

Fund Me: Design and Development of a Web Based Online Charity

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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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APPROVAL

This Project titled “**Design and Development of a Web Based Online Charity**”, submitted by Md. Taseenul Alam 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 (BSc) and approved as to its style and contents. The presentation has been held on Tuesday, January 04, 2022.

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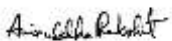


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We hereby declare that this project has been done by us under the supervision of **Raja Tariqul Hasan Tushar, Senior lecturer, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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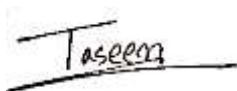
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Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

Bangladesh is an emerging country and we're doing tremendously well in the IT sector and also in the banking sector. We just want to merge them both in a way so that donation and charity can be easier to provide and it will also help the SME (Small and medium enterprises) sector to get financial backup and also reduce the overall poverty from the country. IT has been one of the most important agents of change in recent times, facilitating communication and building new connections. Now-a-days, we are preferring electronic devices over conventional banks and financial institutions. So, our plan is, providing a financial service using a web-based project & we think this small idea can help the actual needy people. In this project, we are building a web-based application called "*FundMe*". We are generating a platform which can solve the conventional charity and donation problems. We think we will be able to provide the proper financial help and backings with this system and it can change the life of a huge number of people in our country who are under the poverty line and it will also help the young entrepreneurs who are unable to get any financial backing's. We think that entrepreneurs will be able to help themselves and as well as help a huge number of unemployed persons by giving them some kind of job. In that way our goal will be fulfilled which is to reduce the poverty problem permanently from the country. We believe that just giving money as a donation to the poor people can't solve the proper problem, we should create some way of regular income for them but those who are properly unable to do any kind of work they will get the charity money without any kind of hesitation. We think that the charity and donations from the upper class of our society is quite significant but it is very much unplanned and unorganized. We think with a proper channel and way we can use those money in such a way that can help those people who are under the poverty line and we also think that it can also help the country to deal with those people who live under the poverty line.

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CHAPTER 1

Introduction

1.1 Introduction

Life is so unpredictable. Anything can happen in any moments. In this short age life, every single people want to safe, they want to get more what they have, some are trying to be settle in their life by financially. In this modern age somebody wants to be financially stable. On the other hand, some people struggle in their life get some food by begging or doing something else. Mainly this charity project is more useful for helpless people and also useful who needs help from other to grow up their financial condition. By this website people can get funds who are trying to grow up their small business. A lot of poor people can be helped by others. Here will be also a notify system by this someone can know that he/she are eligible or not eligible to get funds.

1.2 Motivation

We made this web-based project to be the helping hand for poor people. We also want to help those tiny but hardworking business company or start up team who really needs funds to grow up their company. In Bangladesh there are many companies they could not make profit and goes down but other company helps them to cover up their situation. But few small businesses man or small company tries to grow their business and got rejected for funds. If they need urgent funds, they can get it by using our website and by completing some initial information.

1.3 Objective

The first goal of this project is to manage funds for poor people and spread the humanity to those poor and helpless people as soon as possible. We believe that our project will give great feedback. We also can reduce peoples funding problem.

1.4 Expected Outcome

1. User can interact

2. Message
3. Stream post
4. Subscribe
5. Donate

1.5 Report Layout

This report is divided into six chapters, and this segment provides information on all six chapters.

- ❖ The primary chapter gives the Introduction, Motivation, Objective, and Expected outcome about it.
- ❖ After that we discuss about comparative studies and features.
- ❖ Chapter 3 has defined by BPMN, Design and collection requirement also Case modeling.
- ❖ We brief in chapter four about front end and back end.
- ❖ In five we show the implementation of database and results.
- ❖ Finally In the 6th Chapter, we have concluded our report with future scope and Limitations.

CHAPTER 2

Background

2.1 Introduction

In this modern age somebody wants to be financially stable. On the other hand, some people struggle in their life to get some food by begging or doing something else. Mainly this charity project is more useful for helpless people and also useful for those who need help from others to improve their financial condition. By using this website people can get funds for those who are trying to grow their small business.

2.2 Related Works

Online charity is very much used in all over the place in the modern world and in developed country there all system is automated and charity system is also automated there. So, we have enough related work in that case. A huge number of research work also have been done in that case [6].

2.3 Comparative Studies

In Bangladesh there are so many web-based project. In those web application is slow in gathering funds and are not able to doing comment on there.in our web page user can comment their valuable thought and they can discuss the problem.

Our feature:

- ❖ Understandable User interface
- ❖ Easy to gathering funds

- ❖ The convenience of chatting with a Doners
- ❖ Payment options
- ❖ Service history

2.4 Scope of the problem

- ❖ Fake people can give word for donation.
- ❖ Data losing Problem.

2.5 Challenges

We faced some challenges while doing the project. There were some known and unknown challenges. We also learned a lot of new things by overcoming the challenges.

Challenges:

- ❖ Creating a user-friendly interface
- ❖ Combining the individual works
- ❖ To build a database
- ❖ Fixing the unknown bug of code
- ❖ Learning Django.

CHAPTER 3

Requirement Specification

3.1 Business Process Model (BPMN)

In BPMN management and systems engineering, it is an activity of representing enterprise processes so that the current process can be examined, enhanced, and automated.

BPMN is a picture of the business processes or workflows of a company as a means of identified potential improvements.[12]

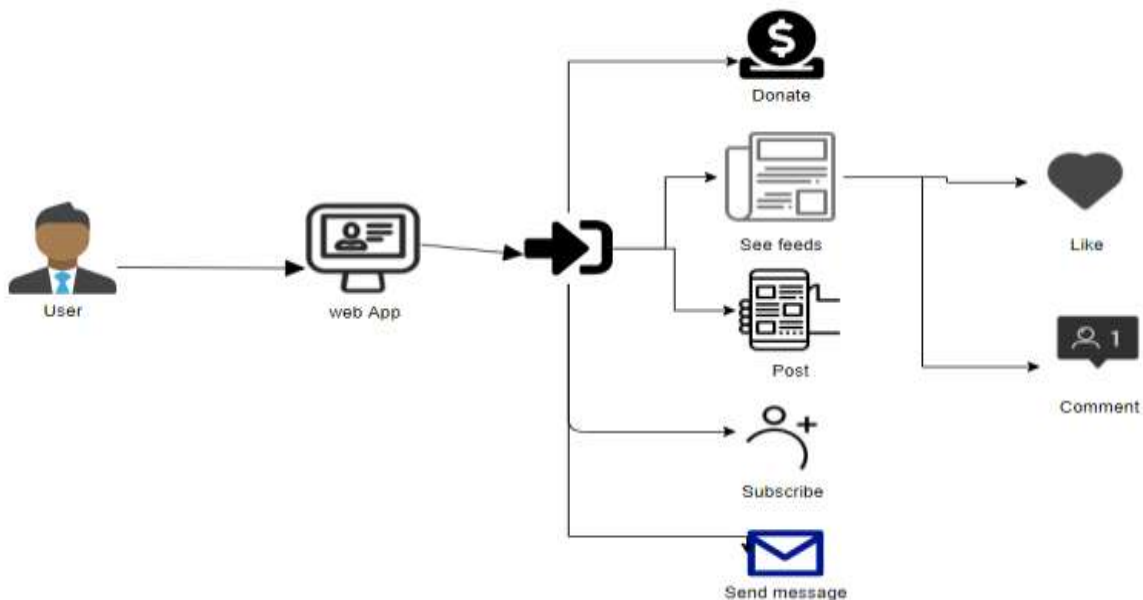


Figure 3.1: Business Process Modeling

There are some advantages to use BPM, they are given below,

- 1) Enhanced agility in business.

- 2) Improve efficiency
- 3) Continuous improvement for better opportunities
- 4) Eliminate redundancies
- 5) Sets an opening and terminating points.

3.2 Requirement Collection and Analysis

Projects must be scheduled and carried out to provide in a timely manner, viable, and relevant a remedy that are so practical. Each project needs to start with a fully validated and approved requirement specification to achieve those objectives. However, it must be collected, organized, and transformed into operational project scope, vision, and work effort before project requirements can be assessed and approved. To consider requirements at all levels and perceptions, the requirements-gathering process must integrate and resolve all of these facts. This is best achieved using standard, consistent steps, but equipped with integrated flexibility.

Methodologies for gathering data:

- a) Questionnaires
- b) Technical observation
- c) Opinion of people

In our project, we use various approaches to gather a complete collection of useful specifications.

