DEVELOPMENT OF ANDROID APPLICATION OF SOCIAL PLATFORM FOR DONATION

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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 "Charitable: Donate for Others" submitted by Adnan Hossain ID: 153-15-6426 & Jahedul Hasan ID: 153-15-6371 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 09.07.2020

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DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Shah Md. Tanvir Siddiquee**, **Assistant Professor**, **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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ABSTRACT

Bangladesh is one of the most disaster prone countries of South Asia. Hence in case of such natural calamities, there are many people who are poor and need help. This is an Android application designed for the collection of funds and donation of old Accessories in order to help orphans and other poor and needy people. This very application eliminates the need to visit to visit organisations or orphans in person in order to help them. Technological advancements have made it easier for everyone to participate in this process. We are using the Internet, the most exoteric communication media in the world in this process and digitalise a crucial part of our real life- a fundraising campaign. The charitable project is an Android application based social platform. This platform is basically for people who are interested and willing to help poor and needy people. The main purpose of this project is to donate all the unused products to organisations and raise funds in a very short period of time in case of emergencies. The benefit of the users here is that they are being able to use the unused products and the organisations are also being benefited according to the donations received. To make this app, we used android studio for elementary work, java for functional work and for database we used firebase. It was tested at different stages and it works completely fine as a prototype.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

With a population of over 150 million people, Bangladesh stands as one of the world's most densely populated countries. A significant portion of the population (around 26 percent) live below the poverty line, and thus does not possess the capacity to bounce back from economic downfalls. However, the country's flat topography, low-lying and climatic features compel its people to meet with economic downturns quite frequently. Such geographical features also make Bangladesh as one of the most disaster-prone countries in South Asia. As a result, natural disasters such as flood, landslides etc. are not infrequent in this country. Such disasters lead to loss of properties and wealth for thousands. The devastated people have no alternative but to turn to seek help from the economically welloff segments of society. And despite the good intentions of the wealthy Bangladeshis, quite often they are unable to donate owing to lack of transparent channels and proper administration. Hence there is a dire need for a proper donation mechanism. The issue of the donation mechanism can be effectively solved by introducing an easy and effective donation process. The aim of this paper is to propose a mobile application "Charitable" that solves this. It is intended to be an effective and easy platform for users to donate and contribute, all the while ensuring the transparency of the whole donation process. The unique selling proposition for this mobile application is it will enable users to donate not just money, but also any used or unused products of their choice. There are other donation apps but they only provide money donation facilities. For instance- a user of "Charitable" can opt to donate his unused garments to another registered entity/individual through this application. This model has the added advantage that it is resulting in utilization of items that otherwise may not have come to of any use. We are confident this application will result in a giving culture that is sure to cause a meteoric rise in the popularity of our application.

1.2 Motivation

Bangladesh is a growing economy. Every year, natural disasters such as Cyclones, floods etc. wreak havoc in the country. In such crisis moments, uncountable number of people seek help to overcome from those disasters. Besides, untoward incidents such as garments burning, building collapse, road accident etc. take place in Bangladesh, There are many generous people, who wants to help those people in dire need through donation. So in order to bridge this gap, we intend to make "Charitable". This is intended to be one application which will help the generous people donate their money safely.

Many organizations require books for orphans, clothes for street Children etc. but there is no established channels to donate to them anything except financial assistance to them. Charitable will thus strive to be a solution also for such entities who work for bettering the lives of the unprivileged.

1.3 Objective

Connect individuals in need of economic or material help with generous people through an Android based mobile application, enabling the donors to donate money or products conveniently and transparently.

1.4 Expected Outcomes

- This platform dedicatedly designed for social welfare workers.
- For donation and contribution purpose can use it.
- For faster fund raising organizations can use it.
- Depend on category users can create event.
- System run on online, users can save their time.
- Anonymously donation feature.
- After successful donation the event will hide automatically.

1.5 Project Management and Finance

The sustainability of an app depends on how well it is managed. The chief architect of an app is the developer. And to keep it operating well, it requires proper maintenance. So we require money to afford the developer and proper maintenance. Since it is a non-profit app, we are keeping an option for voluntary donation. Messages such as "Donate to help upgrade the community" will be flashed that we expect will encourage people or organizations to finance us.

1.6 Report Layout

This project report is divided into seven chapters. Summarized are given below:

- ➤ Chapter 1 gives an overview of the introduction, motivation, management & finance and application of the project. It also describes the expected outcome and objective of our project
- ➤ Chapter 2 describes the background of our project which shows related work on this project. Comparative analysis and challenges of the system are also described.
- ➤ Chapter 3 lists with requirements specifications which contains business case modeling, use case diagram, logical data model and requirement analysis.
- **Chapter 4** details the design and components used.
- ➤ Chapter 5 tells about our Front-end and Back-end implementation and testing process of our project.
- ➤ Chapter 6 describe impact of this project on society and environment. It also describe this project sustainability and ethical aspect of this project.
- ➤ Chapter 7 mentions the conclusion and future scope what we will do in future with our project.

CHAPTER 2

BACKGROUND

2.1 Preliminaries/Terminologies

In today's world, mobile applications are the most popular platform for users. "Charitable" is positioned to be an Android app for social workers. This app is intended to make a community for people who are willing to help out the needy. Numerous apps exist for donation nowadays, but they all share many drawbacks in common- the principal one being donation can only be made in monetary terms.

