



TRƯỜNG ĐẠI HỌC FPT

FPT UNIVERSITY

Capstone Project Document

Volunteering Community Connection System

GSP22SE20	
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Best regards,

Capstone project team.

Definition and Acronyms

Acronym/ Abbreviation	Definition
BR	Business Rule
ERD	Entity Relationship Diagram
GUI	Graphical User Interface
UC	Use Case
API	Application Programming Interface
FE	Feature
LI	Limitation
EX	Exclusion
WBS	Work Breakdown Structure
JSON	JavaScript Object Notation
QR	Quick Response
STLC	Software Testing Life Cycle
VCCS	Volunteering Community Connection System
Conneto	Commercial name of the platform VCCS
Organization	Organization is a voluntary organization of members with common purposes, activities related to social work and helping disadvantaged people.
Project	Project is a set of activities related to volunteer work and over a long period of time, run by an organization. A project can contain multiple volunteer campaigns within it.
Recruitment Campaign	Recruitment campaign is a campaign created with the purpose of getting more human resources to serve voluntary social activities.
Donation campaign	Donation campaign is a campaign created with the purpose of

	raising funds and providing financial relief to difficult situations.
Volunteer	Volunteers are people who give their time to help a nonprofit or a situation in need.
Organization Manager	A representative of the organization that was created on our system.
NPO	A non-profit organization (NPO), also known as a non-business legal entity, non-profit organization or non-profit organization, is a legal entity organized and operated for the collective, public or society, as opposed to a legal entity that acts as a business to generate profits for its owners.
NGO	A non-governmental organization (NGO) is an organization usually established independently of the government. They are usually non-profit organizations and many of them are active in the humanitarian or social sciences; they may also include clubs and associations that provide services to their members and others.

I. Project Introduction

1. Overview

1.1 Project Information

- Project name: Volunteering Community Connection System
- Project code: VCCS
- Group name: Conneto
- Software type: Web Application, Mobile Application

1.2 Project Team

a. Supervisors

Full Name	Email	Phone Number	Role
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Table 1 – Supervisors

b. Team Members

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Nguyễn Thanh Hiếu	hieuntse140062@fpt.edu.vn	0796 800 152	Member

Table 2 – Team Members

2. Product Background

Charity activities are a growing trend of the community with the desire to be able to help and support the development of the community more as well as help the surrounding aspects of life become better as well as an opportunity for everyone to develop themselves. Charity activities are often organized by NPOs and others, ...

Currently, NPOs and NGOs organize a lot of activities with diverse genres: for children, for the elderly, for the environment, ... And such meaningful activities will need to be spread, human

expansion to the community as well as attract the attention and attention of donors, donors and participants to make this journey sustainable.

In addition, transparency about money as well as social activities is more important than ever. And charity organizations or individuals do not have an official channel to bring trust to the community in the activities they have, are doing and will do.

Therefore, Conneno was born to help connect charitable organizations closer to benefactors, donors who want to donate or participate. This will also be an official platform to help transparent all activities or sources of money received for that organization's projects to help the community trust the organization more.

3. Existing Systems

3.1 Mobile App: Thiện Nguyên ([App Thiện Nguyên](#))

“Thiện Nguyên” is a humanitarian platform that applies technology to solve problems of connection, financial transparency and spreading charity activities.

- **Pros:**

- Charity social network, connecting people
- Fast and convenient support
- Publish account statement

- **Cons:**

- The app only has monetary donations
- The app only allows money transfers through bank accounts, limiting the user's donation channel
- The application does not have a transparent image for the spending of the donation amount

3.2 Mobile App: Smai – Tặng đồ thiện nguyện ([App Smai](#))

- **Pros:**

- The application allows flexibility in helping, in-kind donation
- The application allows users to post messages to ask for support or want to support others

- **Cons:**

- The application has been inactive for a long time
- The application interface is not beautiful, it is difficult to attract users
- There are not many new features to stimulate users to use the application more

4. Business Opportunity

The VCCS system is seen as a future connection platform, not only for volunteers or charity organizations. It is also a place to connect the positive values of society. Through allowing direct donations on the platform, or recruiting members for projects, this will be a solid place to connect trust and resources for organizations. Moreover, in the future, the system will create more sustainable opportunities for volunteers to improve their skills, profile to help them develop themselves.

5. Software Product Vision

For all the organizations that want to expand their community network to have more funds and human resources, VCCS will be a centralized platform for both leading prestigious charity organizations. This is a place for organizations to announce their projects, attract more interested people, to contribute both cash and energy. In addition, this platform helps organizations to be more popular with the community, thereby increasing the influence of their projects.

For volunteers, this is a good place for them to learn and participate in meaningful campaigns created by organizations. Thereby, spreading humanitarian values to the community as well as improving their own soft skills. This is the premise to develop the volunteer self in the future.

6. Project Scope & Limitations

6.1 Major Features

6.1.1 Guest

FE-1: Register

FE-2: View details of organizations, projects, campaigns

FE-3: View documents of donation

FE-4: Search for organizations, projects, campaigns

6.1.2 Member – Volunteer (Login required)

FE-1: Logout

FE-2: Manage profile

- View profile
- Update profile

FE-3: Get notifications

FE-4: Donate money for a donation campaign

FE-5: Participate for a recruitment campaign

FE-6: Reset password

FE-7: View history

- View history of donations
- View history of participations

6.1.3 Member – Organization Manager (Login required)

FE-1: Logout

FE-2: Manage organization

- View organizations
- Create organization
- Update organization
- Delete organization

FE-3: Manage project

- View projects
- Create project
- Update project
- Delete project

FE-4: Manage campaign

- View campaigns
- Create campaign
- Update campaign
- Delete campaign

FE-5: Manage documents of donation campaign

- Upload documents
- Delete documents

FE-6: Manage volunteer

- Approve/ reject volunteer
- Take note responsibilities of volunteer

6.1.4 Member – Admin (Login required)

FE-1: Manage profile

- View profile

- Update profile

FE-2: Manage user

- View users
- View user's profile
- Enable/ disable user

FE-3: Manage organization

- View organizations
- Approve/ reject organization
- Enable/ disable organization

FE-5: Manage project

- View projects
- Approve/ reject project
- Enable/ disable project

FE-6: Manage campaign

- View campaigns
- Approve/ reject campaign
- Enable /disable campaign

6.1.5 System Handler

FE-1: Push notification

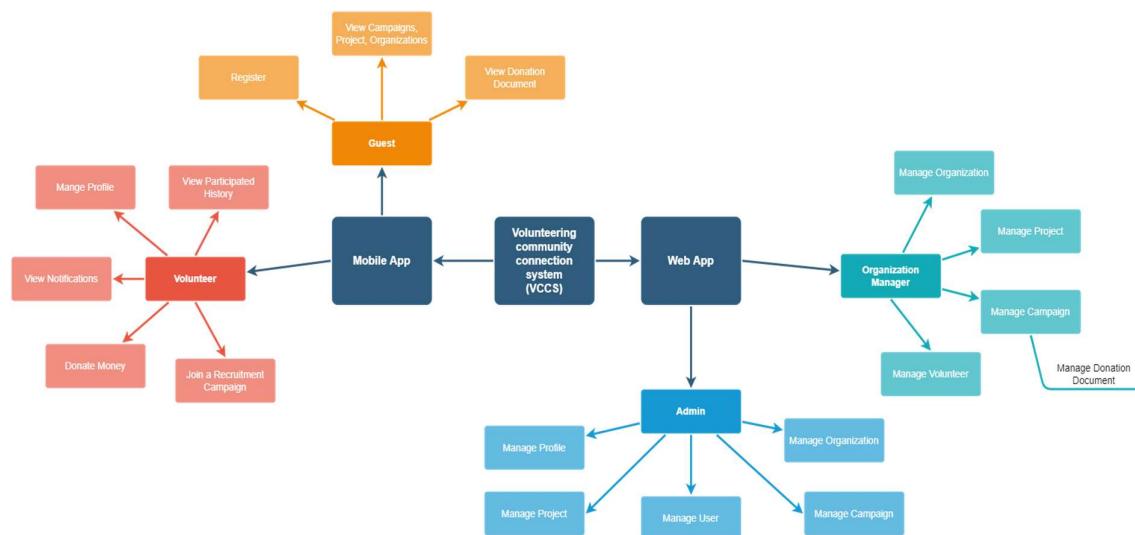


Figure 1 – Features map

6.2 Limitations & Exclusions

LI-1: It is not possible to be completely transparent, and it depends a lot on the sense and accuracy of the reviewer.

