save time and maintains a systemic flow also. This social network system is a smart online application for a suitable place of university, organizations and other group activities.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Project is an experience to a real life and professional working. Real life or professional working is facing new problems to new days and find a problem and solve this problem. Project grows up knowledge, increase working skill and also increase problem find out skill. The position of a student who works in a project gain working skills or satisfy requirements for a qualification to gather knowledge and implement in real world.

This project completed going through lots of analysis, investigation, design, implementation, and ending with system review. People can view the post and submit a comment for responding the post. This project helps to find out all the committee members who include different committee as a member or organizer or very important person. This will help to save important time and less trouble to find anyone.

1.2 Motivation

In the world of web design and development, I have learned about PHP, HTML, CSS, JavaScript, etc. but my main work is with web application and web page design and development. PHP is an open-source and a completely free to use platform. It is a great tool and yet so much powerful to create any kind of application to achieve any goals or to build an application to help with every day chores. After completing this project I expect that my working experience in practical life and research skills are improve much better. My project is an open issue for managing a social platform systematically. I gain lots of practical knowledge about web design, web development, and various programming

language, Web server and database. My goals will be managing the social network system more reliable for whom who are involve with various activities. It will help them for access an easy social communication platform.

1.3 Objectives

According to my project title everybody can get that my system is a social network system for every person who want to use communicate with others by using social platform. My aim is to establish a system where every people including us can use this system for doing their works easiest way. The target and my mission will be record every record of members, bloggers, and every single user of our society. For that this site is totally free login and easy to access. All the users connected each other users in this project to communicate firstly. We provide high tech security for online system and monitoring the system. This will be maintaining a good relationship between all connected friends.

1.4 Expected Outcome

Social Network system is an online web application where get lots of benefit by using this. Different types of members have been access and they are aware to their functionalities. One of the major goals of my project that this is a rare project in Bangladesh so; I expect to be successful to reach the target goal and get a desire outcome. User need to registration and login then they can get a secured login and information according to needs. My ultimate motive is to make the project user friendly interface and which will allow all users to getting

different service. The Social network systems one of the principle is that we can find our any friends, pages, groups and event activities so fast for any occasion.

1.5 Report Layout

Chapter 1 In this chapter we have discussed the motivation of our project, objectives, and also the expected outcome of our project.

Chapter 2 In chapter 2 we have conversation about the background of our application and talk about others related works, comparative studies, the scope of the problems and challenges.

Chapter 3 We discussed in this chapter about our requirements like process modeling; our projects use case model, ER diagram and the other design requirements.

Chapter 4 Our projects all given design idea like front end and back end design, interaction design and the implementation requirements.

Chapter 5 In this chapter, we will share the implementation of our database, front-end design and the test results and reports of the project.

Chapter 6 In this chapter we will discuss about our conclusion and what will be our future plan with this project.

CHAPTER 2

BACKGROUND

2.1 Introduction

A Social network system is a biggest place on network platform where people can get the highest secured system. There are many people who joined several media and make time to attend every event regularly. So when it's time to make lots of events in a time this social media is very useful for everyone. Thinking all the problems I decided to develop a project "Social Network System" so that I can make a well-established online communication platform constitutionally. User can post videos, images, tagging, emoji's etc. This is a friendly system with Hashtags, User Profiles, and Relationships.

2.2 Related Works

There are few system exist that are available in few cities only. But their service is also not enough to fulfill these problem in our daily communication system. There are also many lacking in their system. By using that social site peoples aren't getting their desire services. The existing system are providing the only social service. Among all of them e-courier is one of the existing service that provide parcel service only by using their employee.

2.3 Comparative Studies

If we compare studies between the existing project in the World for the social networking system and my system than I can say that there are differences and unique features for solving the problems of people. In the project there is idea about the searching nearest friends for the user. That's totally helpful for a user. The project contains a profile of the user. The profile is totally free and secured for use. The user will be able to post anything like videos, images, posts and any blogs. They can send any messages, files, calls to others friends. The well-known or popular social site will be able to give proper facilities and fasted response with the system. This totally helpful to the user.

