

**DEVELOPMENT OF INFORMATION SYSTEM FOR INFORMATION SHARING IN
BANGLADESH**

BY

TONMOY CHOKROBORTI

ID: 173-15-10318

AND

HRIDOY SINGHA

ID: 173-15-10325

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

Supervised By

Ms. Sharmin Akter

Lecturer

Department of CSE

Daffodil International University

Co-Supervised By

Ms. Most. Hasna Hena

Assistant Professor

Department of CSE

Daffodil International University



DAFFODIL INTERNATIONAL UNIVERSITY

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APPROVAL

This Project/internship titled “DEVELOPMENT OF INFORMATION SYSTEM FOR INFORMATION SHARING IN BANGLADESH”, submitted by Tonmoy Chokroborti , Hridoy Singha ID No: 173-15-10318 , 173-15-10325 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 06-01-2022.

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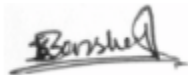
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Faculty of Science & Information Technology

Daffodil International University



Internal Examiner

Dr. Sumit Kumar Banshal (SKBL)

Assistant Professor

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Daffodil International University



Internal Examiner

Md. Abbas Ali Khan (AAK)

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Department of Computer Science and Engineering

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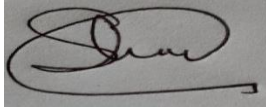
Industry Promotion Expert

LICT Project, ICT Division, Bangladesh

DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Ms.Sharmin Akter , 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.

Supervised by:



Ms. Sharmin Akter

Lecturer

Department of CSE

Daffodil International University

Co-Supervised by:

Ms. Most Hasna Hena

Assistant Professor

Department of CSE

Daffodil International University

Submitted by:

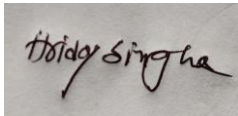


Tonmoy Chokroborti

ID: 173-15-10318

Department of CSE

Daffodil International University



Hridoy Singha

ID: 173-15-10325

Department of CSE

Daffodil International University

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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.

ABSTRACT

Bangladesh is a developing country, but we still have numerous challenges in our everyday lives, such as damaged roads in our neighborhood, broken municipal systems, dirty roads and dust, water problems, gas problems, electrical problems, and security issues, to name a few. As a result, anyone in our country can use this site to post about their difficulties to the government, ministry, or local area counselor for action to be taken. People can also offer their suggestions on how to proceed and plan any development projects. People can thus be included in government planning. People will also receive immediate services that they require. My concept is to create a web platform for Bangladesh's improved growth, as well as to supply residents with information. This web application makes it simple to access government services. In today's world, a digital platform can play the greatest guidelines for solving any problem. Our country is experiencing an increasing number of challenges each day; yet, our government officials are unconcerned about our concerns and will not create a platform that would address all of them at once. Our country is becoming increasingly digital. As a result, we need more optimized digital services in our digital country. I am a citizen of this country, yet when I go outside in my neighborhood, in old Dhaka, and outside of Dhaka, the roads are broken, and the people are the ones who suffer the most, with dust and dirt everywhere. So I'd like to make my country resemble American countries. And the ideal forum for resolving these issues will be a website. People in our country are unable to obtain immediate assistance when they require it, so by adopting my website, I will be able to provide a greater option for obtaining immediate assistance. I adore my country and envision it as a beautiful, healthy, and environmentally friendly metropolis. My project's deliverable or features will be a list of difficulties faced by anyone living in the area, emergency services, daily life critical services, and a social networking element allowing users to discuss a variety of issues. Follow, message, and comment features are all available. The police, fire, and ambulance services all have an emergency helpline option. On the homepage, there is a news portal. Login and registration for government administrators, as well as their statements and solutions to any problems that have been raised. citizen There will be a vote option for any proposed development site to see how many people desire it in order to

tally public opinion, build a locality proposed design by any group of people in any region. My solution is unique and effective.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Bangladesh is a developing country, yet we still have numerous challenges in our daily lives, such as damaged roads in our neighborhood, broken municipal systems, polluted roads and dust, water problems, guess problems, energy problems, and security issues, to name a few. As a result, every citizen of our country can use this site to communicate their difficulties to the government, ministry, or local area counselor for resolution. People can also offer suggestions on how to proceed with any development projects and assist planning. As a result, citizens can participate in government planning. People will also be able to receive immediate assistance that they require. My plan is to create a digital platform that will aid Bangladesh's development and give individuals with information This web application makes it simple to access government services. In today's world, a digital platform can play the greatest guidelines for solving any problem. Our country is experiencing an increasing number of challenges each day; yet, our government officials are unconcerned about our concerns and will not create a platform that would address all of them at once. Our country is becoming increasingly digital. As a result, we need more optimized digital services in our digital country. I am a citizen of this country, yet when I go outside in my neighborhood, in old Dhaka, and outside of Dhaka, the roads are broken, and the people are the ones who suffer the most, with dust and dirt everywhere. So I'd like to make my country resemble American countries. And the ideal forum for resolving these issues will be a website. People in our country are unable to obtain immediate assistance when they require it, so by adopting my website, I will be able to provide a greater option for obtaining immediate assistance. I adore my country and envision it as a beautiful, healthy, and environmentally friendly metropolis. My project's deliverable or features will be a list of difficulties faced by anyone living in the area, emergency services, daily life critical services, and a social networking element allowing users to discuss a variety of issues. Follow, message, and comment features are all available. The police, fire, and ambulance services all have an emergency helpline option. On the homepage, there is a news portal. Login and registration for

