#### Governors State University

# **OPUS Open Portal to University Scholarship**

All Capstone Projects

**Student Capstone Projects** 

Spring 2023

# **Sharing Hope Together**

Rekha Sai Sri Musunuru

Follow this and additional works at: https://opus.govst.edu/capstones

For more information about the academic degree, extended learning, and certificate programs of Governors State University, go to http://www.govst.edu/Academics/Degree\_Programs\_and\_Certifications/

Visit the Governors State Computer Science Department

This Capstone Project is brought to you for free and open access by the Student Capstone Projects at OPUS Open Portal to University Scholarship. It has been accepted for inclusion in All Capstone Projects by an authorized administrator of OPUS Open Portal to University Scholarship. For more information, please contact opus@govst.edu.

# SHARING HOPE TOGETHER

By

**Rekha Sai Sri Musunuru** B.Tech., Vignan's Lara Institute of Technology and Science, 2020

GRADUATE CAPSTONE SEMINAR PROJECT

Submitted in partial fulfillment of the requirements

For the Degree of Master of Science,

With a Major in Computer Science



Governors State University University Park, IL 60484

2023

# ABSTRACT

The primary purpose was to raise donations and aid those in need. Establishing a resource center to serve as an information center and library for farmers to gain the most up-to-date knowledge on climate change is a realistic aim and a solid sign of a successful fundraising event. It seemed like a great opportunity to engage with key contributors and supporters, so the team went ahead with it. Indeed, it may provide an opportunity to show thanks for their cooperation and provide an update on critical activities. Furthermore, it may provide an excellent opportunity to invite influencers and notable corporate leaders who are not currently involved with the charity and use it to gain new support. Knowing that a small number of people have made nearly all the campaign goal's progress can inspire more giving than learning that many people have made all the goal's progress. The MVC framework 7 in Dot Net Core was chosen by our team to create the website's back-end, while HTML5, CSS3, Bootstrap, JavaScript, and Ajax were chosen to create the front end. Data was stored in MS-SQL. Users, Donors, and Administrators all use the fund-raising mechanism. The application is managed by the administrator. The campaigns can be posted by people as needed. Donors can sponsor campaigns or reserve events.

# **Table of Content**

1	Proje	ct Description	1
	1.1	Competitive Information	1
	1.2	Relationship to Other Applications/Projects	1
	1.3	Assumptions and Dependencies	2
	1.4	Future Enhancements	2
	1.5	Definitions and Acronyms	2
2	Proje	ct Technical Description	2
	2.1	Application Architecture	3
2	2.2	Application Information flows	3
2	2.3	Interactions with other Applications	5
2	2.4	Capabilities	5
2	2.5 Risk	Assessment and Management	5
3	Proje	ct Requirements	6
í	3.1	Identification of Requirements	6
í	3.2	Operations, Administration, Maintenance and Provisioning (OAM&P)	6
í	3.3	Security and Fraud Prevention	7
í	3.4	Release and Transition Plan	7
4	Proje	ct Design Description	7
5	Inter	nal/external Interface Impacts and Specification	8
6	Desig	n Units Impacts	. 22
(	5.1	Functional Area A/Design Unit A	. 22
	6.1.1	Functional Overview	. 22
	6.1.2	Impacts	. 22
	6.1.3	Requirements	. 22
(	5.2	Functional Area B/Design Unit B	. 22
	6.2.1	Functional Overview	. 22
	6.2.2	Impacts	. 23
	6.2.3	Requirements	. 23
7	Open	Issues	. 23
8	Ackn	owledgements	. 23
9	Refer	ences	. 23
10	Ap	pendices	. 24

### **1** Project Description

The major objective was to raise money and help the less fortunate. Setting up a resource center to serve as a center of knowledge and library for farmers to learn the most recent information on climate change is a doable objective and a sign of a successful fundraising event. The team decided to pursue it since it felt like a terrific chance to interact with important fans and contributors. In fact, it might be an opportunity to let them know how grateful you are for their help and to provide them an update on important projects. Additionally, it may present a great opportunity to invite influential people and well-known business figures who are not already involved with the charity and use it to gain new support.