"Charitable" aims to be a platform that would enable users to help out the needy with any type of products. Our app will not just be limited to providing monetary benefits to individuals, it would also help social organizations get products/funds to help the needy.

2.2 Related work

In our country so many Donation platform and services exists online & offline. But maximum Donation application are based on Blood collection in our country. Few web applications are existing for fund raising but thus are not working for all kinds of fund collection & activity. Here we combined all kind of helping support for collect by the organization through our application with/without visiting to the user physically.

According to the differences of functionalities done by other applications, we can divided into two different category of Support platform.

Generally, there are two types of fund-raising.

- A. Fund-raising for Profit.
- B. Fund-raising for Non-profit.

2.2.1 Fund-raising for Profit :

Beneficial raising money allude to the ID and requesting of benefactors or different wellsprings of capital revenue driven associations. The fundamental objective of gainful gathering pledges is making benefit by gathering reserves. In a gainful raising support framework, reserves are gathered as cash-flow to contribute for makes benefit. Various kinds of NGOs, Community clubs, social improvement banks, and so on.

2.2.3 Fund-raising for Non-profit:

Non-profitable raising support alludes to the distinguishing proof of contributors who give useful personalities. In non-productive raising support contributor, give cash for request free. The contributor has no enthusiasm to make a benefit here. Noble cause establishment, strict establishment, government offices, and so forth.

Non-gainful raising support alludes to the recognizable proof of benefactors who give an advantageous psyche. In a non-gainful raising money giver, give cash for request free. The contributor has no enthusiasm to make a benefit here. Good cause establishment, strict establishment, government organizations, and so forth.

2.3 Comparative studies

The proposed applications or system above are mostly money donation related applications. It does not provide option for users to donate anything except money. But in our application, we will create an extra option to donate by categories such as food, clothes, accessories etc. We expect this donating facility to inspire generous people to give their unused products in order to help out those in need.

2.4 Scope of the problem

"Charitable" aims to change the current donation procedure and be a platform that encourages others to donate. As many people are there who may not be willing to donate money, but are willing to donate many of their unused items, "Charitable" significantly enhances the number of prospective donors in its platform. All these equip "Charitable" with the potential to solve economic, social, educational and environmental issues.

In our application, people will donate money and other products of their choice. We give our users this extra facility, as well as the option for anonymous contribution.

Some disadvantages of the existing systems are below:

- 1. Complicated donation process make user complex to donate.
- 2. Manual procedures used at present are pretty time consuming
- 3. A Common donation platform is unavailable for donation
- 4. Communication gap between donor and needy people
- 5. List of genuine needy people is unavailable
- 6. Needy people may not express their actual need to others
- 7. Lack of common platforms for micro donation
- 8. Dependence on the third parties on the part of donors, as it is the third parties who agree on how and for whom the donation will be utilized.

Our app promises to address all these issues and resolve them.

2.5 Challenges

2.5.1. Enrollment of Fraud Organizations

Any company seeking donation can sign up in our platform. However, we will contact these personally and conduct subsequent verification. Verification would include contact the relevant organization and checking their documentations, address, conducting physical visit etc. before making them live in our platform. The companies would also be assessed to see whether they genuinely require the funds they seek through posts.

2.5.2. Payment Gateway

Some of the widely used popular payment methods are Formal banking, Online Banking, Mobile Banking and Mobile balance Transfer.

The main focus of donation systems is its payment system. We handled it by giving a transaction ID that a user can make only by using a registered valid phone. The user can only make transactions using that particular number. A copy also recorded to admin to track.

2.5.3. Unwanted Event Creation

The platform will be constantly monitored to watch out for unwanted donation posts (called as "events" in our application). Through careful programming, we also believe we can reduce the frequency of repeated posts.

2.5.4. SECURITY AND RELIABILITY

Main benefits of mobile applications are its simplicity and user friendliness. However, mobile banking through 3rd party application pose a major security threat. As a result, is the privacy, integrity and security of our application will be the main issues of this payment system

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Business Process Model (BPM) represents the way of improving a system process. BPN works to achieve better results from a system. In our BPM most of the part shows event creation, donation, contribution process and other facilities. Our BPM is given below:

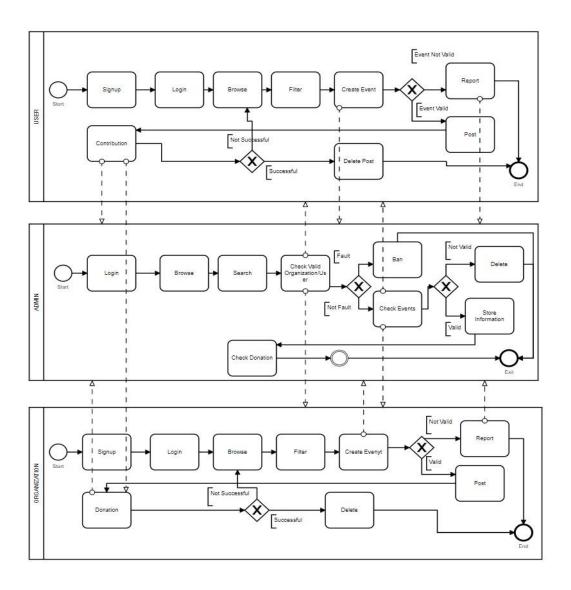


Figure 3.1: Business Process Modeling

3.2 Requirement Collection and Analysis

Lot of techniques were used to gather the requirements in our project. Based on the utility of the techniques, we chose the preferable techniques which is preferable and helped us to gather maximum requirements-