government administrators, as well as their statements and solutions to any problems that have been raised.

1.2 Motivation

I am a citizen of this country, yet when I go outside in my neighborhood, in old Dhaka, and outside of Dhaka, the roads are broken, and the people are the ones who suffer the most, with dust and dirt everywhere. So, I'd like to make my country resemble American countries, and a website would be the ideal platform to accomplish this. People in our country are unable to obtain immediate assistance when they require it, so by adopting my website, I will be able to provide a greater option for obtaining immediate assistance. I adore my country and envision it as a beautiful, healthy, and environmentally friendly metropolis.

1.3 Objectives

To alleviate people's suffering on the roadways. To provide water, gas, electricity, and other essential services where they are required. To provide immediate assistance to persons in need, such as police assistance, fire rescue, and safety rescue. To facilitate people's participation in development. To improve people's quality of life. In development projects, people can also contribute ideas.

1.4 Expected Outcome

People will receive a web application that will propose solutions to their city's challenges. When people require quick assistance, they will receive it. Can participate in the country's ongoing development. With the one-click feature, they can solve their locality's electricity, gas, wasa, and minor utility issues. On the news platform, anyone can submit development suggestions for any development projects.

CHAPTER 2

BACKGROUND

2.1 Introduction

My goal is to create a web platform for Bangladesh's improved growth, and to make government services more accessible to residents through this web application. In today's world, a digital platform can play the greatest guidelines for solving any problem. Our country is experiencing an increasing number of challenges each day; yet, our government officials are unconcerned about our concerns and will not create a platform that would address all of them at once. People in our country are unable to obtain immediate assistance when they require it, so by adopting my website, I will be able to provide a greater option for obtaining immediate assistance. I adore my country and envision it as a beautiful, healthy, and environmentally friendly metropolis.

2.2 Related Works

1. Bangladesh's Public Sector e-Service Development: Status, Prospects, and Challenges
2. A sector-by-sector examination of the role of information in rural development in Bangladesh.
3. Bangladesh's e-government applications: current state and problems
4. Bangladesh government websites were analyzed and rated for accessibility.
5. Bangladesh's e-governance initiatives

2.3 Comparative Studies

1. Bangladesh's Public Sector e-Service Development: Status, Prospects, and Challenges , The rapid advancement of information and communication technology (ICT) has created a plethora of opportunities for the delivery of efficient and cost-effective public services. Bangladesh began to prioritize eService development in the national agenda in 2007, including the transmission of service information through websites. The research employs both survey and interview methods. A survey of 44 government employees who work on e Government implementation in various ministries and central government agencies. Finally, the report makes some recommendations for dealing with important issues.

2. A sector-by-sector examination of the role of information in rural development in Bangladesh. Bangladesh's government website was subjected to an accessibility audit and evaluation. For education, commerce, and work, the internet is the most crucial component of our lives. Accessibility can benefit the aging population as well as people who want to contribute to

society. The paper clings to their two possessions. First, it outlines accessibility guidelines, and second, it is a government-evaluated can analysis.

3. Bangladesh's e-government applications: current state and problems, Bangladesh's e-government initiatives. It is the digital age, and information and communication technology (ICT) is critical to the socioeconomic well-being of the country's citizens. Today, information and communication technology (ICT) plays a critical role in government. E-governance allows government to operate more quickly, deliver better services, and respond to transparency and accountability demands. As a result, it can assist the government in a variety of ways.

4..Analysis and evaluation of Bangladesh government websites' accessibility. In Bangladesh, the role of information in rural development is critical. For a digital Bangladesh, our country needs to revive information about concentrated rural activities. It covers a wide range of topics, including agriculture, health, education, the market, and management. Rural people have the potential to propel the country's socioeconomic development ahead. It also recognizes the importance of information in rural development.

5. Initiatives in e-governance in Bangladesh, E-government applications Bangladesh's current situation and challenges There are numerous online sites dedicated to the advancement of education status and activities, all of which are open to the public at all times. It can assist the educational system as well as other e-services. Students can learn a lot by exploring the website and learning about education. It is also beneficial to Bangladesh's government organizations. People can use their phones or computers to look up any educational topic. As a result, this is the most crucial aspect of learning.