2.4 Scope of the Problems

Since our system is a web base site, it is very important to think about security issue. If security is less dependable then it would be a great problem. At present the world situation is rapidly changing and our framework request a principle concurrence between two communities of people. It is an open platform for all where all users can interact easily. User can easily create an account and login for access the site. Admin can approve to distribute all user access for post and comment.

2.5 Challenges

Every system, especially which is new, we have to face many difficulties and challenges. During the development and testing session of our project (web based Social Network system), we faced many obstacles and issues for making the web application safe and secure, such as designing a user friendly interface for the users .

- Makes a directory of assets and resources for a specific system.
- Discovers the potential threats to all the resources given.
- Gathers valuable information and inspect the system.
- Take attempts to eliminate the potential vulnerabilities of given resource.
- Comprehensive analysis and thorough review of the system.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Essentially, my point is to evaluate my project all the people's in our country. That is the reason I choose to make it non-productive business at first. Yet, later on, I will utilize it business reason. I use business process modeling because it maintains the discipline in manage various methods of measure, analyze, improve, optimize and many business processes. It helps with contemplation and a deeper understanding how will be your process work and the regular way your business function. Change. Everyone should aware how will the organization processes work, what is the goal and how it will operate and this is called transparency.

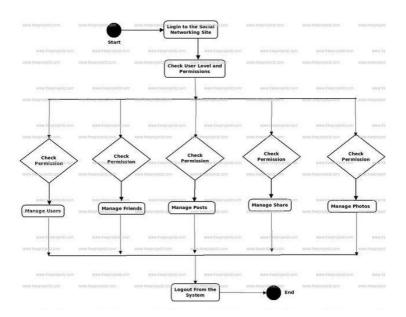


Figure 3.1.1: Business Process Modeling.

3.2 Requirement Collection and Analysis

Requirement analysis indicates software interface with other system elements and also establishes some constraints. A software engineer elaborate on basic requirements established during earlier requirement engineering tasks that allows requirement analysis. If our project team fails to collect all necessary requirements for a structure or solution then the project will face a huge problem. So in this case requirement collection should be a primary responsibility of a project team.

In our system development methodology the project is used the waterfall methodology. Because according to our project feature its very simple and easy to understand.

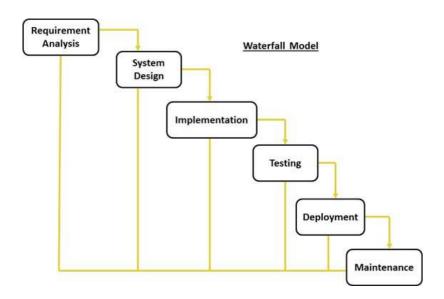


Figure 3.2.1: Waterfall Model.

3.3 Use Case Modeling and Description

When a project needs to analysis the model use case plays a role model interactions among the elements of a system. Use case methodology used for system identifies, clarify, and arrange system requirements. It is the descriptions of the interaction between use case, actor and the system. For making a use case diagram a developer should know the actors differences, relationship between actor and system. In our system we have actors and system relationship for manage the whole system.

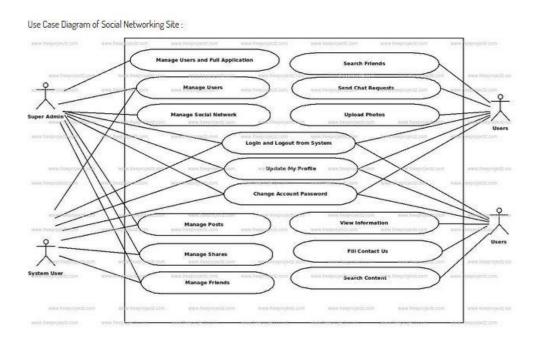


Figure 3.3.1: Use Case Diagram of Social network system.

