**ASK DAFFODILIANS**

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

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**6 JANUARY 2022**



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# APPROVAL

This Project titled **"Ask Daffodilians"**, submitted by Md. Sadeki Salman, ID No: 181-15-10708, Nazmun Naher Shila, ID No: 181-15-11110 and Piash Ahmed, ID No: 181-15-11111 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 Thursday, January 06, 2022.

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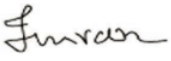

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# DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Md. Mahade Hasan, Lecturer, 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.

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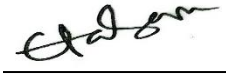

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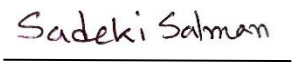

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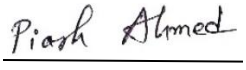

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# ABSTRACT

We highlight issues faced by DIU CSE students having an appreciable skillset. Some possess English language skills while others have a lower level of confidence. This is one of the main criteria why we started this project. Many lacks the ability to put concepts into words; on the contrary, while reading and listening they cannot produce vivid mental images from words and sounds. This ability of extracting and transforming abstract items can be developed through drills and exercises. This has been a reason why this project was born. Once up and running, DIU students would incorporate visualization problems. Structured learning produces structured mental growth. The most important item is structured growth of the mind in conjunction with the development of knowledge and skills as the course proceeds. There are several points we must focus our attention. DIU should level up to the following: Adequate teacher-student interaction, facility with tutorial assessment and, Ensuring proficiency growth. The world is fast evolving. Internationally, we share our skills. One innovates, others borrow. which help slow pace students to catch up with the rest of the class. This also helps students who accidentally missed a lecture and who do not have a clue as to what is happening. The project, as we know it, should be a harbinger of the nature incorporating all the available facility discussed above. The purpose of the project is to create a user-friendly, safe platform with some unique features. This website is a self-contained independent platform. Creating an appealing user interface is a task, providing a consistent backend that allows our website to function smoothly while maintaining privacy. Our current goal is to build a platform with minimum achievable features useful aimed at meeting the needs of DIU.



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# TABLE OF CONTENTS


| CONTENTS | PAGE |
|---|---|
| Approval | II |
| Declaration | III |
| Acknowledgement | IV |
| Abstract | V |
| List of figures | VIII |
| List of tables | X |
| **CHAPTER** | |
| **CHAPTER 1: INTRODUCTION** | **1-4** |
| 1.1 Introduction | 1 |
| 1.2 Motivation | 1 |
| 1.3 Objectives | 2 |
| 1.4 Expected Outcomes | 2 |
| 1.5 Project Management and Finance | 3 |
| 1.6 Report Layout | 4 |
| **CHAPTER 2: BACKGROUND** | **5-7** |
| 2.1 Preliminaries | 5 |
| 2.2 Related Works | 5 |
| 2.3 Comparative Analysis | 6 |
| 2.4 Scope of the Problem | 7 |
| 2.5 Challenges | 7 |
| **CHAPTER 3: REQUIREMENT SPECIFICATION** | **8-17** |
| 3.1 Business Process Modeling | 8 |
| 3.2 Requirement Collection and Analysis | 9 |
| 3.3 Use Case Modeling and Description | 13 |
| 3.4 Logical Data Model | 14 |
| 3.5 Design Requirement | 15 |
| **CHAPTER 4: DESIGN SPECIFICATION** | **18-19** |
| 4.1 Front-end Design | 18 |




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4.2 Back-end Design 18
4.3 Interaction Design and User Experience 19
4.4 Implementation Requirements 19
**CHAPTER 5: IMPLEMENTATION AND TESTING 20-55**
5.1 Implementation of Database 20
5.2 Implementation of Front-end Design 20
5.3 Testing Implementation 38
5.4 Test Results and Reports 55
**CHAPTER 6: IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY 56-57**
6.1 Impact on Society 56
6.2 Impact on Environment 56
6.3 Ethical Aspects 57
6.4 Sustainability Plan 57
**CHAPTER 7: CONCLUSION AND FUTURE SCOPE 58-59**
7.1 Discussion and Conclusion 58
7.2 Scope for Further Developments 59
**REFERENCE 60**


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# LIST OF FIGURES


| FIGURES | PAGE NO |
|---|---|
| Figure 3.1.1: Business process modeling | 8 |
| Figure 3.2.1: System Development Life Cycle (Agile Model) | 10 |
| Figure 3.2.2: Flow Chart | 10 |
| Figure 3.2.3: Data Flow Diagram For our System | 11 |
| Figure 3.2.4: E-R Diagram of our System | 12 |
| Figure 3.3.1: Use Case Diagram of our System | 13 |
| Figure 3.4.1: Logical Data Model of our website | 14 |
| Figure 3.5.1: Responsive Design on 1920x1080 display | 16 |
| Figure 3.5.2: Responsive Design on Moto G4 (360x640 display) | 16 |
| Figure 3.5.3: Responsive Design on iPhone 6/7/8 (375x667 display) | 17 |
| Figure 3.5.4: Responsive Design on iPad (1024x768 display) | 17 |
| Figure 5.2.1: Homepage Before Sign In | 21 |
| Figure 5.2.2: Homepage After Sign In | 22 |
| Figure 5.2.3: Sign Up Page | 23 |
| Figure 5.2.4: Sign In Page | 23 |
| Figure 5.2.5: Forgot Password Box | 24 |
| Figure 5.2.6: Posting a Question Page | 25 |
| Figure 5.2.7: Post visibility format | 26 |
| Figure 5.2.8: Leave an Answer Section of a post | 26 |
| Figure 5.2.9: In Process option in Question | 27 |
| Figure 5.2.10: Categories Page | 27 |
| Figure 5.2.11: Points System section of Badges page | 28 |
| Figure 5.2.12: Badges System section of Badges page | 29 |
| Figure 5.2.13: Contact Us page | 30 |
| Figure 5.2.14: Own Profile page | 31 |
| Figure 5.2.15: Other user’s profile page | 31 |
| Figure 5.2.16: Basic Information section of Edit Profile page | 32 |
| Figure 5.2.17: About Me section of Edit Profile page | 33 |
| Figure 5.2.18: Social Profiles section of Edit Profile page | 33 |




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Figure 5.2.19: Privacy page 34
Figure 5.2.20: Change Password page 35
Figure 5.2.21: Mail Setting page 35
Figure 5.2.22: Delete Account page 36
Figure 5.2.23: Notification Box 36
Figure 5.2.24: Notification page 37
Figure 5.2.25: Admin Panel Dashboard page 37
Figure 5.2.26: Homepage view from Admin's perspective 38
Figure 5.4.1: Unit Test Result 55



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# LIST OF TABLES


| TABLES | PAGE NO |
| --- | --- |
| Table 5.3.1: Different Test Cases | 38 |




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# CHAPTER 1
# INTRODUCTION

## 1.1 Introduction

International students often encounter a brand new spectrum of surroundings facing visible hurdles along with some invisible adversarial domains. Although most of them learn to deal with an assortment of issues, many others get confronted with situations they never seem to cope with -- feeling deserted and aloof from the rest of the crowd. This is where our project comes in handy for all backbenchers. These slow-moving, falling-behind cohorts of students constantly struggle on being shy to expose their true self in front of their smarter counterparts of the community. Thus they get constantly tormented by the workload building. They start seeking help from their classmates; sometimes they get help, sometimes they do not. This is how an enjoyable segment of university education becomes a place of fear and torment to meet course requirements.

## 1.2 Motivation

Visible impediments may get resolved for most entrants in the crowd but a good number of the underprivileged keep struggling hoping for a miracle to rescue them from their untoward state of affairs. This endeavour of ours, we ardently hope, would pose itself like a miracle in disguise for these helpless boys and girls -- those who come from remote niches of the country to fulfil their dreams to study at a good university. Their parents spend their hard-earned money to support their children's education at a university. To be able to help these helpless students through our website will be a great horizon of motivation for us to work on such a dedicated commitment. There are plenty of videos in the internet but learners do have plenty of questions that need answering. That's why they require an office-hour type interactive platform. When learners know where they were going wrong, they will be able to start moving up the ladder quite comfortably with the help of the hub. This will help to solve both academic and real-life problems. This is a great piece of motivation for us to work on such an enterprise.



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## 1.3 Objective

Many of the students come from a weak English background. This is one of the principal hurdles as to why they fall behind in the race. Students being crippled with the timidity of being fearful of making mistakes while asking questions in English at classes while smarter students jolt ahead clarifying issues in class. This platform will work as a hub or center where someone will help and someone else will be getting helped. Here the experienced will have a chance to remove their confusion whereas they will boost their experience. Hence everyone will level up their skills. This will be a free platform for learners. This may also have a commercial outlet and that will be a parallel platform to the free hub. The challenge of our project is to reduce the timidity of the students, helping them to grow more and more confident with time.

## 1.4 Expected Outcomes

Many students are not often able to grasp the content and purpose of any particular lecture on a subject. The students then need to discuss issues arising out of the presentation. Oftentimes it happens that a difficult approach of a lecturer puts the student body off track, it is not unlikely that a mistake has been made by the lecturer. This has aroused confusion. Hence, there must be a platform where any member of any cohort can come together and discuss various academic issues and seek solutions. Quality solutions and the comfort of learning are the final outcomes we shall strive for. There are other issues in class. There may be cases when some sharp students miss out on important aspects of a lecture but prefer to remain silent and hesitate to ask the lecturer in the class for fear of being ridiculed by their class fellows for asking a silly question. Boys do not want to expose their weaknesses before girls. It is similar for girls as well. This is an overall tragedy where voids or gaps start building up. These weaknesses often get boosted to monumental proportions affecting their quiz and final grades with the passage of time. This platform ventures to minimize such accumulation of hopelessness, despair and shackled confidence which impairs speedy and fruitful learning. Another principal objective is to get the students to churn out what has been taught in class to extract meaningful information through practice examples and through open discussions and worked out examples in close quarters. For this to happen, a suitable model needs to be designed and implemented. This is our model



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site. Students may work in isolation or work in groups that will begin to have a low percentage of dependency on their class-fellows who reside in the green band of knowledge acquisition. Students either help or get help here. Anybody knowledgeable may help out. Any question may be placed here, silly or intelligent. There must be a moderator group to monitor the quality of the platform. However, this group-study criterion removes part of the problem, but it cannot eradicate the principal snag that remains unattended which is lack of confidence rooting out from lack of English language ability. This was tagged to be the principal culprit in the overall education system. So we would add links to authentic sites here to help remove deficiency in student morale development. The expected outcome should be centered around the possibility of answering individual problems which is vital to the development of knowledge and skills.

## 1.5 Project Management and Finance

Our project needs to be reviewed by the CSE department. The promotion of such an undertaking demands focused scrutiny and calls for attention by the higher authorities at DIU to grant optimum privileges. Currently, our team is venturing to launch the site in its immature format. Thus it prepares to survive on charity of great minds to help maintain the efficacy and prominence of the site. Volunteers should come forward to contribute. Therefore, presently it is going to stand up on a self-financed mode, with contributions, if any, provided by DIU. The privileged few who are able to sort out their own academic problems in class by asking lecturers questions are able to answer the questions posed in the Q&A threads. As usual, the threads under heads. These are the people who are expected to help out at this platform. The slow, timid and shy students do not want to expose their weaknesses in class. Thus here they are free to ask questions, or there may be hundreds of questions to suit her or his query. Thus the backbenchers shall not continue to decline in their strife of uphill struggle, rather they begin to grow so much confidence that they themselves solve questions for the weaker students that seek help from the platform.



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## 1.6 Report Layout

This being the case, our team has started developing an unprecedented platform which would help both helper and the helped. Often answering and tutoring others help the consolidation of learning. Thus knowledge distributed grows, and does not get diminished. This website would help DIU students race up the ladder of competence to be able to go out into the world and perform better in competing with the world community. Periodic checks ensure the right of DIU to be a part of a fully fledged privileged community enjoying the total scope of knowledge gathering and sharing. Here their long-cherished dreams would come true and they will be here to stay, to leave a mark in society as long as they wish. On this platform, freshers, seniors, teachers and TAs all work together to help out each member of the community sorting out a student going slow and having problems. The design of this website will surely help DIU students to get their questions answered, no matter how silly they may be. Each student will get the prerogative to make the most out of this format where weaklings will get all-round help whenever they want, however they want. The platform will be similar to Quora which is a place to gain and share knowledge where members can ask questions and connect with people who contribute unique insights and quality answers. We shall not confine our students only to seek help from this site. The DIU community is already a part of the international community. Live and let live is the ideology. At the upper level exist all those sites where intelligent questions get asked; here at DIU we make room for slower participants to take part so no one falls behind. We ardently hope that once the website is up and running, our site would soon be a rendezvous of great minds and good culture put together to coexist.



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# CHAPTER 2

# BACKGROUND

## 2.1 Preliminaries

Early in university life, we come to a brand new surroundings and we are facing distinct problems. Maybe it's a problem with our studies or something else. We can use the internet to solve a variety of issues. However, many problems are so complex that even if you don't understand them by hand, they still have flaws. To overcome all of these issues, we will need the assistance of our university's senior students and professors. Many times, though, this is not an easy task. Because there is always a separation. because we often find it difficult to open our minds and speak directly to seniors. It may be due to ingenuity, shame, or the fact that he was unsure if he would give it time. In our technological age, we can quickly adjust to strangers thanks to social media. However, because everyone is preoccupied with their personal lives on social media, they attract more attention as a source of pleasure than education, and no effective work has been done to address this issue. All of these concerns could be easily remedied if we provided a platform for all of our students where only educational topics were discussed. With these concerns in mind, we've attempted to establish a platform where any student may ask or publish questions regarding their studies or any other difficulty, and any other student can help them solve it. This will simply remedy the problem by shortening the distance between everyone. Through our project, we attempted to provide the best answer to the challenges.

## 2.2 Related Works

There could be a slew of other platforms on the internet that aren't dedicated to our specific functions. Some platforms are primarily used for amusement, while others are used for social interaction and education. There are some sites that are similar to ours in terms of functionality that means those contain some of our requirements and other functionalities that are available on many sites. That means none of them are able to meet all of our requirements or targets at the same time on a single platform. Furthermore, none of the other platforms are dedicated to our university. So, our goal was to create a website or



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platform that focused solely on our key functions, and that anyone from our university could readily access.

## 2.3 Comparative Analysis

There could be a slew of other platforms on the internet that aren't dedicated to our specific functions. Some platforms are primarily used for amusement, while others are used for social interaction and education. There are some sites that are similar to ours in terms of functionality, and others that are available on many sites. That means none of them can meet all of our requirements or goals at the same time. Furthermore, none of the other platforms are devoted to our university. So, our goal was to create a website or platform that would just focus on our primary functions, and that anyone from our universities could simply access. There are many other websites on the internet that do not have the same level of functionality as ours. We can follow any member, which is one of our benefits. We can keep track of our members who are resolving the majority of our issues. Some of these elements can be found on social media or other platforms, but not all of them can be found on educational websites. One of the other characteristics is assessment level-up, however this is a critical function that is missing from most educational websites. Any member can level up their assessment on our website by completing different challenges. That implies they can use points to rate them and rank themselves up. On our websites, we've highlighted the fascinating feature of selecting the best answer from among all the responses to a certain query. Some websites include Q&A sections, but none of them have this capability for selecting the best answer. This tool assists other users in quickly locating a complete and accurate answer to a specific question among a large number of valid answers. Any user can publish their difficulties in several categories, which might assist others locate particular queries or problems in those categories. This feature is not available on the majority of Q&A websites. Our website will be easy to use for faculty members as well. They can readily identify the unanswered questions among all the queries and provide appropriate responses. When compared to the characteristics of other instructional websites, this feature is extremely rare. We attempted to create a platform with all of these unique characteristics that will be extremely useful and accessible to any user from our university.



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## 2.4 Scope of the problem

Our major goal is to build a platform with a few distinct features that will be incredibly useful and accessible to any user. Our project is first aimed towards Daffodil International University. However, the site was created in such a way that it may be readily adjusted and made available to any other educational institutions. Any other institution can readily adapt this website to their needs if they so desire.

## 2.5 Challenges

The project's purpose is to create a user-friendly, safe platform with some unique features. Creating an appealing user interface is a difficult task. Our website is now open to the public. That it is a self-contained platform. As an independent platform, we also have the difficulty of providing a consistent backend that allows our website to function smoothly while maintaining privacy. Providing a feature-rich admin panel for our website's administrators is likewise a significant task.



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# CHAPTER 3

# REQUIREMENT SPECIFICATION

The document or sequence of documents that describe the attributes, properties and behavior of a system is known as System Requirements Specification. [1]. Customers always have some requirements or required functionalities that have to be implemented on the system to make them satisfied. It includes some components that work with each other to define the customer's expectations. If a team wants to satisfy its customer, then they have to fulfill the Requirement Specification layout.