2.4 Scope of the Problem

The problem's main focus is on finding simple concepts and facts. We are constantly working to make our application more user-friendly. If we want to make this application easier, we'll need to gather data from several Bangladeshi ministries. However, persuading them to provide information is extremely difficult.

2.5 Challenges

Requirement: The most difficult task is to complete the app's design so that the user would voluntarily utilize it. When building this website, we occasionally run into bugs when the version changes. There are occasions when there is an error that is difficult to detect and repair. It will take a few hours.

Poor Communication: This project is being developed by two of us. It is quite difficult to get together and handle every stage of the project challenge in the event of a pandemic. To make this endeavor a success, effective communication is critical.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Model

The business process model is a method of expressing a system's workflow in a methodical way. The data flow image is a graphical representation of data tracking across an information system. The movement of data through a system to complete certain functions in a business is depicted in logical data flow diagrams. To connect our system processes and business activities, we can connect our DFD and business process diagram.

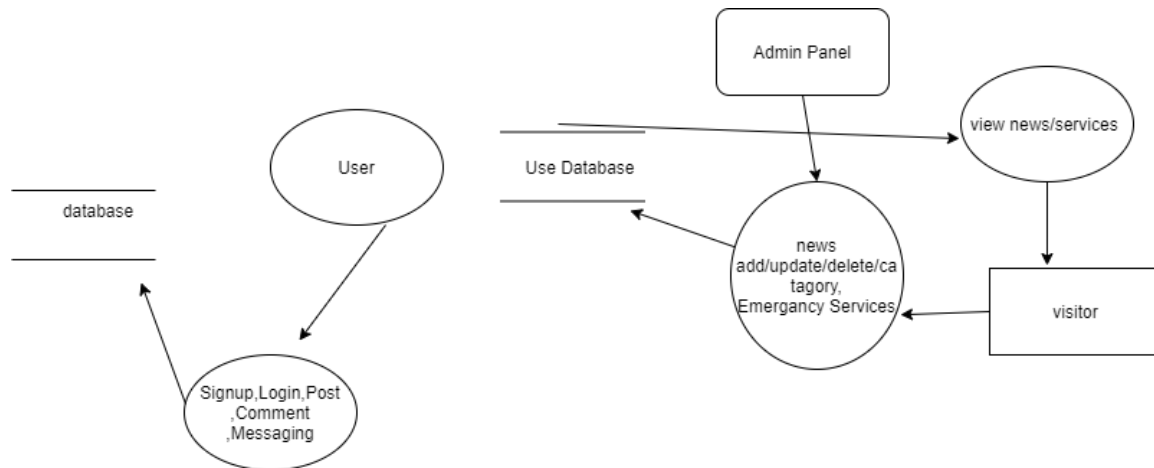


Figure 3.1: Data Flow Diagram

3.2 Requirement Collection and Analysis

Requirement analysis and collection are the two most important aspects of development. There are two sorts of development needs. The first is a functional demand, and the second is a nonfunctional requirement. Functional activities are those that software performs. Nonfunctional criteria help to define an application's personality.

Functional Requirement: There are numerous functional needs in our project. Authentic login, sign up, post something, comments, messaging, admin login, admin posts, form submission of reports, and emergency service databases are all available. All of these functional elements were introduced for the benefit of our users.

Nonfunctional Requirement: The amount of user-friendly UI we utilize usually determines nonfunctional requirements. The user interface should be easy to use and provide a great user experience.