Our system has the following set of use cases. The system our project user can choose the parking slot and park the vehicle. The only registered user can use by logged in and get the service. A user without registration can view the

website but if he/she tries to get parking then must be log in the website. Before log in in the web apps, the user has to fill up some information. Among of these fields, some document must be required. Making blank other fields will appear null. An action can be made to update and delete by its Admin also. Admin maintains provider and user and all the maintained.

3.4 Logical Data Model

Logical data model defines the data in depict without consciousness how they will achieved the database. A logical data includes all applications entities and relationship amidst them.

Logical data model for social network system and different classes of systems are:

The logical data model for social network system is shown figure:

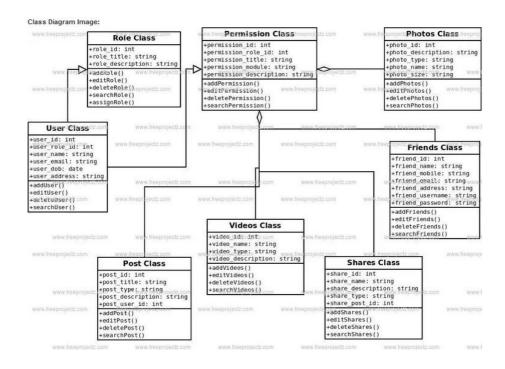


Figure 3.4.1: Logical data model of system.

3.4.2 ER diagram of the project

This is the social network system for all of the peoples who shows the all entity and attribute. For building an Entity relationship diagram there are three levels which are;

- Level 1- Here all model of data objects and their connections to one another.
- Level 2- This is a place for model all entities and relationships.
- Level 3- Here model all entities, relationships, and attributes.

Here Admin and users have a relationship; Convener, admin and local users have a relationship. All entities relationships finally make a social network.

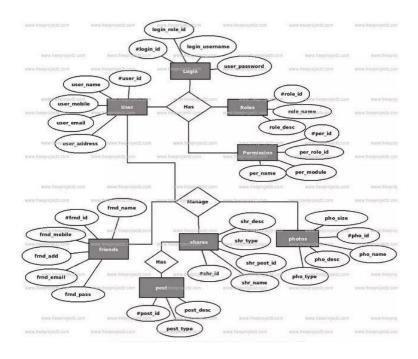


Figure 3.4.2: ER diagram of the Social Network system.

3.5 Design Requirements

Design requirements states the important aspects that your design must be meet client's needs. This section discuss behind the implementation of the system that is a web base system. In this chapter the whole applications design has been showed. Where project architectural structure, use case diagram, ER diagrams included well. This system will require four types of user like Admin and user. The design of the project is user friendly, good looking, and well organized. Modern and updated design tools have been used for decorating this project. The software has many advantages and allowed us to consider future development. Web base application gives us opportunity to find any information from anywhere in the world. We designed our application that user, Admin will create an account by login. The dashboard designed with adds, edit, delete and put the user id that is all easy to find and access.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

Front-end web development is the practice of converting data to graphical interface for user to view and interact with data through digital interaction. Front end design is about user interface of the application. Here is the user interface design and interactions can see all the information in a well-organized format that is easy to read and collect. For designing front end development PHP, HTML, CSS, bootstrap, and java scripts using for make our management system. We create components and features that are especially accessed by all users over a front end development system. We created a simple and well front end design for the users who looked for this application for a long time. The most important part of software development is to design front end design. So, if the front end design makes highlight developing with framework is not hard task for a developer.

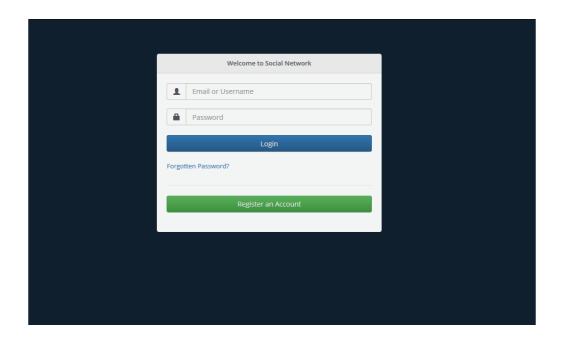


Figure 4.1.1: Front-end design of login page.