## 3.1 Business Process Modeling

A graphical representation of a business process or workflow, as well as its connected sub-processes, is referred to as a business process model [2]. Business Process modeling generates comprehensive, statistical activity diagrams and flowcharts that disclose essential information about how a process operates. Figure 3.1.1 presents the business process model for our website.

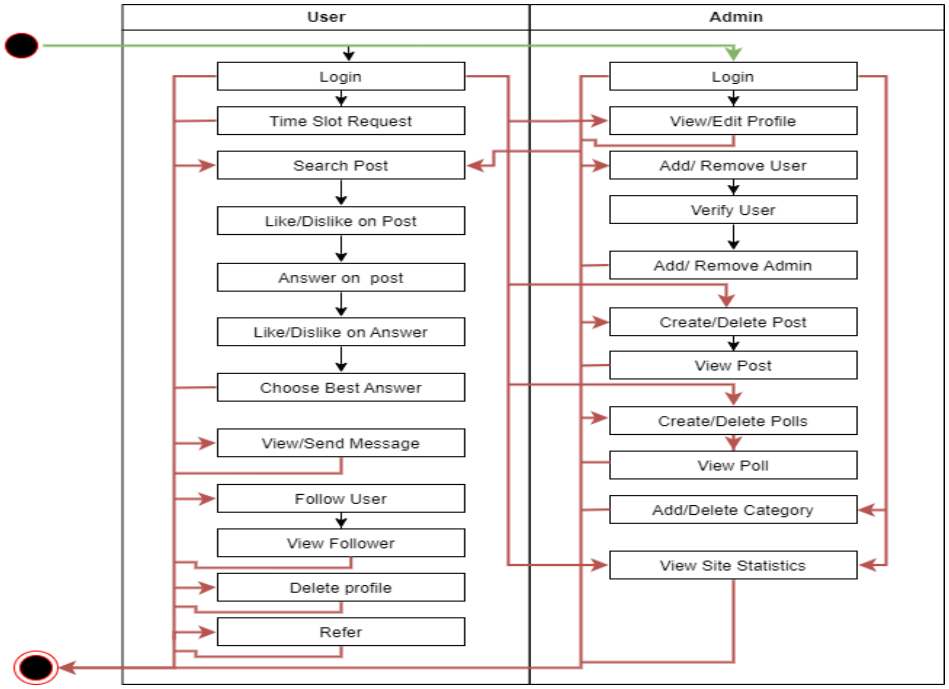


Figure 3.1.1: Business process modeling



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## 3.2 Requirement Collection and Analysis

Gathering requirements is the first approach in developing a website. It is vital to the development of a project. While developing a project, developers have to follow many rules or instructions, or in easy words, they have to follow a set of instructions. This set of instructions is called Requirements. When it comes to the matter of implementing all the features perfectly in a system, the project team must have to understand all the requirements first. If they don't understand the requirements properly and start working, then they may develop the system in such a way that will not satisfy the customer. Before beginning to build a website, the team must first gather all of the criteria. After collecting the requirements, they must analyze them. They must examine how the requirements should be implemented and, if any changes are required, they must make them after consulting with or analyzing them. By adding more features, they can develop an improved website. If the team does not collect the requirements initially, it would be extremely difficult for them to create; either they will overlook important details, or the website will be threatened. As a result, there may be inconsistencies, and the team's hard work will be for naught. As a result, gathering and analyzing requirements is an important project duty. That is the reason we initially collected our requirements before starting development on our website.

## System Development Life Cycle (Agile)

The simplest method to do anything is to follow the rules or a pattern. When it comes to creating a website, there is a pattern that must be followed. The System Development Life Cycle refers to the process of creating a website. There are many variants of the System Development Life Cycle. The Agile Model is one of the most frequent variants of the system development life cycle. We will not be able to work on a stage if the previous stage is not completed, because it follows linear sequential criteria. This model aids in the proper development of a website with less effort. When we need to build a website well in a certain amount of time, we must follow a model, and the Agile model is the appropriate model for this. We used this model to develop our website. Figure 3.2.1 shows the steps of Agile mode of System Development Life Cycle [3].



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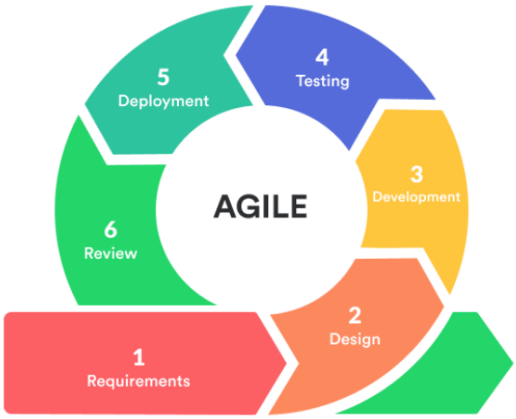


Figure 3.2.1: System Development Life Cycle (Agile Model)

## Flow Chart

We created a website to work with our theme or concept. Every system has its own process. A workflow is likewise followed by our website. Workflow explains who is able to undertake various tasks and how they will be performed. Figure 3.2.1 depicts the process of creating a class schedule on our website.

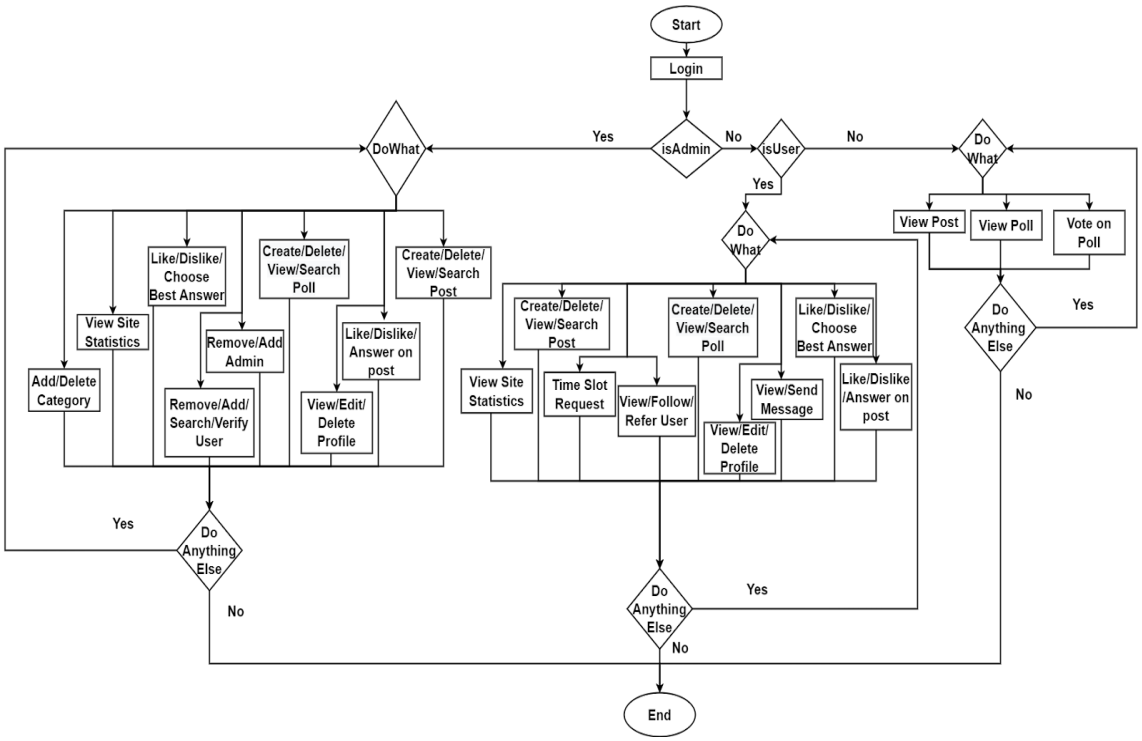


Figure 3.2.2: Flow Chart



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## Data Flow Diagram

When we use a website, we usually see the data and must occasionally input data. This information is subsequently processed and stored in a database. When we request data, the system retrieves it from the database and displays it to us. The user stores data in the database and retrieves data from the database using the system. A graphical representation of all of these operations and data is possible. A Data Flow Diagram is what this is called. Sometimes we need to visualize the data in an easy way like with a diagram or a chart. Data flow diagram helps us to do this task. This diagram also aids us in comprehending where the data will be stored, how it will be maintained, where the data originated, and where it will be displayed. Users are required to share some personal information on our website. The database will save that information. Everything users admit will be saved in the database, whether they ask a question, answer a question, message an user, or message an admin. Everything will be saved in the database, including likes, dislikes, follows, and best answers. They can access all of them from various web features of our website whenever and wherever they need them. Figure 3.2.3 shows the Data Flow Diagram for our website.

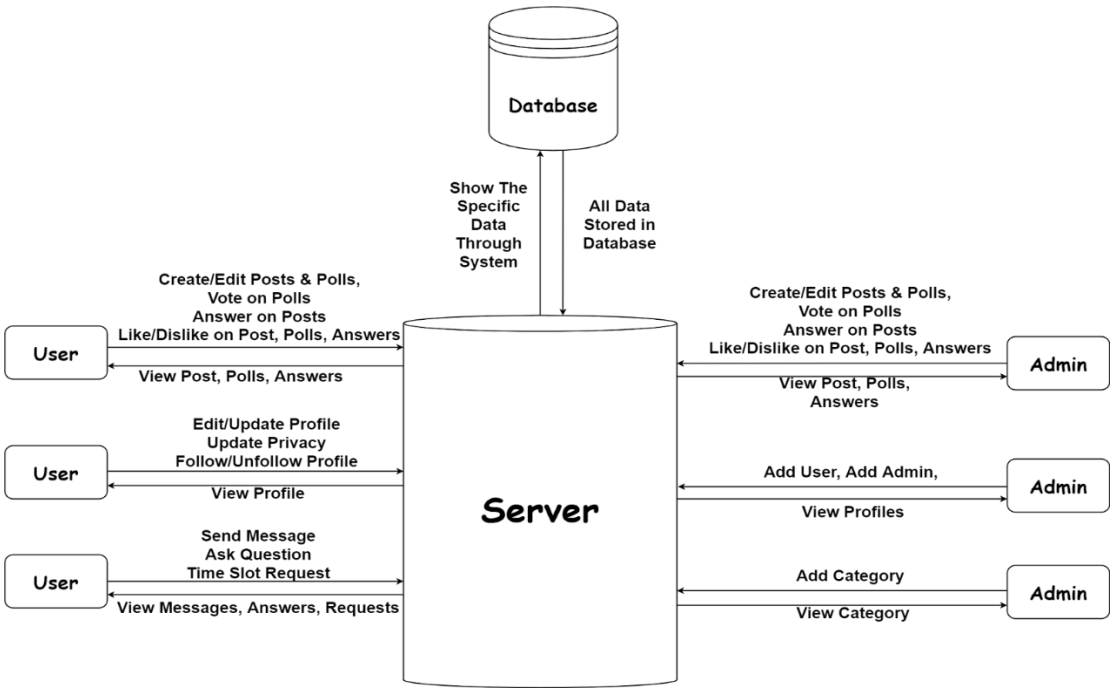


Figure 3.2.3: Data Flow Diagram For our System



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## Entity Relationship Diagram

A system is a combination of various attributes. Consider a bus ticket reservation system. Admin, User, Ticket, and Bus are the attributes in this system. These are all linked to one another. When the relationships between these attributes are appropriately constructed, the system operates smoothly. That's why, while developing a website, it is important to understand the relationships of entities. We can demonstrate this relationship using a diagram easily. This diagram is known as Entity Relationship Diagram. ERD demonstrates the link between database attributes [4].

There are three key components to this diagram:

- Entities
- Attributes
- Relationship

Figure 3.2.4 presents the Entity Relationship Diagram for our website.

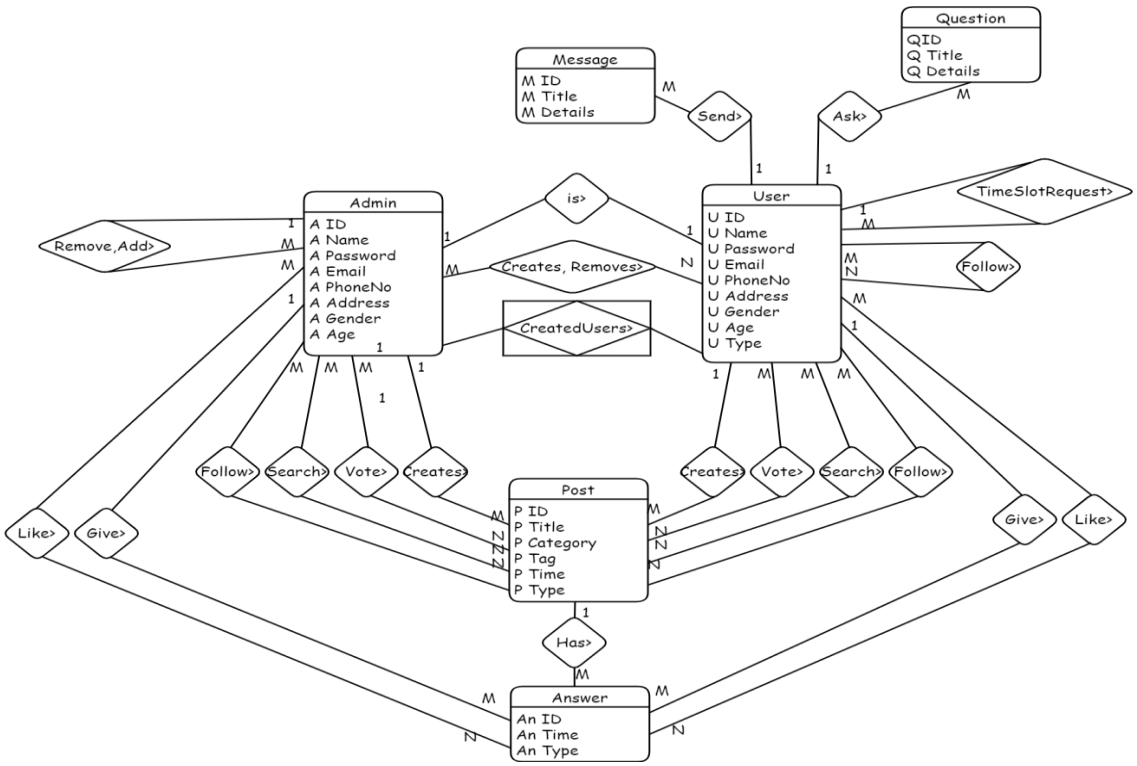


Figure 3.2.4: E-R Diagram of our System



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## 3.3 Use Case Modeling

The user is the primary emphasis when creating a website. The goal of the developers is to provide a user-friendly interface. They make every effort to guarantee that users get the greatest possible experience with the system. This interaction is depicted in a schematic for a system user's interaction with the system. A "Use Case Diagram" is what this is called. The simplest approach to illustrate a user's interaction with a system is through a use case diagram [5]. We can readily identify the different categories of users in a system using this information. A Use Case Diagram can simply show the tasks such users are capable of performing. That is, we can derive a clear understanding of the behavior and characteristics from this. The features and functioning procedure of our system are depicted by Use Case Diagram in Figure 3.3.1.