3.3 Model and Description of Use Case

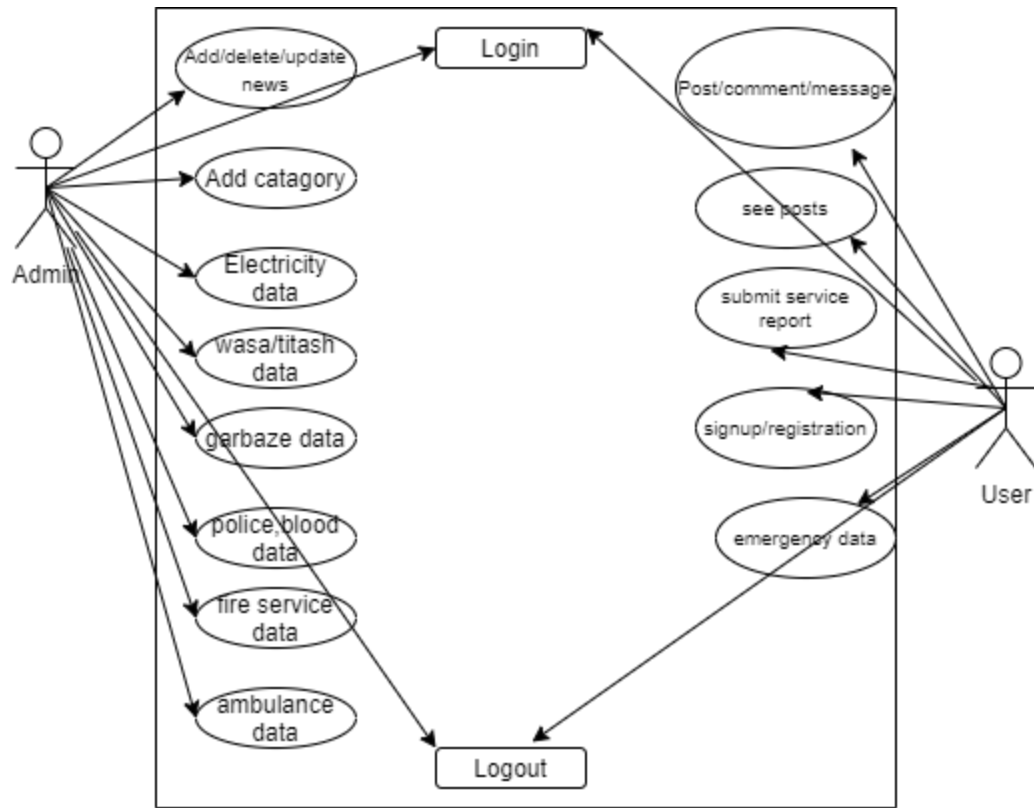


Figure 3.2: Use Case Diagram for the System

3.4 Logical Data Model

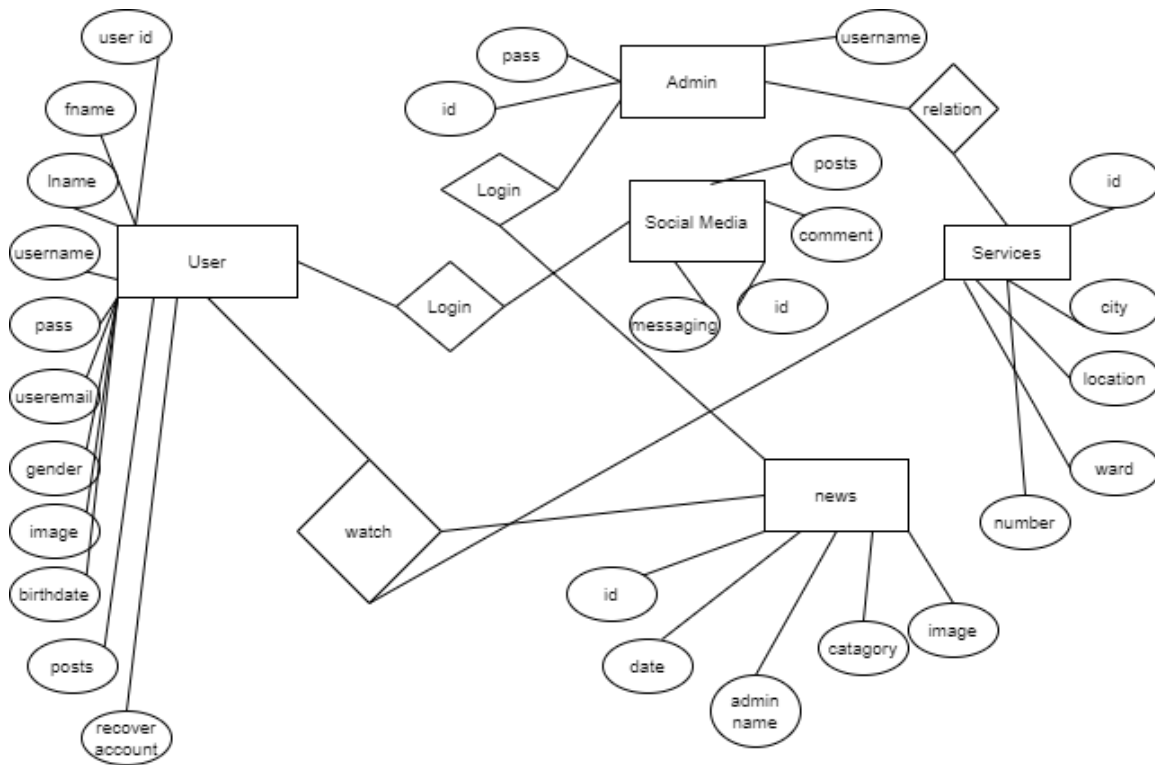


Figure 3.3: Entity Relationship Model

3.5 Design Requirements

Each system or piece of software must take into account some concerns that have been replicated in the overall system architecture. The project's design will differ from one system to the next. We're looking for some points for the following design requirements:

Efficient: It's critical that the website loads quickly on any device. We improved the performance and bug-free nature of our website. This website's design is quite light.

User-Friendly: This website has a highly user-friendly interface. People will be able to simply access all of the functions. The layouts are all extremely tastefully adorned, and the design is really gentle.