LI-2: Only support units and circumstances within Vietnam's national territory.

LI-3: All charitable activities operate within the legal framework of Vietnam

EX-1: Obstructing or forcing organizations and individuals to participate in volunteer activities.

EX-2: Reporting falsely, cheating, appropriating and illegally using money and goods donated and contributed by domestic and foreign organizations and individuals.

EX-3: Taking advantage of volunteering activities for personal gain.

II. Project Management Plan

1. Overview

1.1 WBS & Estimation

#	WBS Item	Complexity	Est. Effort (in days)
1	Specification		18
1.1	Project Planning	Simple	2
1.2	Deliver Report 1 – Project Introduction	Simple	4
1.3	Deliver Report 2 – Project Management Plan	Simple	4
1.4	Deliver Report 3 – System Requirement Specification	Medium	8
2	Design		30
2.1	Design User Interfaces (UI) prototypes	Medium	10
2.2	Deliver Report 4 – Software Design Document	Medium	20
3	Training		12
3.1	Learn backend, frontend, mobile languages and frameworks	Medium	12
4	Implement		154
4.1	Common functions		34
4.1.1	Login (with OTP and password)	Simple	4
4.1.2	Register	Simple	4

4.1.3	Logout	Simple	2
4.1.4	Reset password	Simple	4
4.1.5	Get notifications	Simple	2
4.1.6	Search organization, project, campaign	Simple	2
4.1.7	Get list of organization	Simple	2
4.1.8	View details of organization	Simple	2
4.1.9	Get list of projects	Simple	2
4.1.10	View details of project	Simple	2
4.1.11	Get list of campaigns	Simple	2
4.1.12	View details of campaign	Simple	2
4.1.13	Get list of donation documents	Simple	2
4.1.14	View details of donation documents	Simple	2
4.2	Web Application for Admin	Medium	34
4.2.1	Get list of organizations	Simple	2
4.2.2	View details of organization	Simple	2
4.2.3	Approve/ reject organization	Simple	2
4.2.4	Enable/ disable organization	Simple	2
4.2.5	Get list of projects	Simple	2

4.2.6	View details of project	Simple	2
4.2.7	Approve/ reject project	Simple	2
4.2.8	Enable/ disable project	Simple	2
4.2.9	Get list of campaigns	Simple	2
4.2.10	View details of campaign	Simple	2
4.2.11	Approve/ reject campaign	Simple	2
4.2.12	Enable/ disable campaign	Simple	2
4.2.13	Get list of users	Simple	2
4.2.14	View details of user	Simple	2
4.2.15	Enable/ disable user	Simple	2
4.2.16	Transparency campaign validation	Simple	2
4.2.17	View system statistics	Simple	2
4.3	Wen Application for Organization Manager	Medium	56
4.3.1	View organizations	Simple	2
4.3.2	Create organization	Simple	4
4.3.3	Update organization	Simple	4
4.3.4	Delete organization	Simple	4
4.3.5	View projects	Simple	2

4.3.6	Create project	Simple	4
4.3.7	Update project	Simple	4
4.3.8	Delete project	Simple	4
4.3.9	View campaigns	Simple	2
4.3.10	Create campaign	Simple	4
4.3.11	Update campaign	Simple	4
4.3.12	Delete campaign	Simple	4
4.3.13	View details of donation documents	Simple	2
4.3.14	Upload donation documents	Simple	4
4.3.15	Delete donation documents	Simple	4
4.3.16	Approve/ reject volunteer participate campaign	Simple	2
4.3.17	View system statistics	Simple	2
4.4	Mobile Application for Volunteer		30
4.4.1	View profile	Simple	2
4.4.2	Update profile	Simple	4
4.4.3	Donate money for donation campaign	Complex	12
4.4.4	Participate in recruitment campaign	Medium	8

4.4.5	View history of donation	Simple	2
4.4.6	View history of participation	Simple	2
5	Testing		36
5.1	Unit Test	Complex	12
5.2	Integration Test	Complex	12
5.3	System Test	Complex	12
6	Closing		22
6.1	Deliver Report 6 – Software User Guide	Simple	10
6.2	Deliver Report 7 – Final Project Report	Simple	4
6.3	Create slide and practice for thesis defense	Simple	8
Total Estimated Effort (man–days)			272

Table 3 – WBS & Estimation

1.2 Project Objectives

- Timeliness: 70%
- Allocated Effort: 4 (members) * 4 (months) * 20 (days/month) = 320 man–days
- Estimated total cost: 7 million VNĐ

#	Quality Stage	No. of Defects	% Of Defect	Notes
1	Reviewing	20	20%	
2	Unit Test	30	30%	
3	Integration Test	20	20%	

4	System Test	30	30%	
5	User Acceptance Test	X	X	
Total		100	100%	

Table 4 – Defect distribution

1.3 Project Risks

#	Risk Description	Impact	Possibility	Response Plans
1	Team member drops out	Critical	Low	Reduce scope
2	Host server die	Medium	Low	Change host server and backup server
3	The COVID–19 situation might cause difficulty in communication and discussion among team members	Medium	High	Use online workspace Track working progress frequently. Meet daily.
4	Not applicable in reality	High	Medium	Research donation charity in real life and find ways to transparent money

Table 5 – Project risks

2. Management Approach

Applying the Scrum model into management enables the VCCS team to implement the product with effective coordination among development team members.

2.1 Project Process

SCRUM FRAMEWORK

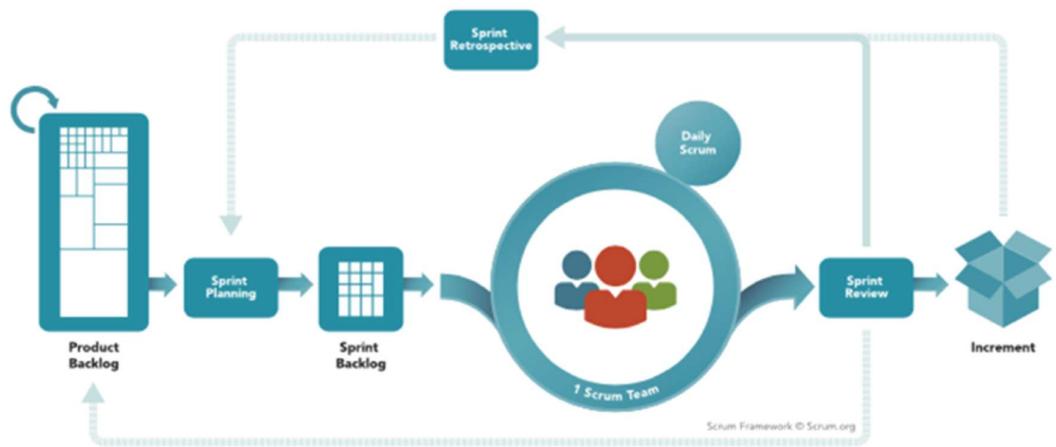


Figure 2 – Scrum framework

VCCS team apply Scrum model – part of an Agile framework into project management process for the following reasons:

- The topic of charity is a relatively new topic and has not yet been completed, requiring a lot of time to research.
- By applying this model, we spend more time discussing the business of the project, improving a lot in communication and working.
- We can break the project down into parts to easily track, deploy and correct when wrong business
- Automation in repetitive tasks leaves more room for innovation.