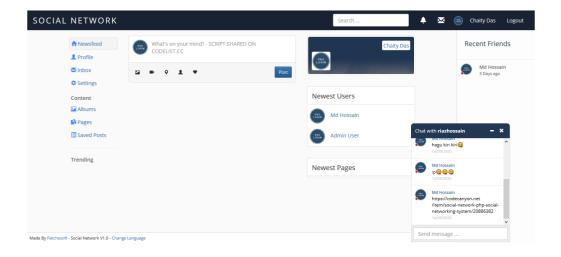


Figure 4.1.2: Newsfeed of the Social Network.

4.1.1 HTML

HTML is a hypertext language that used to create electronic documents and that are displayed on the www. Each and every page consists of a series of connection to other pages and that is called hyperlinks.

4.1.2 CSS

Research was done into Cascading Style Sheets (CSS) and the different ways it could be used to control both layout and style of the site. There was some experimentation with using <div> tags and CSS to controlled layout, as well as using tables to control layout with some CSS to format things like alignment and color.

Figure 4.1.2.1: CSS of the font end design.

4.1.3 Bootstrap

Bootstrap is a free and open source framework for the creation of websites. It is a combination of HTML, CSS, and java script code for manufacture UI parts. It is also called front end framework that is free assembling of instruments for making goals and web applications.

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Figure 4.1.3.1: Bootstrap design of the social site.

4.1.4 Java Script

Java script is known as a dynamic programming language. Mainly it is used as a part of web pages for its lightweight. It is used for client side scripting language that scripts sent to some browser. Java scripts program style performed by methods for a methodology of cloning existing articles.

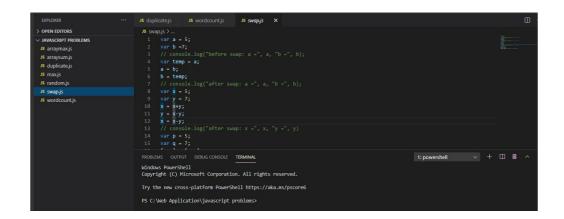


Figure 4.1.4.1: Java Script code of the site.

4.2 Back-end Design

Back end design is the appliance that races a site and the customer doesn't see it. It is simply writing code that is not seen directly or face to face. This is a central part of software and the full system rely on it. There are lots of multipliers subsists admire the scripting languages or the server side languages database, framework, database administration, security, authentication, authorization, data validating, data backups as well. Usually people who work on the server side are called programmers or developers. We developed online committee management system using PHP, MYSQL and Larval framework.

4.2.1 PHP

PHP is a general purpose programming language basically designed for web development. PHP performs system limits, for example from evidence on a framework it can compose, open, update, read, architecture and delete them. It can manage structures and encode data.

4.2.2 XAMPP

MYSQL is commonly used open source relational SQL database management system. In this way database management system provides user and programmers manage to create, update, delete, and manage data.

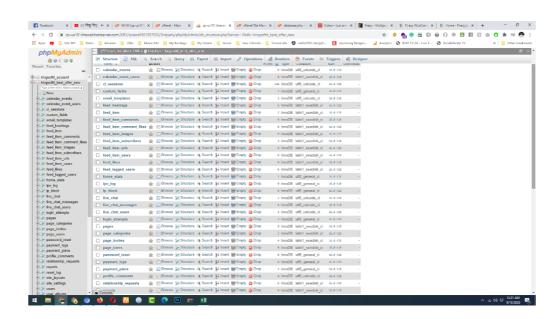


Figure 4.2.: Using MYSQL for database management (migration table).

4.3 Interaction design and UX

We constructed the web application handling bootstrap and font awesome. Designers targets on building enlisting web interfaces with logical and actions. Whole design of this project is user friendly and some modern and update design tools have been used for this project. This project is going to inform about university or organizations committee management sites. Every panel and information will be updated any time. Project deliveries are the beneficial outputs for a project.