### 1.1 Competitive Information

On the website Kickstarter, innovative projects may earn money through donations. One of the original sites, Kickstarter, has seen recent growth as well as several major, successful projects [6]. With a group of like-minded people, quirky is a place to work together and crowdfund for donation-based functions. their website further deeply into assisting the process of bringing a product or technology to market, allowing community involvement in the process. Web collaboration is a rapidly expanding field. The Omilling people will carry out Omilling Traditional Authorities at no expense [1]. The vast bulk of the funding will be used to purchase building materials. Low local overhead costs are maintained. Since improving educational opportunities for local kids in the Omilling neighborhoods would significantly aid in reducing poverty, the local workers for this project will be chosen based on their talent and sincere desire to do so. A plan to get communities ready to take care of AIDS orphans in a home-based, communal setting is being introduced by the Agency Supporting Our Children (ASOC). Coordination of community-based project activities. Community-based professional training to enable them to provide the essential professional support to AIDS orphans in their areas [8]. In several projects, students opted to directly ask wealthy or powerful people in their social networks for donations rather than spending time setting up raffles. Students have recently used Facebook and other online social networks to generate money. The results were mixed; some charities got part of the funding they needed, while others did not. The quality of each student's relationships influences the outcome. The best results, meanwhile, came from having students share their project details on social media while making in-person supply requests.

### 1.2 Relationship to Other Applications/Projects

We were attempting to duplicate the GoFundMe fundraising page [2]. The entry of the campaign title, category, and locations may result in the presentation of important information, as we did. Users may donate

to campaigns and reserve events to support those in need. Websites like GoFundMe also have it. The connection between our initiative and theirs is represented by this [5].

# 1.3 Assumptions and Dependencies

- This sharing hope together application must be familiar to the administrator. Because admin only has access to this application's complete rights, they must be familiar with every aspect of our application.
- > The campaign and other entities may have access to the member database.
- > The user is accustomed to working with computers.
- > The machine should be able to function as an internet server and have an internet connection.
- > The user must be fluent in English because the user interface is only available in that language.

# 1.4 Future Enhancements

Even though the system's goals and objectives have been achieved, there is still room for improvement. Social media integration aids in a company's development of a robust online presence. LinkedIn (LinkedIn n.d.), Twitter (Twitter n.d.), Facebook (Facebook n.d.), and Instagram (Instagram n.d.) are a few of the social media platforms that users of our fundraising website utilize to simply publish campaign postings to engage donors and raise money. As a result, if we ever update our application, we might be able to accomplish this.

#### 1.5 Definitions and Acronyms

- ✓ .NET Network Enabled Technology. .Net Core is new version of .Net Framework.
- ✓ EF Entity Framework
- ✓ MVC Model –View Controller
- ✓ LINQ Language Integrated Query
- ✓ HTML5 Hypertext Markup Language Version 5
- ✓ CSS3 Cascading Style Sheet Version 3
- ✓ JSON JavaScript Object Notation.

# 2 Project Technical Description

The Sharing Hope Together project serves as a fundraising tool. Dot Net Core MVC [3] elements including Entity Framework 7, HTML, CSS, JS, jQuery, Ajax, and BOOTSTRAP were used to create the user interface for this project. The user administration process, including registration, login, user authorization, and role assignment, was streamlined using Identity User. According to data migration, the identity table

and other tables may be expanded or altered, and LINQ [9] makes it simple to turn data into objects. We streamlined the project code using an interface and a repository, which gave us more control over the data while preserving clear, straightforward code. We used partial view login layouts to our benefit. Four consoles were used in the application. These are only a few names that might be used; others include Admin, Authentication, Home, and User. We used an authentication controller to gain access to sign-in, sign-up, default roles, and administrator credentials. We made advantage of the home controller's search, campaign list, campaign information, and guest index functions. We created the admin controller to govern everything, including establishing admin commissions, events, generating categories, locations, user lists, and user approval. We manage campaign creation, donations, event reservations, notification lists, user account balances, and withdrawals in the user controller, among other things.

### 2.1 Application Architecture

We were able to upgrade the database schema and change the data model in this application by using the EF migrations functionality without having to dump and recreate the database [4]. The architecture of this project is composed of the modules Home, Admin, Authentication, Home, and User. Prior to discussing the roles, describe the home page first. Without needing to log in, anybody may browse the confirmed campaign list, registration, campaign data, home, and login to the application. The application's default role is admin. The only people with the authority to create categories, locations, commissions, and events are admins. Additionally, they have access to user, campaign, donation, and withdrawal information. The user occupies the second place in the program. When starting a campaign, provide the objective amount, the date for collecting the amount, and place the campaign in the feature category. The image was uploaded by the user to that campaign. The donor is listed third on the application. The primary tasks of the other interface, referred to as home, are enrolling users, completing the sign-in procedure, creating an admin account, assigning roles like "admin" and "donor," and registering donations. We built a single layout based on the login function, such as admin or donor, for both visitors and everyone.