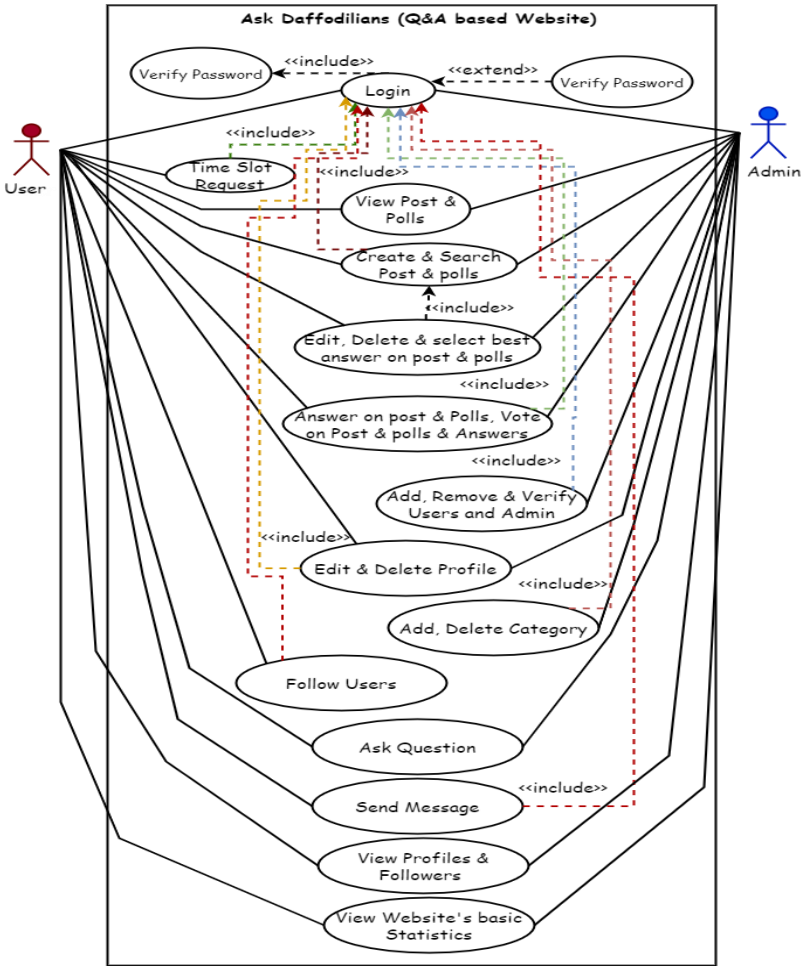


Figure 3.3.1: Use Case Diagram of our System



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## 3.4 Logical Data Model

The most important aspect of developing a website is designing the database. A website is nothing more than an empty pitcher without a database. We won't be able to complete any tasks if the database isn't properly structured and will be able to have a look at the website only. While developing it we must ensure smooth performance when accessing the database. We built our database structure in such a way that it can conduct the server site operations with ease. It can process any query correctly while it is being run. This database structure can be properly represented or modelled. We can readily comprehend the domain information of a system using this paradigm. The Logical Data Model is the name of this paradigm. That means, the domain information contained in a system's database structure is represented by a logical data model [6]. Figure 3.4.1 depicts the logical data model of our system.

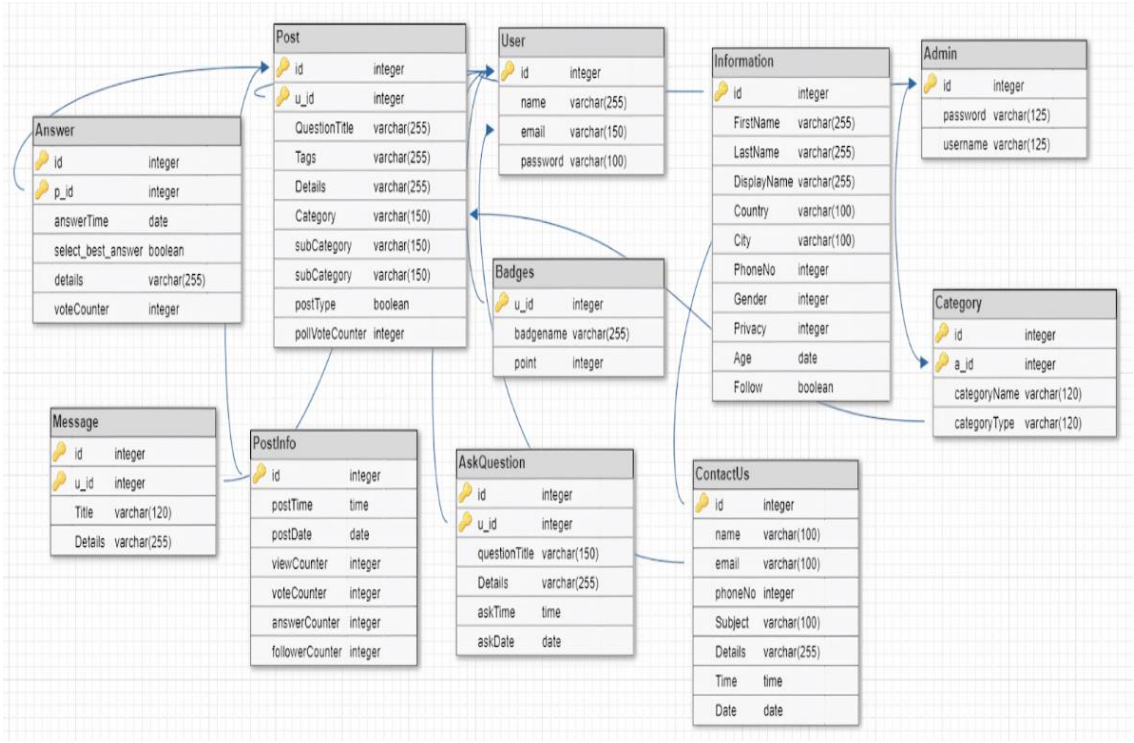


Figure 3.4.1: Logical Data Model of our website



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## 3.5 Design Requirement

We must first gather requirements before developing a website. This subject has already been covered. We must ensure that the website is user-friendly and that it fits the standards when designing it. We deal with the architecture, modules, components, data, and so on while designing the interface. We must ensure that these are properly maintained in order for the system to function properly with an interactive interface and to be readily understandable. We've previously covered the System Development Life Cycle, workflow flowcharts, data flow diagrams, entity relationship diagrams, and our system's use case model in this chapter. All of these clearly demonstrate that our system is user-friendly, well-designed, and processes data that meets our needs. We employ a variety of up-to-date tools to design the website. To make the design interactive, we incorporated new concepts. At any time, we can customize the interface to suit our needs. We also can modify or amend our work whenever we want owing to the improved tools. Our design requirements were met with these tools.

**Architecture Design**

We built a website to put our concept into action. Users are the primary actors on a website. Our website is accessible from any device. Users can use a laptop or desktop computer, as well as an Android or iOS smartphone, to access our website. The data will be rendered, but not properly processed, if we do not ensure the responsive design. As a result, the website's design may be ruined, and users may be unable to access it. Some users may have difficulty browsing the page even if it loads properly. The most important thing to us is to provide excellent service to our customers. For that, we'll need an interactive design. Users should have a user-friendly interface regardless of the device. Responsive web design can help with this. This guarantees that the web pages render correctly and fit on any device with any display size [7]. We made our design responsive so that it may be used effectively on any device. Figure 3.5.1, 3.5.2, 3.5.3 and 3.5.4 depicts the responsiveness of our system.



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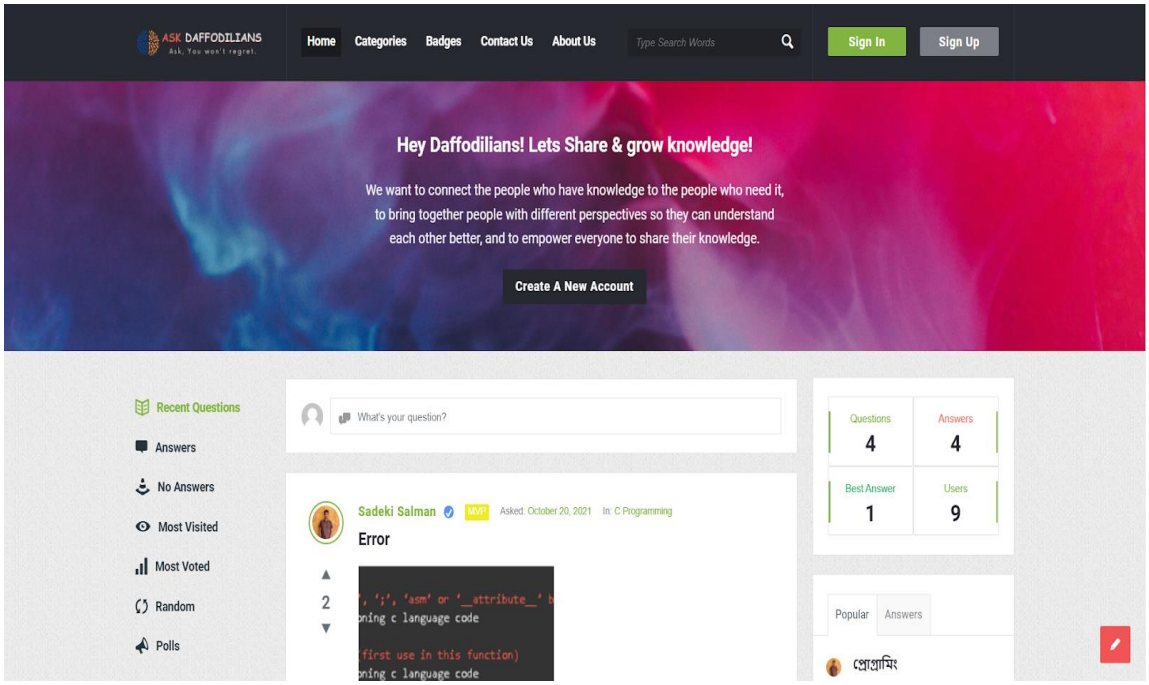


Figure 3.5.1: Responsive Design on 1920x1080 display

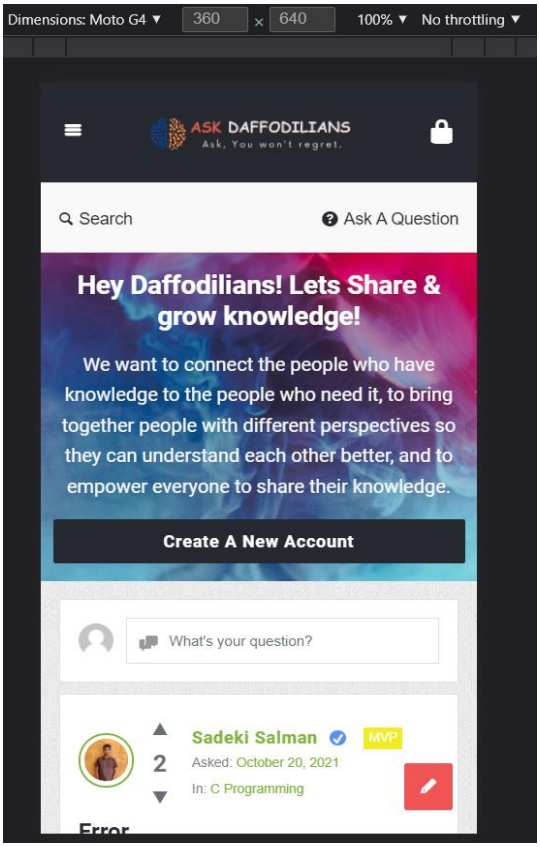


Figure 3.5.2: Responsive Design on Moto G4 (360x640 display)



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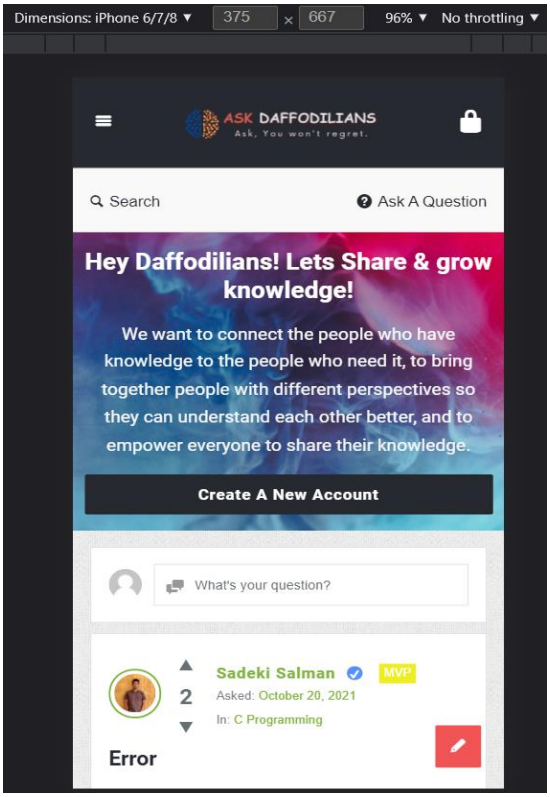


Figure 3.5.3: Responsive Design on iPhone 6/7/8 (375x667 display)

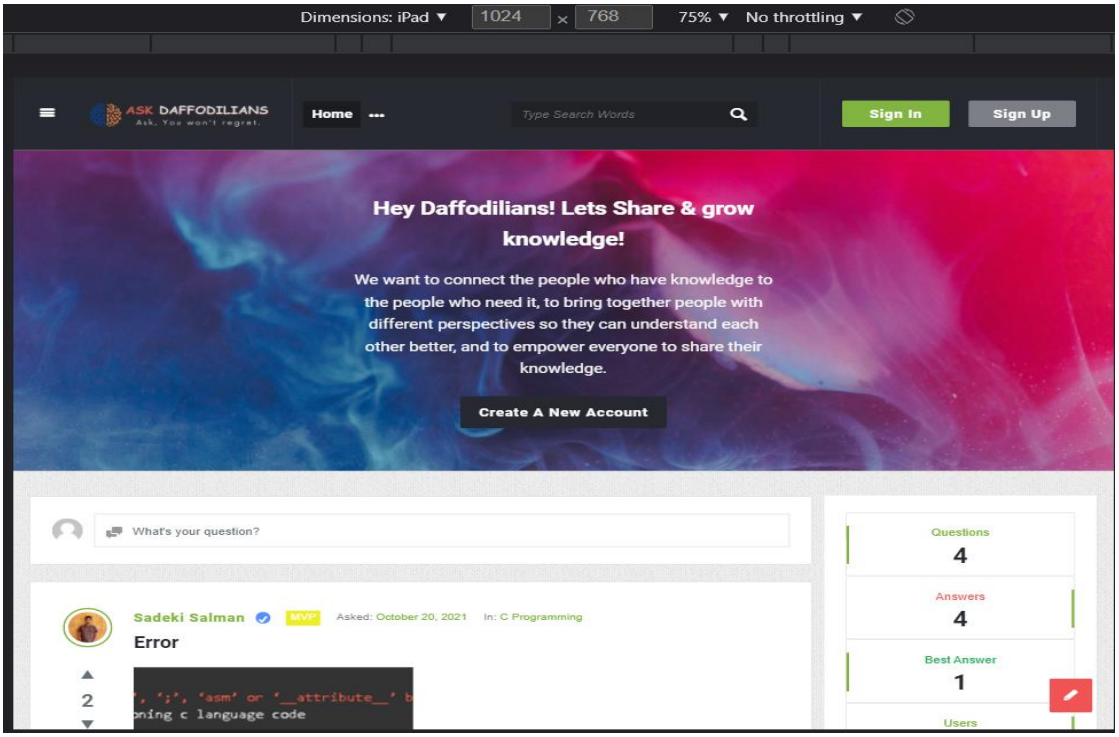


Figure 3.5.4: Responsive Design on iPad (1024x768 display)



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# CHAPTER 4

# DESIGN SPECIFICATION

## 4.1 Front-end Design

To implement our ideas, we decided to develop a website. There were many options available to develop a website. We have chosen WordPress to develop our website. While developing a website the most important part is designing the front-end. Front-end defines the interface of a website. For designing this front-end HTML & CSS are the most important part. HTML is a markup language that is used to build the core of a website. CSS is used to make the website colorful or stylish or interactive. We used HTML and CSS for our front-end design. As a scripting language, we used Javascript. We wanted to make our website responsive with some dynamic features. Our website's responsiveness is shown before in Figure 3.5.1, 3.5.2, 3.5.3, 3.5.4 To implement those dynamic features, we used Javacript. Besides these, we used some free and paid wordpress plugins to design the front-end. Wordpress offers us to build a web page easily by using some tools. And Elementor is the most popular page builder of them. We used this page builder to design our web page easily.

## 4.2 Back-end Design

We used WordPress to build our website. WordPress is a tool written with the programming language PHP. Since we have taken the help of WordPress on the website, PHP language has been used more for back end work. The most common server side executed scripting language is PHP, which is also open source. The most common task in the backend is to store information in a database and display it quickly when needed. We have used MySQL to execute these actions. Everything in our database, including data stores, deletes, displays, is executed through various MySQL queries. We have used a great feature of WordPress called CMS to manage various content in the back end of our website. In a word, we have used PHP, MySQL and WordPress CMS for the backend of our website.



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## 4.3 Interaction Design and User Experience

We decided to create a website to implement our idea. An important part of the website is its design. If the design is not good and beautiful then the user is reluctant to use it no matter how good the features are. Even if you want to make the design better, you can't use exaggerated colors. There are many guidelines in this regard. We designed our website with all of this in mind. Our interface is user friendly and beautiful. We have a combination of many interactive features on our website. Any user will get a good user experience on our website. We try to handle everything in such a way that the user gets the best experience in any situation at any time.

## 4.4 Implementation Requirements

As our website is Q&A based, there could be so many questions, answers as well as some other features like following, sending messages to others, profile updates and so much other data which is obviously stored in a database. And all these features have day-to-day use. For the stability of our website and data, We have to choose a better plan for hosting servers that can give us the best service. Because a better server ensures to update and protect our database. That was our main implementation requirement. For making interactive websites, we used wordpress CMS to be up to date. As well as we have used Elementor to build webpages which is an updated and fascinating web page builder. That was also our requirement to implement our idea most effectively.