CHAPTER4: Design Specification

4.1 Front-end Design

We used HTML5, CSS, and Bootstrap for the front-end design. We started by sketching up all of our user interfaces. After that, we began front-end design utilizing HTML, CSS, and Bootstrap templates. I tried the greatest user interfaces for my website using Bootstrap because it had extremely beautiful interfaces. The importance of front-end design is that it increases people's desire to visit a website. As a result, creating a beautiful and user-friendly website is a business strategy.

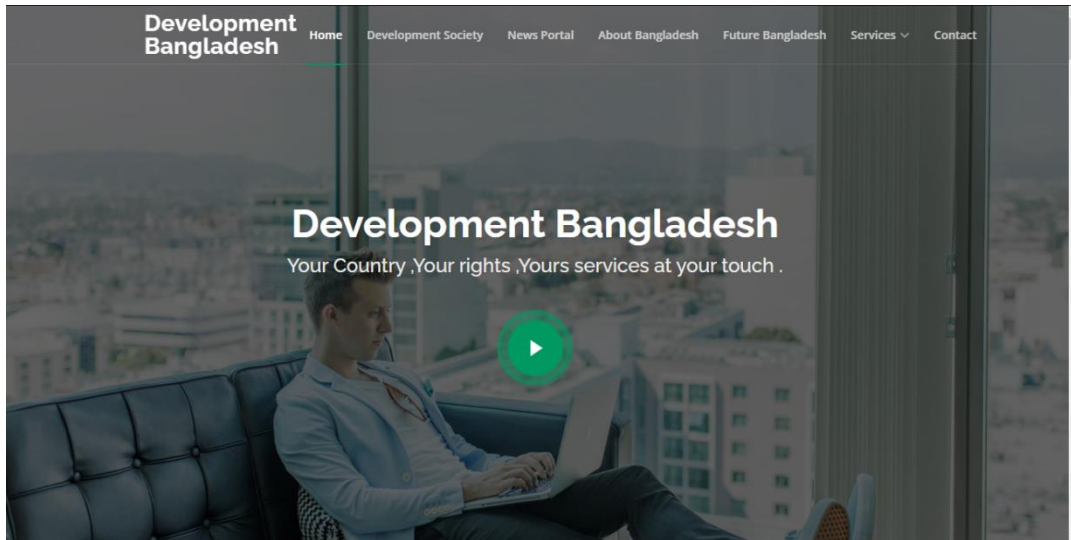


Figure 4.1 Development Bangladesh webpage

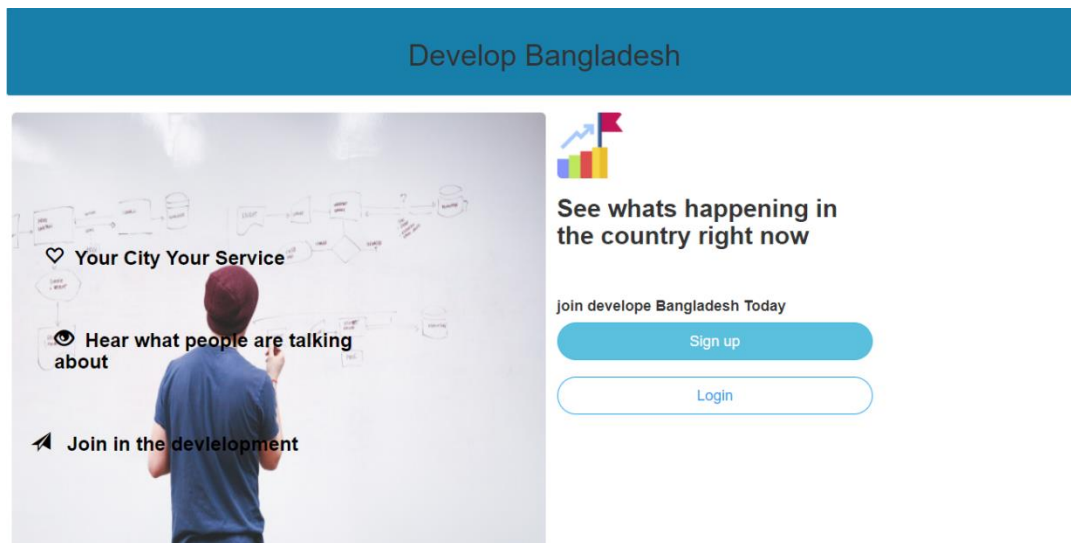
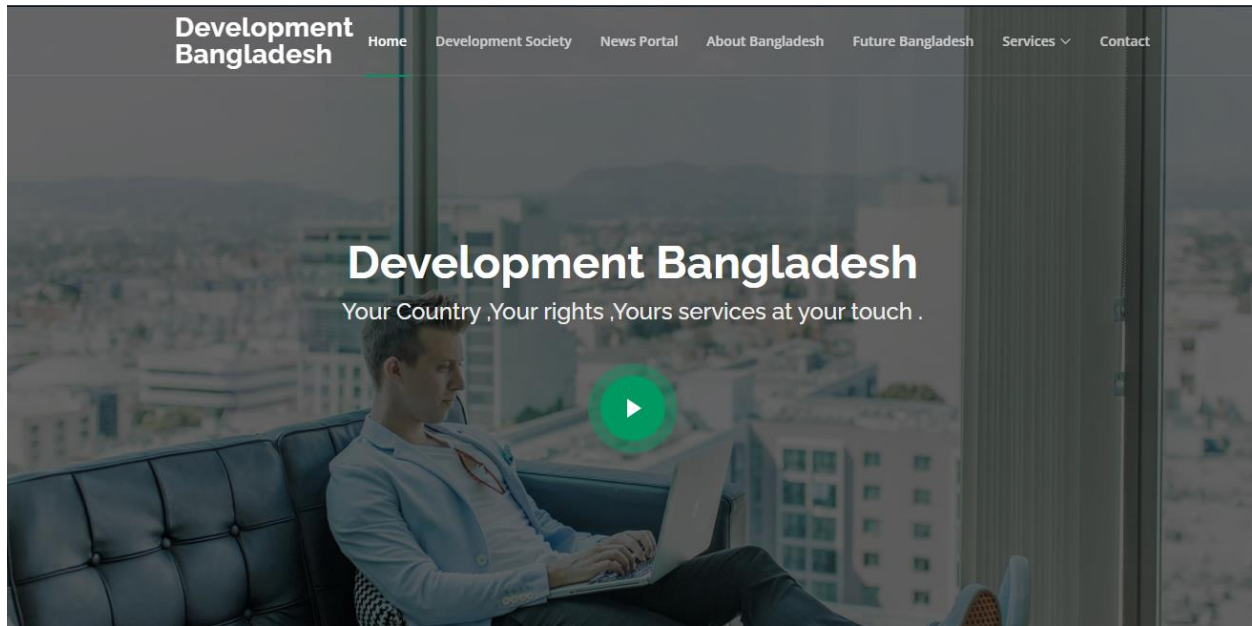


