

COMMUNITY BASED HELP DESK

BY

MD. MOSTAFIZUR RAHMAN

ID: 153-15-610

AND

MD. MASUD RANA

ID: 153-15-599

AND

SHAK. MD. TUHIN SIDDIK

ID: 153-15-593

This Report Presented in Partial Fulfilment of the Requirements for the
Degree of Bachelor of Science in Computer Science and Engineering

Supervised By

Dr. Sheak Rashed Haider Noori

Associate Professor and Associate Head
Department of Computer Science & Engineering
Daffodil International University

Co-Supervised By

Ms. Tania Khatun

Lecturer

Department of Computer Science & Engineering
Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY
DHAKA, BANGLADESH
AUGUST 2019

APPROVAL

This Project titled “**Community Based Help Desk**”, submitted by Md Mostafizur Rahman, ID: 153-15-610, and Md Masud Rana, ID: 153-15-599, and Shak Md Tuhin Siddik, ID: 153-15-593 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfilments of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 6th August, 2019.

BOARD OF EXAMINERS

Dr. Syed Akhter Hossain
Professor and Head

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Chairman

Dr. S M Aminul Haque
Associate Professor & Associate Head

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

Saif Mahmud Parvez
Lecturer

Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Internal Examiner

Dr. Mohammad Shorif Uddin
Professor

Department of Computer Science and Engineering
Jahangirnagar University

External Examiner

DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Dr. Sheak Rashed Haider Noori, Associate Professor and Associate Head, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:

Dr. Sheak Rashed Haider Noori
Associate Professor and Associate Head
Department of Computer Science and Engineering
Daffodil International University

Co-Supervised by:

Ms. Tania Khatun
Lecturer
Department of Computer Science and Engineering
Daffodil International University

Submitted by:

Md. Mostafizur Rahman
ID: 153-15-610
Department of Computer Science and Engineering
Daffodil International University

Md. Masud Rana
ID: 153-15-599
Department of Computer Science and Engineering
Daffodil International University

Shak. Md. Tuhin Siddik
ID: 153-15-593
Department of Computer Science and Engineering
Daffodil International University

ACKNOWLEDGEMENT

First, we express our heartiest thanks and gratefulness to almighty God for His divine blessing makes us possible to complete the final year project successfully.

We really grateful and wish our profound our indebtedness to **Dr. Sheak Rashed Haider Noori, Associate Professor and Associate Head**, Department of CSE, Daffodil International University, Dhaka and **Ms. Tania Khatun, Lecturer**, Department of CSE, Daffodil International University. Deep Knowledge & keen interest of our supervisor and co- supervisor in the field of “*Web Application in Community Based Help Desk*” to carry out this project. His endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior drafts and correcting them at all stage have made it possible to complete this project.

We would like to express our heartiest gratitude to Dr. S.M. Aminul Haque, Associate Professor and Associate Head, Department of CSE, for his kind help to finish our project and also to other faculty member and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

06th August, 2019

ABSTRACT

A community-based help desk is a web-based learning method and strategy that engages with learning, Learners collaborate with each other and work together to solve problems, complete a task, or create something special. In this project we strive to create a global community for any kind of human benefit. This study aims to explore the possibility of using web application techniques to build predictive models of performance in collaborative induction tasks. As per the general education system of the country, we have lacked some concentration in our class session. Our system can help those students get a clearer idea of subjective knowledge. We have explored how to improve communication skills through this application. The results show that such features have some potential to effectively predict performance in these typical functions.

TABLE OF CONTENTS

CHAPTER TITLE	PAGE
Title Page	i
Approval	ii
Declaration	iii
Acknowledge	iv
Abstract	v
Table of Contents	vi-vii
List of Figures	viii
List of Tables	ix
CHAPTER	
CHAPTER 1: INTRODUCTION	1-2
1.1 Overview	1
1.2 Motivation	1
1.3 Objectives	1
1.4 Expected Outcome	2
CHAPTER 2: BACKGROUND	3-4
2.1 Introduction	3
2.2 Related Works	4
2.3 Updated Feature	4
2.4 Comparative Studies	4
CHAPTER 3: REQUIREMENT SPECIFICATION	5-10
3.1 Business Process Modelling	5
3.2 Requirement Collection and Analysis	6
3.3 Use Case Modelling and Description	9
3.4 Logical Data Model	10

CHAPTER 4: DESIGN SPECIFICATION	20-22
4.1 Front-end Design	20
4.2 Back-end Design	21
4.3 Interaction Design and UX	22
CHAPTER 5: IMPLEMENTATION AND TESTING	23-32
5.1 Implementation of Database	23
5.2 Implementation of Front-end Design	23
5.3 Implementation of Interactions	31
5.4 Testing Implementation	31
5.5 Test Results and Reports	32
CHAPTER 6: CONCLUSION AND FUTURE SCOPE	33
6.1 Discussion and Conclusion	33
6.2 Scope for Further Developments	33
REFERENCES	34

LIST OF FIGURES

FIGURES	PAGE
3.1: Business Process Model	05
3.3.3: Use Case Diagram for user/learner	09
3.3.3: Use Case Diagram for Admin	10
3.4: Logical Data Model	18
3.5: Sequence Diagram	19
5.1.1: ER Diagram	23
5.2.1: Home Page of our Website	24
5.2.2: User Registration for User	24
5.2.3: User Login Page	25
5.2.4: User Dashboard	25
5.2.5: Learner Profile	26
5.2.6: Learner Profile Manage	26
5.2.7: Forum	27
5.2.8: Searching User by Skill	27
5.2.9: Connect Request	28
5.2.10: Messaging System	28
5.2.11: Create Collaboration Request	29
5.2.12: All Meeting in a Calendar	29
5.2.13: All Meeting in a Week View	30
5.2.14: Admin Login	30
5.2.15: Admin Dashboard	31

LIST OF TABLES

TABLE NAME	PAGE
Table 3.2.5.2: Hardware Requirement	08
Table 3.2.5.3: Software Requirement	08
Table 3.3.5.1: Use case description for Register	11
Table 3.3.5.2: Use case description for login	11
Table 3.3.5.3: Use case description for Search	12
Table 3.3.5.4: Use case description for Help provider	12
Table 3.3.5.5: Use case description for Help seeker	13
Table 3.3.5.6: Use case description for Manage schedule	13
Table 3.3.5.7: Use case description for Post on Forum	14
Table 3.3.5.8: Use case description for Manage Forum Activity	14
Table 3.3.5.9: Use case description for Expert guidance	15
Table 3.3.5.10: Use case description for Manage profile	15
Table 3.3.5.11: Use case description for Feedback	16
Table 3.3.5.12: Use case description for Manage Admin	16
Table 3.3.5.13: Use case description for Manage User	17
Table 3.3.5.14: Use case description for View Schedule	17

CHAPTER 1

INTRODUCTION

1.1 Overview

The key idea of our project is to spread and share knowledge through the community. Users can share their issues or get specific help from an expert in the section of their discussion page. They can get expert help from our community on a specific topic. The Schedule section uses any place they can set up any support meeting if they want.

1.2 Motivation

At this time, there is no good communication between student to student or teachers in the educational institution. For this reason, we came to our idea. This idea is motivated to create a good community in the educational sector. Our system helps to build a strong connection between learners and can make a good helping Tradition in our young generation.

Lastly, our main motive is to help student communities together or try to make a good collaboration between learners.

1.3 Objectives

The main objectives of our project are building a strong community, those are interested to help each other and gather knowledge by a collaboration method. This document helps us to gather a basic concept, how we construct and design our help desk by creating and using a strong community.

Help us to find out how we can solve our day to day life problems by using the power of learner's community.

1.4 Expected Outcome

The overall objective of the Community Based Help Desk is to develop a customizable, decentralized system that allows learner to set a meeting for a particular problems of virtual and real worlds communication by creating a community. The Community Based Help Desk is designed for construct a community in help purpose. This project helps to create a dynamic helping society for own purpose and benefits.