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# CHAPTER 5

# IMPLEMENTATION AND TESTING

## 5.1 Implementation of Database

As our website is a Q&A based website, many people will post a lot here every day, many people will give messages to other users, they will follow someone, reply to posts and do many more things. Information against each job will be stored on our website. In this case, our database should be such that everyone can use our website beautifully and fluently. We have built our database in such a way that all these things can be handled easily. Users will get a good experience. Since our website is based on WordPress, PHP has been used more for our back-end. And we have used MySQL language for database management. Being open source, MySQL has some special advantages for which we can easily modify it for our own needs. We have nicely implemented everything in the database about how our data will be stored and where it will be seen. Using WordPress has made our database implementation much easier.

## 5.2 Implementation of Front-end Design

In addition to the proper implementation of all our needs on our website, we have ensured that our front end has a beautiful and user friendly interface. Our website has been built with a combination of several web pages where the user interface of each web page is user friendly. Now these UI and features will be explained below:

**Homepage:** The first page which will be visible after entering our website is Homepage. Our website is an open platform for everyone. That's why in this page the visitors will be able to see all the posts, polls, answers, post time, post category, users, user badge and a basic statistics of number of questions, answers, best answers and users. They will be able to perform search operations. A list will be visible in the navigation bar which is horizontally placed on the header. Every list item is linked with another web page of our website. Posting a question will be visible to them but they will not be able to post any question if they don't sign up as a user. For signing up there will be visible a button named



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“Sign Up”. By clicking that button they will become a user of this website. If the visitor is already registered then he will login to use all the features by clicking a button named “Sign In” which will be visible in the header section also. The visitor will also be able to see a button named “Create A New Account”. By clicking on this button they will be able to complete the registration. In the bottom-right corner there will be visible a button that can be used for post creation. For the signed in users this home page will remain the same. But names with profile functionality and notification logo button will replace the “Sign Up” and “Sign” In” button.  And messages with the “Create A New Account” button will be invisible to them. Users will be able to see all the posts using different sorting categories. They can see the posts depending on Most Visited, Most Voted, Random, No Answers and Polls. This section will be shown in the left section of the body part. This will be helpful for our teachers to find the not answered question easily to give the solutions. Our website is developed with a responsive design, that’s why this homepage will be visible with different layouts in different types of devices. Figure 5.2.1 shows the homepage before login and Figure 5.2.2 shows the home page after login.

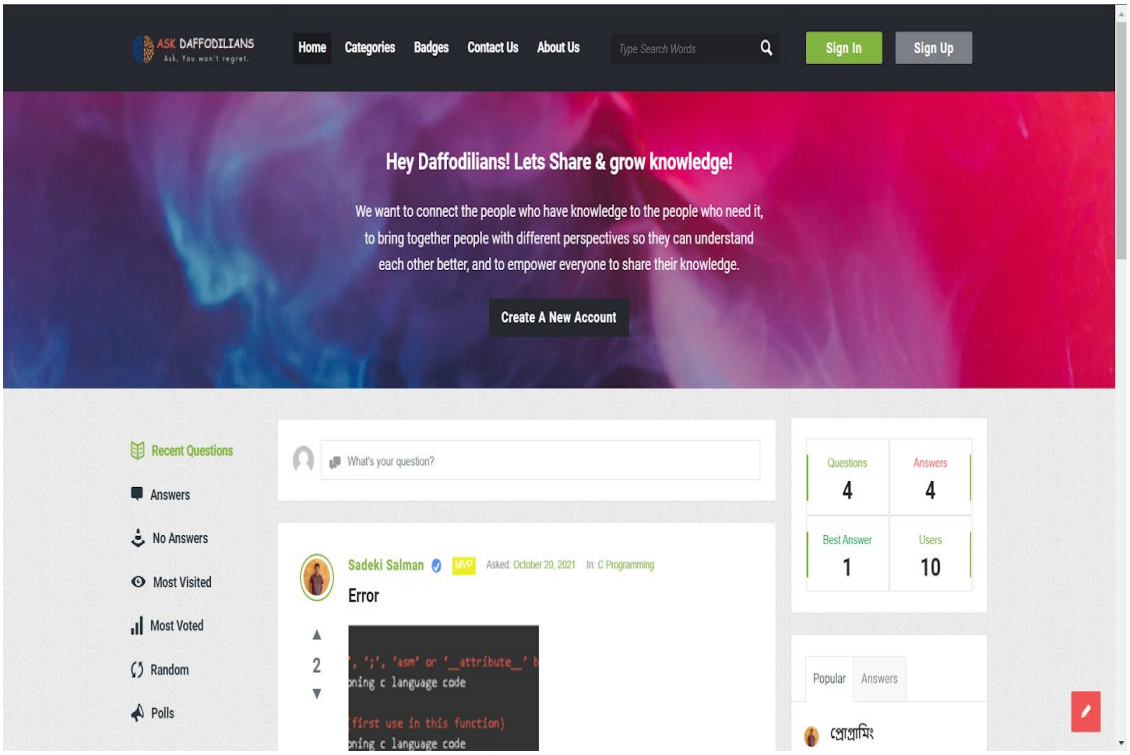


Figure 5.2.1: Homepage Before Sign In



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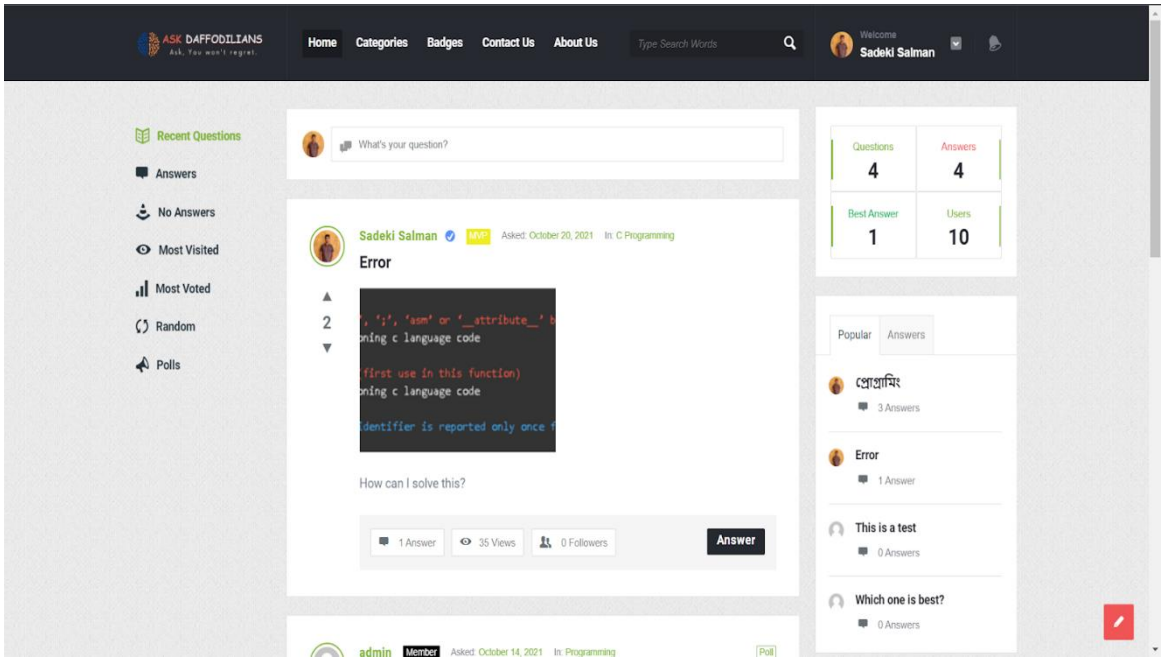


Figure 5.2.2: Homepage After Sign In

**Sign Up:** From the top right corner of the home page we will be able to see the Sign Up button. By clicking this button the Sign Up page will be visible to the visitors and open like a dialog box. Whose are not registered in the website they can register them by giving their information. To be registered a visitor will give Username, E-Mail and Password. By clicking the "Signup" button of this page they will be a registered user of our website. This page will be visible with different layouts on different devices. Figure 5.2.3 shows the Sign In page of our system.

**Sign In:** From the top right corner of the home page we will be able to see the Sign In button beside the Sign Up button. By clicking this button the Sign In page will be visible to the visitors and open like a dialog box. Whose are registered in the website they can log in to the website by giving their registered information. To Sign In they have to put in the right username or email and password. By clicking the "Login" button they will be logged in the website if they are already registered and able to perform all user features of our website. If any user forgot the password then they will be able to change the password by clicking "Forgot Password?" button. This page will also be visible with different layouts on different devices. Figure 5.2.4 shows the Sign In page of our system.



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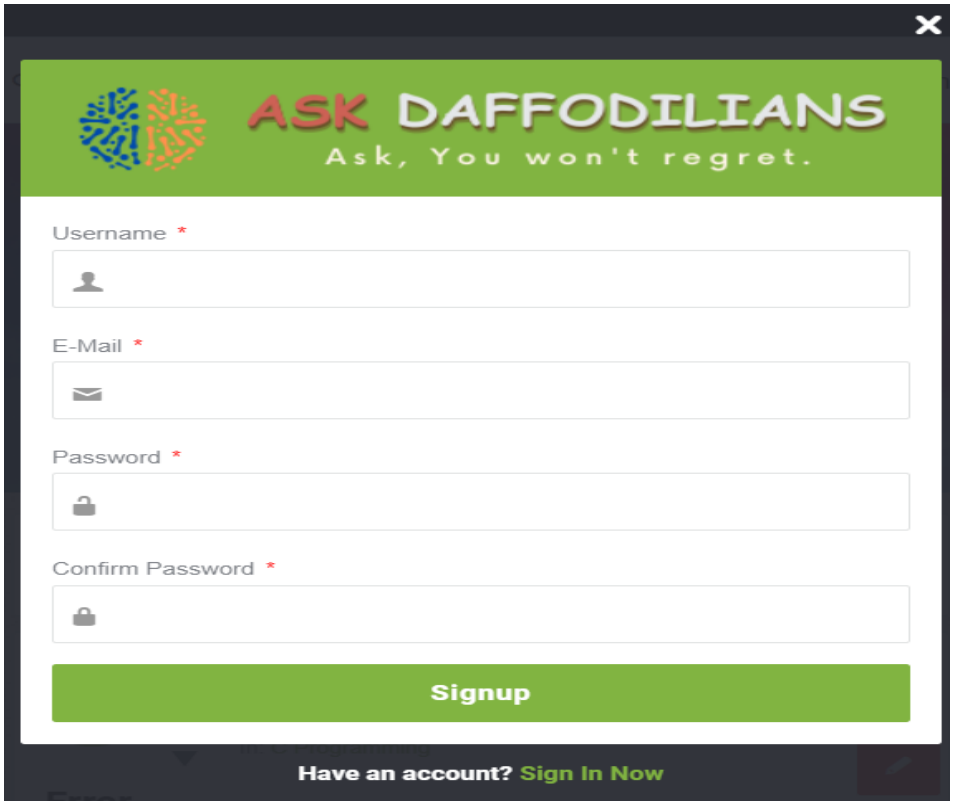


Figure 5.2.3: Sign Up Page

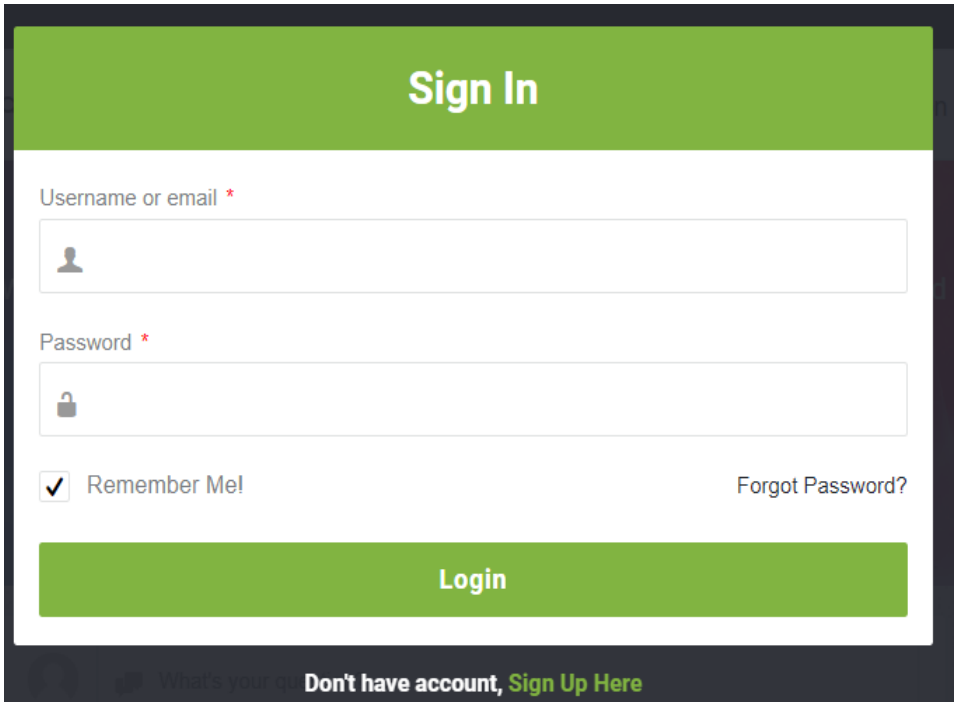


Figure 5.2.4: Sign In Page



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**Forgot Password:** From the ”Sign In” page, when we will click the “Forget Password?” button then the page like Figure 5.2.5 will be visible to the visitors and open like a dialog box. After entering the registered email when the user clicks the “Reset” button then the user will get a mail with a new password. After login with that password they can easily change their password from the User Profile page. This page will also be visible with different layouts on different devices.

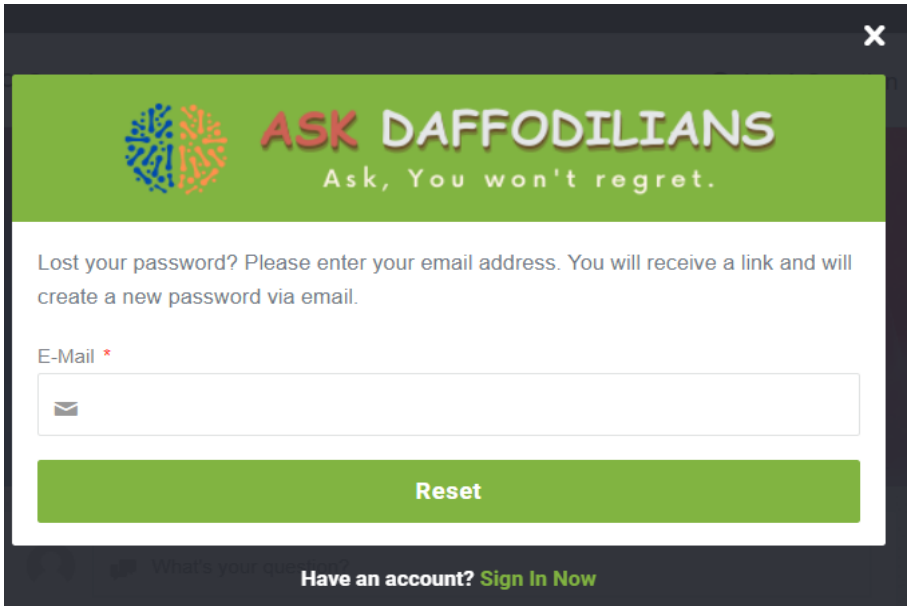


Figure 5.2.5: Forgot Password Box

**Ask A Question:** This is one of the key features of our website. Users will be able to post a question form two or three different places depending on their devices. One text field will be visible under the header section where users will see a text “What’s your Question?”. Another button will be visible in the bottom right corner of the page with a pen logo. By clicking one of these “Ask A Question” pages will be visible to them and open like a dialog box. From this page anyone can post their question. To post a question they have to input the Question Title, Category and Details. After checking in the terms and conditions option they can post their question by clicking on the “Publish Your Question” button. These are mandatory parts. Besides these they can input Tags, Images and Videos for their post. This page will also be visible with different layouts on different devices. Figure 5.2.6 shows the Ask A Question page of our system.