# 2.2 Application Information flows

The creation of a website for the sharing of hope involved the use of three different techniques. Figure 1 below illustrates how to submit an application. The primary goal of the entire curriculum is for participants to find their perfect campaign. The customer may need to use the homepage to search for discovering campaigns, contributing to campaigns, and scheduling events. After that, the registration process is focused on you. They will be sent to the login page once they have finished the registration process. After signing in, donors and administrators may view the home page and search for campaigns.



Figure 1: Main Page Workflow Diagram



Figure 2: Admin Workflow Diagram



Figure 3: User Workflow Diagram



Figure 4: Donor Workflow Diagram

### 2.3 Interactions with other Applications

All crowd funding software should have as standard features intelligent campaign search, event booking, selecting the best applicable category, and donation process. Most of our applications are often made with broad topographies to promote user participation from both donors and acceptors, who may profit from these features to improve their user experiences while collecting the money at the appropriate time. the criteria for approving our application to address a common set of issues faced by poor people. The three stakeholder types that comprise the value of our united hope fall into the following three categories:

- ✓ A portal administrator is the owner of the fund-raising application for Sharing Hope Together.
- $\checkmark$  By doing this, a user can post a campaign.
- $\checkmark$  A donor has the option to select a campaign and donate to it.

# 2.4 Capabilities

- ✓ A user-friendly interface, simple customization, and attractive visibility. both sophisticated and user-friendly features
- ✓ Capabilities for comprehensive campaign searches
- $\checkmark$  There are several search options depending on the keywords.
- Alternatives for searching based on location, using category and title filters for campaigns with the donor and the user

# 2.5 Risk Assessment and Management

The most challenging aspect of fund-raising initiatives is risk management. Even though it is impossible to predict the future with complete accuracy, the risks related to the application can be anticipated and minimized by using a simple and effective risk management technique. Risk management helps with both preventing crisis situations and remembering and picking up from previous mistakes. This raises the possibility that the project will succeed while lowering the risks' negative impacts. We still have a long way

to go before we develop a risk management plan that is effective for us. In order to be able to continually improve our processes and raise the efficiency of our operations, we must engage in a continuous process.

# 3 Project Requirements

## 3.1 Identification of Requirements

#### <GSU-SHT\_2023-01 Admin-capability-SHT001>

Handle- Admin may only handle the donor, all contribution lists, withdraw lists, and user lists.

#### < GSU-SHT\_2023-02 User-capability-SHT002>

**Campaigns-** No one else except the contributor can start a campaign. Anyone who wants to post a campaign must sign up for our application.

#### < GSU-SHT\_2023-03 Donor-capability-SHT003>

**Donate-** Users are unwilling to register in order to give to the campaign. By just clicking the give button, you may donate any amount.

#### < GSU-SHT \_2023-04 User-capability- SHT004>

Events- Users may plan events for which admin will distribute collected funds to those in need.

#### < GSU-SHT \_2023-05 Admin-capability-SHT005>

**Manage** – Only the administrator can establish categories, events, locations, and set the admin commission.

#### < GSU-SHT \_2023-06 Admin-capability-SHT005>

**Notification** – If anyone books an event or donates to a campaign, they must notify the administrator and the appropriate campaign by setting up donor accounts.

### 3.2 Operations, Administration, Maintenance and Provisioning (OAM&P)

#### Operations

You can receive money for the deserving poor individual with the aid of our user-friendly and intuitive program. For the payment process, both security and ease are required. Neither signing in nor registration is necessary to access the website. These campaigns should incorporate the search option's results, together with information on how many goals have been attained.

#### Administration

All users and campaigns are only accessible to the administrator. The administrator is the only one with the authority to add, edit, and remove categories, locations, commissions, events, and other

items. After being given permission by the administrator, the user may be given access to more data, such as the ability for a donor to post a campaign and for a user to donate a significant amount.

#### Maintenance

Large file sizes from complicated web programmers are deleted to speed up page loading. This tool makes sure that all of the data and the complete website are included in the routine backup.