2.2 Product Backlog

ID	As a	I want to	So that	Priority	Sprint	Status
1	Guest	Register into system	I can log in to the application	High	1	Done
2	Member	Login into the system	I can use application's member function	High	1	Done

3	Member	Logout of the system	I can change account or go offline	High	2	Done
4	Member	Update profile	I can change my profile information	Medium	2	Done
5	Member	View profile	I can see my registered information	Medium	2	Done
6	Member	Reset password	I change my password	Medium	3	Done
7	Guest & Member – Volunteer	Search Organizations, Projects, Campaigns	I can view Organizations, Projects, Campaigns that i want	Medium	4	Done
8	Guest & Member – Volunteer	View details of organizations, projects, campaigns	I can view the details information of organizations, projects, campaigns	High	3	Done
9	Guest & Member – Volunteer	View documents of donation	I can view the documents and see if the campaign is transparent.	Medium	2	Done
10	Member – Volunteer	Donate money for a donation campaign	I can do the charity work that i want	High	2	Done
11	Member – Volunteer	Participate for a recruitment campaign	I can join the event of the recruitment campaign	High	2	Done

12	Member – Volunteer	View participated history	I can view all the campaign that i participated in	Medium	4	Done
13	Member – Organization Manager	Manage organizations	I can Create, Update or Delete my organization	High	3	Done
14	Member – Organization Manager	Manage projects	I can Create, Update or Delete my projects	High	3	Done
15	Member – Organization Manager	Manage campaigns	I can Create, Update or Delete my campaigns	High	3	Done
16	Member – Organization Manager	Manage documents of donation campaign	I can upload and delete my transparent document	High	4	Done
17	Member – Organization Manager	Manage volunteer	I can approve or reject incoming participant	High	4	Done
18	Member – Admin	Manage user	I can administrate the users	Medium	1	Done
19	Member – Admin	Manage organization	I can administrate the organizations approve or reject create request	Medium	1	Done
20	Member – Admin	Manage project	I can administrate the projects approve or reject create request	Medium	2	Done

21	Member – Admin	Manage campaign	I can administrate the campaigns approve or reject create request	Medium	3	Done
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Table 6 – Product backlog

2.3 Quality Management

To improve the project quality, VCCS team apply the following schemes:

- Following the available application's design.
- Making and following the coding rules, coding convention.
- Holding daily meetings to follow project's tasks and support each other.
- Following steps of STLC to avoid defects.

2.4 Training Plan

Training Area	Participants	When, Duration	Waiver Criteria
Java Spring Boot	Chánh Đức, Lâm Khang	Week 1–2, 14 days	Mandatory
Angular	Minh Phúc	Week 2, 5 days	Mandatory
Dart, Flutter	Thanh Hiếu, Lâm Khang	Week 2, 5 days	Mandatory
Trello	All members	Week 2, 1 day	Mandatory

Table 7 – Training plan

3. Master Schedule

#	Deliverable	Start Date	Due Date	Effort	Deliverable Scope
1	Project Plan	03/01/2022	07/01/2022	5 days	Risk plan, Schedule plan, WBS

2	Report 1 – Project Introduction Document	10/01/2022	14/01/2022	5 days	Product background, business opportunity, existing products, main features and limitations
3	Report 2 – Project Management Plan Document	17/01/2022	21/01/2022	5 days	Project objectives, WBS, master schedule, main features, project organization and communication
4	Report 3 – SRS Document	07/02/2022	04/03/2022	20 days	Software requirement specification
5	Report 4 – Software Design Document	14/02/2022	11/03/2022	20 days	Architecture design, GUI design, Database design
6	Report 5 – Software Testing Document	14/03/2022	01/04/2022	15 days	Test cases document, Test reports
7	Report 6 – Release Package and User Guides	11/04/2022	15/04/2022	5 days	Installation guides, User manual guides
8	Report 7 – Appendix	18/04/2022	22/04/2022	5 days	Summary of glossary and references used in the project
9	Code package 1 – API for the system	14/02/2022	25/03/2022	30 days	Source Code Unit Test
10	Code package 2 – Mobile application	14/02/2022	01/04/2022	40 days	Code, write test cases and system test
11	Code package 3 – Admin web application	14/02/2022	01/04/2022	40 days	Code, write test cases and system test

12	Test	21/03/2022	15/04/2022	20 days	System test reports
13	Final Package	18/04/2022	22/04/2022	5 days	Final Source Code Final Document User Guide

Table 8 – Master schedule

4. Project Organization

4.1 Team & Structures

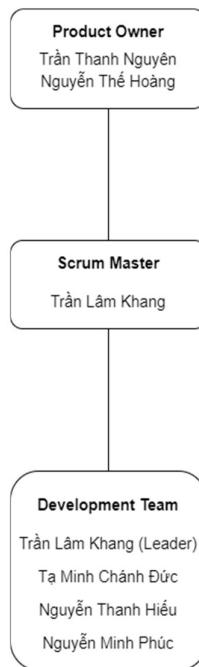


Figure 3 – Team structure

4.2 Roles & Responsibilities

Full Name	Role	Responsibility
Nguyễn Thế Hoàng Trần Thanh Nguyên	Product Owner	<ul style="list-style-type: none"> Provide user requirements Specify system features Review deliverables Supervise project status

		<ul style="list-style-type: none"> Instruct project team
Trần Lâm Khang	Scrum Master	<ul style="list-style-type: none"> Determine project plan Assign tasks to a related member Support member to stay on track of progress
Trần Lâm Khang (Leader) Nguyễn Thanh Hiếu Tạ Minh Chánh Đức Nguyễn Minh Phúc	Development Team	<ul style="list-style-type: none"> Design UI Implement code for the mobile version Test the mobile version Implement code for the web application version Test the web application version Implement architecture into coding Implement API Analyze user requirements and business rules. Research other directions to promptly change and correct. Brainstorm and decision making for project architecture design Prepare data source for the system Write test plan Write test cases

Table 9 – Roles & responsibilities

5. Project Communication

5.1 Communication Plan

Communication Item	Who/ Target	Purpose	When, Frequency	Type, Tool, Method(s)
Daily Meeting	Team Members	<ul style="list-style-type: none"> Review task progress Discuss and solve problems Discuss about project's business 	Everyday workday	Google Meet, Messenger

Meeting supervisors	Supervisors and Team Members	<ul style="list-style-type: none"> • Review project progress • Review project document, core flows • Technical support • Give advice and direction 	Weekly	Google Meet
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Table 10 – Communication plan

5.2 Meeting minutes

5.3 External Interface

Function	Contact Person (name, position)	Contact address (email, telephone)	Responsibility
Supervisor	Trần Thanh Nguyên	nguyentt15@fe.edu.vn 0967 863 063	<ul style="list-style-type: none"> – Provide document template – Give instruction to project team – Review deliverables – Supervise project status
Supervisor	Nguyễn Thế Hoàng	hoangnt2@fpt.edu.vn 0986 628 525	<ul style="list-style-type: none"> – Provide document template – Receive project reports – Answer questions about the project

Table 11 – FU contacts

6. Configuration Management

6.1 Tools & Infrastructures

Programming languages	Java, TypeScript, Dart
Framework	Java Spring Boot 2.3.5, Angular 12, Flutter
API	RESTful API
DBMS	MySQL
IDEs/ Updaters	Visual Studio Code, IntelliJ
UML tools	Draw.io, StarUML
Version Control	GitHub

Deployment server	Ubuntu server
Project management tool	Google Drive

Table 12 – Tools & infrastructure

6.2 Document Management

For document management, we use Google Drive for storing documents, diagrams and relevant files.

We also use Google Doc for continuous editing and storing the main Document.

[Google Drive link](#)

6.3 Source Code Management

We use GitHub server to store code and follow Git management best practices.

Backend Source Code:

- [Core Service Link](#)
- [Fetch Service Link](#)

Mobile Application Source Code: [Link](#)

Web Application Source Code: [Link](#)

III. Software Requirements Specification

1. Overall Description

1.1 Product Overview

With the goal of connecting as well as building a network of charitable communities, VCCS is a platform that allows social organizations to call for donations as well as recruit volunteers to support their projects. In addition, this is also a reputable and transparent system that publicly discloses the sources of donations used by organizations.