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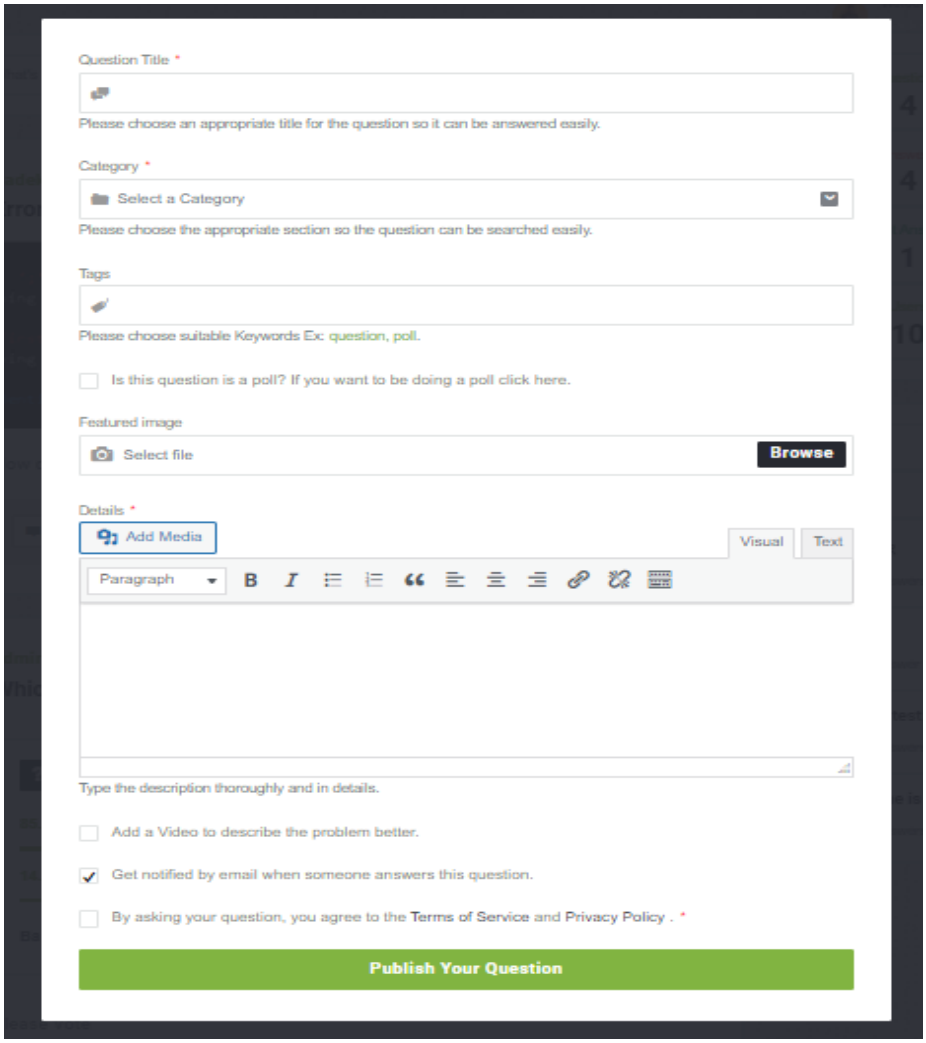


Figure 5.2.6: Posting a Question Page

**Answer:** When a Question will be posted that will be visible on the homepage and the users will be able to see the post creation time, tag, category, and the user who posted it. Users will be able to see the number of answers, views, likes and followers of the post. Answer button will be visible to them. Figure 5.2.7 shows how a question is visible to the users from the homepage. By clicking on the Answer button a section will come to the users end from where the users can leave an answer and can view all the answers. TO leave an answer a user can add text, media or image to post an answer by clicking Submit Button. The post creator can select the best answer here from all the given answers. Here the special feature is that all the users will be able to see the section situated above the Question section. In this section any one of two texts will be shown. If the post creator selects the



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best answer then “Answered” will be shown and if no best answer is selected then “In Process” will be shown. This will help any user to deal with a question wisely. Figure 5.2.8 shows the Leave an answer section and Figure 5.2.9 shows the In Process Section.

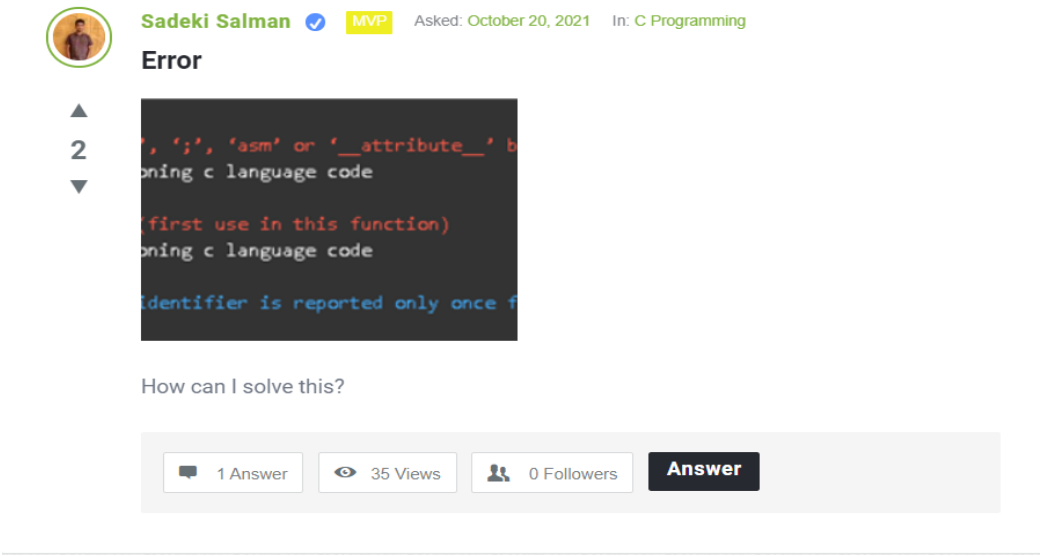


Figure 5.2.7: Post visibility format

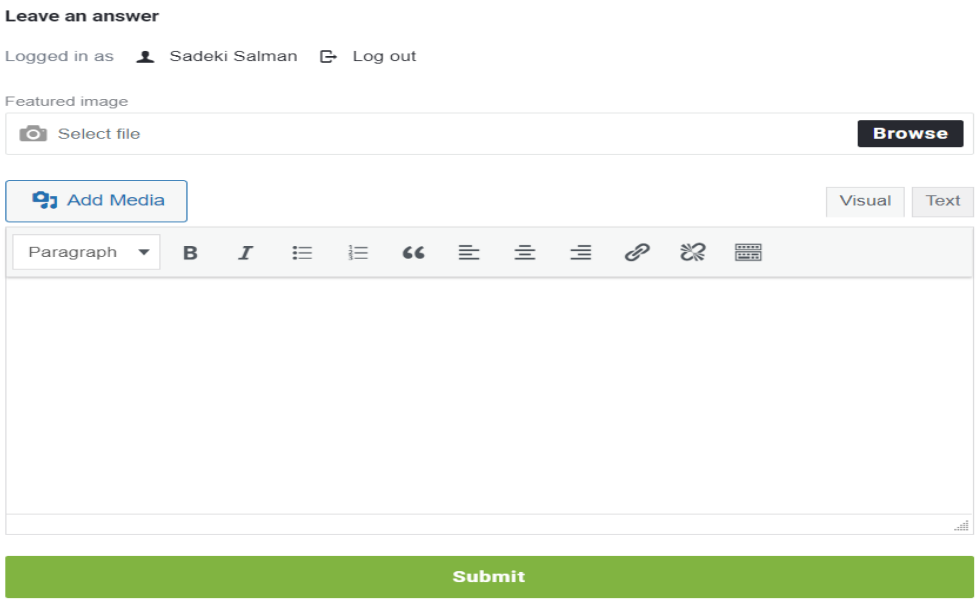


Figure 5.2.8: Leave an Answer Section of a post



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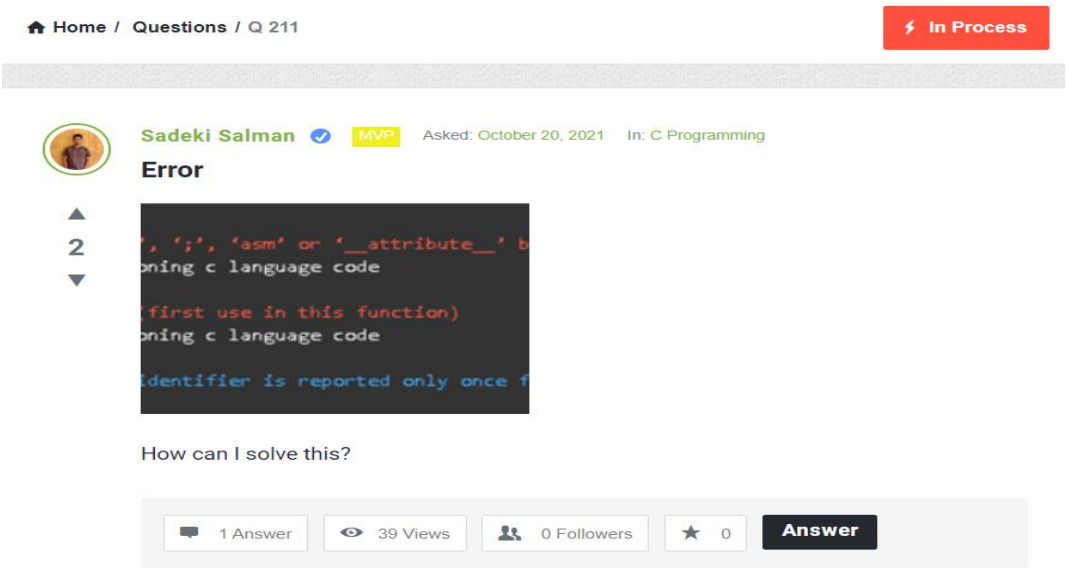


Figure 5.2.9: In Process option in Question

**Categories:** This page users will be able to see all the categories. These categories can be added by the admins only. Users will be able to see the category list by sorting with three types; sorting by Popularity, Followers and Name. They can find any category by searching. We can follow categories. For this, they will get notification for the next posts under those followed categories by them. The Figure 5.2.10 shows the Categories page of our website.

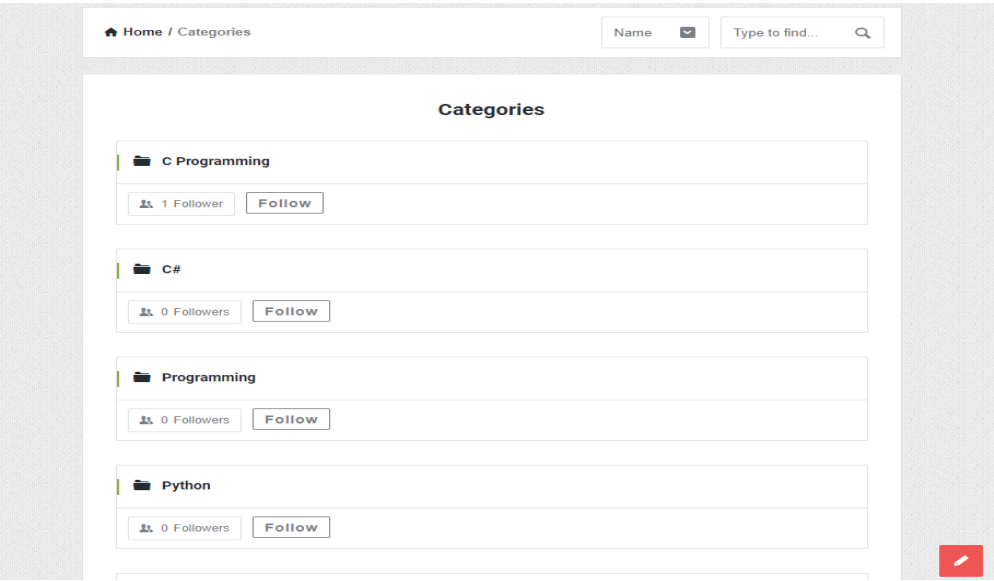


Figure 5.2.10: Categories Page



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**Badges:** One of our features is Assessment Level Up. Our users will be able to rank them up with getting points by performing different tasks. For Signing up, referring members, when your answer has been chosen as the best answer, adding new question, adding new answer, for social media linking up, when a post gets a vote and when an answer gets a vote the users will get some points. With these points they will get some Badges automatically which will be shown beside the Name of a user. These badges are Member, Member Pro, Elite Member, VIP Member, MVP, Legend and Teacher. When a teacher of our university will sign up then he/she will be given the badge "Teacher". All of these are listed in the Badges page. Figure 5.2.11 and Figure 5.2.12 shows the Badges Page.

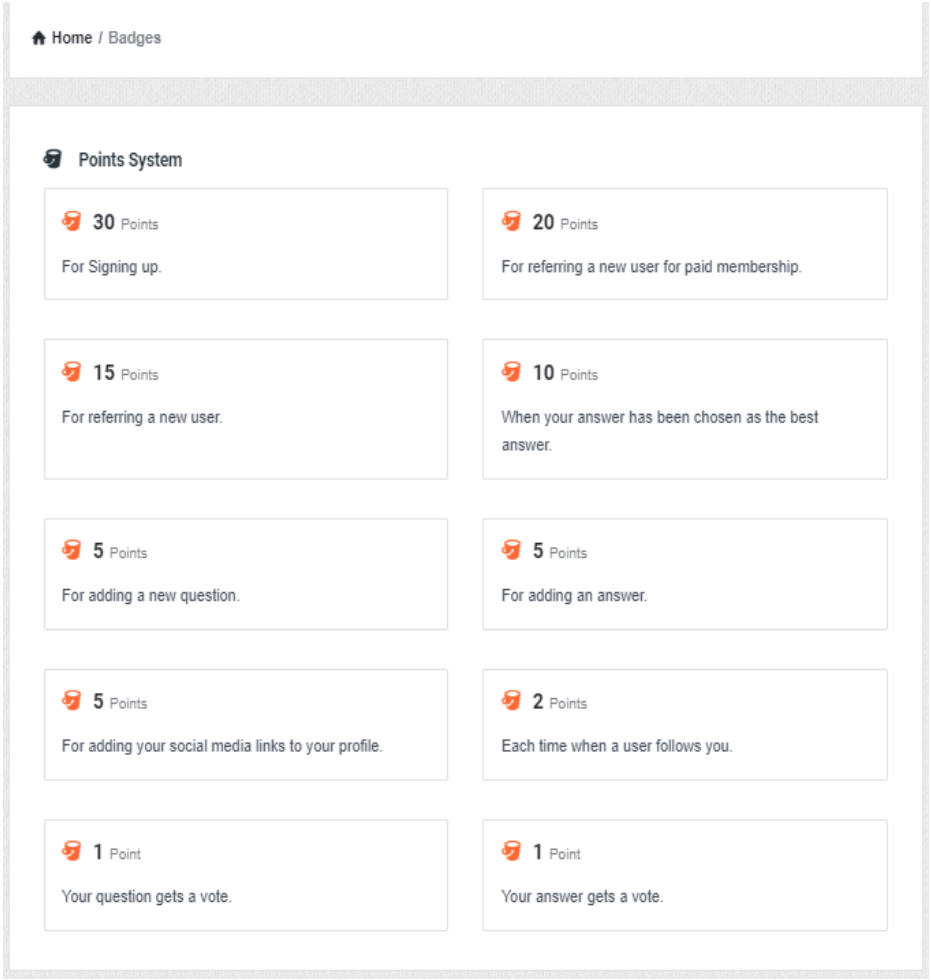


Figure 5.2.11: Points System section of Badges page



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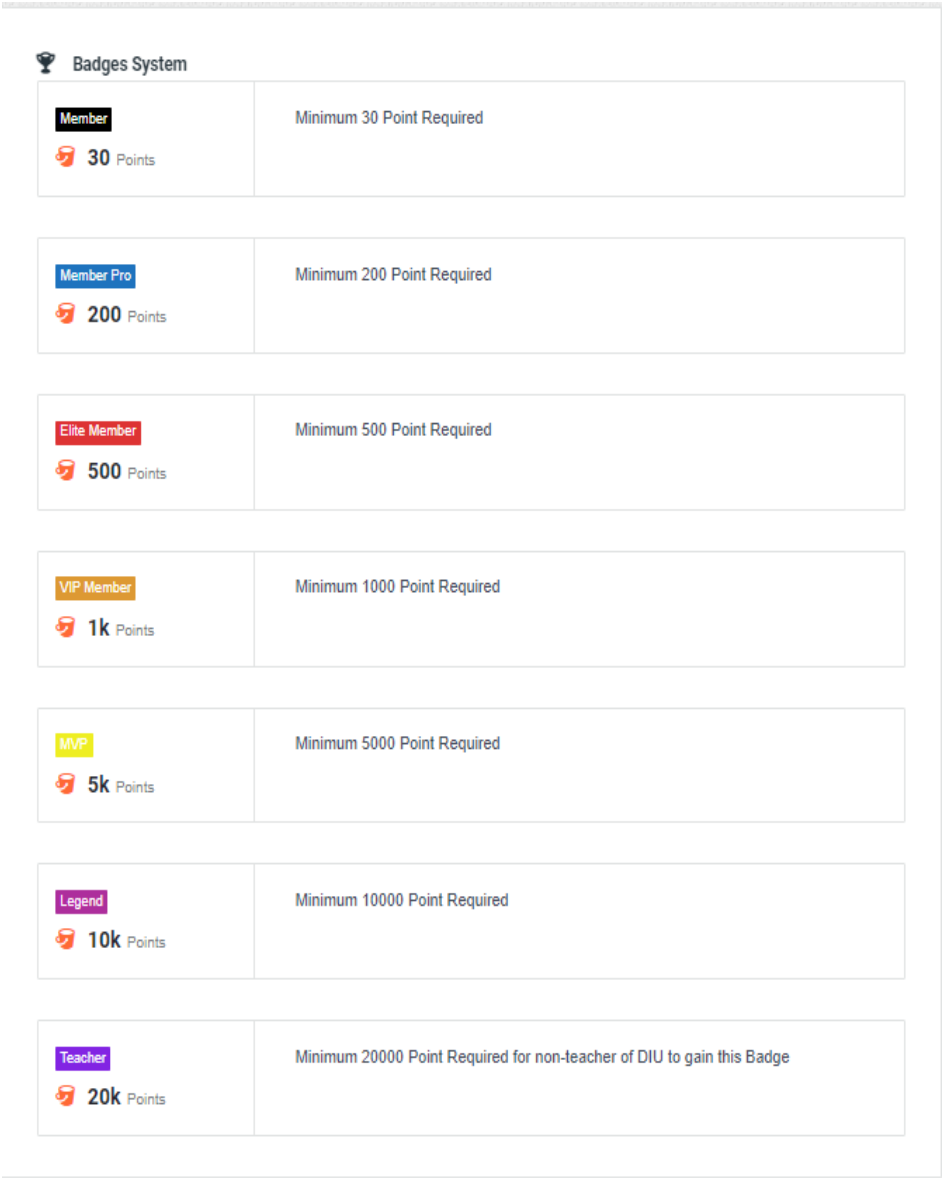


Figure 5.2.12: Badges System section of Badges page

**Contact Us:** While users will face any problems or they need to inform us about anything then they will go to the Contact Us page and can easily contact with us. They need to request for adding some new categories, that time they can use this page to inform us. To perform this task they have to put their Name, Email, Phone Number, Subject and the Message before clicking the Submit button. This page will also be visible with different layouts on different devices. Figure 5.2.13 shows the Contact Us page of our website.