- 1. We first used one-to-one interviews of social workers, organizations and people to understand their expectations and requirements from such type of applications. This technique helped us to identify the gaps in the present systems.
- 2. Secondly we arranged a facilitated session. In this session we discussed about which facilities should be included in our App.
- 3. We then made a Questionnaire to find out the essential requirements of such an application.
- 4. A brainstorming session was then held to find out the critical problems of this Application.
- 5. A Request for proposal Session was then created where we collected suggestions from the public.
- 6. Finally, a prototyping session was run to Analysis for check Requirements.

3.3 Use Case Modeling and Description

Use case diagram actually represent an interaction with the system. It is also called behavior diagram. Internal and external influences requirements are gathered by Use case diagram.

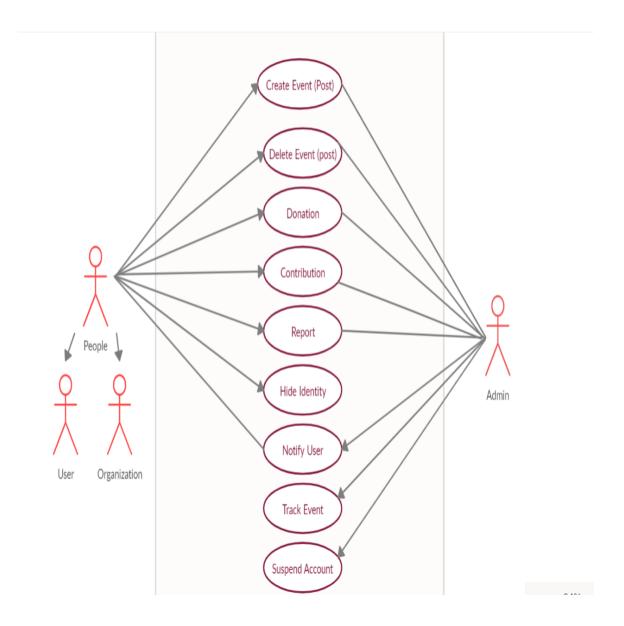


Figure 3.2: Use Case Diagram.

3.4 Logical Data Model

Entity Relation diagrams are called Database Relation Diagram. This relation makes a database simpler for programmers. This is our E-R Diagram Design which helped to understand a better view of database.

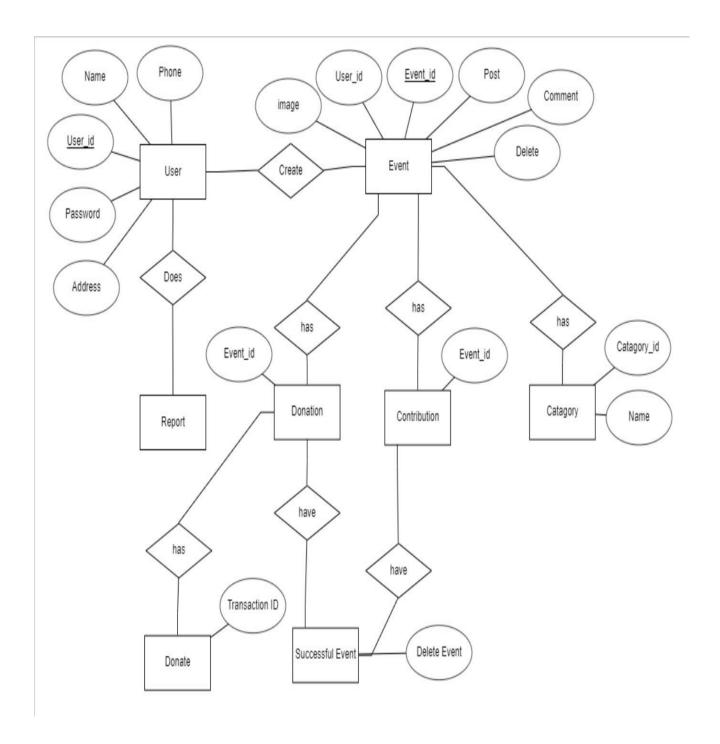


Figure 3.3: Logical Data Model

3.5 Design Requirements

Design Requirements represents the functional ideas, behavior and process of a system. It helps a programmer to understand how a function is working in a system. Design requirements can be represented in many ways. For our project, we have represented it like the flow chart given below:

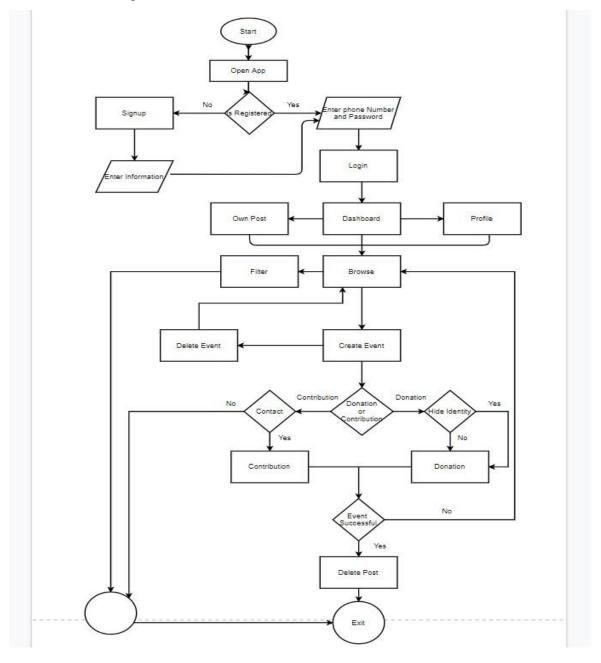


Figure 3.4: Flow Chart

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

For a mobile application, the Front end means the visual part of the application. The aesthetics and design of the application draw the attention of the user. We have used some design techniques to keep our app simple and user friendly. We have divided our application into two parts. The first section is for users and also organization and second section is for Admin.

It is very useful to prepare and maintain a frank and appreciable front-end design. We have tried our level best to create our app with an easy to understand and simple design. As a result, we strongly focused on our performance and accessibility in the user part. In the admin part, we have included: maintainability, readability, and modularity. Though we tried to strike a balance between the user and admin parts, but the user-related experience took precedence whenever there was a conflict between the two parts.

When a user will run our app, it will first start with a screen of a splash and then it will take the user to the signup or login page. If no one is previously logged in from the mobile used, the user will open the signup page. The user will have to provide valid information to sign up and login for the first time. We have kept the registration process very easy for new users to get enrolled in our community.

4.2 Back-end Design

Back-end is a very important and dynamic area for focus in mobile applications. It requires regular maintenance and monitoring from the developer. The users' information, organization's information, donation information have to be stored into back-end processes

in our project. Storing such information require database process and database management in the back-end. We have used "Firebase Database" of Google to process and store the data. Our app creates users' database by creating a user account. "Firebase" gives us some additional facilities such as cloud fire-store which provides real time database service for database management. Also API provides facility Firebase which will help the developers to synchronize the data in the application.

Following figures show the back-end design of our Application.

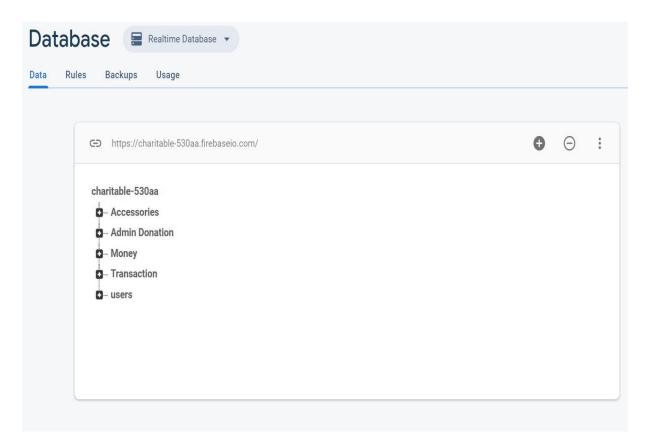


Figure 4.1: Shows The User And Organization Database.

A List shows all the users and organization information who registered in the database.

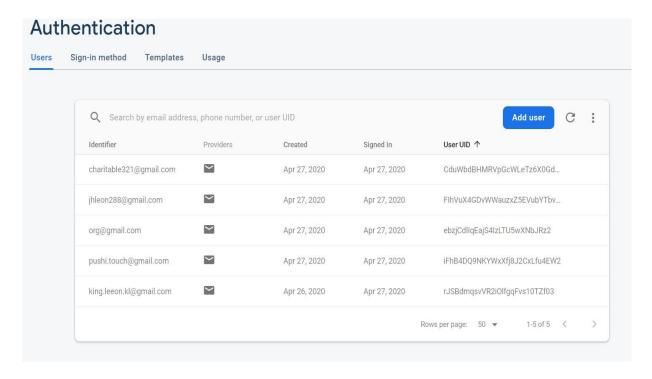


Figure 4.2: Shows All The Database That Was Created.

The database is containing different information about user and organization. Each user has a unique ID that will manage his/her data individually.

4.3 Interaction Design and User Experience (UX)

Interaction design creates a relation between user and application design. Whether an app is standard or not depends on user interaction. An app can achieve the highest popularity and acceptance by using user friendly interaction. User experience can build interactions between user and app. We have emphasized on making the interface in our app as user friendly as possible.

The critical part of an app is security. We have tried to give greater security to the user. We secured the system by providing phone number and password validation. Maximum ©Daffodil International University

features of this application interacts with the user. UX design is a challenging part for an app with such levels of interaction. Programmer always needs to focus on how security and other validations can be maintained as well as keep the users satisfied. We always pay attention to the user satisfaction of our user interface.

4.4 Implementation Requirements

There are many different types of components and software which are used to implement the project. We used Android based design components. For designing the project demo, we have also used Adobe XD.

4.4.1 Adobe XD:

Adobe XD is a partial free software created by Adobe Inc. Adobe XD is a user experience design tool for Apps. Vector images are used here for designing. It is useful for creating prototypes and screen designs such as websites and mobile apps.