1.1.1 Guest Requirements

Guest is the person who has not been identified by the VCCS System. Guest can access to the system with the following feature:

- Register
- View donation documents
- Search for organizations, projects, campaigns
- View details of organizations, projects, campaigns

1.1.2 Member – Volunteer Requirements (Login required)

Member – Volunteer is the person who has been identified by the VCCS System and called Volunteer. Member – Volunteer has access to system with the following feature:

- Logout
- View profile
- Update profile
- Search for organizations, projects, campaign
- View details of organizations, projects, campaigns
- View details of donation documents
- Donate money for donation campaign
- Participate in recruitment campaign
- View participated campaign history
- Get notifications
- Reset password

1.1.3 Member – Organization Manager Requirements (Login required)

Organization is the person who has been identified by the VCCS System and called Volunteer. Organization has access to system with the following feature:

- Logout

- View profile
- Update profile
- View notification
- Manage organization
 - Create organization
 - Update organization
 - Delete organization
- Manage project
 - View projects
 - Create project
 - Update project
 - Delete project
- Manage campaign
 - View campaigns
 - Create campaign
 - Update campaign
 - Delete campaign
- Manage documents of donation campaign
 - Upload documents
 - Delete documents
- Manage volunteer
 - Approve/ reject volunteer participate in recruitment campaign
 - Take note responsibilities of volunteer
- Reset password
- Get notifications

1.1.4 Member – Admin Requirements (Login required)

Admin is the person who accesses the system as the admin role. Admin can use the following functions:

- Get notifications
- Administrate users
 - View user

- Enable/ disable user
- Administrate organization
 - View organizations
 - Approve/ reject organization
 - Enable/ disable organization
- Administrate project
 - View projects
 - Approve/ reject project
 - Enable/ disable project
- Administrate campaign
 - View campaigns
 - Approve/ reject campaign
 - Enable/ disable campaign
 - Validate campaign transparency

1.1.5 System Handler Requirements

System Handler deals with internal processes:

- Push notification

1.2 Business Rules

ID	Rule Definition
BR-01	All features related to donations and charity transparency must comply with the law
BR-02	The platform must be clear about privacy policy and terms of use.
BR-03	All donation transactions must be made through the platform's app.
BR-04	All money raised for one campaign cannot be used for any other campaign regardless of the same project or organization.
BR-05	Passwords must have minimum eight characters, at least one letter and one number and will be hashed MD5 before send to server

BR-06	The user's information must be clear, polite, transparent and accurate about himself and not a virtual account
BR-07	All organizations, projects, campaigns are created by the organization manager
BR-08	The platform will keep all campaign funds and will disburse to the organization after the campaign ends.
BR-09	Each document must be unique and stay protected cannot be steal for private benefits.
BR-10	Users participating in the application must be 15 years of age or older.
BR-11	Amount donation to a campaign: minimum is 1,000 VND, maximum is 20,000,000 VND and cannot donate more than 50,000,000 VND in a day
BR-12	Password will not be shown directly in profile's page
BR-13	When user press confirm they must have responsibility for their decision
BR-14	All organizations cannot have the same name. Projects and campaigns belonging to different organizations are allowed to have the same name
BR-15	Every organization, project, campaign on the platform must be moderated by the system administrator to be displayed
BR-16	Types of organization, project, campaign include: non-profit organizations, non-governmental organizations, social organizations, business organizations, donor organizations, ...
BR-17	All operating organizations must have a legal entity
BR-18	The message input in donate message must be polite and follow the societal norms
BR-19	If an organization, project, campaign is removed from the platform, all information will no longer appear on the platform

BR-20	There are two types of campaigns on the platform: receiving donations and recruiting volunteers
BR-21	Project/campaign end time must be at least 15 days longer than project start time
BR-22	The duration of the campaigns must be within the duration of the active project
BR-23	Target to receive donations for projects and campaigns: minimum 10,000,000 VND, maximum 1,000,000,000 VND
BR-24	Every donation campaign must have donation documents used after the campaign ends
BR-25	Donation campaigns that have been removed from the platform can no longer accept donations. Donated money will be refunded to donors
BR-26	Full transparency of the source of funds will be reconciled from the party claiming to be the organization and also the receiving party
BR-27	The volunteer's phone number and email information must be unique and not duplicated
BR-28	The campaign duration and working time must be within the project duration
BR-29	Within 1 month from the end of the donation campaign, the organization manager must submit all documents verifying the campaign's revenue and expenditure.
BR-30	A project should last a minimum of 3 months and a maximum of 2 years
BR-31	A campaign should last at least 15 days and up to 1 year
BR-32	This is a non-profit philanthropic platform and does not charge any management fees or user fees. 100% of the money donated for the campaigns received will be used for the purpose of calling.

BR-33	The platform works on the principle of promoting the transparency of charity activities in Vietnam, through a public monitoring mechanism from the community.
BR-34	The following goals will not be called for fundraising in the Charity application: Calling for Capital or Shares, not related to practical or useful activities for society, Contradicting the operating principles and ethical standards and social norms; Relating to political and religious activities; The content of the goals is contrary to the law, Not consistent with the goals and mission of the Charity foundation.
BR-35	Contents of spending for encouraged volunteering activities include: <ul style="list-style-type: none"> ● Emergency support: hunger relief, cold relief (food, food, blankets, clothing, medicine...), first aid for injured people; visit the family of the victim; supporting the construction of houses that have fallen, drifted, or been severely damaged due to the impact of natural disasters, fires or serious incidents in order to stabilize the immediate life of victims and their relatives; ● Long-term support: Financial support for victims and victims' families, Support to maintain and overcome production, Financial support to remove temporary houses, build other facilities.
BR-36	Accounts and characters are not allowed to be named after celebrities, leaders, terrorists, fascists, criminals, and the names of individuals and organizations that oppose the State of the Socialist Republic of Vietnam. Socialist Republic of Vietnam, which jeopardizes national security, social order and safety, and the foundation's operating principles.
BR-37	Account names or characters must not be identical or confusingly similar to the initials or full names of state agencies, political organizations, socio-political organizations, socio-political organizations – professional, social organization, socio-professional organization of Vietnam and international organization, without the permission of such agency or organization.
BR-38	Do not use the same or confusing account names or characters to impersonate other individuals or organizations for the purpose of giving false information, distorting, slandering, or insulting the reputation of the organization or honor. and the dignity of other individuals.
BR-39	Do not name the account, the character infringes the intellectual property rights.

BR-40	Do not use images that imply incitement to violence, lewdness, debauchery, crimes, social evils, superstition, destruction of the nation's fine customs and traditions.
BR-41	Do not use images or images that are offensive to celebrities, national heroes, leaders of the Party and State of Vietnam and leaders of international organizations.
BR-42	Do not use images containing signs that are identical or confusingly similar to symbols, flags, badges, abbreviations, full names of state agencies, political organizations, political organizations – social organizations, socio-political-professional organizations, social organizations, socio-professional organizations of Vietnam and international organizations that offend the reputation of these organizations.
BR-43	Do not use images related to religion that incite and divide the great national unity bloc, and go against Vietnam's religious policy.
BR-44	Do not use photos of criminals, terrorists, fascism, and photos or images depicting individuals and organizations opposing the State of the Socialist Republic of Vietnam, causing harm to national security and order. social self-security.
BR-45	Do not use photos that offend the reputation of the organization, the honor and dignity of other individuals.
BR-46	Do not use images that infringe intellectual property rights.
BR-47	There is only one document detailing cash flow for each donation campaign.
BR-48	Once the project and campaign have started, the information cannot be edited.
BR-49	Volunteers will be temporarily locked out of their accounts (minimum 15 days) if they do not participate in successfully registered campaigns more than 5 times.