#### Provisioning

The application offers users the chance to keep track of their performance while ensuring a steady environment.

# 3.3 Security and Fraud Prevention

Through planning for security and fraud prevention, the process for detecting fraud can be established. The planning procedure for fraud prevention consists of the following phases.

- All user data should be preserved through the proper registration process, and the program should be updated often.
- > Clear duties and responsibilities have been delegated to management and recruiting.

# 3.4 Release and Transition Plan

The creation of a website cannot begin unless it has been fully developed and tested. Before the problems can be solved, the sharing hope together website must be launched. Following program startup, data storage will start, and the maintenance process will be used to maintain the application's continuous workflow.

# 4 Project Design Description

This project's whole was built using Dot Net Core. To achieve this, we used the MVC pattern format. We choose the website to serve as a GoFundMe imitation [10]. We employed two separate layouts in our application: one for the main menu and one for registered users. The layout's main goal is to present all available campaign information, including those that need registration and those that do not. The identical registration method was used for all user categories. All users, including administrators, contributors, and users, used the same login page. We enable each user to fulfil their own obligations, not those of others. The Admin Layout Page shows up as the initial page when a user comes in as an administrator. Using this Admin Layout, the administrator may see all the data related to this application on the Dashboard. The only person with the power to create categories, locations, commissions, and events is the administrator. Additionally, they have control over user lists, donations, campaigns, notifications, and withdrawals. Administrators update their personal info as things change.

The donor Layout Page is the first page a user sees when logging in. Users can establish campaigns, edit personal information, browse donation lists, and read notifications thanks to the user. Until the objective was accomplished or the deadline had passed, the campaign received the sum. Once the user's donation amount reaches more than \$100, the withdraw button will become active. The user can then take their money out of their account. Donors can look for campaigns, given to them, and book events without logging in. These bookings will be added to the user account.

# 5 Internal/external Interface Impacts and Specification

In the life cycle of software development, the requirement definition phase is essential. Even though this application may be built using a variety of software and hardware requirements, the software and hardware requirements that we used to build this fund-raising website are listed below:

## **Software Requirements:**

<b>Operating System</b>	:	Windows 10
Language	:	C#
Database	:	MSSQL
Front End	:	HTML5, CSS3, Bootstrap5, JavaScript, jQuery
Browser	:	Preferable Google Chrome or Mozilla Firefox or Edge



Figure 5: Software Development Process [11]



Figure 6: Database ER Diagram

The following screenshots show the design elements of the application:



**Figure 7: Home Page** 



Figure 8: Home Page Section 2

# around the world

Q



#### Figure 9: Campaign List Home Page Section3



Figure 10: Home Page Section3



# **Figure 11: Search Functionality**





s	н	A	R	ı	N	G	н	0	Ρ	Е	т	0	G	Е	т	н	Е	R
۰.						-		-		-		-	-	-			-	

Q Home Campaign List Register L	ogir
---------------------------------	------

Dongte Now MAKE	Raised Amount : 250.00	
What factors affect		
the attractiveness of		
rivers? Scientific		
They provide habitat for fish, crayfish, insects, snails, as we		

**Figure 13: Donation Page** 

SHARING HOPE TOGETHER	Home Campaign List Register Login
Donate Now	
What factors affect	Raised Amount : 250.00
the attractiveness of	Card Number
rivers? Scientific	Expiry MM/YY
research	cvv
Rivers are an important part of the natural environment. They provide habitat for fish, craufish, insects, snails, as	Pay Now Cancel
we	

Figure 14: Payment Page



Figure 15: Alert Message

🛿 +1 (555) 098-7654 🛛 🖬 abcd@govst.edu			3	f in 🖸	Â
SHARING HOPE TOGETHER		Q Home	Campaign List	Register Login	
	and the second s				
	Sharing Hope Together				
	온 First Name				
	& Last Name				
	& User Name				
	& Email Address				
	Password				
	Confirm Password				
					•