- a) Those who took part
- b) Timeline and Scope
- c) Goals

Validating deliverables must be created after requirements data has been compiled, evaluated, and finalized to document requirements for review and acceptance. This is how we keep track of all that makes our project run smoothly.[13][14]

3.2 Use Case Modeling and Description

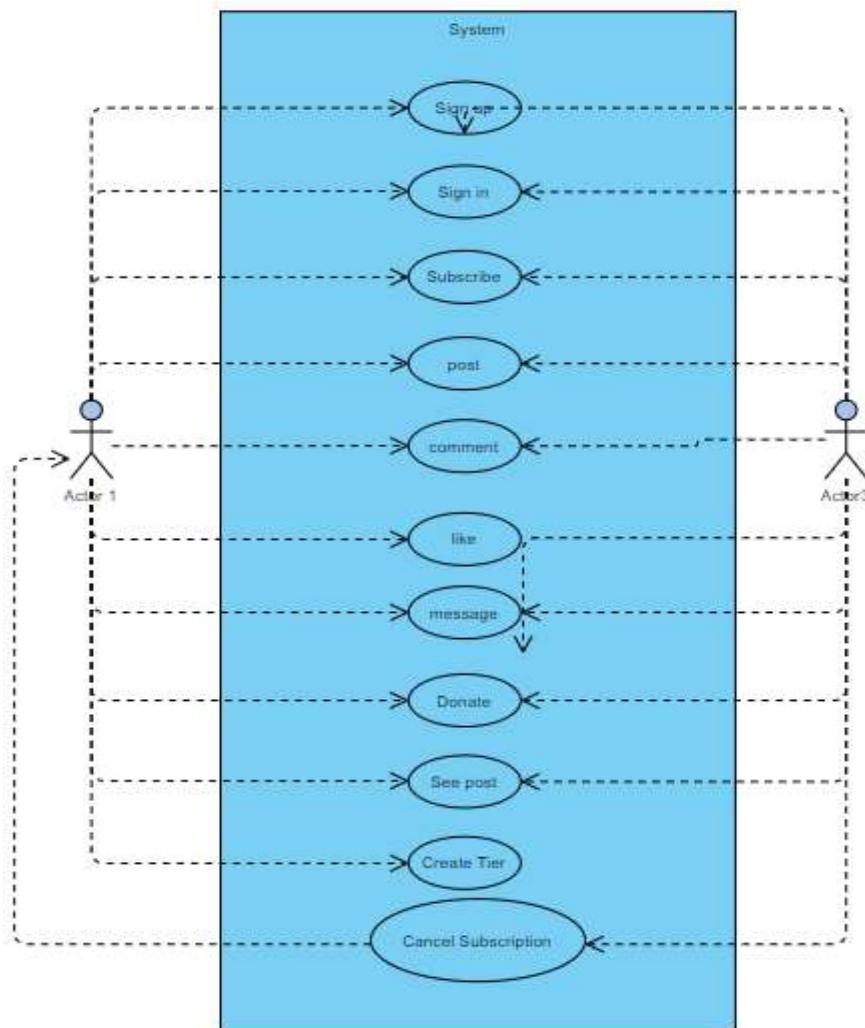


Figure 3.2: Use Case Diagram [16]

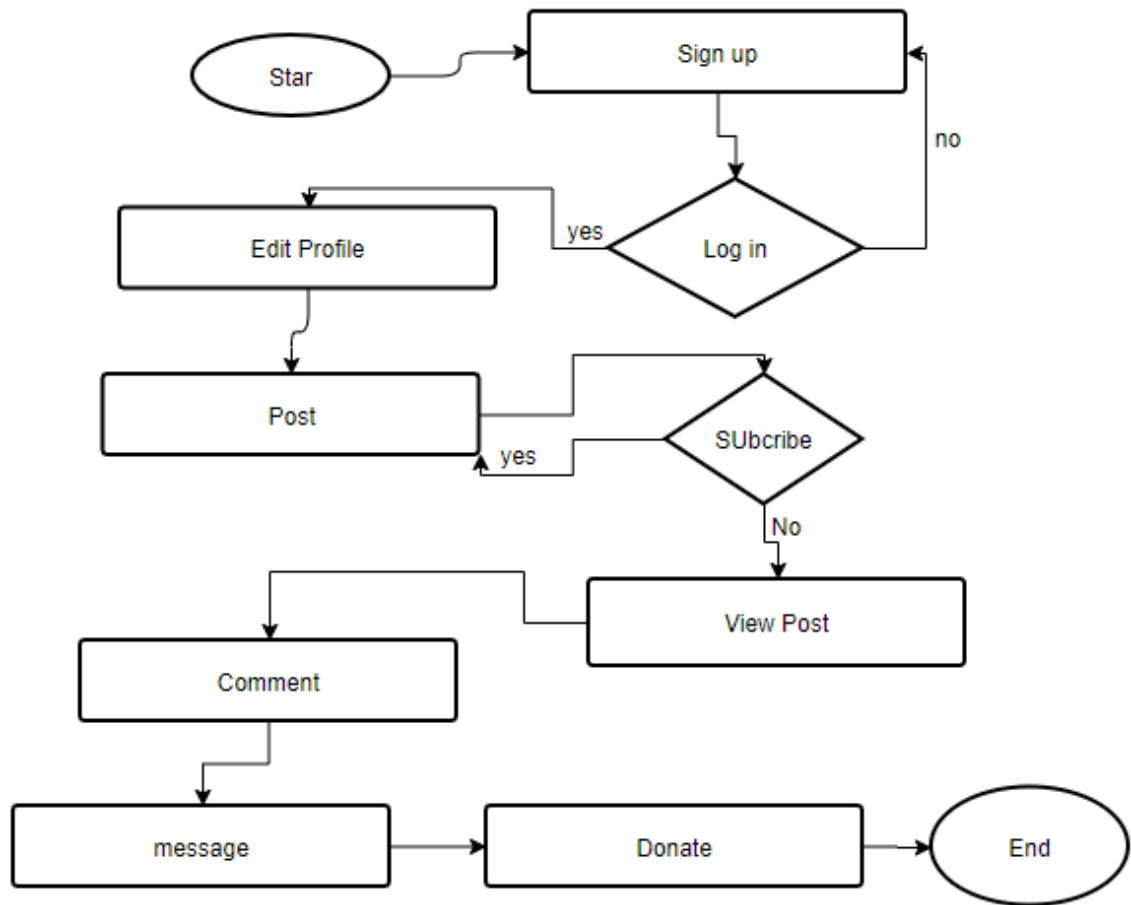


Figure 3.3: Flow Chart Diagram [17]

3.3 Design Requirement

Our project, which is a Web Based Creation. People can access it here with an internet connection. They can edit their profile and they can communicate with each other asking for help and could find funds.

CHAPTER 4

Design Specification

4.1 Front-end Design

Frontend design is nothing but a GUI design. This is a user interface where user can interact with it. For frontend designing we use XML to design. [5]