Table 13 – Business rules

2. User Requirements

2.1 Overview

2.1.1 Use case diagram

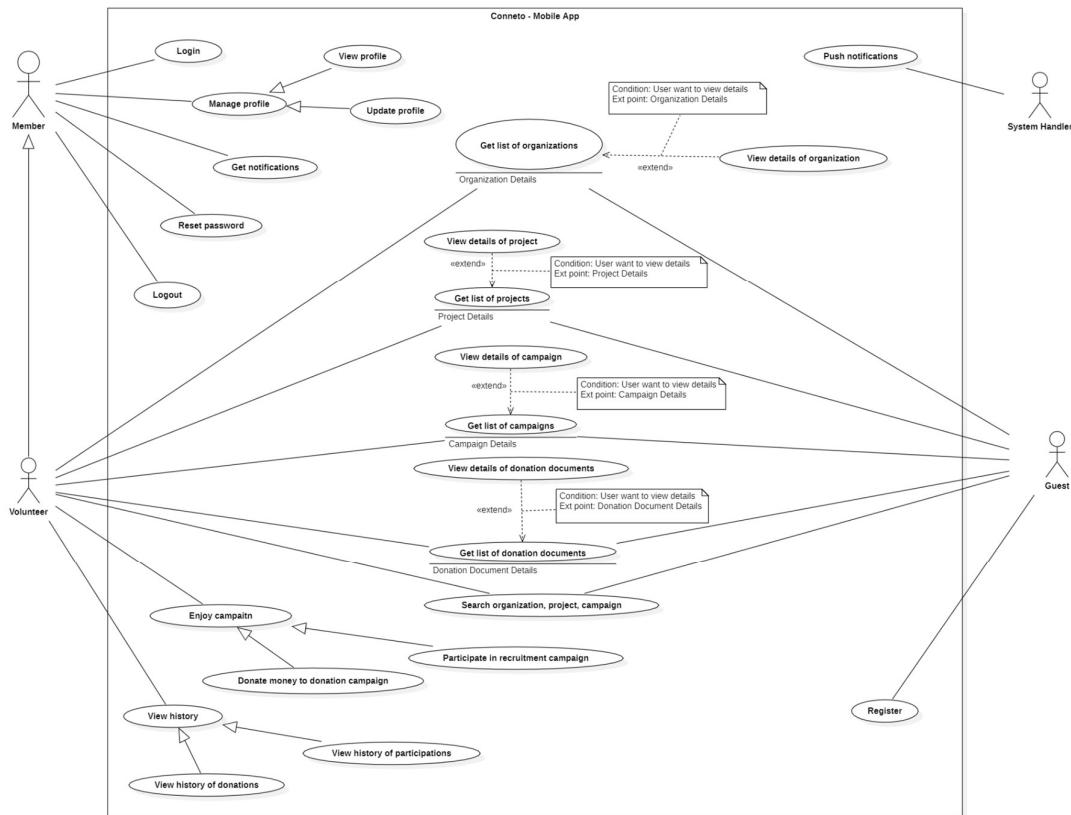


Figure 4 – Overview Use Case – Mobile App

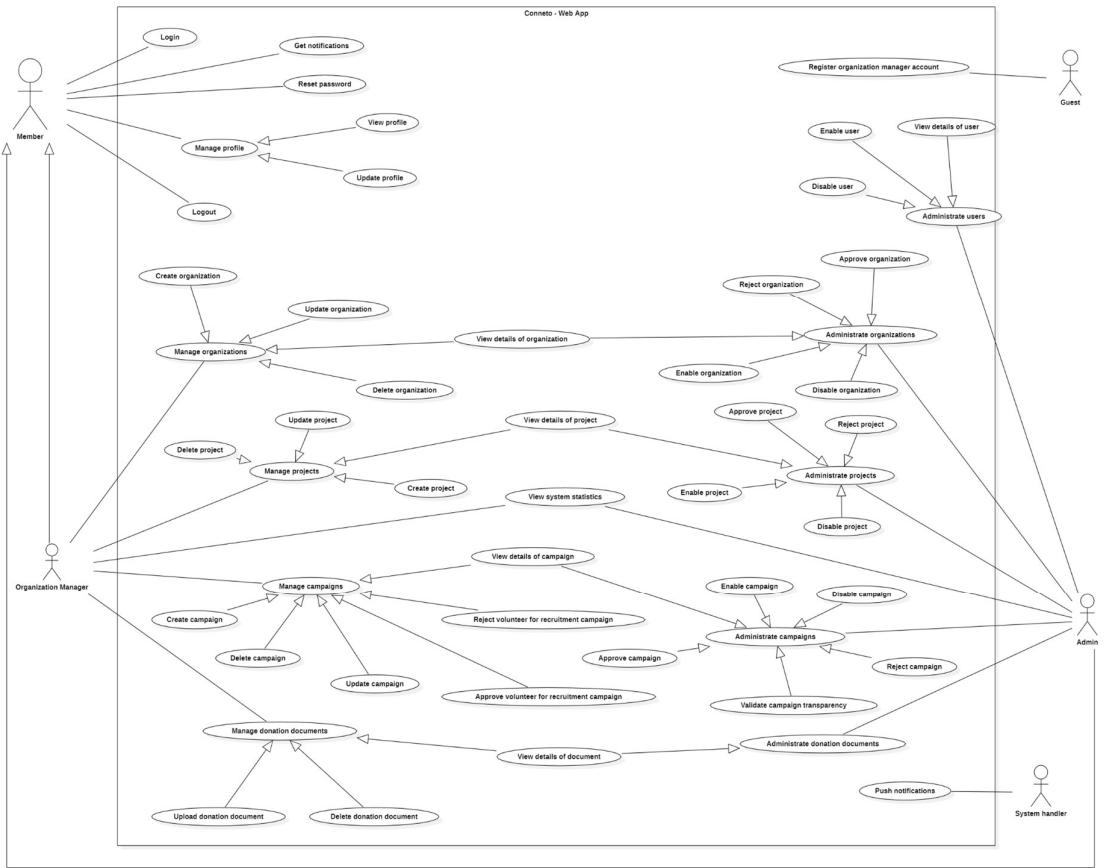


Figure 5 – Overview Use Case – Web App

2.1.2 System actors

#	Actor	Description
1	App Guest	App Guest is the one who have not joined the application but have a desire to become a Volunteer so that they can contribute to volunteering campaigns
2	Web Guest	Web Guest is the one who have not joined the system but have a desire to become an Organization Manager so that they can create the Organization, Project and Campaign on our system
3	Volunteer	Volunteers are people who participate directly in fundraising campaigns or participate in activities created by organizations

4	Organization Manager	Organization Manager can be organization owner or representative who is the manager of all things volunteering-related organizations, projects, and campaigns
5	Administrator	Admin manage users, organizations, projects, campaigns
6	System Handler	System Handler deals with internal processes

Table 14 – System actors

2.1.3 Use case list

ID	Use Case	Primary Actors	Secondary Actors
Mobile Application			
UC-01	Login	Member	N/A
UC-02	Register	Guest	N/A
UC-03	Search organization, project, campaign	Guest	Volunteer
UC-04	Get organizations list	Guest	Volunteer
UC-05	Get organization details	Guest	Volunteer
UC-06	Get projects list	Guest	Volunteer
UC-07	Get project detail	Guest	Volunteer
UC-08	Get campaigns list	Guest	Volunteer
UC-09	Get campaign detail	Guest	Volunteer
UC-10	Get documents of donation list	Guest	Volunteer

UC-11	View details of donation documents	Guest	Volunteer
UC-12	Logout	Member	N/A
UC-13	View profile	Member	N/A
UC-14	Update profile	Member	N/A
UC-15	Donate money to donation campaign	Volunteer	N/A
UC-16	Participate in recruitment campaign	Volunteer	N/A
UC-17	View history by donation	Volunteer	N/A
UC-18	View history by participant	Volunteer	N/A
UC-19	Get notifications	Member	N/A
UC-20	Reset password	Member	N/A

Web Application

UC-21	Register organization manager account	Guest	N/A
UC-22	Login	Member	N/A
UC-23	Administrate users	Admin	N/A
UC-24	View details of user	Admin	N/A
UC-25	Enable user	Admin	N/A
UC-26	Disable user	Admin	N/A
UC-27	Transparency campaign validation	Admin	N/A

UC-28	Administrate organizations	Admin	Organization Manager
UC-29	Approve organization	Admin	N/A
UC-30	Reject organization	Admin	N/A
UC-31	View details of organization	Admin	Organization Manager
UC-32	Create organization	Organization Manager	N/A
UC-33	Update organization	Organization Manager	N/A
UC-34	Delete organization	Organization Manager	N/A
UC-35	Administrate projects	Admin	Organization Manager
UC-36	Approve project	Admin	N/A
UC-37	Reject project	Admin	N/A
UC-38	View details of project	Admin	Organization Manager
UC-39	Create project	Organization Manager	N/A
UC-40	Update project	Organization Manager	N/A
UC-41	Delete project	Organization Manager	N/A
UC-42	Administrate campaigns	Admin	Organization Manager
UC-43	Approve campaign	Admin	N/A
UC-44	Reject campaign	Admin	N/A
UC-45	View details of campaign	Admin	Organization Manager