**Figure 16: Registration Page** 

Sharing Hope Together
Admin
P
Login
Forgot password? <b>Of</b> Sign up

Figure 17: Login Page

	=	Searc	ch		Q							A STO
		. ,										
*		Catego	ry Name				Category Icons					
						ম						\$
٢		Catego	rv Details				Feature Category					
**		g-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				·					
\$												
5												
*		Sub	omit Ca	ncel								
<u>م</u>												
- 5		Category	/ List									
		S.NO CATEGORY CATEGORY CATEGORY DETAILS NAME ICONS					FEATURE CATEGORY	STATUS	UPDATE	ACTIVE / IN ACTIVE CATEGORY		
	flaticon- Healthcare fundraising is an essen 1 Health Care healthcare successful development strategy f			ential comp for health	ponent of any ncare institutions			0	•			
		2	Education	flaticon- education	Education encompasses what go well, such as through extracurricu arts, STEM fields, and more	es on outs ular enrich	side the classroom as ment programs in the	Yes	Active	<b>~</b>	0	

Figure 18: Category Page - Admin Layout

	≡	Search		٩						¢.	T.
•••	Loc	cation						Dashboard	> Location > Lc	cation Creation & L	ist
	Ŀ	ocation Creati	on			Location	List				
# \$	L	ocation				S.NO	LOCATION	ACTIVE / IN ACTIVE	UPDATE	ACTIVATE	
5		Submit	Capaal						<b>&gt;</b>	0	
\$		Submit	Gancer						0	0	
(†) (5)									0	•	

Figure 19: Location - Admin Layout

	≡	Search	٩				(F)
•••	U	ser List					Dashboard > User List
≣ ⊘		User List					
# \$		S.NO	FIRST NAME	LAST NAME	USER NAME	STATUS	ACTIVATE
•			Mansi				•
*							•
() (5							

Figure 20: User List - Admin Layout

=	E Search	٩			and the second
	Event Creation				
	Campaign Event Title			Amount	
<u>ہ</u>			ম		
\$	Category			AboutEvent	
<b></b>	Health Care				
<b></b>					
\$	EventDate			Available Tickets	
<b>(</b> )	dd-mm-yyyy		Ē		
<b>E</b>	Venue			VenueLocation	
	Oragnizer			OragnizerEmail	
	OragnizerContactNo			Event Image	
				Choose file No file chosen	

Figure 21: Event Creation - Admin Layout

=		Search	'n		٩									1ª
		Subr	mit Ca	ancel										
	Eve	ent List												
	s	5.NO	CAMPAIGN EVENT TITLE	CATEGORY	ORAGNIZER	VENUE	VENUELOCATION	AVAILABLE TICKETS	EVENTDATE	AMOUNT	ISFEATURED	ISACTIVE		
			inspiring Women			Gaylord National Resort & Convention Center	Edison Rooftop 223 W 46th St. New York, NY 10036		30-04- 2023 00:00:00				0	
						Gaylord National Resort & Convention Center	Guastavino's 409 E 59th Street, New York, New York						0	

Figure 22: Event List - Admin Layout

Campaigr	1				Da	shboard > Camp	oaign 🔸 Campaign C	reation & List
Campaig	ın List							
S.NO	CAMPAIGN TITLE	CATEGORYID	LOCATIONID	ABOUTCAMPAIGN	DEADLINE	ISFEATURED	ISACTIVE	
	What factors affect the attractiveness of rivers? Scientific research		Chicago	Rivers are an important part of the natural environment. They provide habitat for fish, crayfish, insects, snails, as well as birds and mammals. They regulate the amount of water in the environment by discharging excess water into the seas and oceans. Rivers are also attractive for tourism, with many people enjoying their leisure time near them. The purpose of the study is to identify the attributes of rivers that determine their attractiveness from the public's point of view.	15-05- 2023 00:00:00		Active 🧭	٠
	People Health Response And Village Mans			Nutritious school food helps students develop lifelong healthy eating habits This campaign helps students develop lifelong healthy eating habits			Active 🕗	٥



	=	Searc	ch	٩				
	C	)onate Li	st					Dashboard > Donate List
₩		Donate L	ist					
# \$		S.NO	FULL NAME	EMAIL	CONTACT	CAMPAIGN	AMOUNT	DATE
<b>.</b>				teja@gmail.com		People Health Response And Village Mans		04-03-2023 21:54:06
\$			Nazia Roohi			What factors affect the attractiveness of rivers? Scientific research		05-03-2023 19:54:06
۲ آ			Rekha		98947	People Health Response And Village Mans		10-03-2023 19:54:06
					51746	People Health Response And Village Mans		
				teja@gmail.com		What factors affect the attractiveness of rivers? Scientific research		28-04-2023 11:24:41