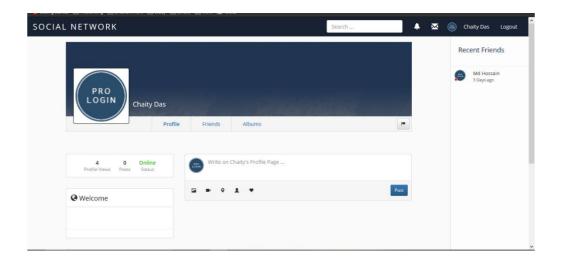


Figure 4.3.1: User profile of Social Network system.

4.4 Implementation Requirements

- The design needed to implement in the programming language PHP.
- For web server its highly preferred database is MYSQL.
- It is small but speed is so fast that's why it the ideal database solution.
- HTML and CSS will use to design the website.
- The system should provide some reliable facilities for all users.
- From validation the project needed using java script.
- Invalid data input should display an error message.
- For dynamic design bootstrap framework needs to be perfect.
- For visual condition distant types of icons, fonts are compiled from google or other font store.
- The design needed for specific design query to be implemented

CHAPTER 5

IMPLEMETATION AND TESTING

5.1 Implementation of Database

The utilization manages the spot you present database management system on the required hardware, redesign the database to run best programming stage. A center part of programming building is the subdivision of the advancement procedure into a progression of stages, steps, every one which centers around one part of the improvement. For SDLC-

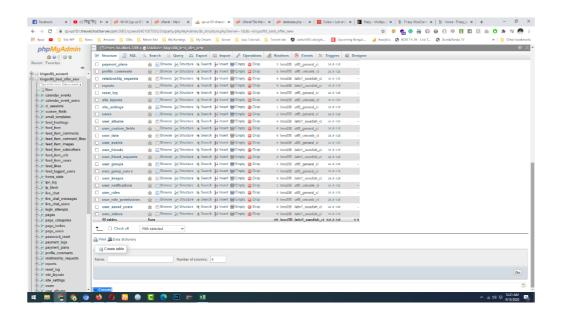


Figure 5.1.1: Implementation of user table database.

5.2 Implementation and Front-End Design

Front-end development generally called client side progression which was established of making HTML, CSS, bootstrap, and JavaScript for a web application. So a customer can watch and interface with them explicitly. The testing strategy related with front-end improvement to make the front end of a site adjust consistently in this way the originator demands to dependably think about how to field is marketing. For implementation of front-end design-

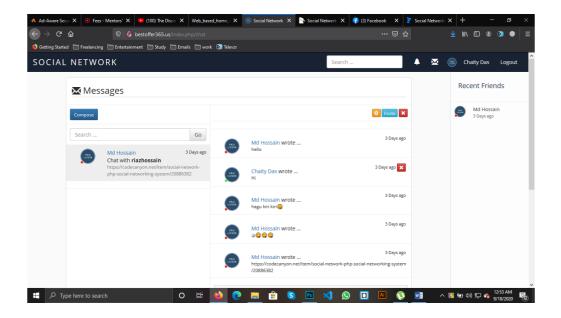


Figure 5.2.1: Inbox of a user.

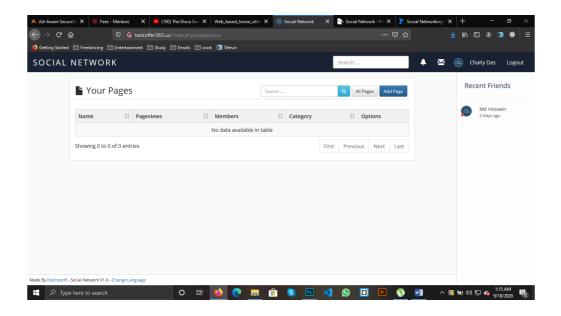


Figure 5.2.2: Page panel of Social Network system.