CHAPTER 2

BACKGROUND

2.1 Introduction

The term community-based education is used in a variety of disciplines, but there is no appropriate definition on it. Collaboration has become the trend of the 21st century. One of the critical concerns is the emphasis on the thinking of society and the need to work together for individuality, from individualism to community endeavour.

The Community Based Help Desk is an educational web-based learning system that involves different groups of learners working together to solve a problem, complete a task, or create something special. Through this educational process environment, students are challenged, both socially and emotionally, to hear different points of view, and to clarify and defend their ideas. By doing this, learners begin to create their own unique concept by using the power of a learner's community.

There are two types of users in our web application:

- Admin
- Learner

Community-based education transforms a significant space in the classroom of educational institutions away from the normative teacher-educated or discourse-blended mix. The lecture, listening, the note-taking process is not completely invisible in the collaborative classroom, but it is in addition to other processes where learners actively engage in discussions and course material.

2.2 Related Works

In the field of web-based application, a lot of work already have been done. And there are some specialized systems have been Quora, Stack-Overflow, Code Mentor, GitHub Community, etc.

2.3 Updated Feature

Our E-learning based software can make collaboration between learners. After the updated feature, we add some advance level feature. It will more preferable then. Our messenger will be more flexible and attractive to users. Collaboration system will come with a more advanced reminder and alert system. The software will be more reliable and more user friendly.

2.4 Comparative Studies

In academic life, students are facing problems with studying without consulting. They don't get the right direction. Some students are proficient in a particular subject. But another is proficient in other subjects. Our intention is to bring them into a group and make a connection between them. So that they can face each other to help them what they need.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modelling

3.1.1 Overview

A proper business process model can collaborate in safe development steps, ordain the direction of product development, and we want to create strategies to achieve goals. The Business Process Model Plan template gives us a step through the process of creating a stiff, well-structured plan for our system.

3.1.2 Strategic Implementation

The process is for the education of a student community through a website that is organized. Which creates a strong bond and improves communication relations.

The following figure shows the business model for the system

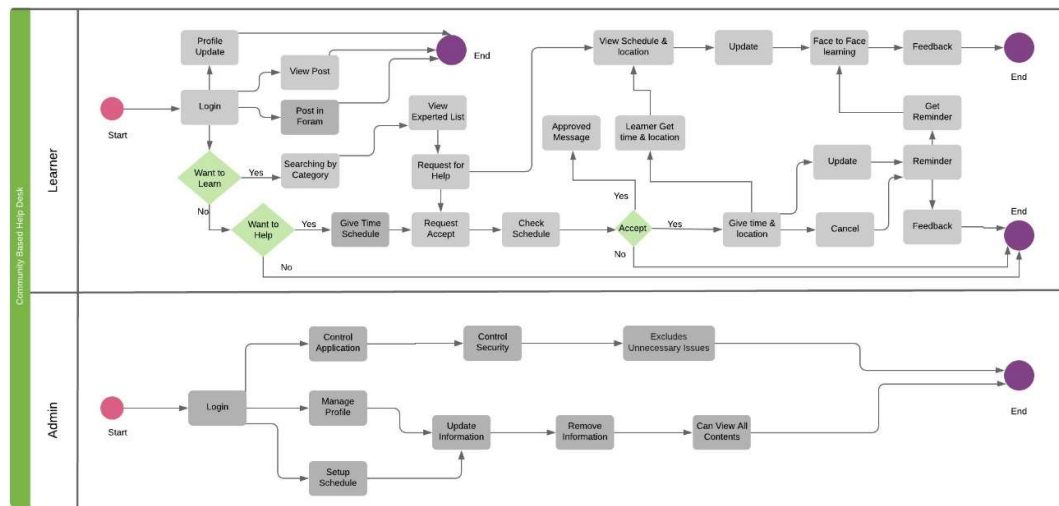


Figure 3.1: Business Process Model

3.2 Requirement Collection and Analysis

We've been working with Community Based Help Desk. This project is simple and developmental for this requirement. The assertion of our project mainly flowing two working process. Like as, Hardware and Software.

3.2.1 Learner Requirement

Actually, the learner is one of the most important actors for the system. When he will be accessed by the system, he must be registered firstly. Then he will be permitted to log in the system. The learner can post in the forum for a quick response from the community members. He can post on their problems in the forum and other members can reply on it. As usual, he can update the post, mark the best answer and closed the problem. Help seeker and help provider are two main part of the learner. A learner who wants to help, that's a help provider but another a help seeker. Seekers are finding the exported list. They can also discuss their problem and solution by a Chatting Tool. The provider gives the scheduled time and seeker find the free schedule for his own which subject he wants to help. A fixed time and place will be selected are known as an appointment. An appointment is updated by them. The appointment will be cancelled too. A reminder will be reached their profile by the system.

List of the key requirements:

- ▶ Post in forum
- ▶ Searching by profile
- ▶ Searching by skill
- ▶ View expert list
- ▶ Request for help
- ▶ View schedule and location
- ▶ Schedule management
- ▶ Manage profile
- ▶ Give Feedback

3.2.2 Admin Requirement

In this project of admin is another important actor who controlled the website or application. Admin can update all the process of feature. To manage users' profile and checking the security part. Admin can view all activity and information. An admin can create a new admin for the system. An admin can manage all the skill and channel details of this system. As this is the learning website. So unethical issue is excluded by the admin.

List of the key requirements:

- ▶ Manage profile information
- ▶ Setup schedule
- ▶ Remove information
- ▶ Security checking
- ▶ Excluding the unethical issue

3.2.3 Educational Requirements

The Project is developed using the combination of two different language JavaScript and PHP. We have used Laravel as a back-end technology which is a popular PHP framework. We have used Vue Js which is a Java Script framework for developing or Chat tool and Bootstrap framework for designing. We used Sublime Text Editor for the coding of the project. Created and maintained all databases into MySQL, in that we create tables, write the query for store data or record of the project. We have managed the database using XAMP server.

3.2.4 Technical and Legal Requirement

This is the system that is protecting to secure the unethical issue by the anti-malware. Like as the extension of Captcha. Requirements are given below:

- ▶ Users have the right to permission to the use of their data.
- ▶ Consumer protection
- ▶ Accessibility
- ▶ Protecting Cyber Security and user information

- ▶ Protecting from SQL Injection
- ▶ Protecting cookies.
- ▶ Protecting with CSRF protection.

3.2.5 Requirement Components

Actually, this is a web-based application. By using the software and hardware to complete our project.

3.2.5.1 Hardware Requirement

It needs at least one computer and internet connection to run the program.

Table 3.2.5.2: Hardware Requirement

Processor	Intel Pentium Dual Core or above
Motherboard	Any
Ram	2GB or more
Hard Disk	200GB
Monitor	Any colour monitor
Keyboard	Any
Mouse	Any
Internet Connection	Broadband or mobile network

3.2.5.3 Software Requirement

Different types of software are needed to provoking and manage this website

Table 3.2.5.4: Software Requirement

Software	Usage
<ul style="list-style-type: none"> ➤ Operating system ✓ Linux (any version) ✓ Windows (any version) 	Start the computer and adjust to customize all hardware components, applications, and software
<ul style="list-style-type: none"> ➤ Browser 	A web browser that able to run a web application.

3.3 Use Case Modelling and Description

3.3.1 Overview

A use case diagram which is the simplest delegation for the user's interaction. When the user is involved with the system, it becomes to view the many relationships between the user and the different types of use cases. The diagram of use case can recognize the many types of users.

3.3.2 Use Case Model

In the model of use, the case can possibly identify the Actors and Use cases into the site and affinity among them.

3.3.3 Use Case Model for User



Figure 3.3.3: Use Case Model for User.