Figure 24: Donate List - Admin Layout

 0
 Searcr
 000101

Q)

						145
Notificati	on List				Dashboard	I → Notification List
Notificat	tion List					
S.NO	тітіе	CAMPAIGN / EVENT DETAILS	CREATED DATE	STATUS	READ DATE	ACTIONS
	New Event Booking Payment Done	2023 JURY CHAIR	26-03-2023 14:00:37			Ø
	New Donation Payment Done	What factors affect the attractiveness of rivers? Scientific research	26-03-2023 14:00:37		28-03-2023 00:00:00	
	New Event Booking Payment Done	INSPIRING WOMEN	01-04-2023 14:00:37		05-04-2023 00:00:00	
	New Donation Payment Done 500	What factors affect the attractiveness of rivers? Scientific research	28-04-2023 11:24:42			

Figure 25: Notification List - Admin Layout

	≡	Search		٩					C. S. C.
 ▲	Wi	thdraw List							Dashboard > Withdraw List
#= \$	١	Withdraw List							
5 5		S.NO	TRANSFER AMOUNT		COMMISSION	TRANSFERRED T	0	TRANSFERRED DATE	
۲ ۲					25.00			05-04-2023 00:00:00	

Figure 26: Withdraw List - Admin Layout

	=	Search		٩				A A A
····	С	ampaign					Dashboard > Campaign > <b>Campaig</b>	n Creation & List
* *		Campaign Creation	on					
5		Campaign Title				GoalAmount		
					ፕ			
		Categoryld				LocationId		
		Health Care				New York		
		AboutCampaign				DeadLine		
					\$	dd-mm-yyyy	c	
						Campaign Image		
						Choose file No file chosen		
		IsFeatured						
		Submit	Cancel					



	=	Searc	h	C	2					and the second
		Sub	mit Cancel							
×		Campaig	n List							
5		S.NO	CAMPAIGN TITLE	CATEGORYID	LOCATIONID	ABOUTCAMPAIGN	DEADLINE	ISFEATURED	ISACTIVE	
			What factors affect the attractiveness of rivers? Scientific research		Chicago	Rivers are an important part of the natural environment. They provide habitat for fish, crayfish, insects, snails, as well as birds and mammals. They regulate the amount of water in the environment by discharging excess water into the seas and oceans. Rivers are also attractive for tourism, with many people enjoying their leisure time near them. The purpose of the study is to identify the attributes of rivers that determine their attractiveness from the public's point of view.	15-05- 2023 00:00:00		Active	
			People Health Response And Village Mans			Nutritious school food helps students develop lifelong healthy eating habits This campaign helps students develop lifelong healthy eating habits	02-03- 2023 00:00:00		Active	2

Figure 28: Campaign List

	=	Search	٩				nº.						
····	١	Withdraw List				Dashboard 🔸 Withdraw Lit	st						
× *		Current Balance	Current Balance : 1625.00 Withdraw Percentage 5.00%   Commission Amount 107.50										
		Withdraw List											
		S.NO	TRANSFER AMOUNT	COMMISSION	TRANSFERRED TO	TRANSFERRED DATE							
				25.00	Mansi	05-04-2023 00:00:00							

Figure 29: Withdraw List

	E Search Q		
	Profile Managment		Dashboard > Account Management > Update Profile
×	Update Profile		
5	First Name		Last Name
	Mansi	ይ	Dodiya 요
	PhoneNumber		UserName
	1233746	ይ	mansi &
	Old Password		New Password
		6	
	Verify Password		
		ম	
	Update Cancel		

Figure 30: Update Profile Management

### 6 Design Units Impacts

The design of a website or an application has a significant influence on the business. The demands of the business may be determined by developers using this design methodologys. According to the needs of the company, the designing process will be accessed, and the designing strategy may be changed to meet the needs of the customer. Design should take the payment procedure into account. Secure contribution will assist to protect the storage of client data while also benefiting the software's design. The technique for preserving security and identifying fraud should be specified in the design aim.

# 6.1 Functional Area A/Design Unit A

#### 6.1.1 Functional Overview

Making sure all important business tasks are effectively carried out is the major goal of functional areas. This is necessary in order to accomplish the company's aims and objectives. This design unit and workflow approach will help the system's operational functions as they adapt it to meet their needs and those of the client. The working procedure entails authentication, authorization, data modifications, user information updates, backup and recovery, and administration [7].