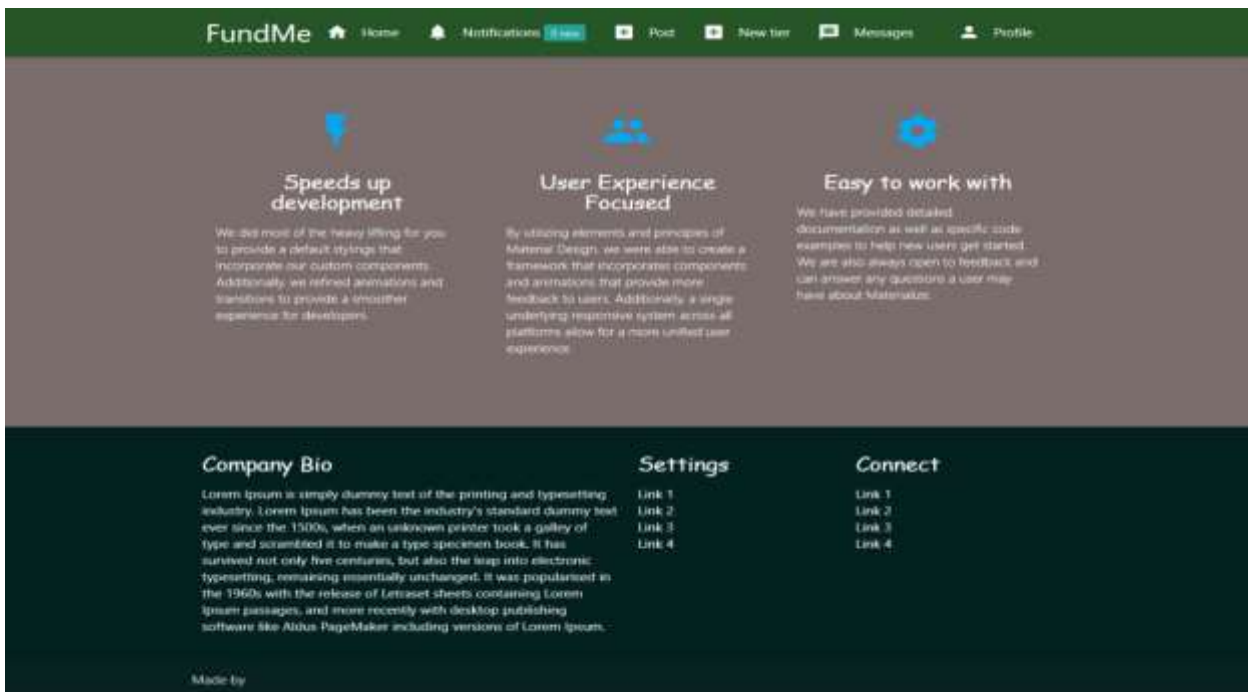


Figure 4.1: Home page

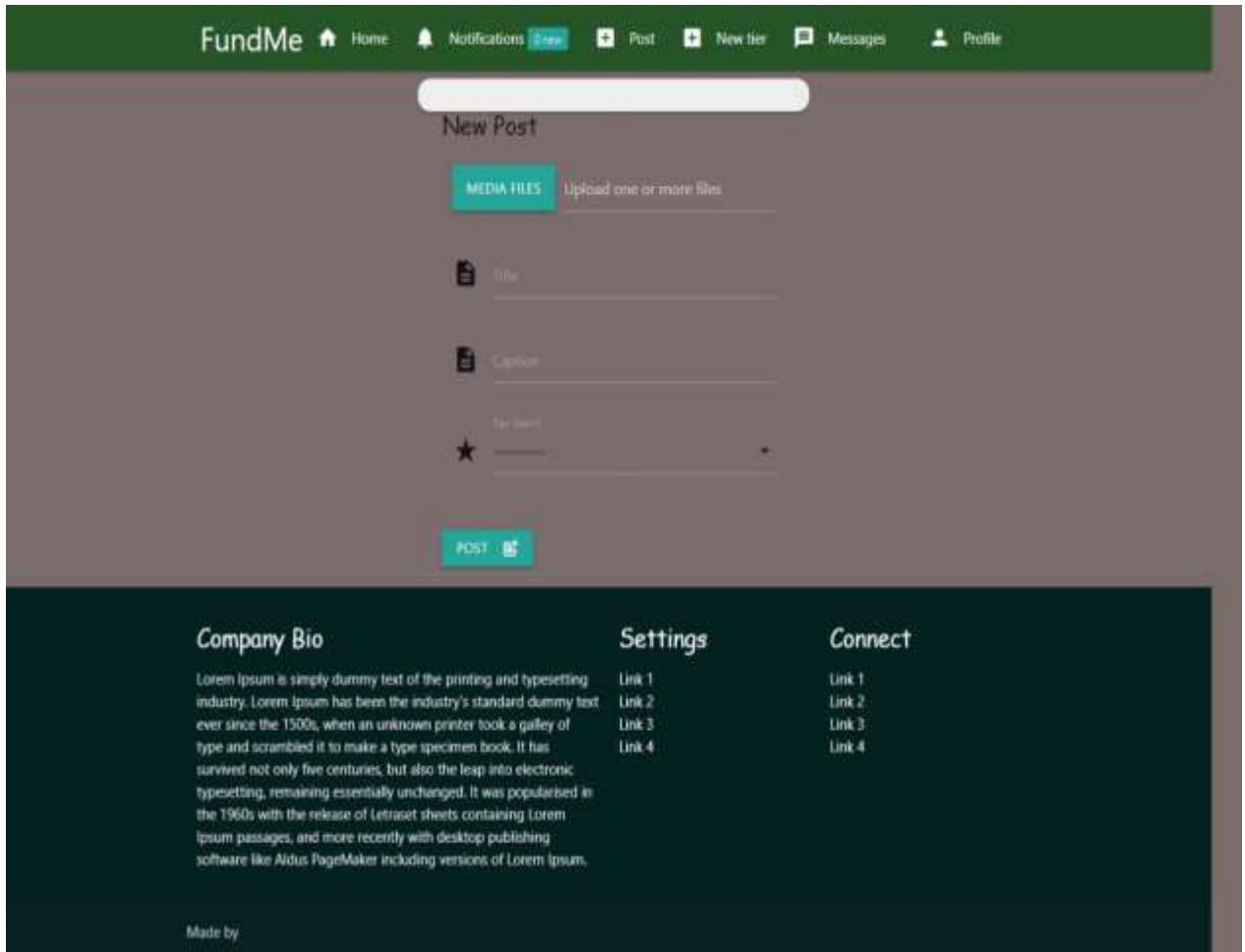


Figure 4.2: Post Form (Front-end)