3.3.4 Use Case Model for Admin

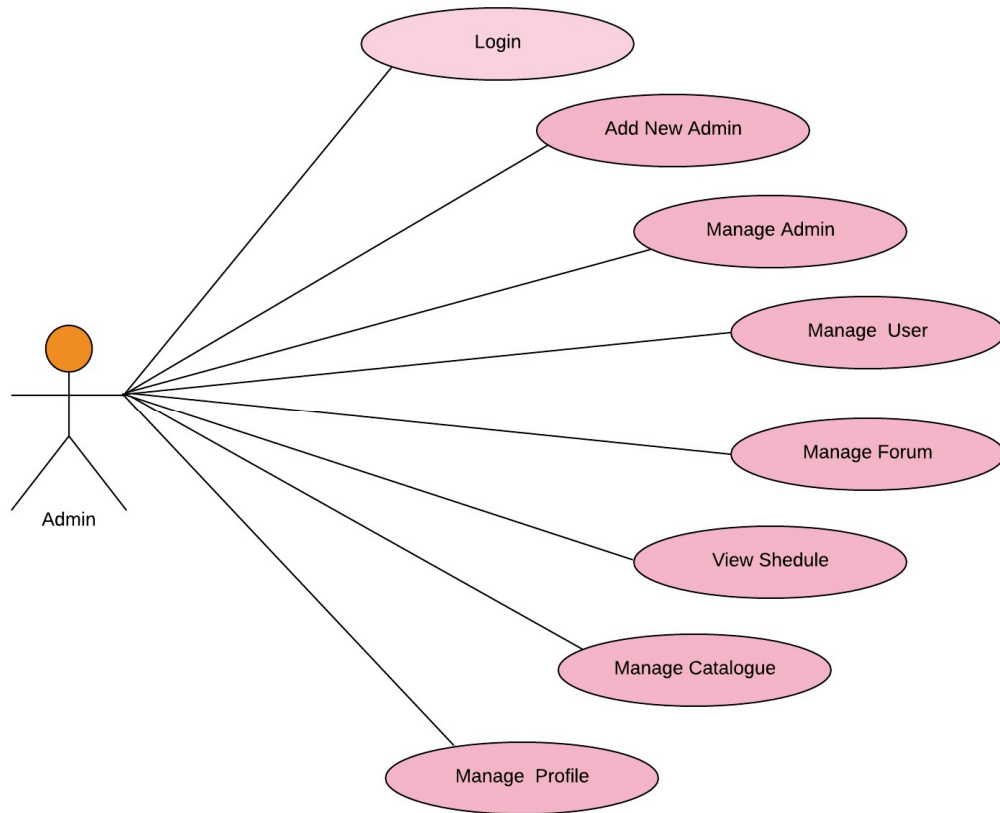


Figure 3.3.4: Use Case Model for Admin.

3.3.4.1 Use Case Model for the Proposed System

In this application, there are two main actors. The actor named user represents the learner who is using the system and the actor named Admin that controls the system its own environment.

The following figure on the above the Use Case Diagram for the web application.

A brief description of the use case is given below for the diagram of the use case model.

3.3.5 Use Case Description

TABLE: EXPLANATION OF USE CASE – INSTRUCTION

Table 3.3.5.1: Use case description for Register

Case Id:	01
Statement Name:	Register
Created By:	Shak Md Tuhin
Date of Creation:	26-06-2019
Description:	In this use case, Admin, Learner can register successfully.
Primary Actor:	Admin, Learner
Secondary Actor:	None
Precondition	None
Postcondition	By registering Learner can get the login page and Admin login page.

Table 3.3.5.2: Use case description for login

Case Id:	02
Statement Name:	Login
Created By:	Shak Md. Tuhin
Date of Creation:	26-06-2019
Description:	In this case, User has to log in with his/her registered Username and password.
Primary Actor:	Admin, Learner
Secondary Actor:	None
Precondition	Must have to registered
Postcondition	None

Table 3.3.5.3: Use case description for Search

Case Id:	03
Statement Name:	Search
Created By:	Shak Md. Tuhin
Date of Creation:	26-06-2019
Description:	In this case, the user has to search for two elements. Search by profile name or search by category.
Primary Actor:	Learner
Secondary Actor:	None
Precondition	Login first.
Postcondition	None

Table 3.3.5.4: Use case description for Help provider

Case Id:	04
Statement Name:	Help provider
Created By:	Shak Md. Tuhin
Date of Creation:	26-06-2019
Description:	In this case, a learner can see help request, set time and place, or chat for providing help.
Primary Actor:	Learner
Secondary Actor:	None
Precondition	Log in first to the profile.
Postcondition	None

Table 3.3.5.5: Use case description for the Help seeker

Case Id:	05
Statement Name:	Help seeker
Created By:	Sheikh Md Tuhin
Date of Creation:	27-06-2019
Description:	In this case, a learner can send a request for help via sending a virtual chart or request for a private meeting.
Primary Actor:	Learner
Secondary Actor:	None
Precondition	A learner has to search first and select person.
Postcondition	None

Table 3.3.5.6: Use case description for Manage schedule

Case Id:	06
Statement Name:	Manage schedule
Created By:	Shak Md Tuhin
Date of Creation:	27-06-2019
Description:	In this case, help provider manages his/her schedule. A provider can cancel the meeting or edit the time and place.
Primary Actor:	Learner
Secondary Actor:	None
Precondition	Log in to his / her profile.
Postcondition	None.

Table 3.3.5.7: Use case description for Post on Forum

Case Id:	07
Statement Name:	Post on Forum
Created By:	Shak Md Tuhin
Date of Creation:	27-06-2019
Description:	In this case, Learner can ask any query globally in the forum to gather suggestion from expert.
Primary Actor:	Learner
Secondary Actor:	None
Precondition	None
Postcondition	None

Table 3.3.5.8: Use case description for Manage Forum Activity

Case Id:	08
Statement Name:	Manage Forum Activity
Created By:	Shak Md Tuhin
Date of Creation:	27-06-2019
Description:	In this case, Learner and Admin can manage the forum activity by edited their post, deleted their post. delete comments on their post.
Primary Actor:	Learner, Admin
Secondary Actor:	None
Precondition	Log in as a learner or as an Admin.
Postcondition	None

Table 3.3.5.9: Use case description for Expert guidance

Case Id:	09
Statement Name:	Expert guidance
Created By:	Shak Md Tuhin
Date of Creation:	28-06-2019
Description:	In this case, a learner can request for some help from an expert in a specific field.
Primary Actor:	Learner
Secondary Actor:	Expert
Precondition	Login
Postcondition	Stay on this page until the expert accepts the request.

Table 3.3.5.10: Use case description for Manage profile

Case Id:	10
Statement Name:	Manage profile
Created By:	Shak Tuhin
Date of Creation:	28-06-2019
Description:	In this case, learner and admin can manage their profile by edit name, edit semester, edit field interest.
Primary Actor:	Learner
Secondary Actor:	None
Precondition	Login
Postcondition	None

Table 3.3.5.11: Use case description for Feedback

Case Id:	11
Statement Name:	Feedback
Created By:	Shak Md Tuhin
Date of Creation:	28-06-2019
Description:	After successful collaborate and shearing knowledge learners can give their feedback.
Primary Actor:	Learner
Secondary Actor:	None
Precondition	Login
Postcondition	None

Table 3.3.5.12: Use case description for Manage Admin

Case Id:	12
Statement Name:	Manage Admin
Created By:	Shak Md Tuhin
Date of Creation:	28-06-2019
Description:	In this case, Admin can create a new admin and manage the activity.
Primary Actor:	Admin
Secondary Actor:	None
Precondition	Log in as an admin.
Postcondition	None

Table 3.3.5.13: Use case description for Manage User

Case Id:	13
Statement Name:	Manage User
Created By:	Shak Md Tuhin
Date of Creation:	28-06-2019
Description:	In this case, Admin can manage learners to block them or block their comments or other unethical activities.
Primary Actor:	Admin
Secondary Actor:	Learner
Precondition	Login as an Admin
Postcondition	None

Table 3.3.5.14: Use case description for View Schedule

Case Id:	14
Statement Name:	View Schedule
Created By:	Shak Tuhin
Date of Creation:	28-06-2019
Description:	In this case, Admin can view the schedule of the learners and when they fixed there meeting and where it is.
Primary Actor:	Admin
Secondary Actor:	Learner
Precondition	Login as an Admin