4.4.2 Android Studio

Android studio is an integrated development environment created by Google for their Android operating system. It is Android's official IDE and is used for creating rich Android app development. It offers some tools for testing, debugging and rich code editing facilities.

4.4.3 SDK

Android SDK means Software Development Kit. This contains a set of development tools to develop Android application. The SDK includes Required Libraries as well as documentation for API (Application Program Interface).

4.4.4 Firebase Database

It is a dynamic Database which was created by Google. It gives real time facility to build rich and collaborative application. It gives secure access to database directly. Data is kept on locally while offline.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

In this section, we describe the process of implementing the database in our project. Previously we discussed that Firebase is our principal database. Firebase is a real time database which allows secure access to the database directly. In Firebase, there is no need of SQL. Real-time Database synchronizes the local data changes automatically that occurred while the client was offline. Firebase provides a flexible function called Firebase Real-time Database Security Rules to define how your data should be structured. Developers can define who has access to what data, and how they can access it when integrated with Firebase Authentication.

For storing information of users or organization, the user or organization will require registration. To log in to our database, the user will need his/her Email number and password.

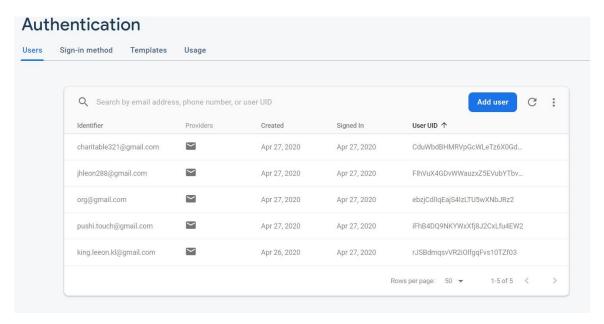


Figure 5.1: Register User List Of Firebase

Next time, user has to provide a valid Email number and password to login. If the Email number and/or the password are not valid, then the user will be barred from signing in. Firebase ensures such authentication facility.

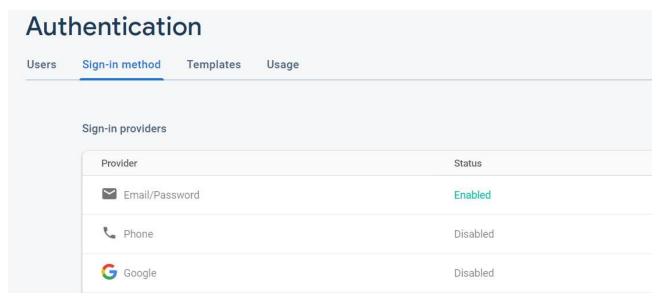


Figure 5.2: Valid Signing Method

There will be an admin in our app, where admin will track the user's information and history by using the admin's unique User ID.



Figure 5.3: Admin Database Section

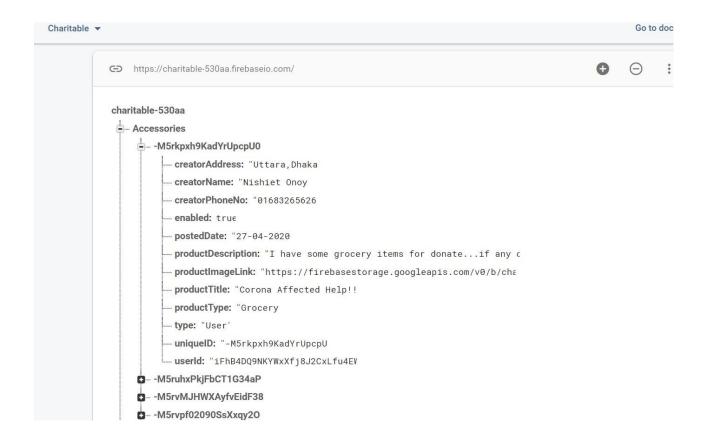


Figure 5.4: Track All Accessories Post

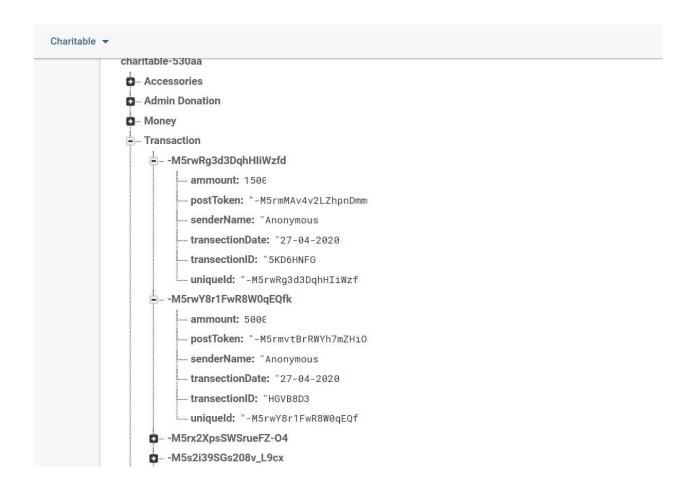


Figure 5.5: Track All Transaction Post

User will start to save information in database and as the database is real time database, the data will remain in both offline and online.