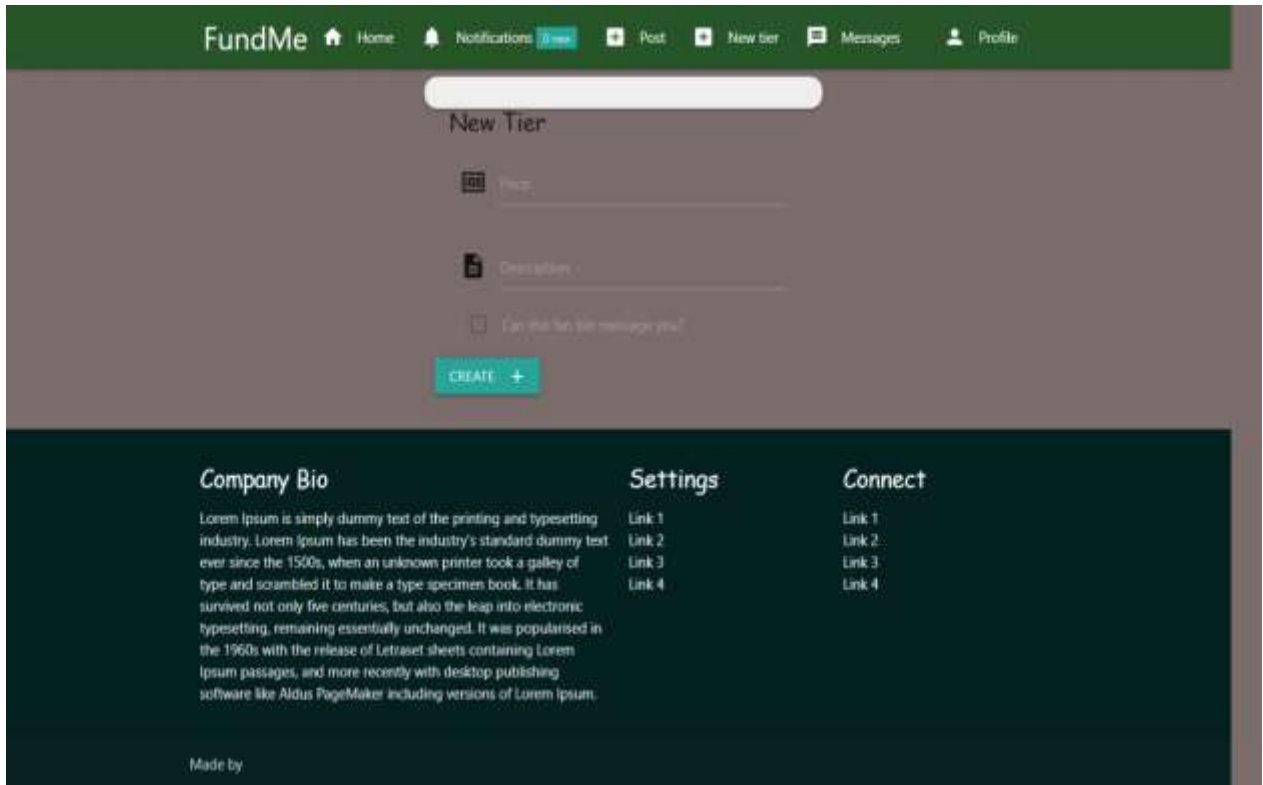


Figure 4.3: Tier Form

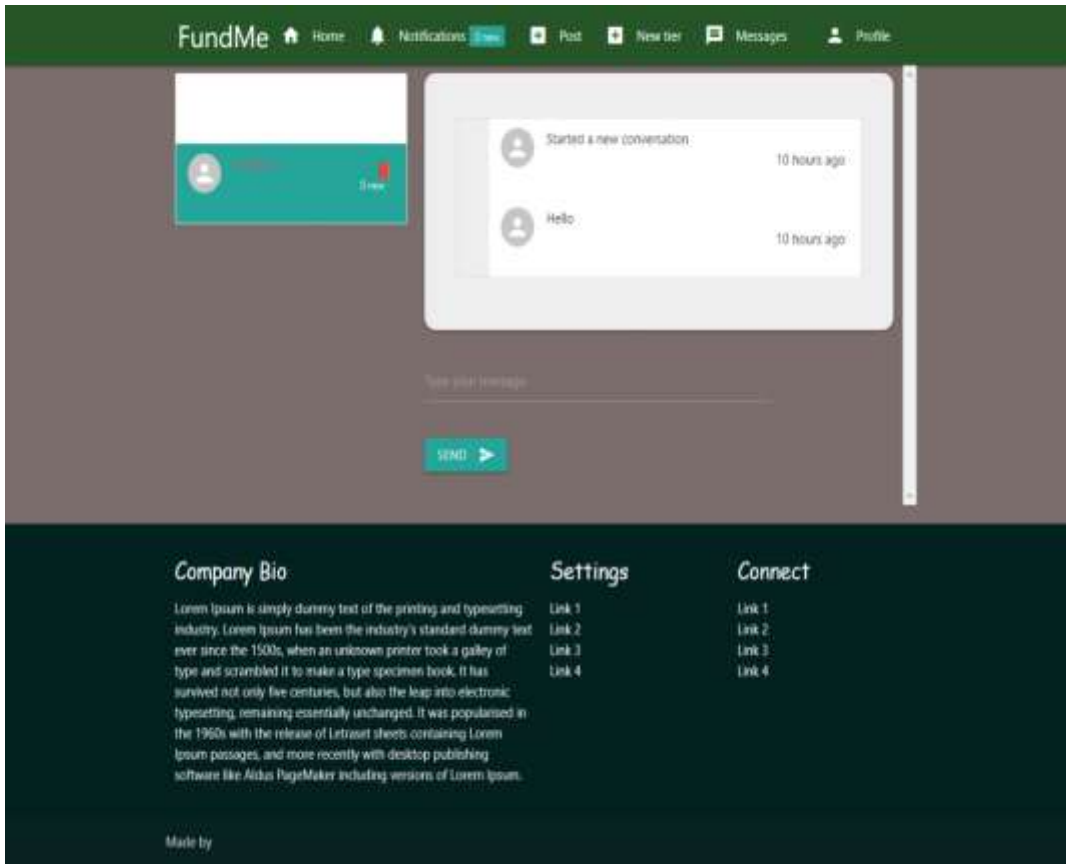


Figure 4.4: Messenger

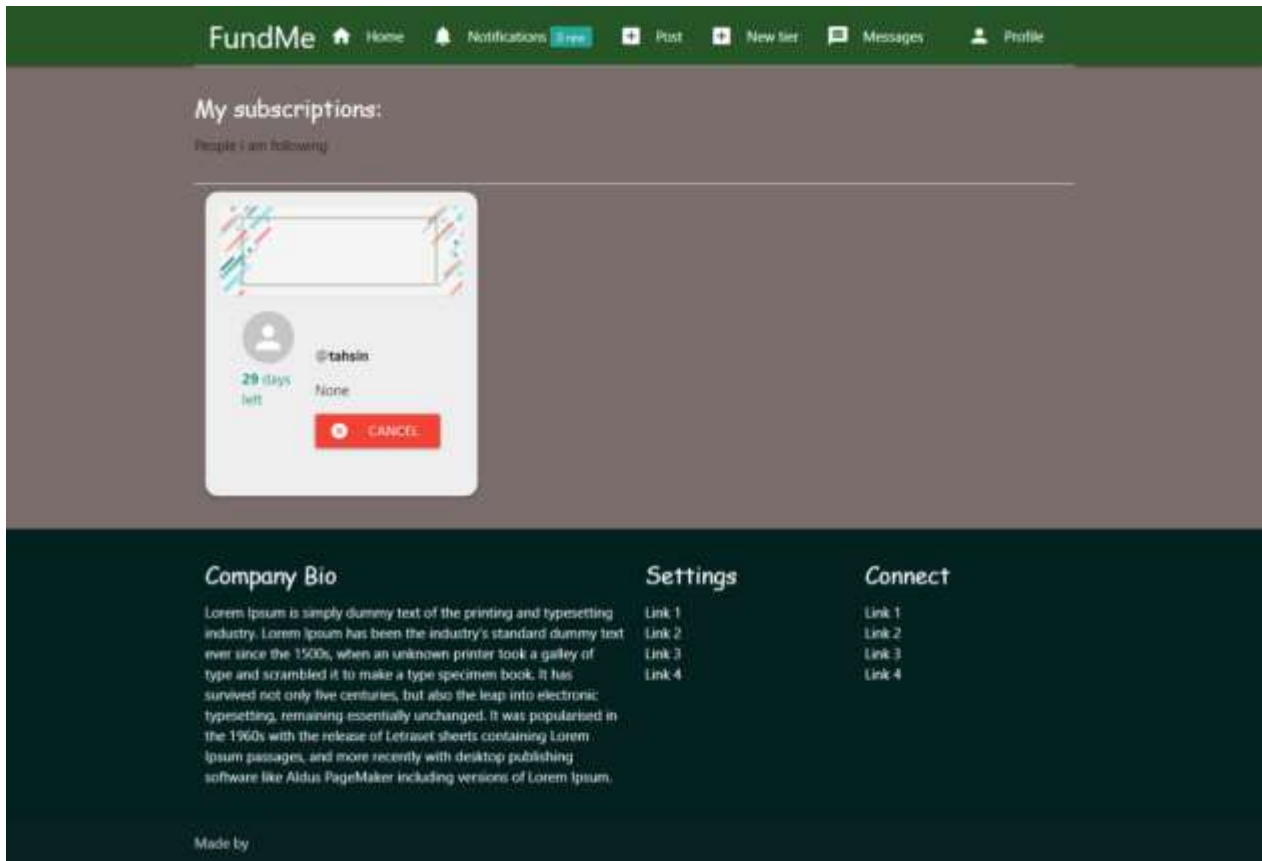


Figure 4.5: Subscriber List

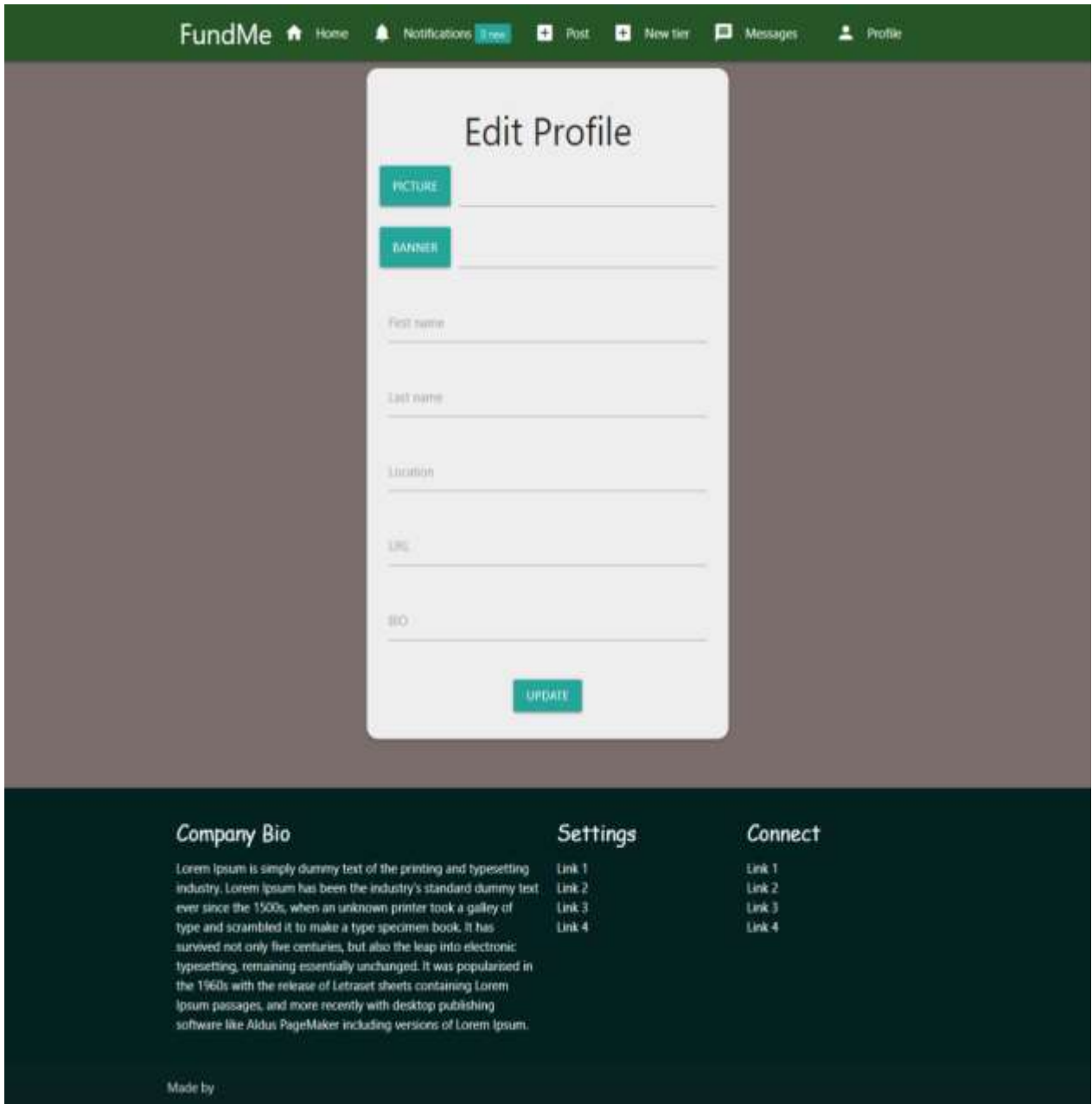


Figure 4.6: Profile edit Form

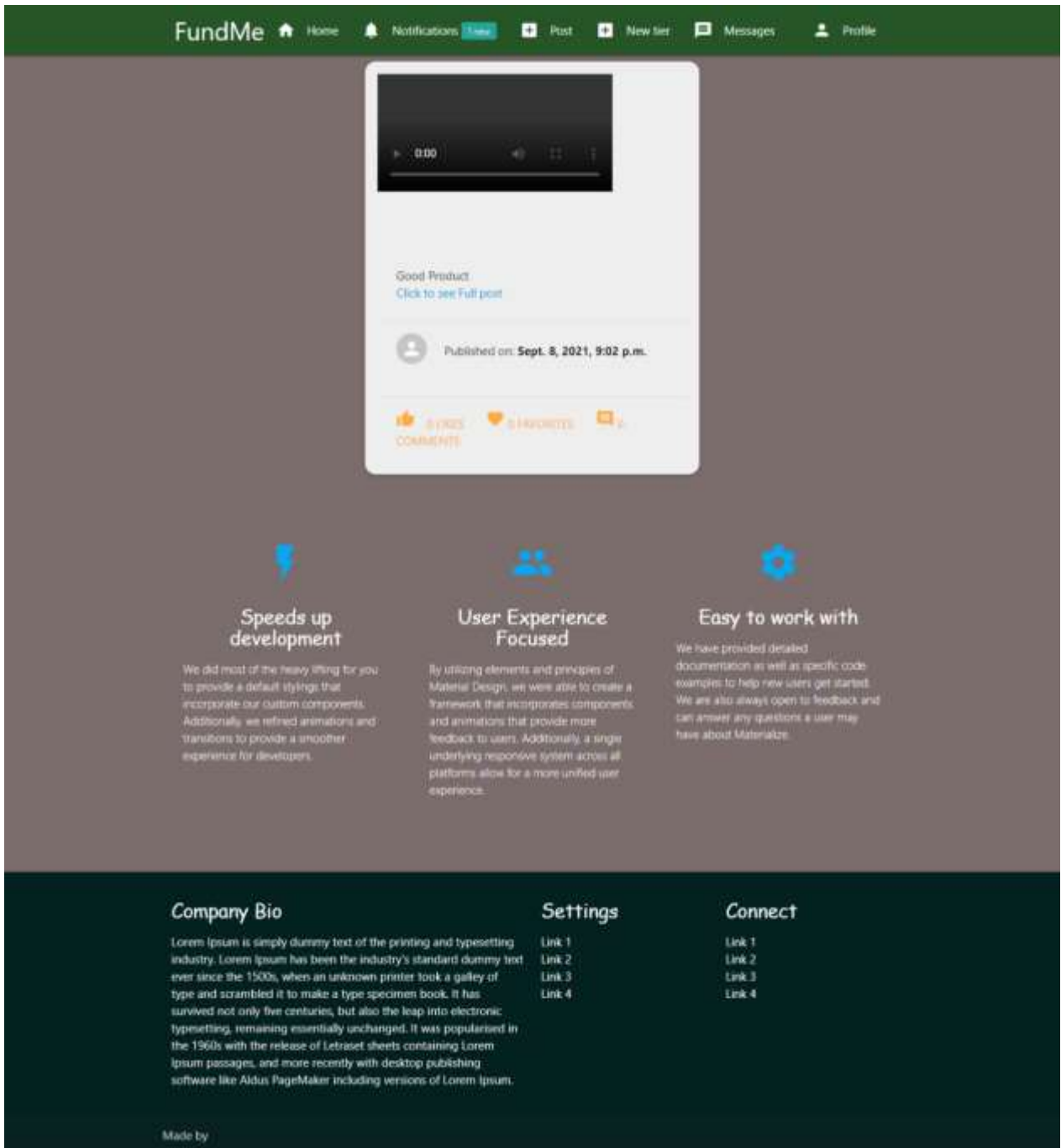


Figure 4.7 News feed

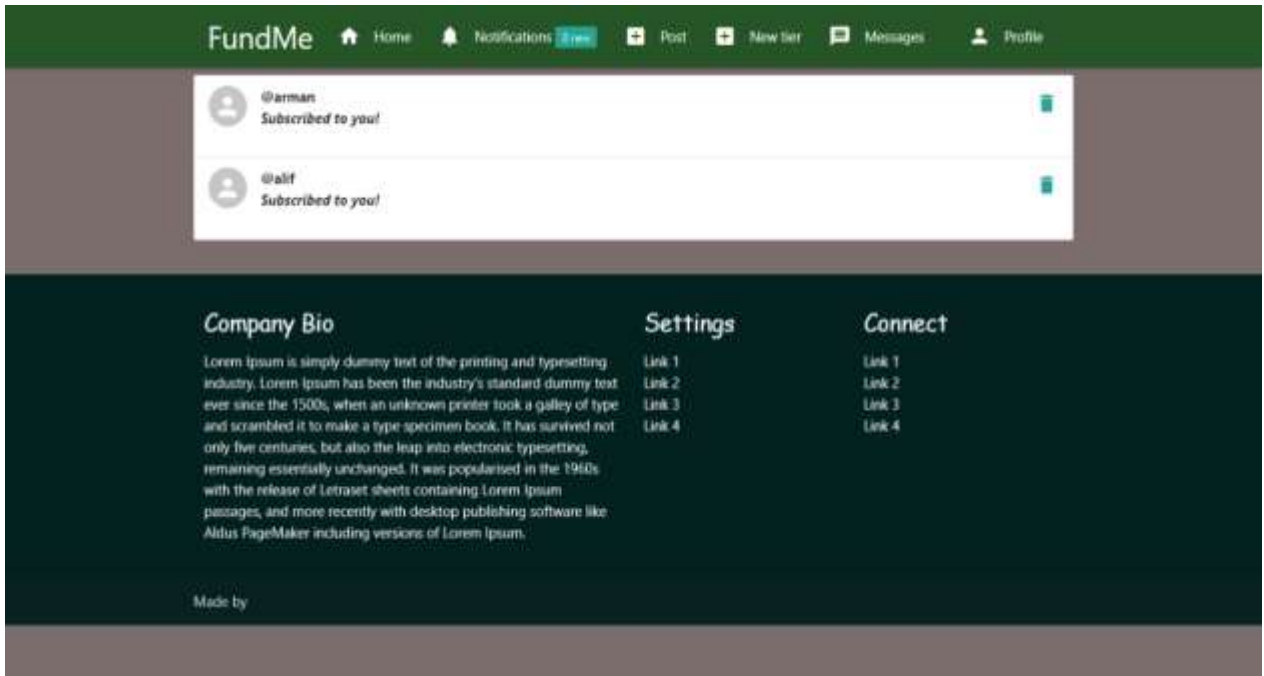


Figure 4.8: Admin panel

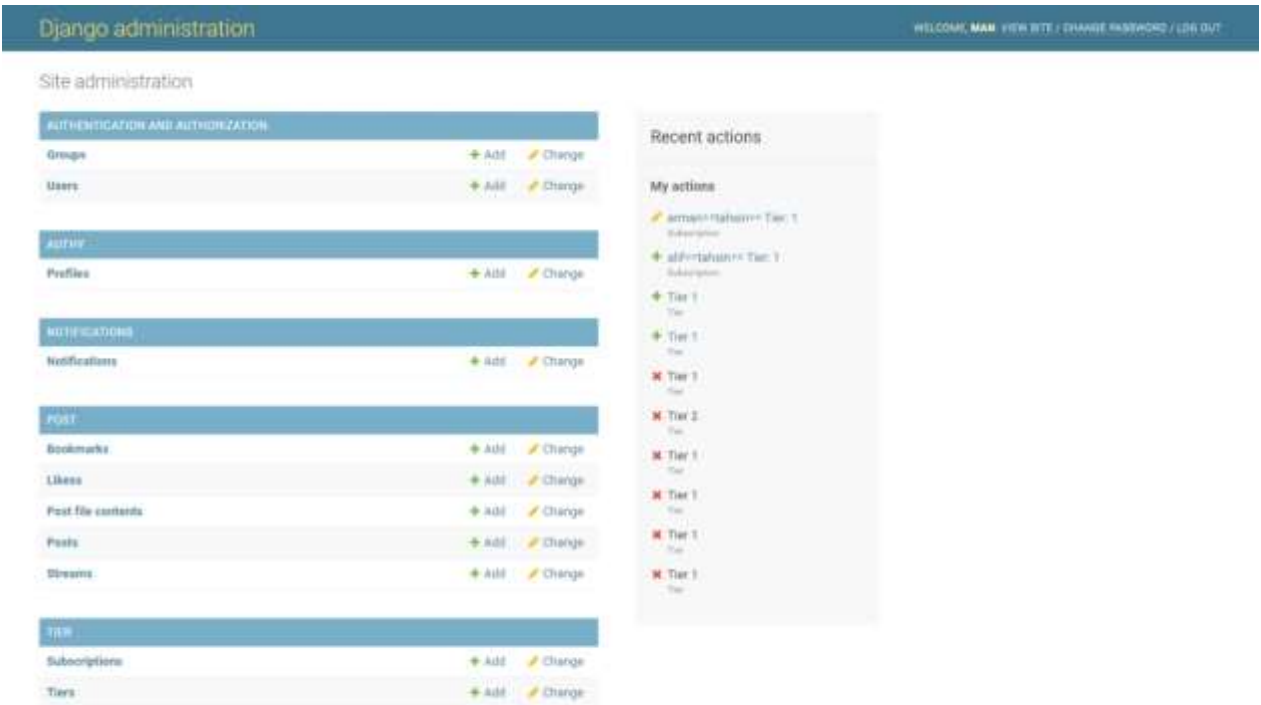
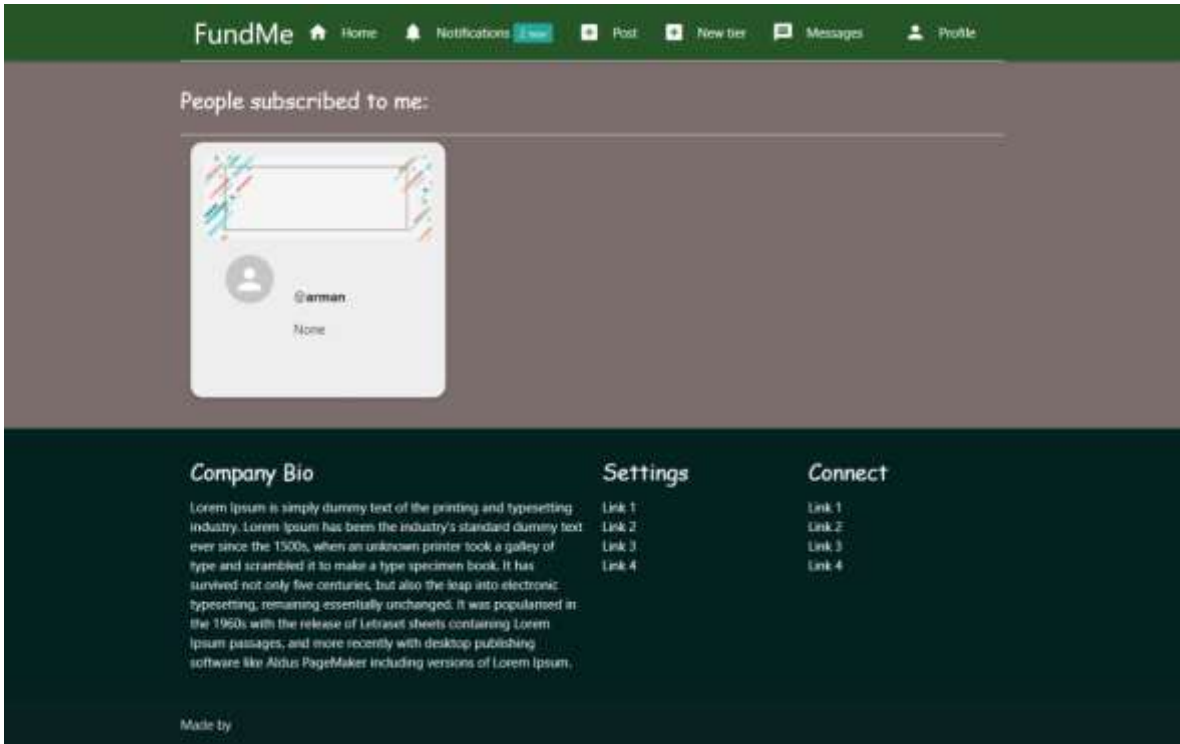


Figure 4.10: Admin Stream Survey

The image shows a screenshot of the Django administration interface. The top navigation bar includes the text "Django administration" on the left and "WELCOME MAX | VIEW SITE | CHANGE PASSWORD | LOG OUT" on the right. Below the navigation bar is a breadcrumb trail: "Home / Auth / profiles / Add profile".

The left sidebar contains a list of administrative sections, each with an "Add" button:

- AUTHENTICATION AND AUTHORIZATION
 - Groups + Add
 - Users + Add
- AUTH
 - Profiles + Add
- NOTIFICATIONS
 - Notifications + Add
- POST
 - Bookmarks + Add
 - Links + Add
 - Post file contents + Add
 - Posts + Add
 - Streams + Add
- USER
 - Subscriptions + Add
 - Tasks + Add

The main content area is titled "Add profile" and contains the following form fields:

- User:** A dropdown menu with a plus sign to its right.
- Location:** A text input field.
- City:** A text input field.
- Profile info:** A large text area for entering profile information.
- Picture:** A "Choose File" button followed by the text "No file chosen".
- Banner:** A "Choose File" button followed by the text "No file chosen".

At the bottom of the form, there are three buttons: "Save and add another", "Save and continue editing", and "SAVE".

Django administration WELCOME, [MAN](#) / [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

[Home](#) / [Post](#) / [Streams](#) / [Add stream](#)

AUTHENTICATION AND AUTHORIZATION

- Groups [Add](#)
- Users [Add](#)

ACTIVE

- Profiles [Add](#)

NOTIFICATIONS

- Notifications [Add](#)

POST

- Bookmarks [Add](#)
- Likes [Add](#)
- Post file contents [Add](#)
- Posts [Add](#)
- Streams** [Add](#)

TIER

- Subscriptions [Add](#)
- Tiers [Add](#)

Add stream

Subscribed:

User:

Post:

visible

[Save and add profile](#) [Save and continue editing](#) [SAVE](#)

Django administration WELCOME, [MAN](#) / [VIEW SITE](#) / [CHANGE PASSWORD](#) / [LOG OUT](#)

[Home](#) / [Authentication and authorization](#) / [Users](#)

AUTHENTICATION AND AUTHORIZATION