3.4 Logical Data Model

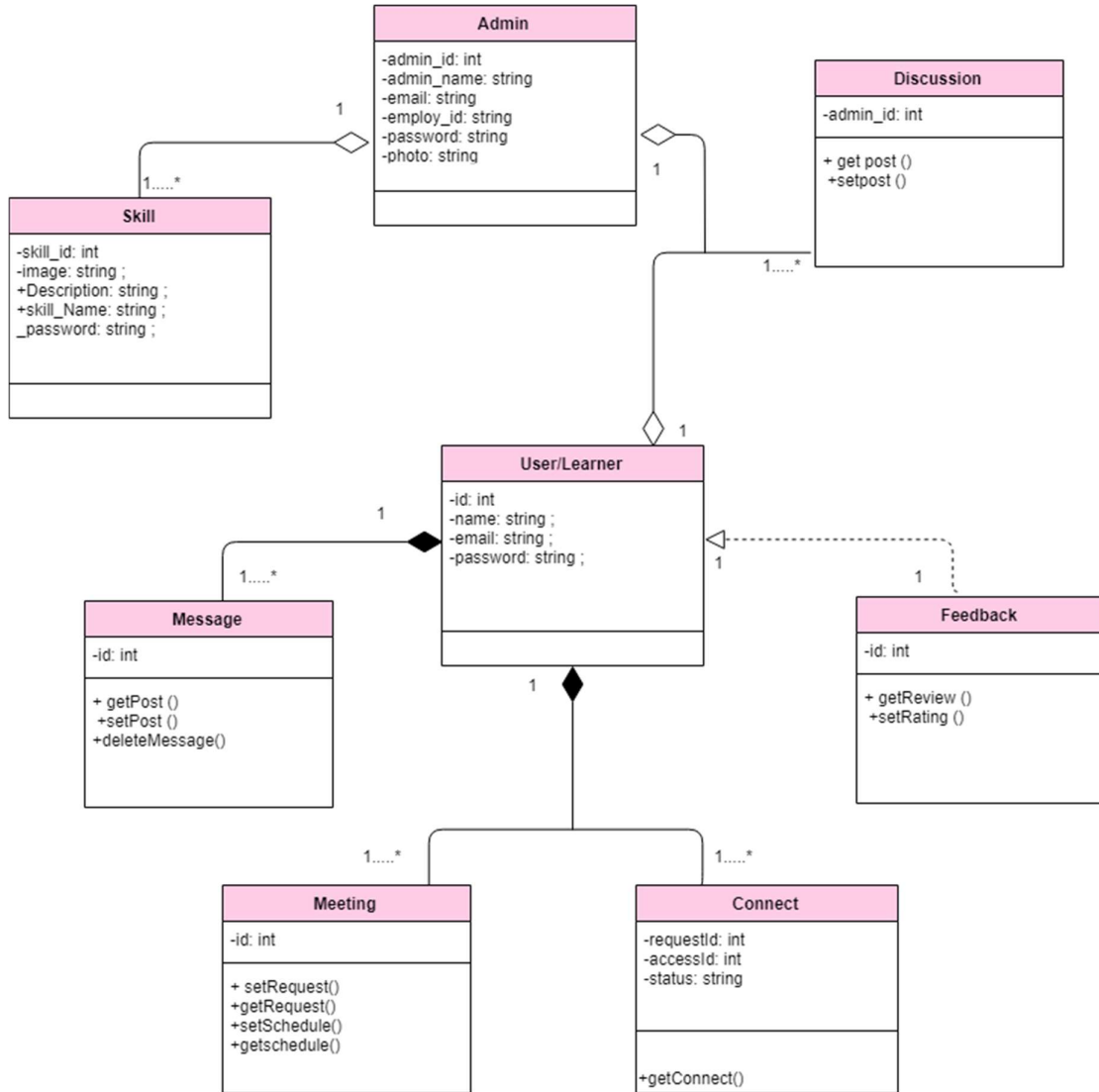


Figure 3.4: Logical Diagram

3.5 Sequence Diagram

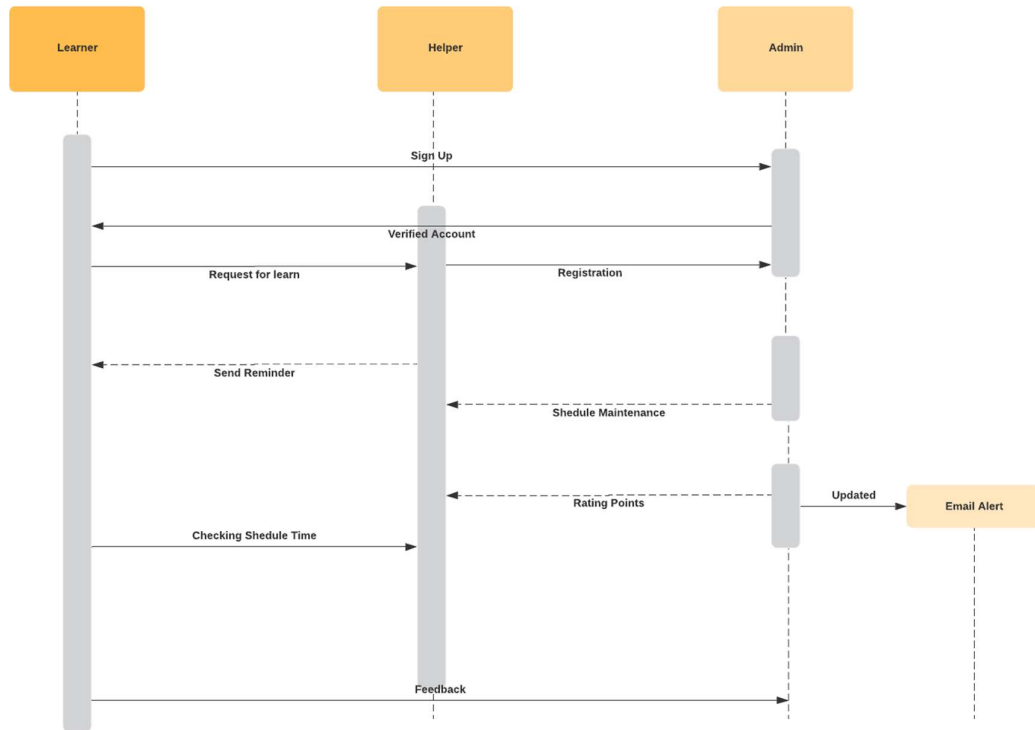


Figure 3.5: Sequence Diagram

CHAPTER 04

DESIGN SPECIFICATION

4.1 Front-end Design

To complete front-end design for our project, we are using some primary languages, frameworks and also some libraries.

- ➡ HTML
- ➡ CSS
- ➡ Bootstrap
- ➡ JavaScript
- ➡ Library/Technique: jQuery, Ajax, Json
- ➡ Framework: Vue Js

4.1.1 Hypertext Mark-up Language

Hypertext Mark-up Language stands by HTML. When we create a page to make a structure of a homepage, we must need HTML. HTML is the main structure of a website. Though it is not a programming language because it can't create the dynamic functionality of the website. On the contrary, it builds possible to organize ordination file. Different type of tag is using this language. Like as HTML, sections, title, headings, paragraphs, links, breaks, tables, etc. Example of `<h1>this is heading</ha>` tag.

4.1.2 Cascading Style Sheet

Short for cascading style sheets, CSS is used to describe reusable styles for presenting documents written in a mark-up language. This is mainly needed for the design part of the website.

As HTML to make the structure. For this structure use CSS to very good design. Like as home windows, doors. CSS3 is the version of CSS that replaces CSS2. It introduces new

selectors and properties that allow for more flexibility with page layout and presentation. Some updates, such as the box-shadow property allow visual effects to be applied without the need for creating special images.

4.1.3 JavaScript

JavaScript is one of the most popular programming languages. JavaScript is a lightweight, explanatory or in-time integrated programming language with first-class functions. It is best known as a scripting language for web pages, many browser environments use it as Node.js, Apache CouchDB and Adobe Acrobat. It uses `<script> </script>` tag.