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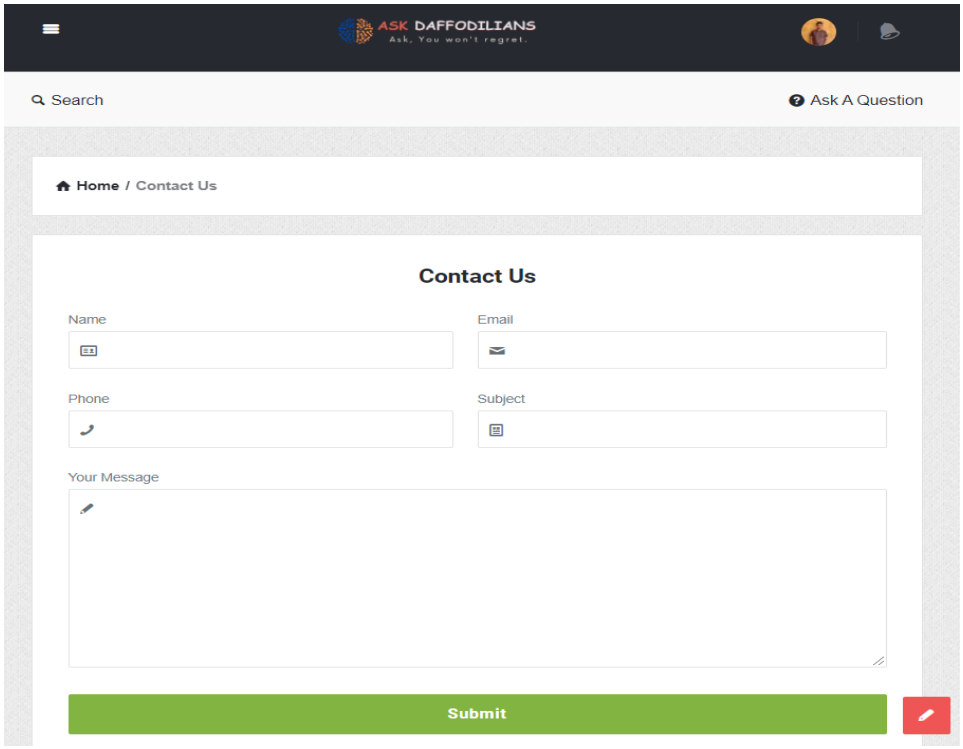


Figure 5.2.13: Contact Us page

**About Us:** We have included this page to meet with our team.

**Profile:** All the users will be able to see their own profile. From there they will be able to see all the details. When they will visit their own profile page then they will be able to show the profile picture, cover photo, address, phone number, gender, age,social media links, number of questions, answers performed by them, number of best answers, theri points, badge, followers and followings. Figure 5.2.14 shows the view of the profile page when a user wants to see his/her own. This page will also be visible with different layouts on different devices. We users will go to see the other users profile page then all of the listed features will be shown with some extra buttons. These are the Follow button, Ask button and Message button. By follow button they can follow that user, by Ask button they can personally ask them any question even in anonymously and by Message button they can message them personally. Here the important thing is, users can protect their data by setting the privacy settings. Figure 5.2.15 shows the view of the profile page when a user wants to see another user's profile. This page will also be visible with different layouts on different devices. Users can edit their profile by clicking the Edit Profile button.



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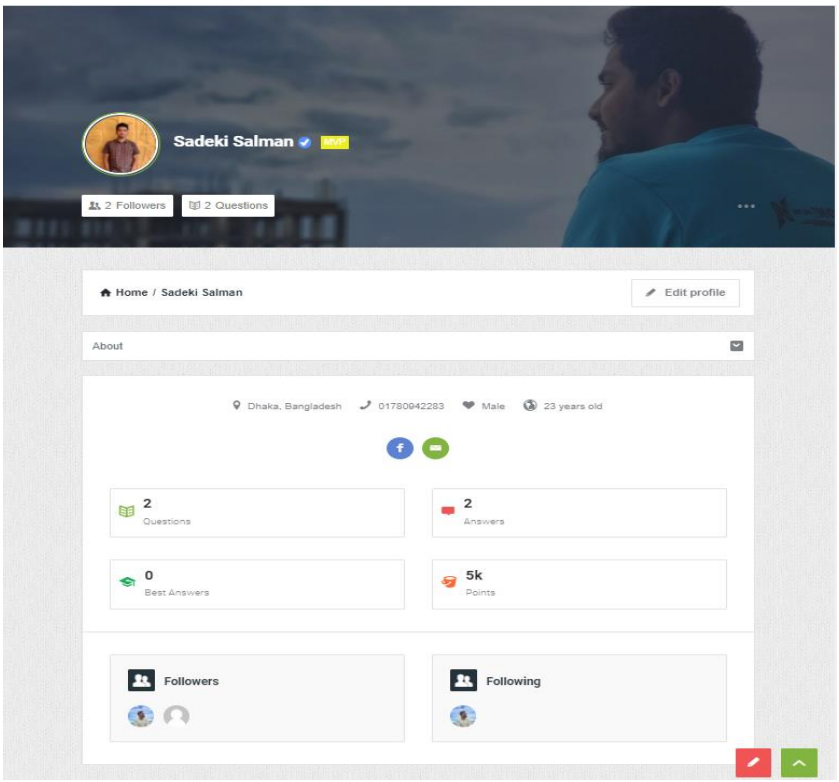


Figure 5.2.14: Own Profile page

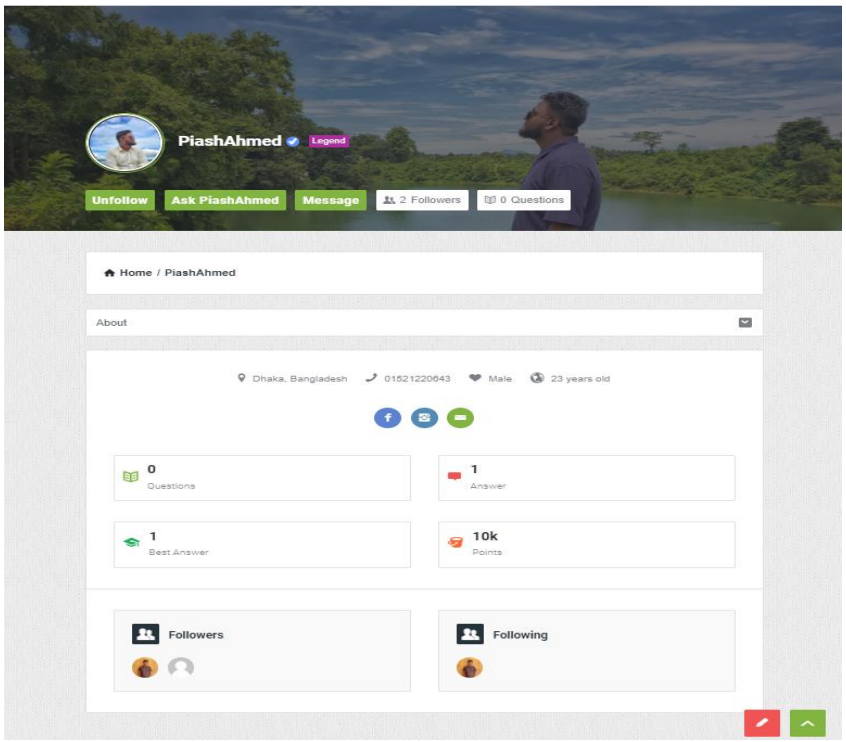


Figure 5.2.15: Other user's profile page



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**Edit Profile:** On Edit profile page users can add their details. They can add their Basic Details with First Name, Last Name, Display Name, Profile Picture, Cover picture, Country, City, Phone, Gender and Age. Email and Nickname will be filled up because a user gave these while being registered. Figure 5.2.16 shows the Basic Information Section from the Edit Profile page. They can also add their Personal Bio, Website link in the About Me section. Figure 5.2.17 shows the About Me Section from the Edit Profile page. In the last part we can add our Facebook, Twitter, Youtube, Vimeo, Linkedin, Instagram and Pinterest profile links and this section's name is Social Profile. Figure 5.2.18 shows the Social Profile Section from the Edit Profile page. This page will also be visible with different layouts on different devices.

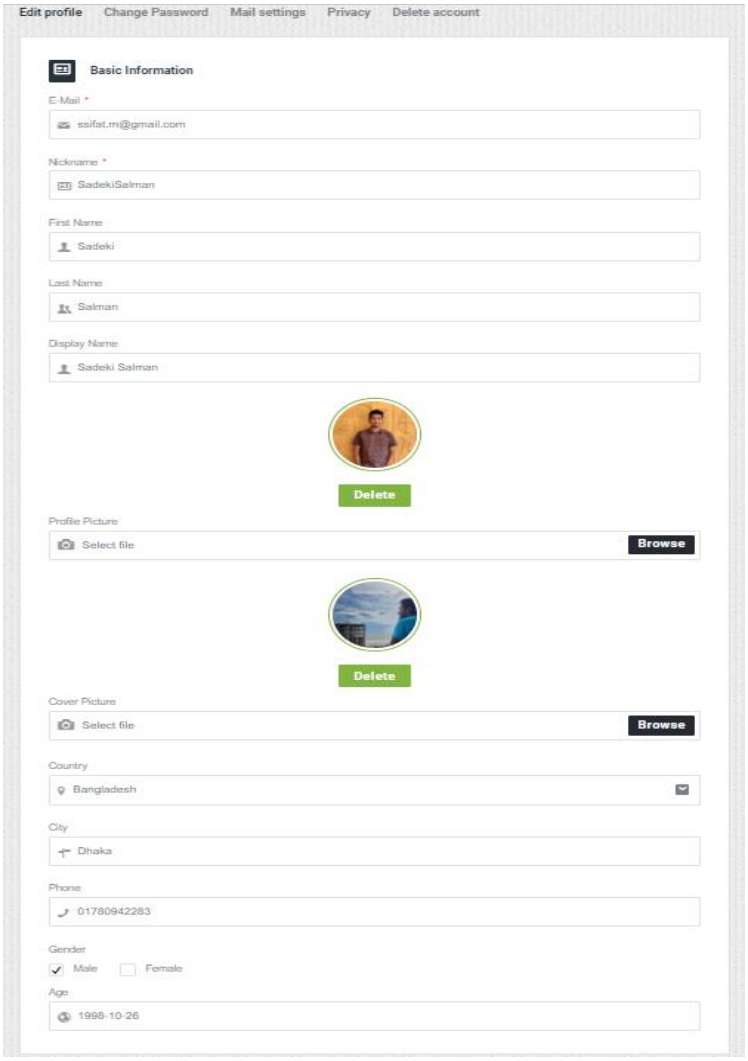


Figure 5.2.16: Basic Information section of Edit Profile page



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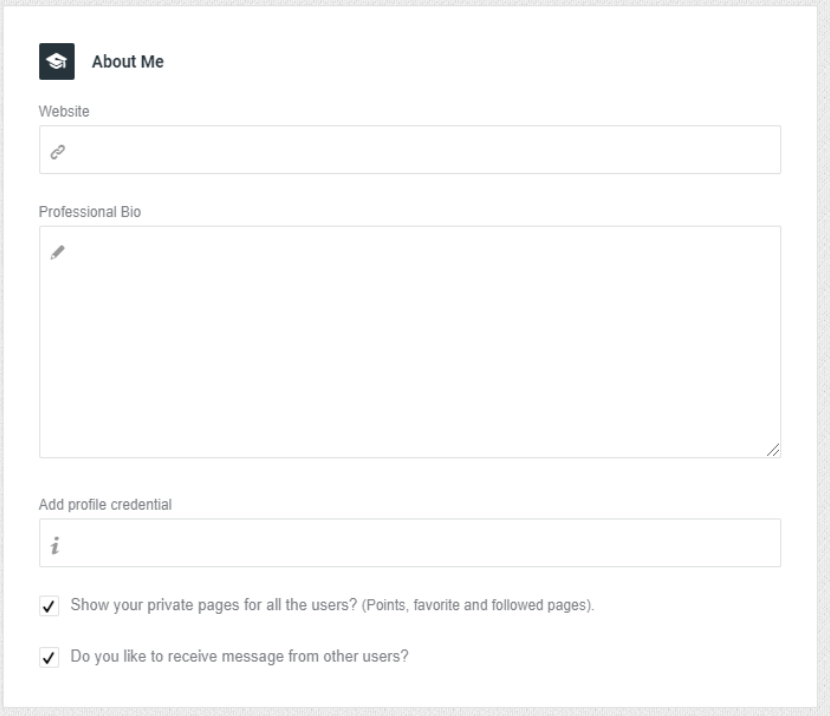


Figure 5.2.17: About Me section of Edit Profile page

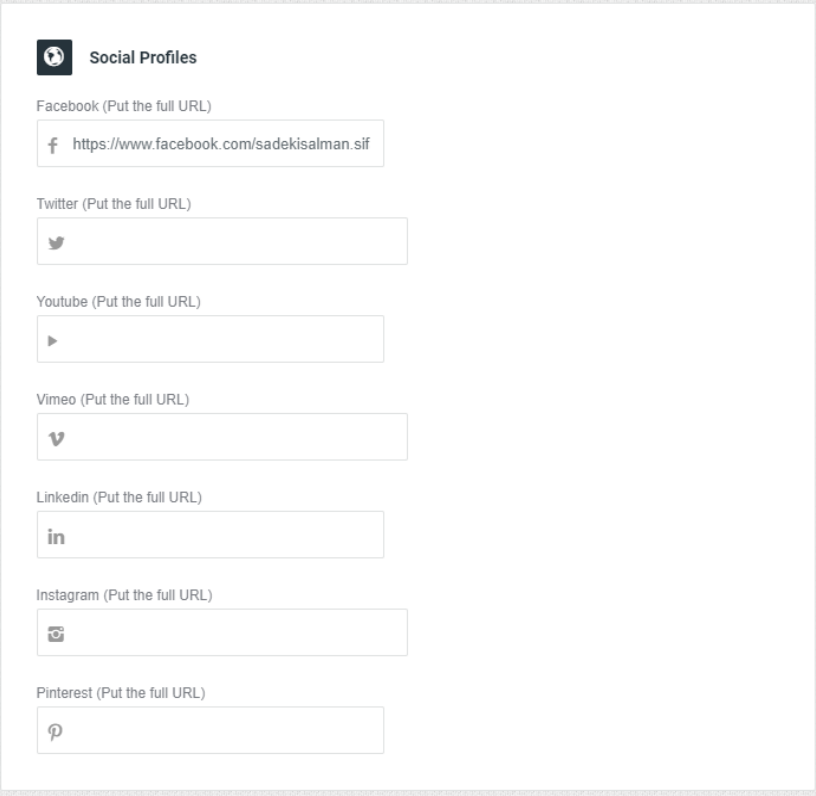


Figure 5.2.18: Social Profiles section of Edit Profile page



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**Privacy:** One of our important features is privacy. Users can protect their information by privacy setting. They can perform privacy actions on Mail, Country, City, Phone, Gender, Age, Social Links, Website, Biography and Profile credential. There we included three privacy options. These are

- Public
- All Members
- Only Me

After setting all the privacy settings they can change those by pressing the Save button. Figure 5.2.19 shows the Privacy page.