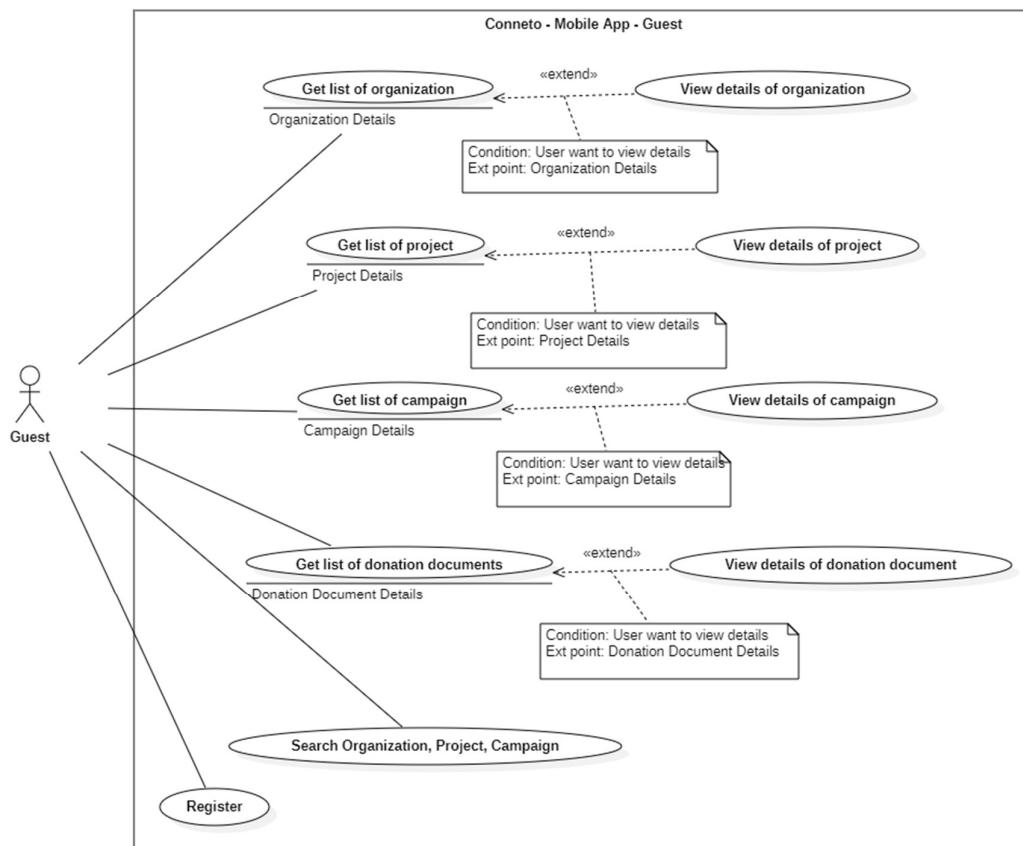
UC-46	Validate campaign transparency	Admin	N/A
UC-47	Create campaign	Organization Manager	N/A
UC-48	Update campaign	Organization Manager	N/A
UC-49	Delete campaign	Organization Manager	N/A
UC-50	View system statistics	Admin	Organization Manager
UC-51	Get list of donation documents	Organization Manager	Admin
UC-52	Upload donation documents	Organization Manager	N/A
UC-53	Delete donation documents	Organization Manager	N/A
UC-54	View details of donation document	Organization Manager	Admin
UC-55	Approve volunteer participate in recruitment campaign	Organization Manager	N/A
UC-56	Reject volunteer participate in recruitment campaign	Organization Manager	N/A
UC-57	Enable organization	Admin	N/A
UC-58	Disable organization	Admin	N/A
UC-59	Enable project	Admin	N/A
UC-60	Disable project	Admin	N/A
UC-61	Enable campaign	Admin	N/A
UC-62	Disable campaign	Admin	N/A

System			
UC-63	Push notifications	System Handler	N/A

Table 15 – Use case list

2.2 Mobile Application

2.2.1 <Guest> Overview Use Case



[Figure 6 – Overview Use Case – Mobile App – Guest](#)

2.2.1.1 <Guest> Register

ID and Name:	UC-02: Register		
Created By:	DucTMC	Date Created:	05/02/2022

Primary Actor:	App Guest	Secondary Actors:	N/A
Description:	This feature allows guests to register an account.		
Trigger:	Guest indicates that he/she wants to register an account		
Pre-conditions:	PRE-1. User has not logged in and does not have an account.		
Post-conditions:	POST-1. User is redirected to the “Home” screen.		
Normal Flow:	<ol style="list-style-type: none"> 1. User clicks the “Đăng ký/ Đăng nhập” button at the profile screen. 2. Displays a “Login” screen with the required input field: phone number. 3. User inputs required field information and clicked the “Tiếp tục” button (see UC-02.0.E1). 4. Conneno sends a text message with 6-digit OTP for phone verification. 5. User input 6-digit OTP into required field and select “Tiếp tục” button (see UC-02.0.E2, UC-02.0.E3, UC-02.0.E4). 6. The system validates the OTP successfully and checks the existing account if not user is redirected to the “register” screen, if yes use case continue step 7 in UC-01: Log in. 7. User input required field information and clicks “Đăng ký” button. (UC-02.0E5, UC-02.0E6, UC-02.0E7, UC-02.0E8, UC-02.0E9) 8. The system saves the register information successfully and user is redirected to the home screen. 		
Alternative Flows:	<ol style="list-style-type: none"> 1a. User clicks the “Đăng ký/ Đăng nhập” button at the history screen. 1a1. Return to step 2 in normal flow. 1b. User clicks the “Quyên góp” button. 1b1. Return to step 2 in normal flow. 1c. User clicks the “Tham gia” button. 1c1. Return to step 2 in normal flow. 		

Exceptions:	<p>UC–02.0.E1 User inputs invalid phone number</p> <p>1a. Conneto shows error message “Số điện thoại không đúng định dạng”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>1a2. User re-enter phone number – use case continue UC–02.0.2</p> <p>UC–02.0.E2 User inputs incorrect 6-digit OTP</p> <p>1a. Conneto shows error message “Sai mã OTP”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>1a2. User re-enter OTP code – use case continue UC–02.0.5</p> <p>UC–02.0.E3 User inputs expired 6-digit OTP</p> <p>1a. Conneto shows an error message “Mã OTP hết hạn”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>1a2. User select “Resend” button – use case continue UC–02.0.3</p> <p>UC–02.0.E4 Internet connection lost</p> <p>1a. Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”.</p> <p>1a1. User select “X” button on the pop up – use case stops.</p> <p>UC–02.0.E5 User inputs invalid first name</p> <p>1a. Conneto shows error message “Họ không đúng định dạng”.</p> <p>1a1. User clicks “back” button – use case stops.</p> <p>UC–02.0.E6 User inputs invalid last name</p> <p>1a. Conneto shows error message “Tên không đúng định dạng”.</p> <p>1a1. User clicks “back” button – use case stops.</p> <p>UC–02.0.E7 User inputs invalid birthday</p> <p>1a. Conneto shows error message “Độ tuổi không phù hợp, độ tuổi phải lớn hơn 15”.</p> <p>1a1. User clicks “back” button – use case stops.</p> <p>UC–02.0.E8 User inputs invalid password</p> <p>1a. Conneto shows error message “Mật khẩu không đúng định dạng”.</p> <p>1a1. User clicks back button – use case stops.</p> <p>UC–02.0.E9 User inputs invalid email</p>
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	<p>1a. Connego shows error message “Email không đúng định dạng”.</p> <p>1a2. User clicks back button – use case stops.</p> <p>UC-02.0.E10 User inputs existed email</p> <p>1a. Connego shows error message “Email đã được đăng ký”.</p> <p>1a2. User clicks back button – use case stops.</p>
Priority:	High
Frequency of Use:	High
Business Rules:	BR-10, BR-43, BR-5, BR-6
Other Information:	N/A
Assumptions:	N/A

Table 16 – UC: Register

2.2.1.2 <Guest, Volunteer> Get list of projects

ID and Name:	UC-06 Get list of projects		
Created By:	HieuNT	Date Created:	23/3/2022
Primary Actor:	Guest, Volunteer	Secondary Actors:	N/A
Description:	This feature allows Guest or Member – Volunteer to view a list of all the Projects that is active on the application without logging in.		
Trigger:	Guest or Member – Volunteer indicates that he/she wants to browse a list of Projects.		

Pre-conditions:	N/A
Post-conditions:	<p>POST–01.</p> <ul style="list-style-type: none"> Success: System returns a list of Projects, users can browse them <p>POST–02.</p> <ul style="list-style-type: none"> Fail: System shows error message.
Normal Flow:	<p>UC–06 Get a Projects list</p> <ol style="list-style-type: none"> User clicks on the “filter” icon on the explore screen. System displays a bottom–sheet menu. User chooses the “Dự án” item from the “Loại” Dropdown menu on the bottom–sheet menu. System will displays a list of projects, each item include mandatory fields: “Tên dự án”, “Mô tả”, “ngày bắt đầu”, “ngày kết thúc” ...
Alternative Flows:	N/A
Exceptions:	<p>UC–06.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. <p>1a1. User select “X” button on the pop up – use case stops.</p> <p>UC–06.0.E2 No any Project</p> <ol style="list-style-type: none"> A text “Không thể tìm được dự án bạn yêu cầu” will shows in the center of explore screen.
Priority:	Medium
Frequency of Use:	Usually
Business Rules:	N/A

Other Information:	N/A
Assumptions:	N/A

Table 17 – UC: Get list of projects

2.2.1.3 <Guest, Volunteer> View details of project

ID and Name:	UC-07 View details of project		
Created By:	HieuNT	Date Created:	23/3/2022
Primary Actor:	Guest, Volunteer	Secondary Actors:	N/A
Description:	This feature allows an Guest or an Member (Volunteer) to view all the Project's details without logging in.		
Trigger:	After browsing a list of Projects, User indicates that he/she wants to see more information about a specific Project.		
Pre-conditions:	PRE-01. A list of projects must be shown for volunteer to press in.		
Post-conditions:	POST-01. · Success: System navigate to Project Details screen with details of a Project. POST-02. · Fail: System shows error message.		