Figure 4.2 Social Media login/sign up

Figure 4.3 Social Media home page



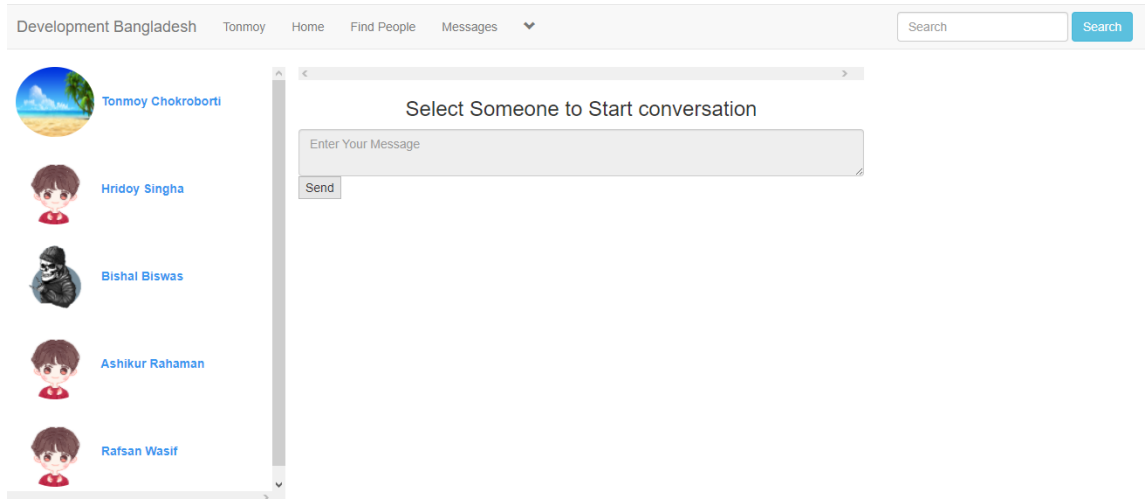


Figure 4.4 Messenger



Figure 4.5 News Portal

Figure 4.6 Emergency services



4.2 Back-end Design

The back-end is handled by the server. We issued a request from the front-end, which was then forwarded to the server for a response. The server data provided the desired information and returned it to the front-end. Databases are used to store data. Data from a needed database was returned from the server side. So the back-end has two parts: one is the database, and the other is the database responses. We used mysql to construct databases and xampp mysql to set up a local server. For the back end, we used plain PHP. Back-end servers can use PHP.