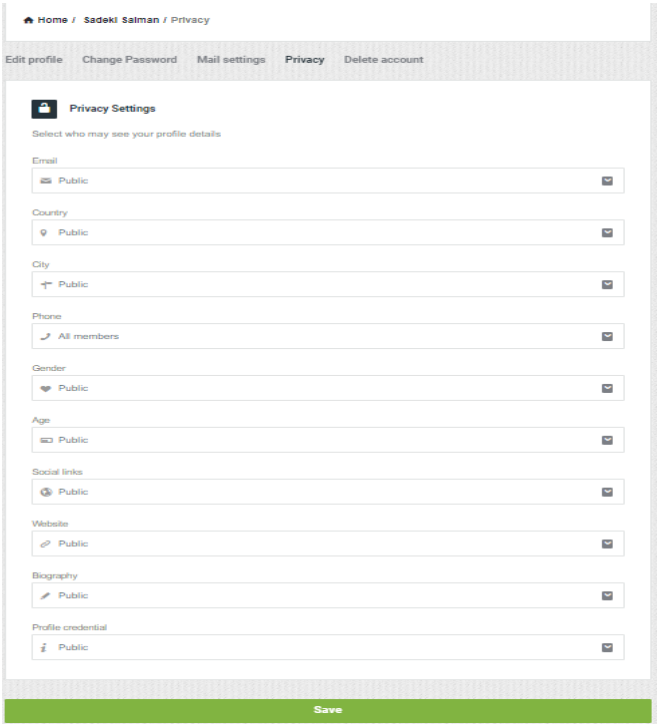


Figure 5.2.19: Privacy page

**Change Password:** Users are able to change their passwords whenever they need to change. If the users know their password then they have to Login first. Then they have to go to the Change Password page and then by putting the new password on New Password and Confirm Password Field they can change their password. By clicking the Save button this action will execute. If anyone needs to change the password but he/she doesn't know



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the password then he/she could be able to change the password from ”Forget Password?” button on the Sign In page. Figure 5.2.20 shows the Change Password page.

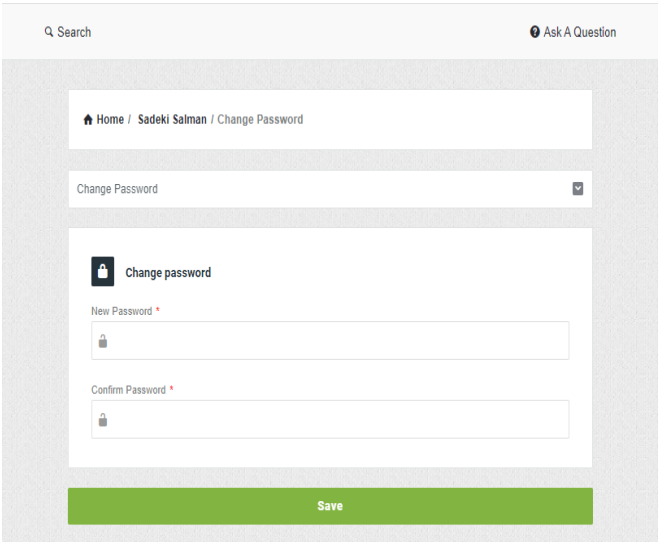


Figure 5.2.20: Change Password page

**Mail Setting:** Our users will get notification on different actions. Like from their posts, new messages, follows and so on. If anyone wants to get mail for these actions then there are only four options for getting notification on mail. For receiving new messages, while a new answer is added to the question, while a new answer is added to the question a user follows and when replies are added in answers, a user can get notification by mail. Figure 5.2.21 shows the Mail Setting page.

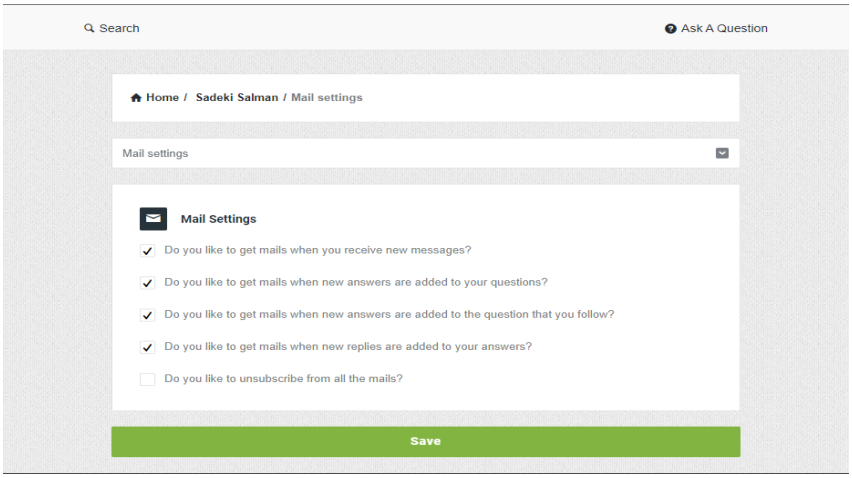


Figure 5.2.21: Mail Setting page



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**Delete Account:** If users want to delete their account permanently this option is available on our website. From the Delete Account page any user can perform this action. Figure 5.2.22 shows the Delete Account page of our website.

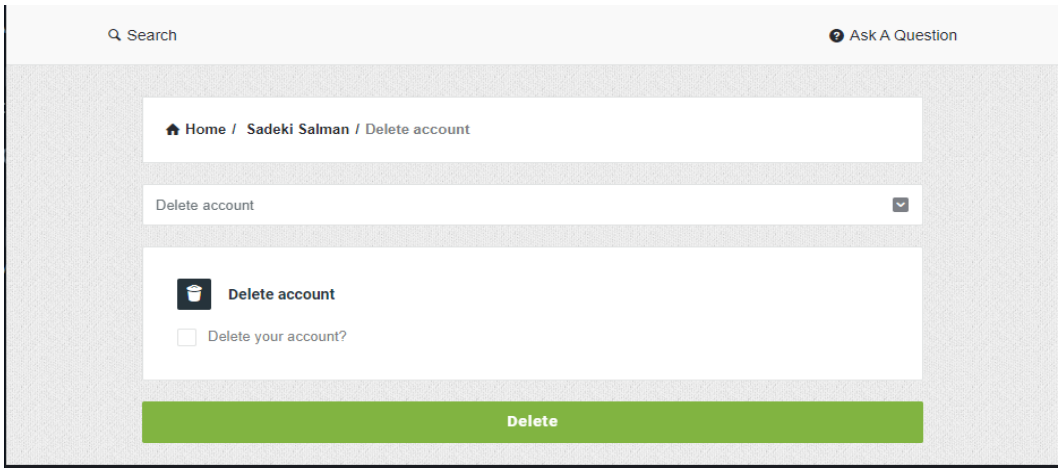


Figure 5.2.22: Delete Account page

**Notification:** In the header section of our website, there is available a logo of notification. By clicking this a box will open with notifications. Figure 5.2.23 shows the notification box. In the end of the box there is a section with text "Show All Notifications". If users click this text then the Notification page will be opened and they will be able to see all the notifications. Figure 5.2.24 shows the Notification page of our website.

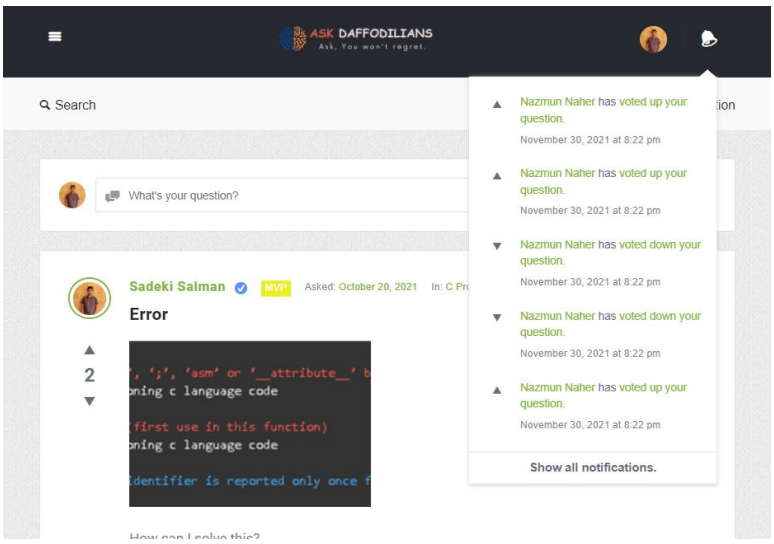


Figure 5.2.23: Notification Box



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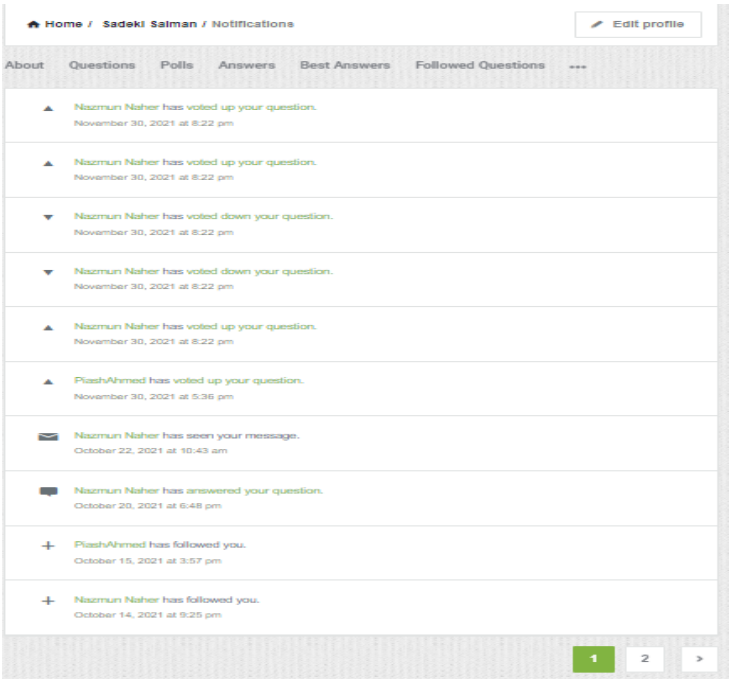


Figure 5.2.24: Notification page

**Admin Panel:** When an admin will login to the website then he/she will see a different view of our website. Figure 5.2.25 shows the view of the Admin Panel Dashboard page. From different sections of this page, the admin can perform any tasks whatever he/she wants to do. Figure 5.2 shows the view of the Homepage from an admin's perspective. Here he will be able to perform the tasks as like as a user.

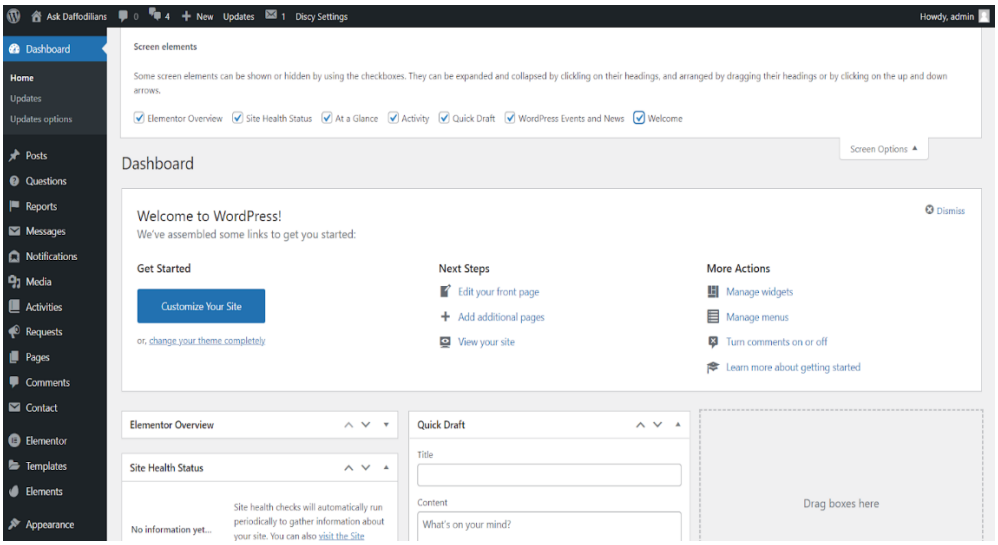


Figure 5.2.25: Admin Panel Dashboard page



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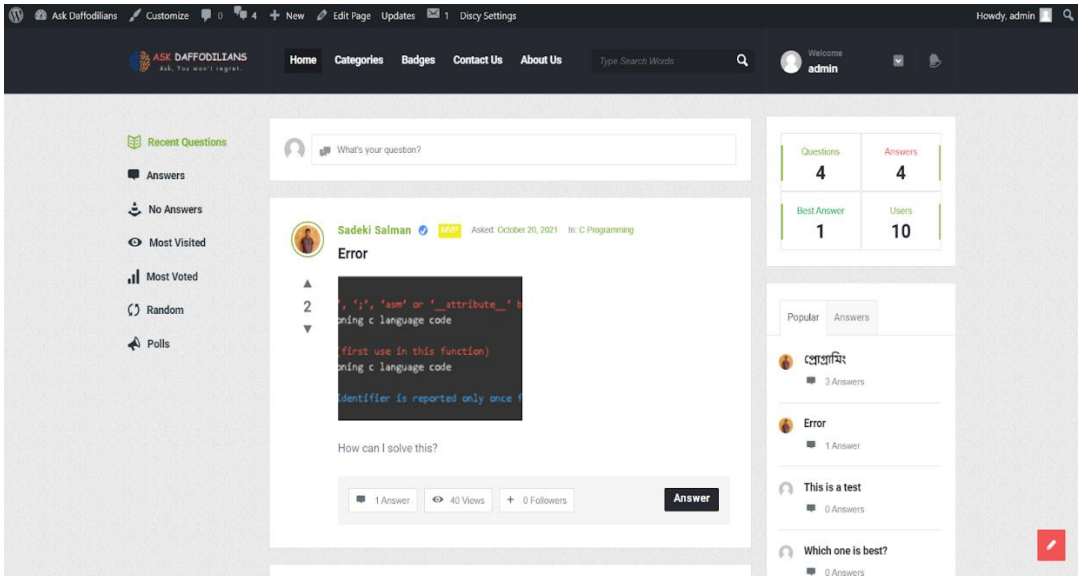


Figure 5.2.26: Homepage view from Admin's perspective

## 5.3 Testing Implementation

We followed the Agile model to develop our website. The fourth step of this model is Testing. It's an important step while developing a website. We must have to do testing before launching the website. We have also done the testing. We tested whether all our features are properly working or not. Table 5.3.1 shows different test cases of our website.