4.2 Back-End Design

We'll be used a few basic programming languages, frameworks and techniques to build up our web application.

- ➡ PHP
- ➡ Laravel Framework
- ➡ MySQL for Database

4.2.1 PHP: Hypertext Pre-processor

PHP is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. In the largest community of the developer used PHP. There are many innovative features and very pliable in this language. It's a free updated feature available.

4.2.2 MySQL

MySQL is interacting with the relational database for the database management system. Organize data into one or more tables. Each table has a column and row. The unique key identifies each row. It is very faster and reliable. Firstly, install a local server in the pc. Then going to run SQL.

4.3 Interaction Design and UX

4.3.1 User Interfaces

All interaction with the application will occur through a web-based interface. The “Community Based Help Desk” will be accessed through a secure user interface requiring the use of a predetermined login name and password. Any unexpected system operation will be announced to the user with an error web page stating the cause of the error. In the event that a cause can’t be readily determined a generic error message will be presented. The layout of the web interface will conform to a standard screen resolution of 1024x768. The layout of the web interface will be responsive for all devices.

4.3.2 Hardware Interaction

This website will interact only with the provided web server and database server. Any additional system interaction will be handled directly by the operating system and any other supporting software systems.

4.3.3 Software Interaction

This application will interface with Microsoft SQL Server for database interactions. The website will utilize Web Server to deliver HTML content to clients. The community of this web application will provide support for communication with Servers for email notification and calendar synchronization. This application will provide a standardized API so that third-party programs may access information programmatically from the “Community Based Help Desk” system.

4.3.4 Communication Protocols

The Laravel will provide systems for HTTP and HTTPS interactions with the Web Server.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

Creating a sophisticated website is impossible without a database. In a database, software customizes configure and install the process of implementation. The software is followed by a different kind of step and procedure.

5.1.1 Entity Relationship Diagram

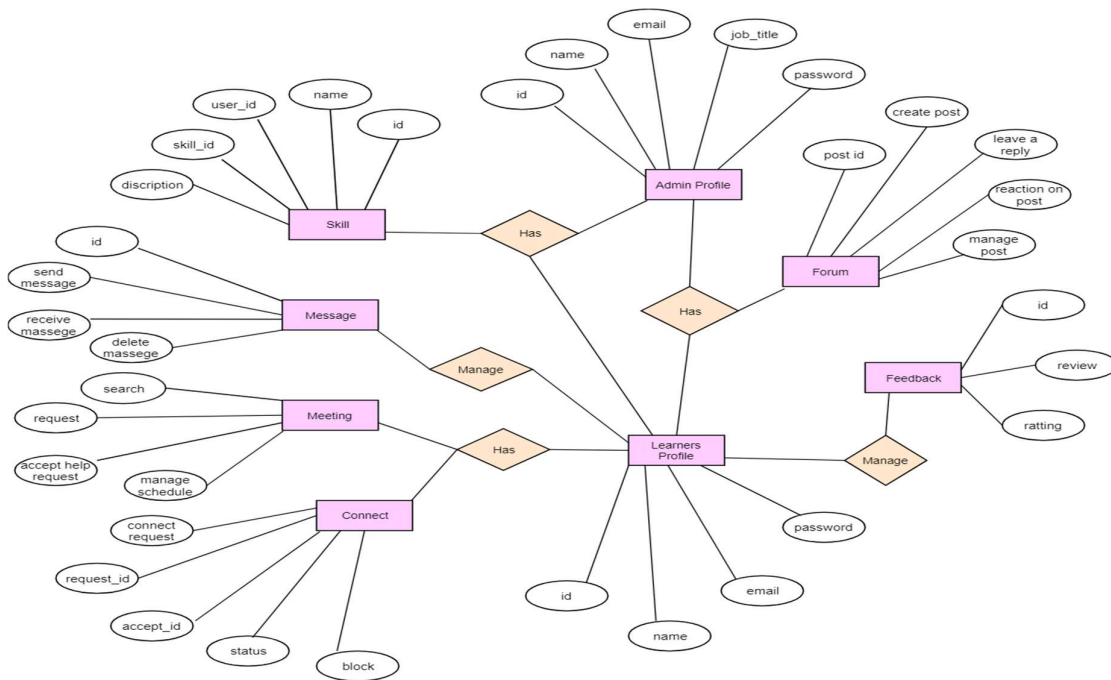


Figure 5.1.1: ER Diagram

5.2 Implementation of Front-end Design

The development of website applications for the customer side is known as front-end and betterment. This is basically conjoining of Hypertext Mark-up Language, Cascading Style Sheet, the framework Vue JS. Every idiom is decoding and regulating by different kind of internet browser that's are the web pages good interface and communicate. All approachable pages are combined known as a web application.

5.2.1 Home Page

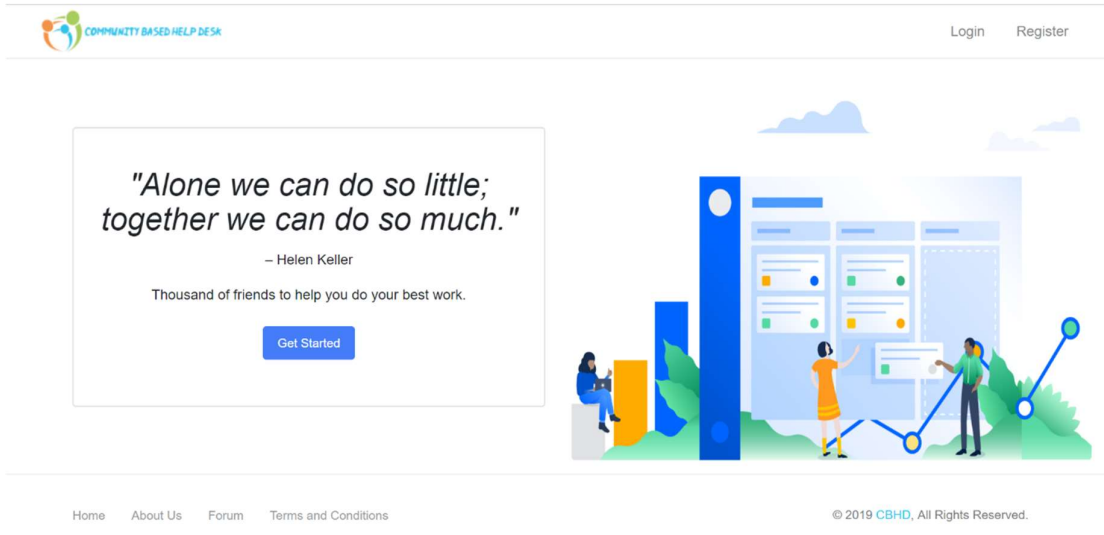


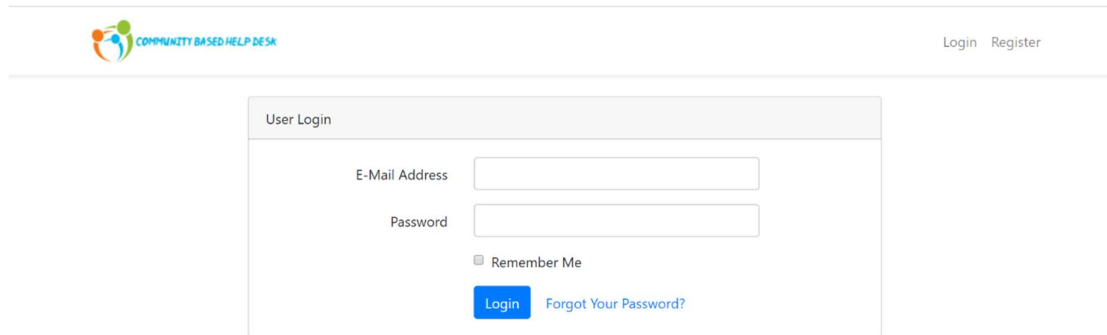
Figure 5.2.1: Home Page of our Website

5.2.2 User Registration Page

The screenshot shows the user registration page. At the top left is the logo with the text "COMMUNITY BASED HELP DESK". At the top right are links for "Login" and "Register". The main content area is a form titled "User Register" with the following fields: "Name", "E-Mail Address", "Password", and "Confirm Password". Each field has a corresponding input box. Below the fields is a blue "Register" button.