- Groups [Add](#)
- Users** [Add](#)

ACTIVE

- Profiles [Add](#)

NOTIFICATIONS

- Notifications [Add](#)

POST

- Bookmarks [Add](#)
- Likes [Add](#)
- Post file contents [Add](#)
- Posts [Add](#)
- Streams [Add](#)

TIER

- Subscriptions [Add](#)
- Tiers [Add](#)

Select user to change

Search

Action: 0 of 10 selected

<input type="checkbox"/>	ID	EMAIL ADDRESS	FIRST NAME	LAST NAME	STAFF STATUS
<input type="checkbox"/>	admin	admin@gmail.com	Admin	Admin	<input type="checkbox"/>
<input type="checkbox"/>	admin2	admin2@gmail.com	Admin	Admin	<input type="checkbox"/>
<input type="checkbox"/>	admin3	admin3@gmail.com	Admin	Admin	<input type="checkbox"/>
<input type="checkbox"/>	admin4	admin4@gmail.com	Admin	Admin	<input type="checkbox"/>
<input type="checkbox"/>	admin5	admin5@gmail.com	Admin	Admin	<input type="checkbox"/>
<input type="checkbox"/>	admin6	admin6@gmail.com	Admin	Admin	<input type="checkbox"/>
<input type="checkbox"/>	admin7	admin7@gmail.com	Admin	Admin	<input type="checkbox"/>
<input type="checkbox"/>	admin8	admin8@gmail.com	Admin	Admin	<input type="checkbox"/>
<input type="checkbox"/>	admin9	admin9@gmail.com	Admin	Admin	<input type="checkbox"/>
<input type="checkbox"/>	admin10	admin10@gmail.com	Admin	Admin	<input type="checkbox"/>