#### 6.1.2 Impacts

Authentication, data updates, user information updates, backup and recovery techniques, and administrative tasks are all included in the work process. These design unit and workflow processes enable the computer's operating functions to change the system to satisfy operational and client demands.

#### 6.1.3 Requirements

- $\checkmark$  The administrator oversees user authentication.
- $\checkmark$  This application may be seen without logging in or registering.
- $\checkmark$  The interfaces between the interior and the outside must be appropriately configured and dependable.
- $\checkmark$  To safeguard client data, it is vital to implement a data backup strategy.

### 6.2 Functional Area B/Design Unit B

#### 6.2.1 Functional Overview

Information about the consumer should be securely kept in the database, which should be updated. Only approved people will be able to access the website, and the database will be password-protected.

### 6.2.2 Impacts

It will enable the software to function. Before trying to log into the system, a user must first authenticate themselves. Included is the ultimate objective, which might be a physical item, an online storefront, or an ordering process. Additionally, it is possible to combine approval procedures and authorization levels.

### 6.2.3 Requirements

Business rules, administrative behaviors, authentication, access levels, external interfaces, reporting, and other requirements are examples of functional demands. These requirements help to ensure that the client and the development team are working towards the same objectives.

# 7 **Open Issues**

The administrator and donor must get alerts and messages in line with the donations they have made and the event payments the administrator has made.

# 8 Acknowledgments

We would like to express our gratitude to Dr. Dae Wook Kim, our professor, for providing us with the exceptional possibilities to develop this wonderful project plan. Our ability to conduct extensive research was made possible by this project. We will gain a lot of knowledge from this Sharing Hope Together project. It enhanced our capacity for research and report writing.

# 9 References

[1] Bushouse, B. K. (2004, November 30). *Community nonprofit organizations and service-learning: Resource constraints to building partnerships with universities.* Michigan Journal of Community Service Learning. Retrieved May 5, 2023, from https://eric.ed.gov/?id=EJ848483.

[2] *GoFundMe: #1 Fundraising Platform for Crowdfunding*. (n.d.). GoFundMe: #1 Fundraising Platform for Crowdfunding. https://www.gofundme.com/

[3] *ASP.NET MVC Tutorial*. (n.d.). ASP.NET MVC Tutorial. https://www.tutorialspoint.com/asp.net\_mvc/index.html

[4] *Programming Microsoft Linq in Microsoft .Net Framework 4*. (n.d.). Google Books. https://books.google.com/books/about/Programming\_Microsoft\_Linq\_in\_Microsoft.html?id=yMFQswEA CAAJ

[5] Di Lauro, S., Tursunbayeva, A., & Antonelli, G. (2019). How nonprofit organizations like gofundme use social media for fundraising: A systematic literature review. *International Journal of Business and Management*, *14*(7), 1.

[6] Qiu, C. (2013). Issues in crowdfunding: Theoretical and empirical investigation on Kickstarter. *Available at SSRN 2345872*.

[7] R. (n.d.). ResearchGate / Find and share research. ResearchGate. https://www.researchgate.net/

[8] *Hope Ofiriha* — *Charity Helping South Sudanese Women & Children Rebuilt Their Lives*. (n.d.). Hope Ofiriha — Charity Helping South Sudanese Women & Children Rebuilt Their Lives. <u>http://www.ofiriha.org/</u>.

[9] Pialorsi, P., & Russo, M. (2010). Programming Microsoft LINQ in Microsoft .NET Framework.

[10] Olsen, M., Keevers, M. L., Paul, J., & Covington, S. (2001). E-relationship development strategy for the nonprofit fundraising professional gofundme. *International Journal of Nonprofit and Voluntary Sector Marketing*, 6(4), 364-373.

[11] Kim, S.-K. (2019, November 26). Systematic Innovation Mounted Software Development Process and Intuitive Project Management Framework for Lean Startups. arXiv.org. https://arxiv.org/abs/1708.06900

# 10 Appendices



**Figure 31: Authentication Controller** 



Figure 32: Login Method and Donor, Admin & User Role Creation



**Figure 33: Admin Controller** 



Figure 34: Events Action - Admin Controller



Figure 35: Sign-In and Update-Account Actions



Figure 36: Home Controller Campaign List



**Figure 37:3 User Controller Notification** 



Figure 48: Campaign Creation