Table 5.3.1: Different Test Cases

| Test Case | Test Input | Expected Outcome | Obtained Outcome | Passed/ Failed |
|---|---|---|---|---|
| 1. User Login | User name Password | Login Successfully | Login Successfully | Passed |
| 2. User Login | Incorrect Name or Password | Login Failed | Login Failed | Passed |



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| | | | | |
|---|---|---|---|---|
| 3. Admin Login | User name Password | Login Successfully | Login Successfully | Passed |
| 4. Admin Login | Incorrect Name or Password | Login Failed | Login Failed | Passed |
| 5. User Signup | Username Email Password | Registered Successfully | Registered Successfully | Passed |
| 6. User Signup | Username Wrong Email Password | Enter Valid Email | Enter Valid Email | Passed |
| 7. Post a Question | Question Title Category Details | Question Posted Successfully | Question Posted Successfully | Passed |
| 8. Post a Question | Question Title Details | Fill The Required Field | Fill The Required Field | Passed |
| 9. Leave an Answer | Text | Answer Added Successfully | Answer Added Successfully | Passed |
| 10. Like on a Post | Click on like button | Count Increased | Count Increased | Passed |
| 11. Dislike on a Post | Click on dislike button | Count decreased | Count decreased | Pass |



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| | | | | |
|---|---|---|---|---|
| 12. Select Best Answer | Click on Select as Best Answer | Best Answer Selected | Best Answer Selected | Passed |
| 13. Search | Text | Related Result Found | Related Result Found | Passed |
| 14. Add Category | Category Name | Category Added Successfully | Category Added Successfully | Passed |
| 15. Follow Category | Click on Follow Button | Category Followed Successfully | Category Followed Successfully | Passed |
| 16. Sorting Posts | Click on Most Voted | Sorted Successfully depends on Most Voted | Sorted Successfully depends on Most Voted | Passed |
| 17. Sorting Category | Click on Popular | Sorted Successfully depends on popularity | Sorted Successfully depends on popularity | Passed |
| 18. Search Category | Category Name | Category Found | Category Found | Passed |
| 19. View Badges | Click on Badges Menu | View Badges Information | View Badges Information | Passed |
| 20. View Contact Page | Click on Contact Us Menu | View Contact Us Info | View Contact Us Info | Passed |



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| | | | | |
|---|---|---|---|---|
| 21. Contact With Admin | Name<br>Email<br>Phone<br>Subject<br>Message | Successfully Sent the message | Successfully Sent the message | Passed |
| 22. View About Us Page | Click on About Us Menu | View About Us Information | View About Us Information | Passed |
| 23. 2View Own Profile | Click on User Profile menu | View Profile Information | View Profile Information | Passed |
| 24. View others Profile | Click on View Profile Menu | View Profile Information | View Profile Information | Passed |
| 25. Follow User | Click on Follow Button | Successfully Followed | Successfully Followed | Passed |
| 26. Ask Question Personally | Question Title Details | Successfully Asked a question | Successfully Asked a question | Passed |
| 27. Ask Question Anonymously | Question Title Details Check on Anonymous option | Successfully Asked a question Anonymously | Successfully Asked a question Anonymously | Passed |
| 28. Send Message | Title Details | Successfully Send a Message | Successfully Send a Message | Passed |



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| | | | | |
|---|---|---|---|---|
| 29. Refer | Click on Referrals Menu | Successfully referral link created | Successfully referral link created | Passed |
| 30. Edit Profile | First Name<br>Last Name<br>Display Name<br>Profile Picture<br>Cover Picture<br>Country<br>Phone<br>Gender<br>Birth Date | Successfully Profile Updated | Successfully Profile Updated | Passed |
| 31. Change Password | New Password<br>Confirm Password | Successfully password Changed | Successfully password Changed | Passed |
| 32. Privacy Setting | Select Only Me | Successfully updated privacy | Successfully updated privacy | Passed |
| 33. Delete Account | Check on Delete Account | Account Deleted Successfully | Account Deleted Successfully | Passed |
| 34. View Points | Click on Points Menu | View Gained Points Information | View Gained Points Information | Passed |



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| | | | | |
|---|---|---|---|---|
| 35. View Notification | Click on Notification Icon | View Notification List | View Notification List | Passed |

Test case for the users is given below:

- **Test Case 1.1:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the homepage and opened the login page.

  **Input:** User has filled Username, Password and pressed the "Login" button.

  **Result:** User Successfully Logged in to the system.

- **Test Case 1.2:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User is logged in and pressed "Ask A Question" Button.

  **Input:** User has filled Question Title, Category, Details, checked in Terms of Service option and pressed the "Publish Your Question" button.

  **Result:** User Successfully Posted in a question to the system.

- **Test Case 1.3:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User is logged in and pressed "Answer" Button.

  **Input:** User has filled the Text Area and pressed the "Submit" button.

  **Result:** User Successfully added an answer to the question.

- **Test Case 1.4:**



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**Precondition:** Devices have to be connected with the Internet connection.

**Assumption:** User is logged in and opens his/her own posted question.

**Input:** User has pressed the “Select as best answer” button.

**Result:** User Successfully selected the best answer of the question.

- **Test Case 1.5:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User is logged in and opens his/her own posted question.

  **Input:** User has pressed the “Select as best answer” button.

  **Result:** User Successfully selected the best answer of the question.

- **Test Case 1.6:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User is logged in.

  **Input:** User has pressed the “Like” button of a post.

  **Result:** User Successfully liked the post and like count increased.

- **Test Case 1.7:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the home page.

  **Input:** User has clicked the “Most Visited” option from the list.

  **Result:** A sorted list depending on Most Visited is visible to the user.

- **Test Case 1.8:**



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**Precondition:** Devices have to be connected with the Internet connection.

**Assumption:** User has accessed the home page.

**Input:** User has clicked the "Most Visited" option from the list.

**Result:** A sorted list depending on Most Visited is visible to the user.

- **Test Case 1.9:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the home page and clicked the search icon.

  **Input:** User has entered a text and hit enter.

  **Result:** A list related with the text is visible to the user.

- **Test Case 1.10:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the home page.

  **Input:** User has pressed the Notification icon.

  **Result:** Notification box is visible to the user.

- **Test Case 1.11:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the home page.

  **Input:** User has pressed the Categories Menu.

  **Result:** A list with categories is visible to the user.

- **Test Case 1.12:**



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**Precondition:** Devices have to be connected with the Internet connection.

**Assumption:** User has accessed the categories and logged in.

**Input:** User has pressed the Follow button.

**Result:** A category is followed by the user.

- **Test Case 1.13:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the categories page and logged in.

  **Input:** User has pressed the Follow button.

  **Result:** A category is followed by the user.

- **Test Case 1.14:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the categories.

  **Input:** User has selected the Popular option.

  **Result:** A category list based on popularity is visible to the user.

- **Test Case 1.15:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the categories and clicked on the search option.

  **Input:** User has entered a category name and hit enter.

  **Result:** Searched Category is visible to the user.

- **Test Case 1.16:**



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**Precondition:** Devices have to be connected with the Internet connection.

**Assumption:** User has accessed the homepage.

**Input:** User has pressed the Badges menu.

**Result:** Badges details are visible to the user.

- **Test Case 1.17:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the homepage.

  **Input:** User has pressed the Contact Us menu.

  **Result:** Contact details page is visible to the user.

- **Test Case 1.18:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the Contact Us page.

  **Input:** User has entered Name, Email, Phone, Subject, Message and pressed the Submit button..

  **Result:** A message is sent to the admin.

- **Test Case 1.19:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the homepage.

  **Input:** User has pressed the About Us menu.

  **Result:** Our team members' information page is visible to the user.



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- **Test Case 1.20:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the homepage.

  **Input:** User has pressed the About Us menu.

  **Result:** Our team members' information page is visible to the user.

- **Test Case 1.21:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the homepage.

  **Input:** User has pressed the View Profile button.

  **Result:** User Profile is visible to the user.

- **Test Case 1.22:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has accessed the User Profile page and logged in.

  **Input:** User has pressed the Ask button.

  **Result:** Asking a question box is visible to the user.

- **Test Case 1.23:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the user profile page and pressed the Ask button.

  **Input:** User has entered Question Title, Details, checked in the Privacy Policy option and pressed the Ask button.



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**Result:** Successfully asked a question to the user.

- **Test Case 1.24:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the user profile page and pressed the Ask button.

  **Input:** User has entered Question Title, Details, checked in the Privacy Policy option, checked in anonymous option and pressed the Ask button.

  **Result:** Anonymously asked a question to the user.

- **Test Case 1.25:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in and hover on user's profile picture.

  **Input:** User pressed the Follow button.

  **Result:** Successfully Followed the user.

- **Test Case 1.26:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in and accessed the user profile page.

  **Input:** User pressed the Message button.

  **Result:** Sending Message box is visible to the user.

- **Test Case 1.27:**

  **Precondition:** Devices have to be connected with the Internet connection.



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**Assumption:** User has logged in, accessed the user profile page and clicked the message button.

**Input:** User has entered Message Title, Details and pressed the "Send Your Message" button.

**Result:** Message is sent to the user successfully.

- **Test Case 1.28:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the user profile page and clicked the message button.

  **Input:** User has entered Message Title, Details and pressed the "Send Your Message" button.

  **Result:** Message is sent to the user successfully.

- **Test Case 1.29:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the own profile page and clicked the Edit Profile button.

  **Input:** User has entered First Name, Last Name, Display name, Country, City, Phone, Birthdate, uploaded the profile picture, cover picture and selected the gender and then pressed the "Save" button.

  **Result:** Profile Updated Successfully.

- **Test Case 1.29:**

  **Precondition:** Devices have to be connected with the Internet connection.



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**Assumption:** User has logged in, accessed the own profile page and clicked the Edit Profile button.

**Input:** User has entered First Name, Last Name, Display name, Country, City, Phone, Birthdate, uploaded the profile picture, cover picture and selected the gender and then pressed the “Save” button.

**Result:** Profile Updated Successfully.

- **Test Case 1.30:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the own profile page.

  **Input:** User has pressed the “Change Password” menu.

  **Result:** Password Change Page is visible to the user.

- **Test Case 1.31:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the own profile page and clicked the Edit Password menu.

  **Input:** User has entered password two times and then pressed the “Save” button.

  **Result:** Password Changed Successfully.

- **Test Case 1.32:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the own profile page.

  **Input:** User has pressed the “Mail Setting” menu.



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**Result:** Mail Setting page is visible to the user.

- **Test Case 1.33:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the own profile page and clicked the mail setting menu.

  **Input:** User has checked in the options and pressed the Save button.

  **Result:** Mail Setting is updated successfully.

- **Test Case 1.34:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the own profile page. .

  **Input:** User has pressed the Privacy menu.

  **Result:**Privacy page is visible to the user.

- **Test Case 1.35:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the own profile page and pressed the Privacy button.

  **Input:** User has selected the Only Me option for all the personal details and pressed the Save button.

  **Result:** User's personal details are not visible to the other users.

- **Test Case 1.36:**

  **Precondition:** Devices have to be connected with the Internet connection.



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**Assumption:** User has logged in, accessed the own profile page.

**Input:** User has pressed the Delete Account menu.

**Result:** Delete account page visible to the user.

- **Test Case 1.37:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the own profile page and pressed in the Delete Account menu.

  **Input:** User has checked in the "Delete your account?" option and pressed the Delete button.

  **Result:** Account is deleted successfully.

- **Test Case 1.38:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** Admin has logged in, accessed the Dashboard.

  **Input:** Admin has clicked in the "Add Category" menu.

  **Result:** Add category page is visible to the admin.

- **Test Case 1.39:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** Admin has logged in, accessed the Dashboard and pressed the Add Category menu.

  **Input:** Admin has filled the Category name and pressed the "Save" button.

  **Result:** Category added Successfully.



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- **Test Case 1.40:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** Admin has logged in, accessed the Dashboard and pressed the User menu.

  **Input:** Admin has checked the verify option and pressed the “Save” button.

  **Result:** User is verified successfully.

- **Test Case 1.41:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** Admin has logged in, accessed the Dashboard and pressed the User menu.

  **Input:** Admin has pressed the “remove” button for a user.

  **Result:** User is removed successfully.

- **Test Case 1.42:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed his/her own post.

  **Input:** User has pressed the “Delete” button.

  **Result:** Post Deleted Successfully.

- **Test Case 1.43:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed his/her own post.

  **Input:** User has pressed the “Edit” button.



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**Result:** Edit Question page is visible to the user.

- **Test Case 1.44:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in, accessed the homepage.

  **Input:** User has pressed the “Follow Icon” of a post.

  **Result:** Post is followed successfully and number of followers increased.

- **Test Case 1.45:**

  **Precondition:** Devices have to be connected with the Internet connection.

  **Assumption:** User has logged in and pressed on his/her own name.

  **Input:** User has pressed the “Log Out” menu.

  **Result:** User is successfully logged out.

## 5.4 Test Results and Reports

There may have been some minor bugs but our website passed successfully in all the test cases. The test case result is shown in Figure 5.4.1.

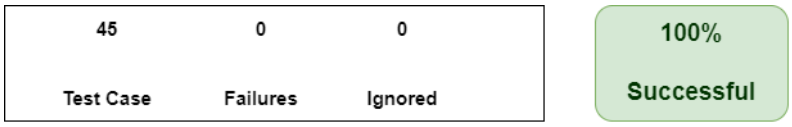


Figure 5.4.1: Unit Test Result



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# CHAPTER 6

# IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY

## 6.1 Impact on Society

Understanding and communication between seniors and juniors are usually a long way off in the early days of university life. That may be due to newness or skepticism. Sites like social media were not enough to cover this distance. Because social media is full of diversified content. They are not focused on education or sincerity. In this age of technological advancement, there was a need for a site where education would be focused and that would help bridge the gap between seniors and juniors. That is why even if we face different problems now, we will not need to communicate with anyone physically. Anyone can ask any question on our platform without any hesitation, no matter what the category. If those problems are solved in this way, day by day, the social relations between the senior and junior students at our university will continue to develop, which will set milestones for the future. Since we are all comfortable enough using the internet, this website will be very easy for us to use. As well as being an open platform, it is possible to have a category-wise discussion of research-related issues that we would be proud to use to create the next glorious chapter of our university. It will be socially effective for us.

## 6.2 Impact on Environment

Our website is eco-friendly. Because, since it is an educational and Q&A website, such issues can be discussed here, which has a bad effect on the environment. Besides, it is possible to discuss in detail what to do about it. Moreover, excessive use of the internet is always to be avoided. It is hoped that open discussion of research papers on this subject will bring benefits to the environment and social life. Because good education will have a beautiful effect on the environment, and one of the goals of this platform is to emphasize the importance of this good education, which will have a long-term effect on our environment. Our website can revolutionize users, which will have a huge impact on the environment around us. Planting such trees is a social and eco-friendly activity. When someone starts talking about this, different suggestions from different people can bring us



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environmental success. Therefore, the environmental impact of the website is expected to be positive.

## 6.3 Ethical Aspects

In this age of the Internet, the emphasis is on ethical matters. This is because the various data of its users may be private to them. If it falls into the hands of someone else, they may be personally harmed. That's why our website places so much importance on privacy. so that the user can enjoy his or her visit to the websiteIn addition, the content management of our site is monitored so that no one can post or share anything on any site related to unethical work. But in all cases, there is minimal potential for non-ethical work, so we can discuss this in a category on the website that can play a significant role in our mental development and keep us free from non-ethical work. Moreover, monitoring measures have been taken to remove extremist ideology or vindictive content. Hopefully, we will have 100% success in controlling unethical activities.

## 6.4 Sustainability Plan

Newer versions of the website builder and the necessary frameworks or languages are constantly coming up for a specified period of time in case of technological bugs, feature updates, or design updates. Everything needed to build our website has been used up to date. We are also always ready to take the necessary steps in case new updates come out later, so that users do not face any problems. Our website is built around our university, and we are determined to make the necessary changes in the future. Moreover, we are always ready to fix the technical bugs so that the users of the website never face any problems.



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# CHAPTER 7

# CONCLUSION AND FUTURE SCOPE

## 7.1 Discussion and Conclusion

The whole aspect of teaching is based on the proper paradigm of message dissemination. To get ourselves acquainted with the background of how knowledge and skill get synchronized into our system suitable us of the structure. This knowledge may help tutors, lecturers and educators better understand how teaching programs should be designed and executed for faster learning and learning with ease. We wish to outline several aspects of our Q&A website which is specifically customized to help out CSE students studying at DIU. There are no platform at DIU where the students get Q&A website and where they get answered to the questions posed. Students can easily able to interact with the teachers concerned; dedicated anybody helping out students shall be rewarded with credits or points. Searching like Stack Exchange, or Quora Digest, this site will have Q&A platform. The students will at first search for the material they are seeking to find. There will be post area where they will write their question. If they find the right answer to the questions posed, they will pose their question through a post. The answer may be given by any member of the cohort, anybody who knows the answer to the question. The answer may also be given by a TA, a senior student, a junior lecturer, a senior lecturer, or the professor concerned. There is no restriction to the number of answers. One answer may be better than the others. If the answer is exactly the answer expected by the questioner, then they may show acceptance. There would be space for comments, likes and dislikes. Positive and constructive comments will encourage the commenter to review more material to help out. There will be a two-fold motivation, 1) acquiring points, badges, 2) making a positive contribution to the community. Students often have to spend a good deal of time searching for support material on the internet. With the advent of IT, this website may be able to offer a memorable experience for all time to come. A lot of time will be saved if some such website is available in its full form. Students do not have to struggle and waste time searching for materials that do not exist. When they obtain help, their study at DIU will be a pleasurable experience. This is only the beginning. Who knows, one day DIU may be



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able to run 100% engineering programs to reach out to students around the country, and our project will be the precursor of this dream.

## 7.2 Scope for Further developments:

The purpose of this discussion is to know how learning takes place. So we may better equip ourselves to implement how learning methodologies can be made easy to grasp and made easily accessible to slower students. There must be room for slower students to produce brilliant successes There will also be appointments can be requested by a questioner for a specified office hour; the time can be arranged for any specific course-related topics to be answered. The appointment can be a course tutor, or any other dedicated personality able to offer voluntary help. When the site grows to take the shape of a fuller form offering 100% online engineering courses, this website may grow into a site which may draw in students from home and abroad to generate revenue for DIU contributing to the national economy.



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