Normal Flow:	<p>UC-07 View Project's Details</p> <ol style="list-style-type: none"> 1. User clicks on a specific project of the project list. 2. Application navigate user to the screen contains 2 tabs of most recently campaigns and Project's details, includes: <ul style="list-style-type: none"> · Project Name: Text · Organization Name: Text · Organization Logo: Image · Project Location: Text · Description: Text · Start Date: Text · End Date: Text
Alternative Flows:	<ol style="list-style-type: none"> 1a. User clicks on a specific project appears on the "Organization's detail" page (Projects tab). 1a1. Return to step 2 in normal flow.
Exceptions:	<p>UC-07.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1a. Conneto shows the pop up error "Mất kết nối với Internet, vui lòng thử lại sau!". 1a1. User select "X" button on the pop up – use case stops.
Priority:	Medium
Frequency of Use:	Usually
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 18 – UC: View details of project

2.2.1.4 <Guest, Volunteer> Get list of organizations

ID and Name:	UC-04 Get list of organizations		
Created By:	HieuNT	Date Created:	23/3/2022
Primary Actor:	Guest, Volunteer	Secondary Actors:	N/A
Description:	This feature allows an Guest or an Member (Volunteer) to view a list of all the Organizations that is active on the application without logging in.		
Trigger:	Guest or a Member (Volunteer) indicates that he/she wants to browse a list of Organizations.		
Pre-conditions:	N/A		
Post-conditions:	<p>POST-01.</p> <ul style="list-style-type: none"> · Success: System returns a list of Organizations, users can browse them <p>POST-02.</p> <ul style="list-style-type: none"> · Fail: System shows error message. 		
Normal Flow:	<p>UC-04 View a list of Organizations normally.</p> <ol style="list-style-type: none"> 1. User clicks on the “filter” icon on the explore screen. 2. System displays a bottom-sheet menu. 3. User chooses the “Tổ chức” item from the “Loại” Dropdown menu on the bottom-sheet menu. 4. Application shows screen contains a list of Organizations, each item contains: <ul style="list-style-type: none"> · Organization Name: Text 		

	<ul style="list-style-type: none"> · Organization Logo: Image · Organization Type: Text
Alternative Flows:	N/A
Exceptions:	<p>UC–04.0.E1 Internet connection lost</p> <p>1a. Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”.</p> <p>1a1. User select “X” button on the pop up – use case stops.</p> <p>UC–04.0.E2 No any Project</p> <p>1. A text “Không thể tìm được tổ chức bạn yêu cầu” will shows in the center of explore screen.</p>
Priority:	Medium
Frequency of Use:	Usually
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 19 – UC: Get list of organizations

2.2.1.5 <Guest, Volunteer> View details of organization

ID and Name:	UC-05 View Organization's Details		
Created By:	HieuNT	Date Created:	23/3/2022
Primary Actor:	Guest, Volunteer	Secondary Actors:	N/A
Description:	This feature allows an Guest or a Member (Volunteer) to view all the Organization's details without logging in.		
Trigger:	After browsing a list of Organizations, User indicates that he/she wants to see more information about a specific Organization.		
Pre-conditions:	PRE-01. A list of organizations must be shown for volunteer to press in.		
Post-conditions:	<p>POST-01.</p> <ul style="list-style-type: none"> · Success: System navigate to Organization Details screen with details of a Organization. <p>POST-02.</p> <ul style="list-style-type: none"> · Fail: System shows error message. 		
Normal Flow:	<p>UC-05 View Organization's Details</p> <ol style="list-style-type: none"> 1. User clicks on a specific organization from the organization list. 2. Application navigate user to the screen contains tabs of projects, achievements and other information and Organization's details, includes: <ul style="list-style-type: none"> · Organization Name: Text · Description: Text · Organization Type: Text · Organization location: Text 		

Alternative Flows:	<p>1a. User clicks on a specific project from the logo icon that appears on the ‘Campaign Card’ and ‘Project Detail Page’.</p> <p>1a1. Return to step 2 in normal flow.</p>
Exceptions:	<p>UC-05.0.E1 Internet connection lost</p> <p>1a. Conneno shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”.</p> <p>1a1. User select “X” button on the pop up – use case stops.</p>
Priority:	Medium
Frequency of Use:	Usually
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 20 – UC: View details of organization

2.2.1.6 <Guest, Volunteer> Get list of campaigns

ID and Name:	UC-08 Get list of campaigns		
Created By:	HieuNT	Date Created:	23/3/2022
Primary Actor:	Guest, Volunteer	Secondary Actors:	N/A
Description:	This feature allows an Guest or a Member (Volunteer) to view a list of all the Campaigns that is active on the application without logging in.		

Trigger:	Guest or a Member (Volunteer) indicates that he/she wants to browse a list of Campaigns.
Pre-conditions:	N/A
Post-conditions:	<p>POST–01.</p> <ul style="list-style-type: none"> · Success: System returns a list of Campaigns, users can browse them <p>POST–02.</p> <ul style="list-style-type: none"> · Fail: System shows error message.
Normal Flow:	<p>UC–08 View a list of Campaigns normally.</p> <ol style="list-style-type: none"> 1. User clicks on the “filter” icon on the screen. 2. System displays a bottom–sheet menu. 3. User chooses the “Chiến dịch” item from the “Type” Dropdown menu on the bottom–sheet menu. 4. Application shows screen contains a list of Campaigns , each item contains: <ul style="list-style-type: none"> · Campaign Name: Text · Campaign Cover: Image · Campaign Type: Text · Project logo: Image · Project name: Text · Donated/Participated amount: Text · Target amount: Text · Progress bar: Image · Participants: Text · Time left: Text
Alternative Flows:	<p>1.1 System automatically gets a list of Campaign.</p> <ol style="list-style-type: none"> 1. Users get to the Home Page.

	<p>2. System will automatically get a list of Campaigns and displays without any pre-condition.</p>
Exceptions:	<p>UC-08.0.E1 Internet connection lost</p> <p>1a. Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”.</p> <p>1a1. User select “X” button on the pop up – use case stops.</p> <p>UC-08.0.E2 No any Project</p> <p>1. A text “Không thể tìm được chiến dịch bạn yêu cầu” will shows in the center of explore screen.</p>
Priority:	Medium
Frequency of Use:	Usually
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 21 – Get list of campaigns

2.2.1.7 <Guest, Volunteer> View details of campaign

ID and Name:	UC-09 View details of campaign		
Created By:	HieuNT	Date Created:	26/3/2022
Primary Actor:	Guest, Volunteer	Secondary Actors:	N/A
Description:	This feature allows an Guest or a Member (Volunteer) to view all the Campaign's details without logging in.		