Figure 5.2.2: User registration for new user

5.2.3 login Page



The login page features a header with the 'COMMUNITY BASED HELP DESK' logo on the left and 'Login Register' links on the right. The main content area is a 'User Login' form with the following elements:

- E-Mail Address:
- Password:
- Remember Me
- [Login](#) [Forgot Your Password?](#)

Figure 5.2.3: Login for all user

5.2.4 User Dashboard

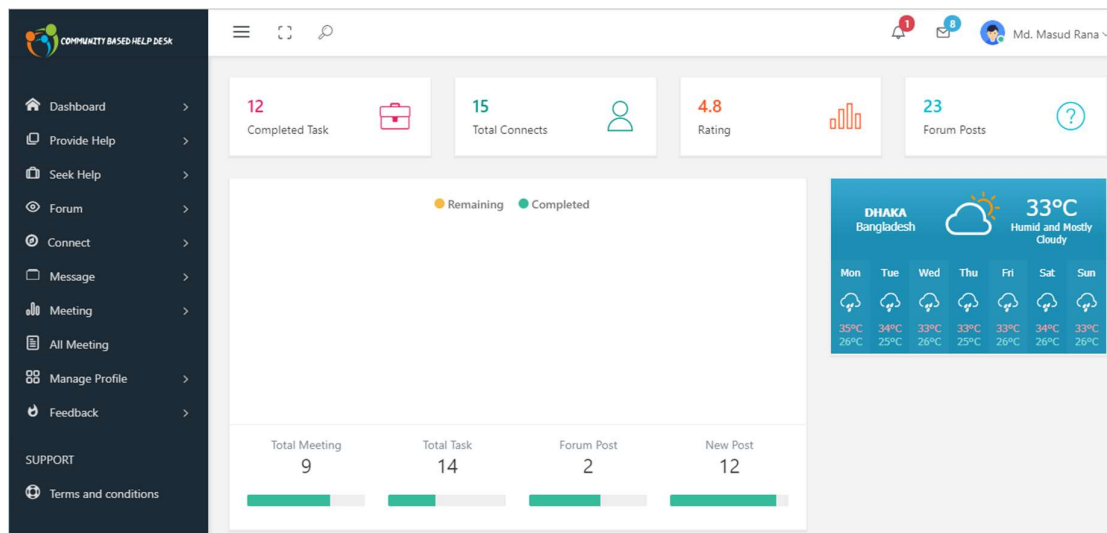


Figure 5.2.4: Given all the information in the Dashboard

5.2.5 Learner Profile

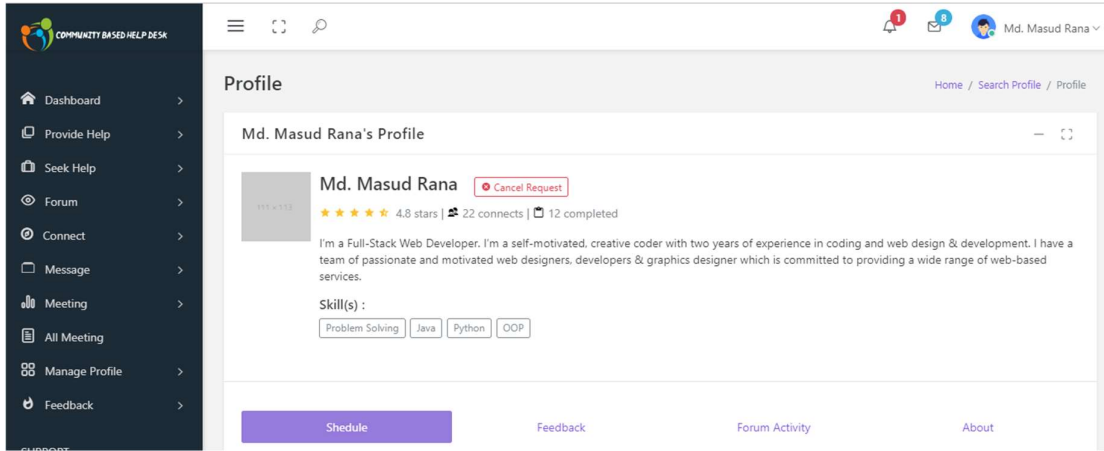


Figure 5.2.3: Learner Profile

5.2.6 Learner Profile Manage

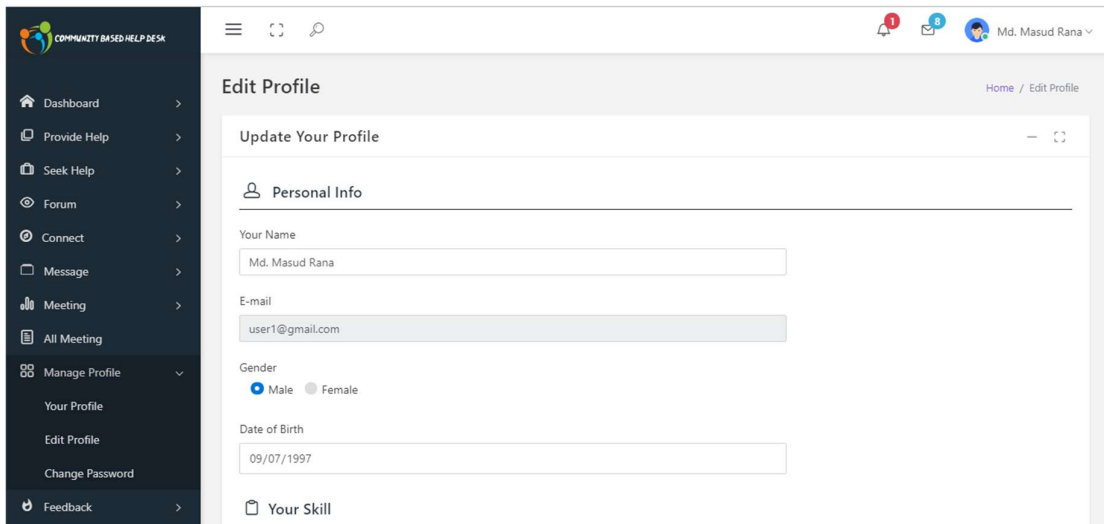


Figure 5.2.6: Learner Profile Manage

5.2.7 Forum

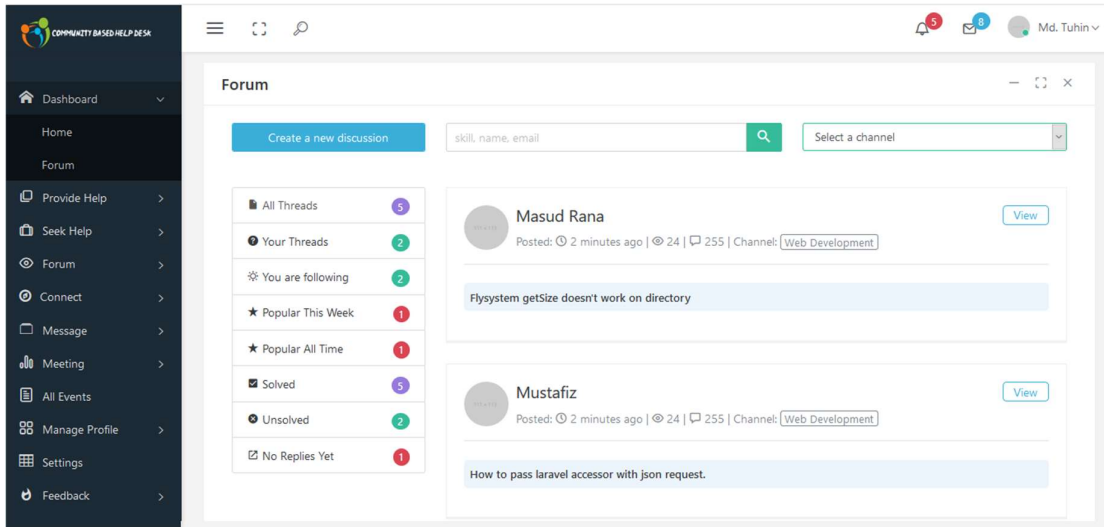


Figure 5.2.7: Forum for quick response/solution from all the user of the community