10 users

FILTER

By staff status

- All
- Yes
- No

By supervisor status

- All
- Yes
- No

By active

- All
- Yes
- No

Figure 4.11: Admin panel user list

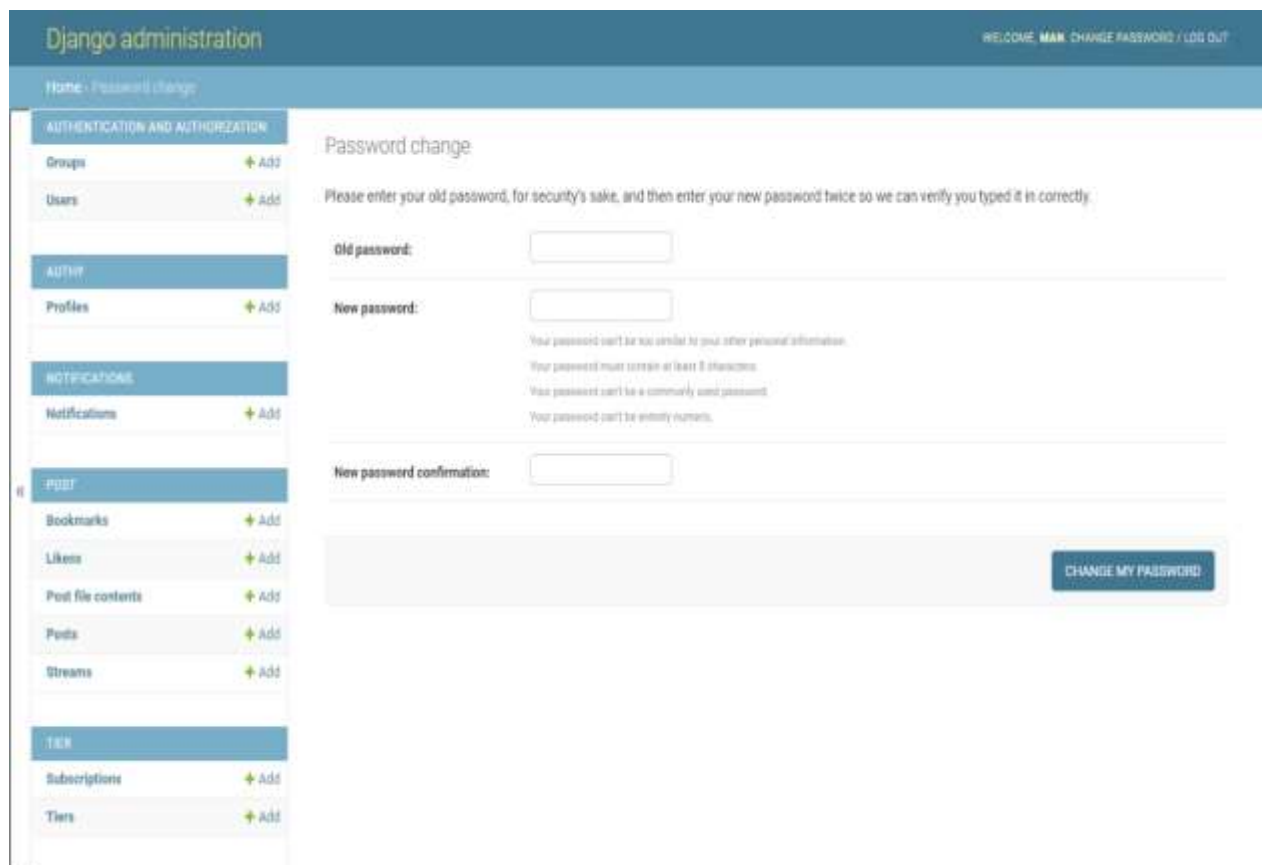


Figure 4.12: Admin password change

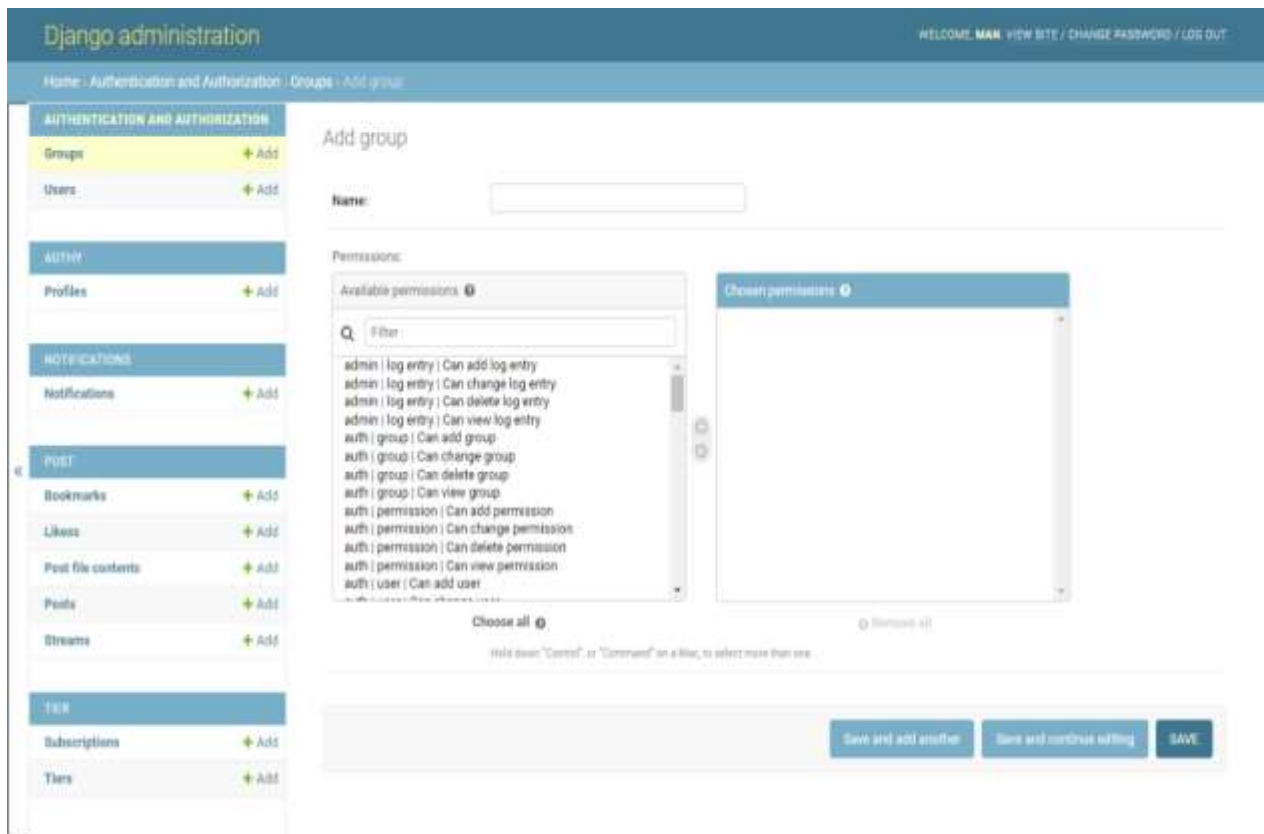


Figure 4.13: Admin create group

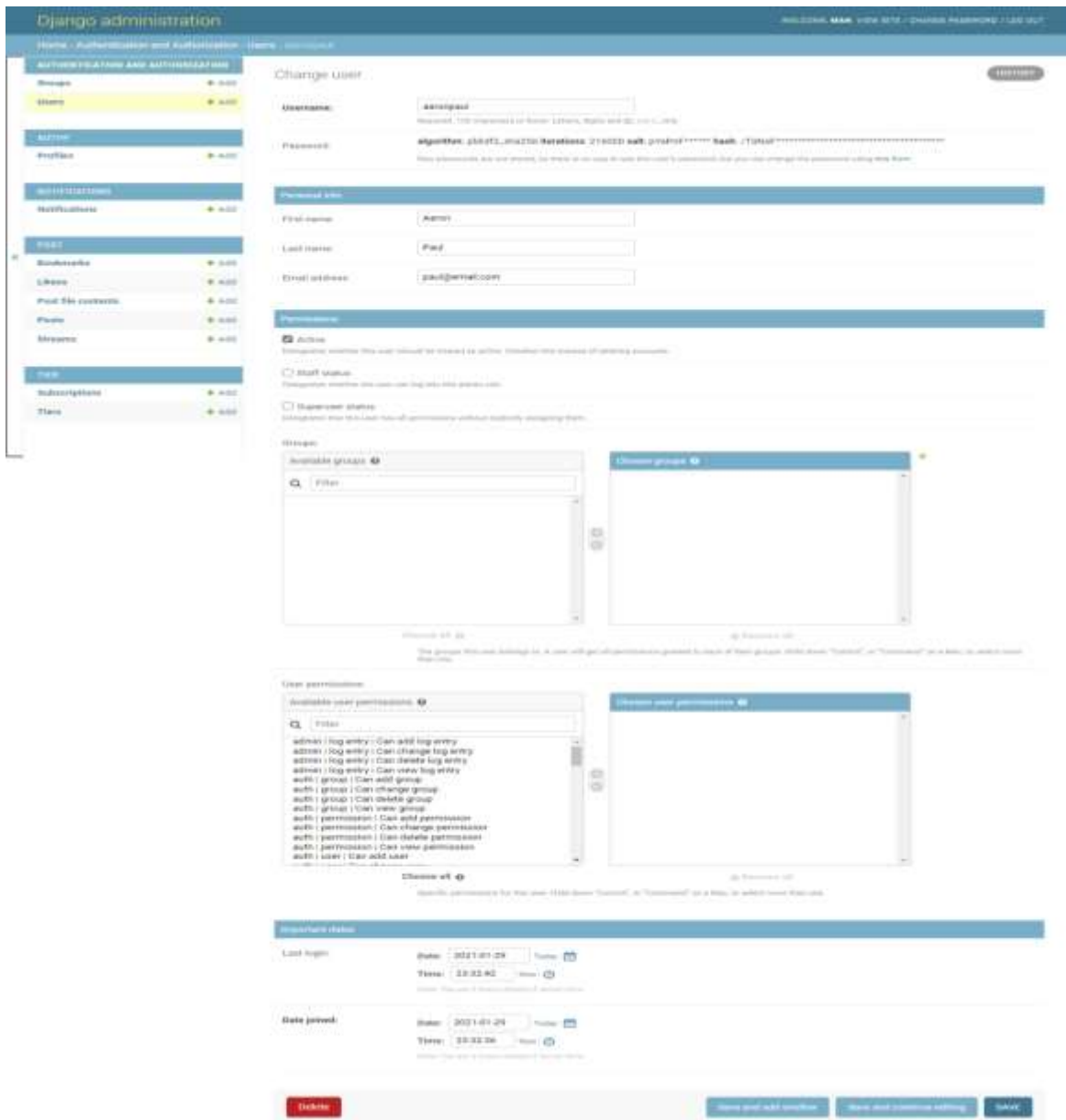


Figure 4.14: Admin user permission

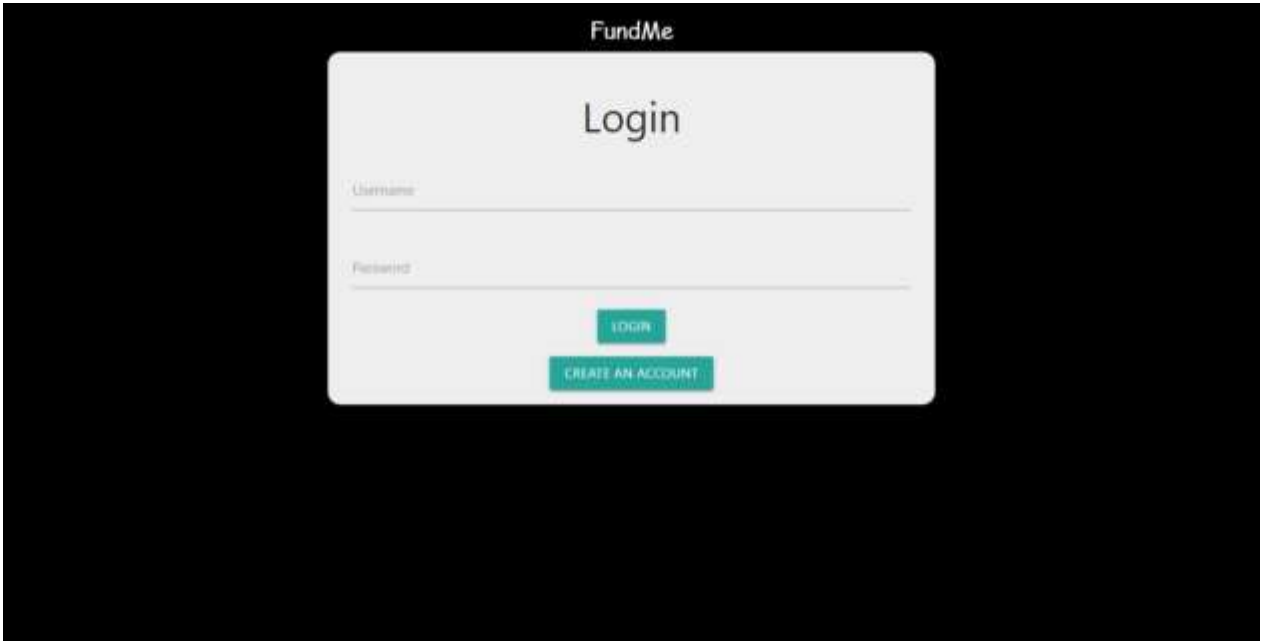


Figure 4.15: Login page

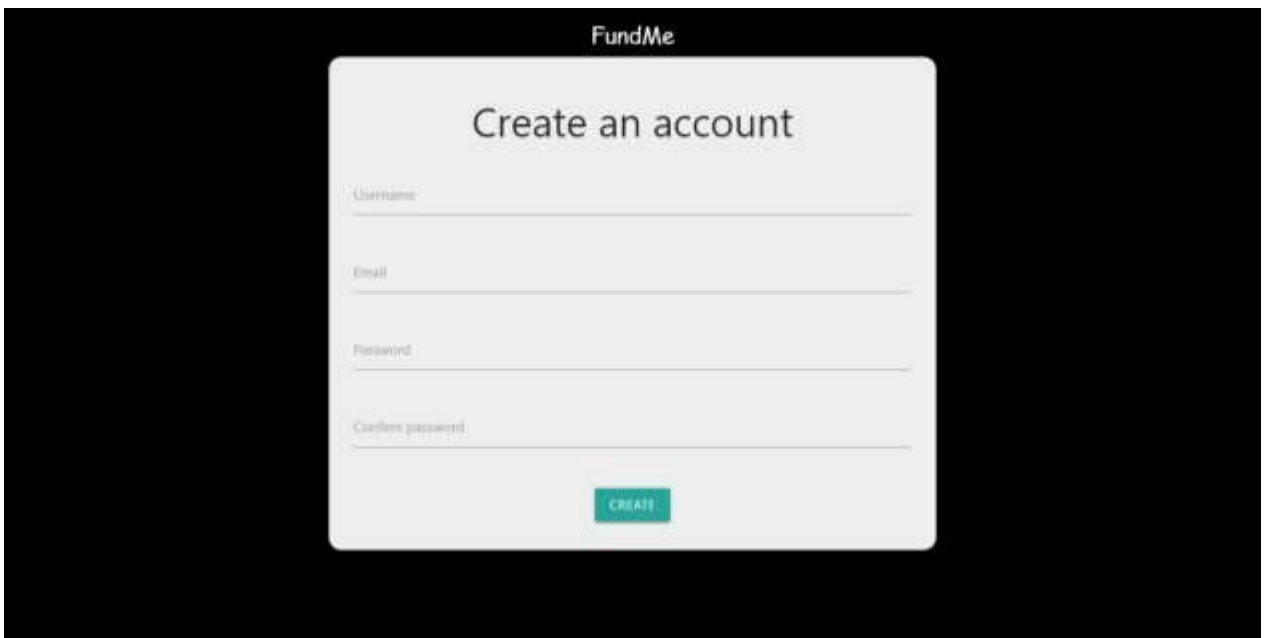


Figure 4.16: sign up page

4.3 Interaction Design and UX

The design of user interfaces for mobile electronic devices is known as UX design. The basic plan is to design a simple and easy to use interface for the client and complete the requirements. When we designed the UX, then we are precisely focus on accessibility, effectiveness and easy to optimize on the user experiences.[4]

CHAPTER 5

Implementation and Testing

5.1 Implementation of Database

Firestore is a Backend service. It allows us to develop a quality full application with the help of so-many tools. It's Google's toolkit. It's a NoSQL database program, which stores data with the help of JSON-like documents and that lets us store and sync data in real-time. There are some databases like MySQL which are fast and easy to use for small and big businesses, but sometimes NoSQL is faster than relational databases. It is more flexible and scalable than a relational database. The firestore database can be used for searches with limited sorting and filtering functions.

To register in the app with a phone number and other information without this user cannot sign in to the application.

5.2 Implementation of Interaction

Implementation of Interaction describes how the application handles different types of inputs from the actuators. We made our application so lucrative, simple, and user-friendly to the customer. It is the most difficult work to complete this task for client needs. We had done our job with a level of perfection. Our project is well-build and well-implemented with all of the requisite components that a client needs.[2]

5.3 Testing Implementation