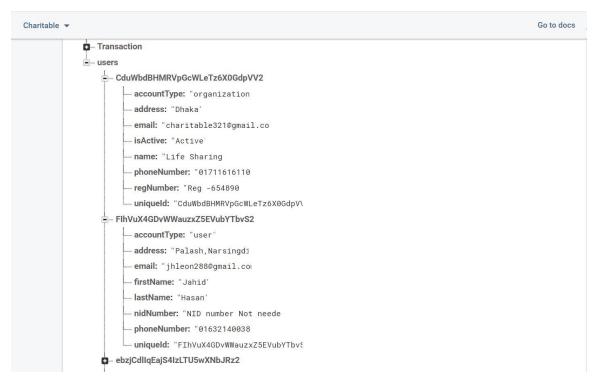


Figure 5.6: User Interface

5.2 Implementation of Front-end Design

The purpose of this project is to establish a social platform. Here we tried our best to connect social workers, so that people can contribute and can also collect donation. The description of front end design is given below. When users will use the app first, a scree will appear that shall include the charitable icon.



Figure 5.7: First Screen After Lunch App

After that, a sign in or sign up page will appear to the user within a second. If the user is registered before, he/she has to provide phone number and password, click the signin button to log in.

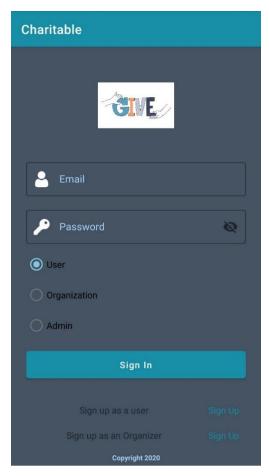


Figure 5.8: Sign In Page

For a new user, he/she has to provide valid information and click the sign-up button to register. There are two option registration as user or registration as organization.

Registration page as user looks like:

Register as user



Figure 5.9: User Signup Page

Registration as organization page appear like this:

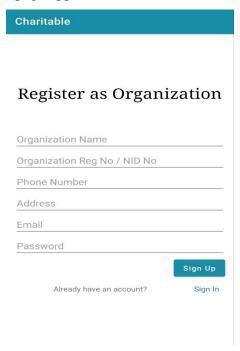


Figure 5.10: Organization Signup Page

After completing the registration process, a home page will appear to the user, where he/she will have the option to watch the event posts about donation or contribution.

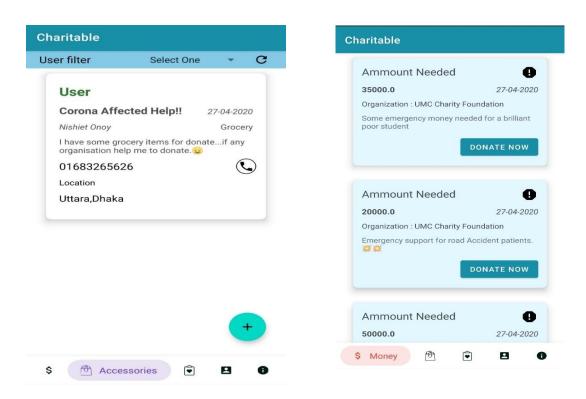


Figure 5.11: User Homepage

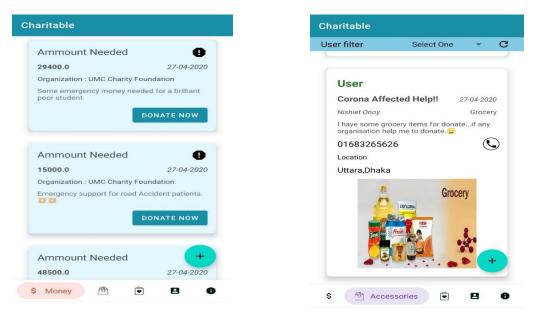


Figure 5.12: Organization Homepage

Users can easily create an event to contribute as the user interface is easier.

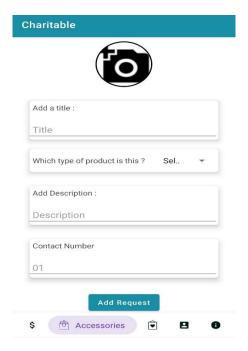


Figure 5.13: Event Create

A home page section will arrive to the user. User can then browse and filter for events easily.

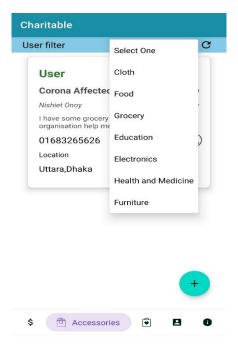


Figure 5.14: Homepage And Filter

Valid organizations (who are registered to app), can raise fund in cases of emergency.

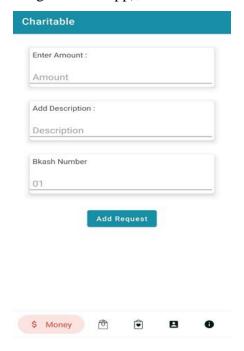


Figure 5.15: Fund Rise

For donating money, there will be a regular and an anonymous option in our app for those donors who want to hide his/her identity. Transaction ID has been used to secure money transferring.