5.2.8 Searching User by Skill/Category/Name/Email

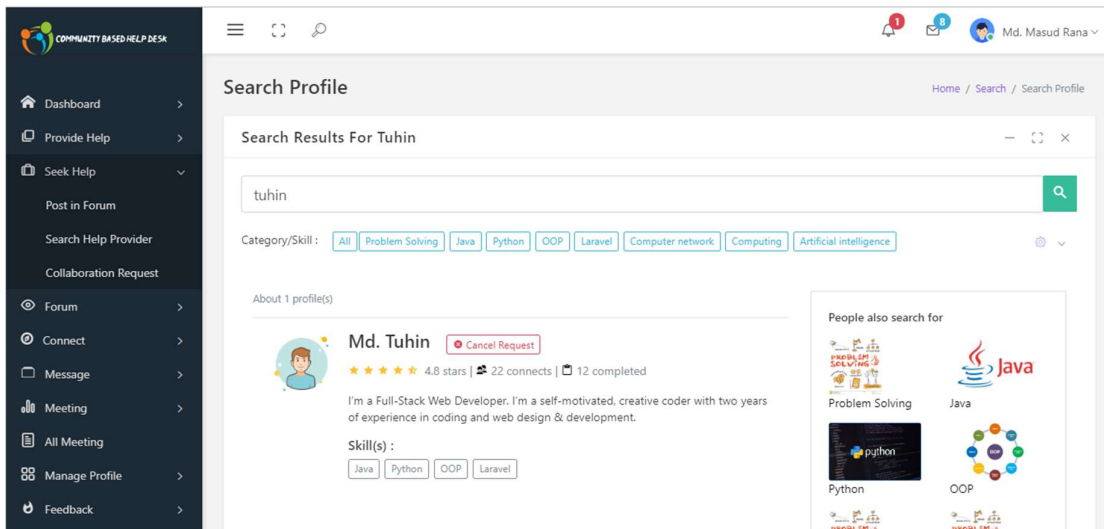


Figure 5.2.8: Searching user by skill/category

5.2.9 Connect Request

COMMUNITY BASED HELP DESK

COMMUNITY BASED HELP DESK

Home / All Connect Request / New Connect Request

New Connect Request

You can accept connect request by clicking accept button or simply reject the request by clicking reject button

#	User Name	Profile	Request send at	Action
1	Md. Mostafiz	View	17 hours ago	Accept Reject
2	Md. Hafiz	View	17 hours ago	Accept Reject
3	Md. Rakib	View	17 hours ago	Accept Reject

Copyright © 2019 CBHD, All rights reserved.

Figure 5.2.9: Connect request to add in the contact list

5.2.10 Messaging System

COMMUNITY BASED HELP DESK

COMMUNITY BASED HELP DESK

Md. Masud Rana

Messenger

Contacts

Search contact

- Masud Rana online
Please accept the request
- Md. Mustafiz online
Hello Masud i really need

Masud Rana

Hi, Masud
5 minutes ago

Hello, Tuhin. How are you?
4 minutes ago

I am fine. Hope you are doing great.
3 minutes ago

I want to collaboration with you about Image Image Processing.
2 minutes ago

Are you free today noon??