Testing Implementation is the main part of applications for testing the apps and checking errors. We tried our level best to develop our project with minimal errors.[3]

These parts are divided into two parts. They are given below,

1. Inner Logic

2. Domain of input and output

Table 5.1: “Web Based online Charity” (Fund Me).

Test Case	Test Input	Expected Outcome	Actual Outcome	Result
1.Run web page	Uses android phones	Page runs successfully	Page runs successfully	Passed
2.Sign in without Phone no	Blank input	Can't access without it	Please enter a phone no	Passed
3.Invalid Phone no	Invalid no	Can't access without it	Can't access without it	Passed
4.Without Registration	Blank input	Can't use the services	Need to register	Passes

5.4 Test Result and Reports

Application testing is the most important part of web development. Because we have to test everything that we did. We also provide us with the following advantages. what we learnt from our mistakes. We made a table that is mentioned above-called the Test case table for "Fund Me". In the table, we had done a few numbers of testing. After that we got a legitimate outcome. Therefore, our “Fund Me” is freed from the error.

CHAPTER 6

Conclusion and Future Scope

6.1 Conclusion

Our project's main aim is to reduce the time and complexity for getting funds. At the time of implementation of this project some problems and difficulties we faced. We are fresher in this project-based field. But we tried our best to solve the difficulties and tried to reach the maximum user's satisfaction. We tested our project and we got good results and also got a fast notify system to others. In future we will try to launch the android version of this project. Using our project people can help each other and also humanity can grow. People can be helped easily.

6.2 Limitations

All things are good in our project. Though everything is not perfect. Our project has also some limitation,

- Users could not able to access without internet
- Android versions are not available.

6.3 Future Thoughts of Works

In future we will try to make our work better and will also try to send the helping hand by funding in maximum numbers.

- Will launch the android version
- Will try to reduce data losing

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