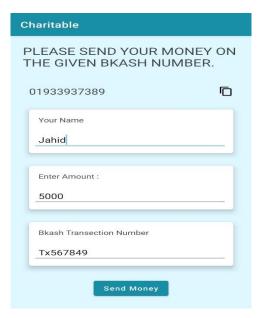


Figure 5.16: Without Anonymous Contribution

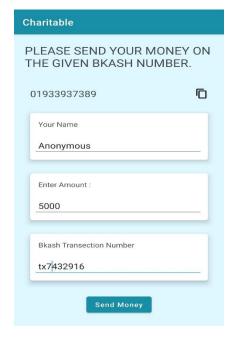


Figure 5.17: Anonymous Contribution

User can Also see her own posts

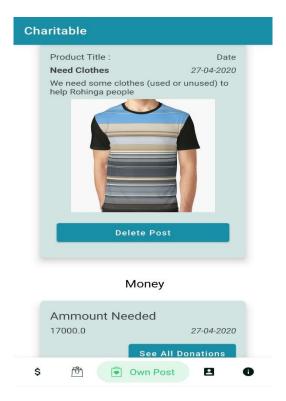


Figure 5.18: Users Own Post

When organization or user need accessories they can call directly to each other from event's given number

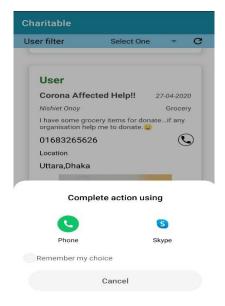


Figure 5.19: Contact For Accessories

If organization want to see who donate them. They can see this



Figure 5.20: Organization All Transaction

All users have an sign out option after their interaction with the app



Figure 5.21: Sign Out Page

A report option is given to user for any suspicious organization

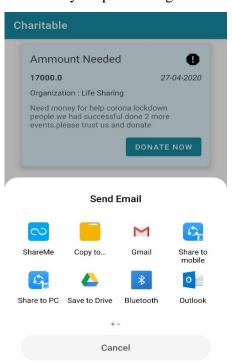
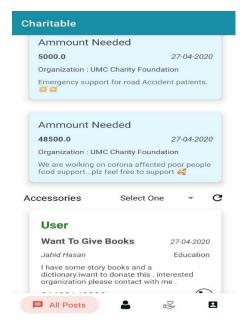


Figure 5.22: Report To Organization

An admin can track all of these processes and has the right to check the validity of an event. If he/she finds any wrong event, he/she will take immediate punitive action against those users.



5.23: Admin All Post

Admin can track all users. If find any fault against organization he will ban the organization.



Figure 5.24: Admin User And Organization List

An about us page section describe our policy and also a Donate option to support us.



Figure 5.25: About Us

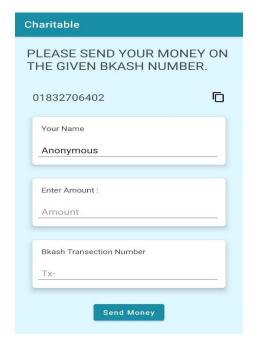


Figure 5.26: Support Us

5.3 Testing Implementation

Testing is an important process for an app. There are many steps to test a software. Without testing, an app may not work properly. Testing can reveal scope for error identification, and updating/upgrading of the app. Regular systems should be tested by a computer engineer. Strategies and steps that will be used to test our app as given below:

5.3.1 Unit Testing

In unit testing, levels and methods are tested. Its purpose is to check whether the functions are working properly or not. Unit testing is conducted by software developers.

Unit tests will detect changes whenever a code is altered. It reduces defects and anomalies in newly established features or reduces bugs when the existing functionalities are changed.

5.3.2 Verification Testing

Verification is tested in development phase to determine whether they meet the specified requirements of verification. Verification ensures whether the system fulfills its design and requirements or not.

5.3.3 Validation Testing

Validation Testing is a high-level testing process done by QA professionals. Validation testing checks and ensures whether the system complies with the requirements and performs functions it is intended to. It also checks whether the system meets organization's goals and user needs.

5.3.4 System Testing

System test planning process is a very high end planning process for developing a software. System Testing is known as fully integrated applications which includes

external outer boundaries instead of checking how components interact with one another and with the system as a whole. It is an End to End testing scenario.

Verification thorough testing each & every input in the application is done for checking desired outputs.

5.4 Testing Report

We can assess the efficiency of an application and the market readiness of it by its testing reports. After the test report describes our project operating conditions and the app is ready for using, we employ several ways of testing. If we always find positive test result, we will be able to say that our app is error free and acceptable. Nevertheless, we will continue to test our application for further update.

CHAPTER 6

IMPACT ON SOCIETY, ENVIRONMENT & SUSTAINABILITY

6.1 Impact on Society

Our Android application Created for the reason of collecting funds from different people. The funds will then be donated to the orphans or poor people for many reasons. Our Android app gives a layout to the users for donation and thus get rid of the process of physically seeing the orphans or organizations for donating. The important appearance of our app is that it helps users to donate amounts ranging from a minimum of Tk. 1 to as much as one desires to. There are many unfortunate experience that took place in Bangladesh in the last few years, such as garments fire, building collapses, road accidents and many other untoward incidents. Natural disasters are common here owing to the geographical feature of this landscape. These tragedy caused vital damages such as loss of

human lives and loss of properties. In our society different kind people, who wants to stand beside those tragedy-affected people through financial support. "Charitable" is such an Android app which will help them to achieve their donations. Donations that are received from the individual donors or organizations will be allocated based on the needs of the victims.