Type your message

Figure 5.2.10: Messaging system between two learners

5.2.11 Create Collaboration Request

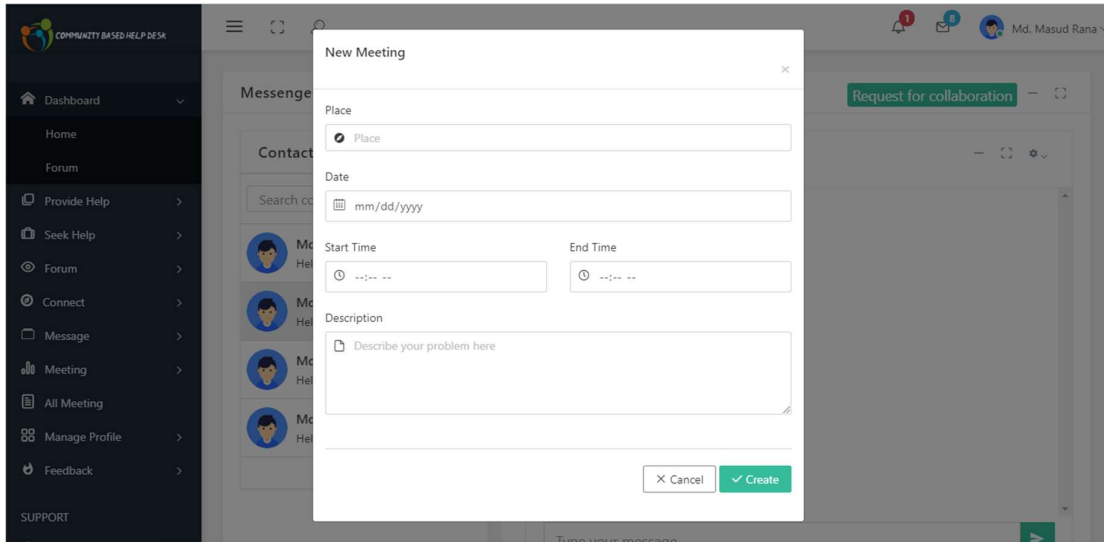


Figure 5.2.11: Create a collaboration request

5.2.12 All Meeting in a Calendar

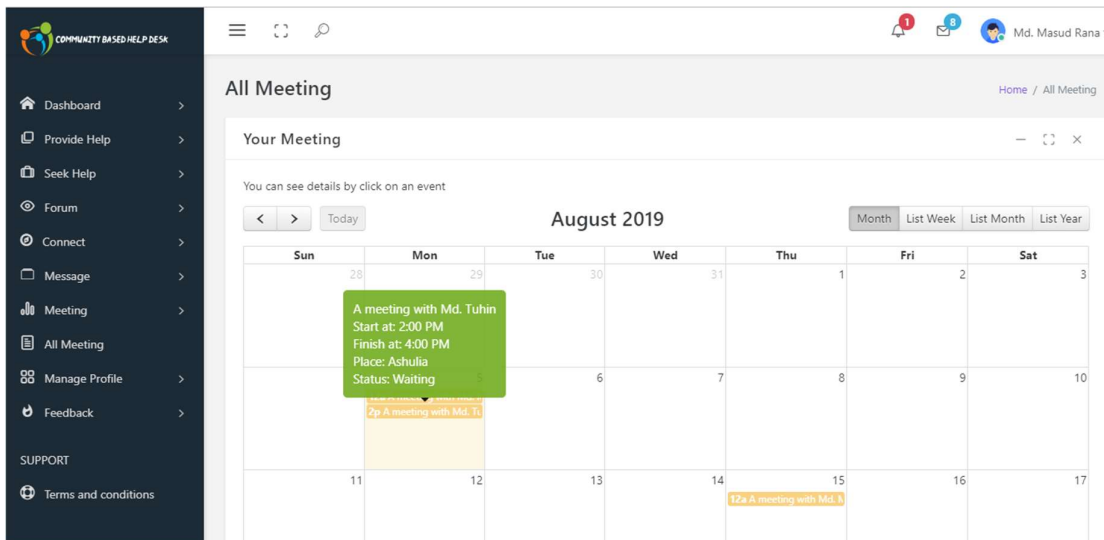


Figure 5.2.12: All meeting in a calendar view

5.2.13 All Meeting in Week View

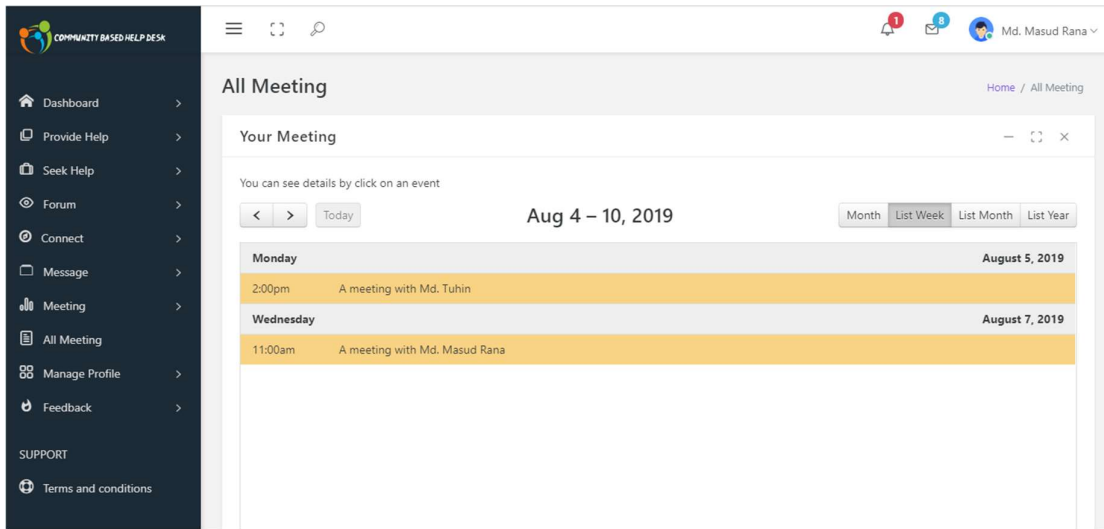


Figure 5.2.13: All meeting in week view

5.2.14 Admin Login

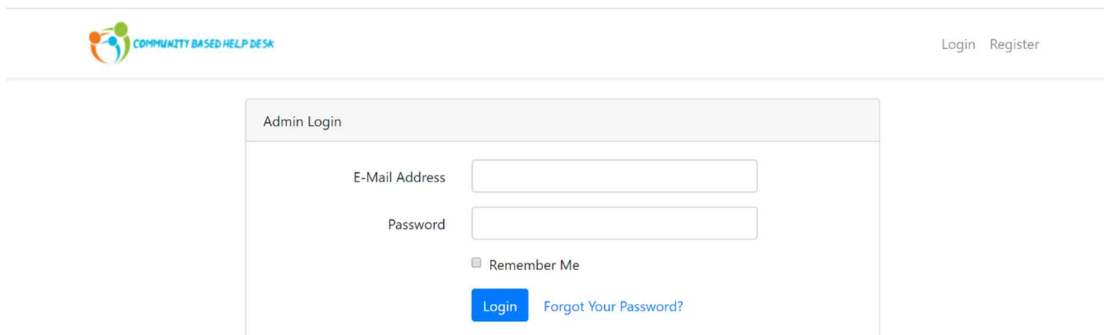


Figure 5.2.14: Admin Login

5.2.15 Admin Dashboard

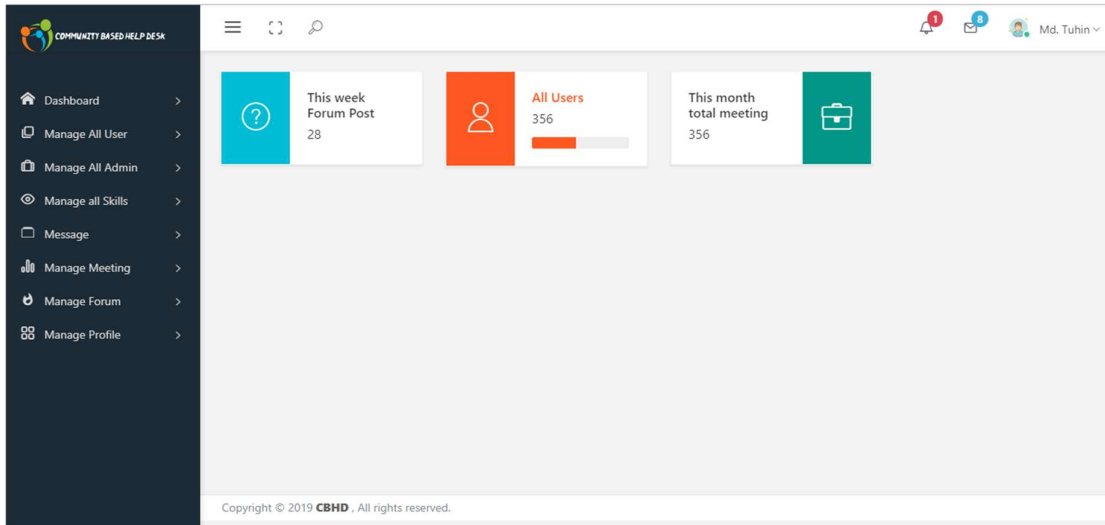


Figure 5.2.15: Admin Dashboard

5.3 Implementation of Interactions

Software design and form design through the code is a very important part of software development. This is the step that's the application is developed. Combined all the step of coding part and needed to assertion for creating our web application. Any required framework can be used to complete the task. The paper speaks to the exceptional spotlight about UI and UX as a sensitive supporting network.

5.4 Testing Implementation

5.4.1 System Testing

This project performs system testing on a fully integrated system to evaluate it in compliance with its specific requirements. Testing is the unbelievable important part of web development, yet some developers don't evaluate it. When a perfect website is testing none to happen. The website runs easily by testing.

5.4.1 Functionality Testing

Functional testing is mainly known as deeply testing for the working process. The project is based on community based. So, we have to test all function are working perfectly according to the database. Obviously, no one expects every minor error to be corrected every time but frequent testing of the website of developing as efficient an application as possible.

5.4.2 Security Testing

Understanding safety goals and planning tests to take into account the security requirement of every learner. We identify our application on security requirements. Typically, a serious-minded malicious attack is used to test how the web application responds in these situations. If a security shortage is detected, we find the best way to overcome them.

5.5 Test Results and Reports

By the testing result, the performance of our website was closer to the prospective consequence. This structure was changed to the entire forum. Each forum has been viewed and tested step by step. The whole frameworks of the project were connected module by module. At the end of the combination, the whole structure was tried and confirmed.

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Discussion and Conclusion

A Community Based Help Desk is the website that is very potential. There is a huge number of students who are the community of learner. There are many students who want to teach for free. Because the flame wants to increase the range of intelligence. Many small problems do not become easy for everyone to learn. We have to work with those who are experiencing these problems. So, our main task is to create a strong bridge between those who want to read and learn freely.

First one of them will have to make a specific appointment. Finally, the face to face meeting will have occurred. The system will be under development. We believe this system will serve as a good medium for the learning community.

6.2 Scope for Further Developments

We would like to go a long way with this work in the future. First of all, we want to bring this to a mobile application. So that everyone can use it manually. We want to add some extra feature. Like as, adding Artificial Intelligence, video calling system, online class, quiz, and library, etc.

In the future it's more sophisticated features will be designed. Since now a small community has been created for implementation. Of course, if we get good feedback, we published it globally.

References

- [1] <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0142551>, “Community Based Help Desk,” journals.plos.org, Dhaka, 10.12.2018.
- [2] <https://www.thirteen.org/edonline/concept2class/coopcollab/index.html>, “Community Based Help Desk,” www.thirteen.org, Dhaka, 04.02.2019.
- [3] https://clt.curtin.edu.au/teaching_learning_practice/student_centred/collaborative.cfm, “Community Based Help Desk,” clt.curtin.edu.au, Dhaka, 15.03.2019.
- [4] https://en.wikiversity.org/wiki/Introduction_to_Community-Based_Learning, “Community Based Help Desk,” en.wikiversity.org, Dhaka, 19.05.2019.
- [5] <https://www.edglossary.org/community-based-learning/>, “Community Based Help Desk,” www.edglossary.org, Dhaka, 10.06.2019.
- [6] <https://study.com/academy/lesson/community-based-learning-definition-examples.html>, “Community Based Help Desk,” study.com, Dhaka, 06.07.2019.