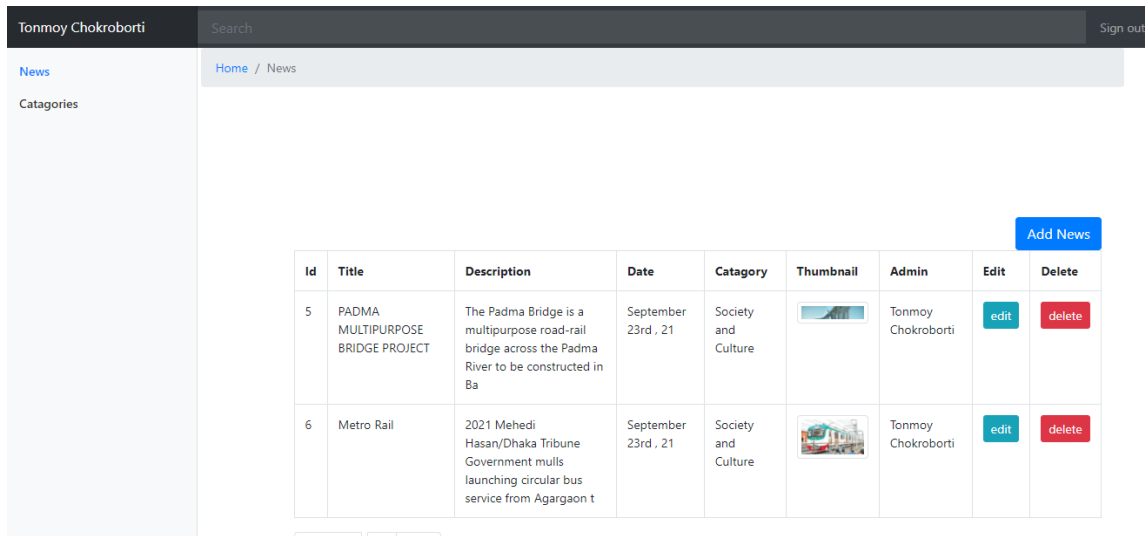


Figure 4.7 Admin Panel back-end

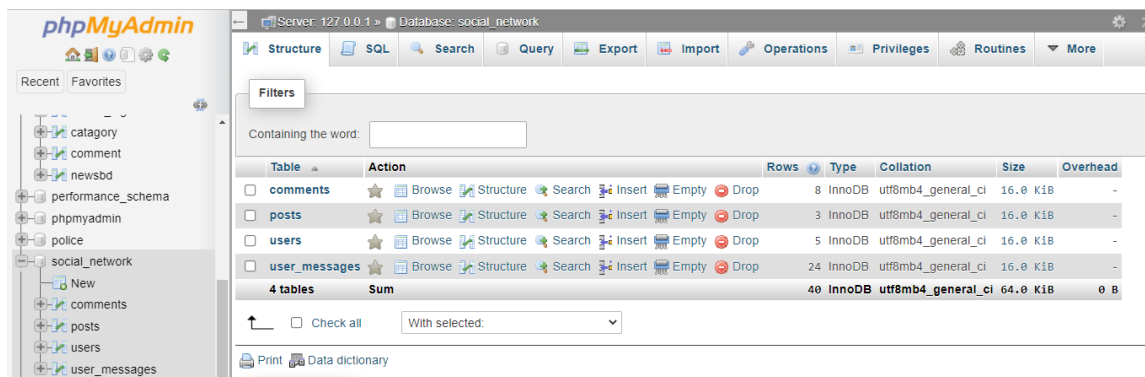


Figure 4.8 Mysql database server

4.3 Interaction Design and Ux :

Nowadays, users expect websites to be highly engaging. The interactive design of a website makes it very user-friendly and engaging. It establishes a link between the user and the system. The user experience can be enhanced by beautiful interactive design.

4.4 Implementation Requirements

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We needed Sublime Text editor to design and develop the entire project in order to complete it. We needed a xampp local host server and browsers for the back end. We needed javascript and jquery for dynamic elements on our website. For the icons, we used Adobe . To run back-end programs, we also needed to install php on our PC.

CHAPTER6:

Implementation and Testing

5.1 Implementation of Database

We needed xampp local server to set up the database. We have database name, password, and port number in xampp local server, and we used all of this to construct our local back end server using the browser. We took user input and saved it in the required database. When we needed it, we fetched data from databases and sent it to the front-end. We created queries to load data, update data, remove data, and get data from the database. The xampp database was extremely user-friendly.