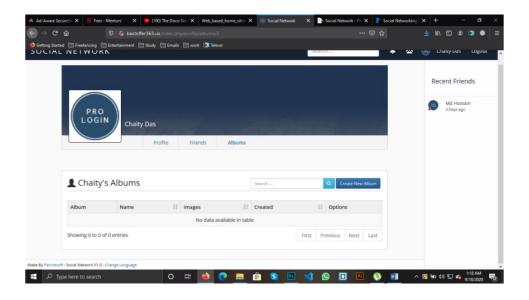


Figure 5.2.3: Make user Album.

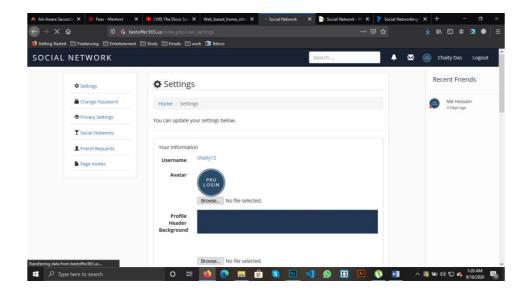


Figure 5.2.4: Settings for maintain the ID.

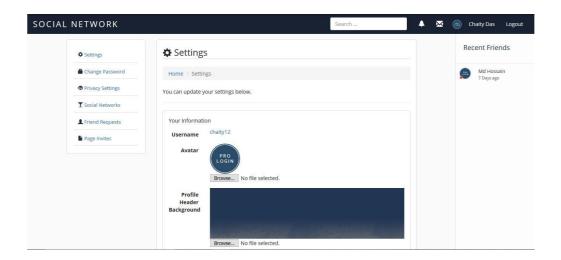


Figure 5.2.5: Settings option of social network system.

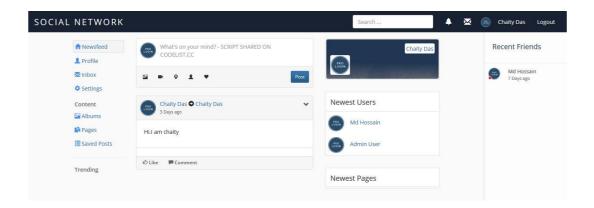


Figure 5.2.6: Live chat option with admin.

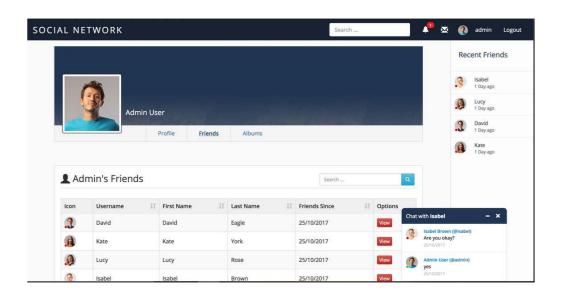


Figure 5.2.7: Admin profile.

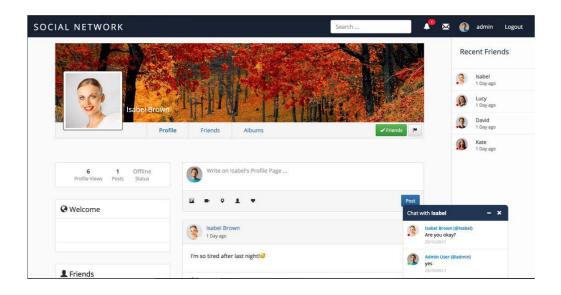


Figure 5.2.8: Friends profile in social network system.

5.3 Implementation of Interactions

We implement the project that how the interactions are initiated, maintained, terminate and what requirements needed to do this. Examine various social contexts in which interaction might be occur structure of social interactions. We used visual paradigm online for use case diagram, ER diagram and context diagram.

Interaction system is based on these tools:

1. PHP-It was designed to be simple, modular, secure, and reliable. It is easy to understand, and easy to integrate with other programs.