The distribution of amounts among people is done on regular small intervals of time by verifying the information of the organization provided and all this is done under some authorized supervision.

6.2 Impact on Environment

The most vital environmental topic in Bangladesh are climate changes, natural calamities (lightning, cyclone, flood, flash flood, drought, earthquake, riverbank erosion and sedimentation) and environmental pollutions (air pollution, water pollution, soil pollution, and noise pollution). Besides this, other effect of climate become different such as maximum Temperature, Dry spell, and Salinity Intrusion etc. are also responsible for the declining crop yields in Bangladesh. In our Country many people who cannot manage their tariff or may be in sorrowful situation for such environmental calamities. Thus poor people do not get actual funds in such situations, which necessitates the need for donation. And on the other side, there are many people from different sector who want to donate or help those people in dire need of help but are not able to help due to various reasons such as incomplete details of victims or inadequate amount of funds.

6.3 Ethical Aspects

Ethics and Accountability for Non-profits. Usually non-profit foundations are depend on the public support to do their job. For this reason it is very important for thus foundation to regularly carry out the public's faith through their commitment to ethical principles, transparency, and responsibility. If organization create Transparency then it inspires their confidence for doing their job. Beside this, fundamental law of nonprofit organizations can ©Daffodil International University

demonstrate their dedication to ethical practices & completely being transparent with financial information and definitely fundraising practices.

Anonymous Donation

Some donors ask that their gift should remain **anonymous**, and are concerned that the nonprofit will sell their contact information to other nonprofit organizations. To address these concerns, our application of fundraising has the option of anonymity.

Below there are few guidelines for ethical charity fundraising:

- Charities have to regularly review the ethics of their fundraising methods
- All fundraising requests should be truthful
 - Accurate description about the charity work
 - Accurate description needed for the intended uses and destinations of the donation event.
 - Don not encourage unrealistic expectations of what the donation will achieve
- Delicately collected donations will be used to support the published purposes of the charity event.
- Fund of Charity accounting and accountability will be the highest legal priority, accounting and ethical standards will be fully transparent.
 - o Financial activities should be reported regularly by that charities.
 - Percentage of income spent on raising funds will make clear by that charities.

- Percentage of income spent on administration will make clear by that charities.
- Any conflicts situation that may arise will be disclose by Fundraisers.
- Donors lists will not be sold anywhere.

The public expects charities to put beneficiaries first. The public also expects the charities to be courteous in their fundraising, generous to those on low pay and be moderate to those with higher pay, be ethical when investing money, be concerned about their environmental impact and fair in their treatment of volunteers, staff and supporters.

6.4 Sustainability Plan

A sustainability plan enhances the final product while sustainable business practices can ensure productivity. Operational efficiency will ensure resources are conserved and help save time and costs. Companies with sustainability plans are better equipped to transform goals into reality. Financial sustainability plan compels an organization to regularly conduct systematic analysis regarding its financial ability to continue to provide services over time. It assists an organization to identify the long-term financial resources that it needs in order to fulfill its vision and mission. In order to be sustainable, a nonprofit organization must set its long-term targets that it will endeavor to accomplish. An organization cannot hope to be sustainable if it cannot understand why it exists and what its long term ambitions are that it wants to accomplish to bring about a social change. Sustainability plan outlines how a non-profit plans to continue its operations over the long-term. The plan usually details about its financial side but it might also encompass how the organization wants to handle leadership changes and major external events (such as the emergence of a new competitor or a drastic fall in number of volunteers).

CHAPTER 7 CONCLUSION AND FUTURE SCOPE

7.1 Discussion and Conclusion

Finally, we done it successfully. Donation system android application "Charitable". In this time it was the demand to create a Smart Phone-based fund-raising and contribution system in our developing country. I think we can do it successfully. Our application would be a game changing open platform for online fund-raising and willing contribution system in Bangladesh. Every project has a challenge so the challenging part of this project was to make it user friendly system which will not only minimize the struggle for the charity foundations but also benefit the donor in a way that this project targeted. In near future our project can be integrated with other fund-raising system to make the complete system more useful for charity. The whole system maintains transparency so that all of the users can have that believe. We expect that our operations run smoothly. The poor people will be benefited and at the same time, donors will get the satisfaction of their amount being used for the right cause.

7.1.1 Limitations

In our world, nothing can be possible to make it be truly perfect like all other things that created. During Our work we tried for making this application perfect but we have some limitations that are not expected. We made this Application to start the project, not to be end. From the beginning trying our best to reduce the limitation of this Android application. But it is not the end so we will solve it future updates.

Some of the limitations are as follows:

- O Users have to use the internet to access our system.
- o Currently we have no option of having foreign currency in our system.

7.2 Scope for Further Developments

Our Android application "Charitable" has lots of hope & scope in future to be made it more user-friendly System.

Some of the future avenues for improvement are mentioned below:

- Other well-known local payment gateway like Bkash,, Rocket, Nagad etc. can be added in future.
- Some Popular payment methods like Master card, Visa card, Pay-pal Payment can be added in future.
- For accessed globally iPhone applications can be developed in future.
- After achieve mass volume of user then database volume will be high, we need to go for Oracle databases in future.
- In-App chatting system can be added in future.

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Charitable

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