5.2 Implementation of Front-end Design

We began by utilizing our social networking feature. People can use social media to make posts, comments, and messages about any topic. On each given subject, social media connects an increasing number of people. Our social media is used to educate Bangladeshi citizens about their rights and responsibilities in the country regarding development concerns such as roads, food, water, power, natural gas, and all other emergency services. As a result, on our social media platform, people can post about their concerns and solutions in their daily lives in their neighborhood. Then government authorities will be able to simply initiate and solve people's problems. People can speak out on any major national issue and write their thoughts about it. Our social media allows people to send messages to one another. To begin, we sketched our user interface concepts to see how they would appear. We drew up designs for user sign up, login, and the social networking home page after logging in. On the home page, you'll find all of the options for posting, comments, messaging, and user profiles. After that, we drew sketches of posts, comments, edit delete comments, messenger, user profiles, edit delete posts, and lost

password. As a result, we had to create a front end for social networking. As a result, we chose Bootstrap as the front end for our website design. Bootstrap is a fantastic framework for creating beautiful designs. We started with raw code using bootstrap templates, then added java script, external, and internal CSS. Then we started the project's online news portal's second phase. The delivery of development news was our primary goal. Bangladesh as a whole. For our news platform, we created an admin panel. We started with admin sign up authentication for the admin panel. By finishing the sign up process, the administrator will be able to log in using his or her id and password. The admin panel page was displayed after a successful login. For our admin panel, we used bootstrap templates. We sketched all of our user interfaces for our news portal before using bootstrap templates to see how they should look. Then we started coding bootstrap templates. In bootstrap, we introduced external, internal css , java script, and j query. In the admin panel webpage, we included a category option. The project's third step was to provide emergency services that we require on a daily basis. Emergency services for Bangladesh will be available via our development website. Emergency was selected The emergency homepage was accessed by the service user. For the main page, we first mocked up all of the user interfaces to see how they would look. For the home page, we used bootstrap templates along with css, j query, and javascript after the drawing was finalized. On the webpage, we introduced an emergency hotline service, a billing method choice, station details, and a new connection registration option. There was a helpline of stations when I clicked on emergency service. It will be divided into four categories: north Dhaka, south Dhaka, Narayongonj, and Keranigonj. There's also a complaint box on the emergency page.

5.3 Implementation of Interactions

We created various icons, photos, and interactive templates to make our website more interactive so that visitors may provide the best feedback and user experiences. Our primary goal was to create a user-friendly website.

5.4 Testing Implementation

For testing the performance and output of our web project, we employed a variety of browsers such as Opera, Mozilla Firefox, Chrome , and Internet Explorer. In all of the browsers we used, it

gave us the same user experience, loading speed, time consuming performance, and better user interaction with server site databases. As a result, we found no performance issues during our testing.

5.5 Test Results and Reports

Test Case	Test Input	Expected outcome	Obtained outcome	Pass/Fail
Sign-Up	Sign-up with correct info	Create account successfully	Account create	pass
Sign-up	Sign=up with incorrect info	Create account unsuccessfully	Unsuccessful account create	pass
login	Login with valid email and password	Login successful	Successfully login	pass
Login	Login with invalid id and password	Login unsuccessful	Unsuccessfully login	pass
Online messaging	Tap to chat	Message sent and received successfully	Successfully worked	pass
Post ,comment	Tap to post ,comment	Successfully posted ,comment	Successfully worked	pass

Edit ,delete ,recover	Tap to edit ,delete ,recover	successful	worked	pass
form submission	submit	Successfully stored on database	Worked	pass
Know information from database	Tap to know	Successfully fetched from database	worked	pass
Find a blood donator	Tap to search	Successfully downloaded	worked	pass

Table 01: A Test Case for The System

5.6 Test Results and Reports

The outcomes of the tests and reports show us how well the system is working. It allows us to compare the taste outcomes to our project's goal.

- Login System
- Registration System
- Social media post ,comment,messaging system
- Online news portal system
- Emergency services system

CHAPTER:6

Conclusion and Future Scope

6.1 Discussion and Conclusion

This project is for the people of Bangladesh. In our daily lives, we face numerous challenges. However, because they do not know everything, the government does not intervene in our dilemma. So I wanted to provide a platform where individuals could speak out about their responsibilities, rights, and grievances with the government. We also require some emergency assistance in the event of an emergency. However, we do not receive assistance in a timely manner. As a result, we created this platform so that people can receive emergency assistance quickly while being safe and comfortable. As a result, we believe that our project will be highly beneficial to mankind, the practice of rights and duties, and the solution of day-to-day problems for a better life and health. People will also learn about Bangladesh's growth rate in each sector, annual development, and future development projects in Bangladesh. Bangladesh will benefit greatly from our project.

6.2 Scope for Further Developments

In the future, we will continue to develop our project. Rather of php, we will use laravel php for our project. We'll improve our messenger by adding the active or inactive mood of any user. We will offer the ability to add friends and follow people on social media. We'll integrate two-factor authentication for both login and password recovery. More options will be added to our news portal. We will add all division wise helpline emergency numbers for power, wasa, titash, ambulance service, police help, and so on to the emergency services option. For online bill pay, we will implement a bkaash online payment option gateway. The design of our user interfaces will be more interactive. Every month, we will develop our required alternatives in order to improve our service user feedback that is more positive. As a result, our project has a lot of potential in the future.

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