- 2. MySQL -is a relational database system. The program runs as a multi-user server for multiple databases
- 3. HTML-Hypertext Markup Language (HTML) is the default language for creating websites and web applications.
- 4. CSS -CSS is the language for displaying Web pages, including colors, layout and fonts.

5.4 Testing Implementation

For interaction a system based some tools:

PHP was designed to be simple and elegant, modular, secure and sensible. It is easy to understand and interrogate with other programs.

MYSQL is relational database which control the database system. The programs run multiple servers for multiple databases.

HTML hypertext markup language used is a default language to for creating the font end design of a website.

CSS is the cascading style sheet displaying web pages with many layout, colors and fonts.

5.5 Test Result and Reports

The test case describes some types of explanation test data and finally got the result. For testing implementation explanation, test information, and finally got real result. The test techniques or test substance are encircled into a test execution plan that shows which methodologies use first which is a kind of superscript.

PHP is fundamentally utilized for recovering and showing data assets on the web that is available to all clients everywhere throughout the world. MySQL is utilized for social database administration framework. The application is utilized for an extensive variety of purposes, including information warehousing, online business, and logging applications. Hypertext Preprocessor (or basically PHP) is a server-side scripting dialect intended for Web advancement.

CHAPTER 6

DISCUSSION AND CONCLUSION

6.1 Discussion and Conclusion

This undertaking points are to diminish the agony of client. Furthermore, at some point in view many people show their interest to use online base platform. I can made myself specialist for improve different types of technology. In the other view I should check the rating of my application and gather public comment about it. User needs should be my first encouragement and made more updates in this application. Heaps of client will have the capacity to take advantage in the wake of making this site. It will spare both time and cash.

6.2 Scope for Further Developments

In future, my idea can be used for huge scale online cooperation framework. There are only very few information about user I can updated. In future, I can add more option and facilities for user. In future I can add multiple file added option. I can make upcoming method for the users who want to go further with this project. There is not any good security system for admin and user. So in future I can make strong the security system of admin and user. I can add video and audio call transaction better.

REFERENCES

- [1] Network Connectivity of Social Islami Bank Limited, available at; http://hdl.handle.net/20.500.11948/2553 Last Accessed on 3rd May, 2020 at 1:44 PM.
- [2] Using Social Networks to detect Malicious Bangla Text Content
- , available at http://dspace.daffodilvarsity.edu.bd:8080/handle/123456789/3715 last Accessed on 3rd May, 2020 at 1:00 PM.
- [3] Network Infrastructure Management and Monitoring System of Sonali Bank Limited, available at; http://dspace.daffodilvarsity.edu.bd:8080/handle/123456789/4025 Last Accessed on 3rd May 9 AM.
- [4] Banking (UCB) Networking System, available at; http://dspace.daffodilvarsity.edu.bd:8080/handle/123456789/3907 Last Accessed on 2nd May 12:00 AM.
- [5] Web Application Development Using PHP Larval Framework available at; http://dspace.daffodilvarsity.edu.bd:8080/handle/123456789/3747 Last Accessed on 30th April 6:00 PM.
- [6] Learn about HTML, CSS, JAVASCRIPT, and BOOTSTRAP, Available at; https://www.w3schools.com_last Accessed on 3rd April 2:00 PM.
- [7] Lara casts, available at; https://laracasts.com/ Last Accessed on 4th May 1:00 AM.

APPENDIX A

Project Reflection:

In the term of final defense, three options are available Thesis, project and internship. We choose to make a project because we thought it would give us an opportunity for make an application which is beneficial. It is our opinion that every student should achieve some knowledge of hand skill in actual life and apply well. Every web developer should utilize their experience for making some projects. It will help us a lot, we did not know before how many criteria belongs for develop an application.

APENDIX B: Related Diagrams

To implement our introduced work at first, we assemble a model and base architecture of our application. We adopt a few diagrams and logical model to show how to implement our project. From the use case diagram, we know about our user and system activity in our map. We implement our web base site using PHP and MYSQL. We describe the actors in a common panel Admin and other users.