Trigger:	After browsing a list of Campaigns, User indicates that he/she wants to see more information about a specific Campaigns.
Pre-conditions:	PRE-01. A list of campaigns must be shown for volunteer to press in.
Post-conditions:	<p>POST-01.</p> <ul style="list-style-type: none"> Success: System navigate to Campaign Details screen with details of a Campaign. <p>POST-02.</p> <ul style="list-style-type: none"> Fail: System shows error message.
Normal Flow:	<p>UC-09 View Campaign's Details</p> <ol style="list-style-type: none"> User clicks on a specific campaign of the campaigns list. Application shows screen contains Campaign's details, based on the campaign type, the details screen will contains each type mandatory fields.
Alternative Flows:	<ol style="list-style-type: none"> User clicks on Campaign item displays on Project's details screen. <ol style="list-style-type: none"> Return to step 2 in normal flow. User clicks on Campaign item displays on home screen. <ol style="list-style-type: none"> Return to step 2 in normal flow.
Exceptions:	<p>UC-09.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. <ol style="list-style-type: none"> User select “X” button on the pop up – use case stops.
Priority:	Medium
Frequency of Use:	Usually

Business Rules:	BR-29
Other Information:	N/A
Assumptions:	N/A

Table 22 – UC: View details of campaign

2.2.1.8 <Guest, Volunteer> Get list of donation documents

ID and Name:	UC-10 Get list of donation documents		
Created By:	HieuNT	Date Created:	23/3/2022
Primary Actor:	Guest, Volunteer	Secondary Actors:	N/A
Description:	This feature allows an Guest or a Member (Volunteer) to view a list of all the donation documents of the campaign on the application without logging in.		
Trigger:	Guest or a Member (Volunteer) indicates that he/she wants to browse a list of donation documents.		
Pre-conditions:	N/A		
Post-conditions:	POST-01. · Success: System navigate to a document screen with list of donation documents, users can browse them POST-02. · Fail: System shows error message.		

Normal Flow:	<p>UC-10 View a list of Donation Document normally.</p> <ol style="list-style-type: none"> 1. User clicks on the “tài liệu chứng thực” text on the campaign details screen. 2. System navigate user to donation document screen. 3. Application shows a screen contains a list of donation document arranged by grid, each item contains mandatory fields: name of document, url, upload date, type,...
Alternative Flows:	N/A
Exceptions:	<p>UC-10.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1a. Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. 1a1. User select “X” button on the pop up – use case stops.
Priority:	Medium
Frequency of Use:	Usually
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 23 – UC: Get list of donation documents

2.2.1.9 <Guest, Volunteer> View donation document details

ID and Name:	UC-11 View donation document details		
Created By:	HieuNT	Date Created:	15/2/2022
Primary Actor:	Guest, Member	Secondary Actors:	N/A
Description:	This feature allows a Guest or a Member (Volunteer) to view all the Donation document's details without logging in.		
Trigger:	After browsing a list of donation documents, User indicates that he/she wants to see more information about a specific donation document.		
Pre-conditions:	PRE-01. A list of donation document must be shown for volunteer to press in.		
Post-conditions:	<p>POST-01.</p> <ul style="list-style-type: none"> · If document type is “Cash flow details”: System navigate to Cashflow details screen with details of that type of document. · If document type is NOT “Cash flow details”: System will launch the url of the document. <p>POST-02.</p> <ul style="list-style-type: none"> · Fail: System shows error message. 		
Normal Flow:	<p>UC-11 View donation document details</p> <ol style="list-style-type: none"> 1. User clicks on a specific document of the document list. 2. Application shows screen contains document details, base on the type the details screen will contains each type mandatory fields. 		
Alternative Flows:	N/A		

Exceptions:	UC–11.0.E1 Internet connection lost 1a. Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. 1a1. User select “X” button on the pop up – use case stops.
Priority:	Medium
Frequency of Use:	Usually
Business Rules:	BR–09
Other Information:	N/A
Assumptions:	N/A

Table 24 – UC: View details of donation document

2.2.1.10 <Guest, Volunteer> Search Organization, Project, Campaign

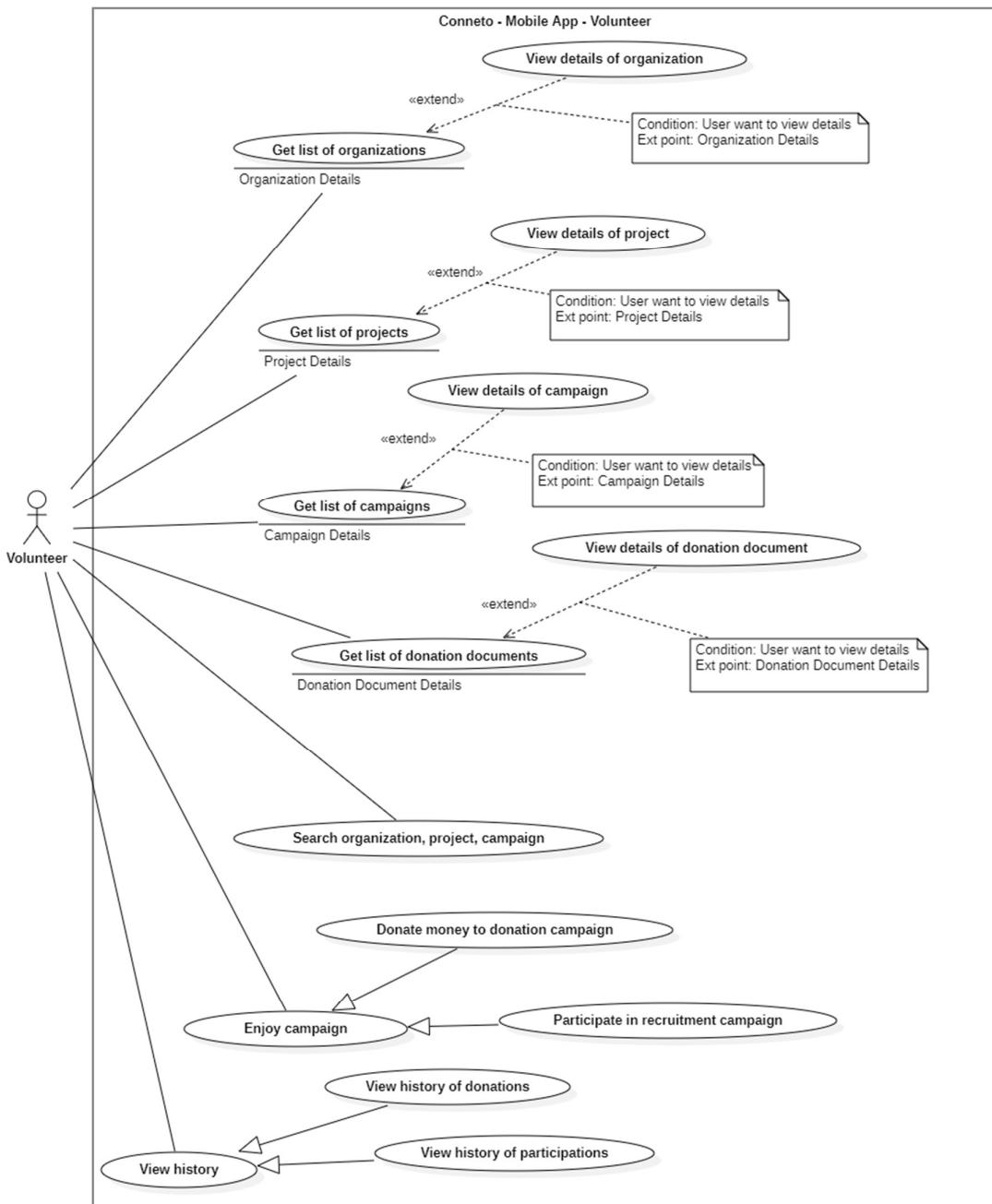
ID and Name:	UC–03 Search Organization, Project, Campaign		
Created By:	HieuNT	Date Created:	1/1/2022
Primary Actor:	Guest, Volunteer	Secondary Actors:	N/A
Description:	This feature allows a Guest or a member (Volunteer) to search Organization, Project or Campaign by using a Search bar.		
Trigger:	User indicates that he/she wants to search for a Campaign, a Project or an Organization.		
Pre-conditions:	N/A		

Post-conditions:	<p>POST–01.</p> <ul style="list-style-type: none"> Success: System returns a list of Organizations, Projects or Campaigns that match the name with the keyword on the Search bar's input field. <p>POST–02.</p> <ul style="list-style-type: none"> Fail: System shows error message.
Normal Flow:	<p>UC–03 Search Organization, Project, Campaign</p> <ol style="list-style-type: none"> User input Organization, Project or Campaign name base on type object they choosed on the input field of the Search bar. User clicks on the magnifying glass icon as the "Search" button on the Search bar. Application shows screen contains a list of Organizations, Projects or Campaigns, each item contains the mandatory fields.
Alternative Flows:	N/A
Exceptions:	<p>UC–03.0.E1 Internet connection lost</p> <p>1a. Conneno shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”.</p> <p>1a1. User select “X” button on the pop up – use case stops.</p> <p>UC–03.0.E2 No any match found</p> <p>1. A text “Không thể tìm được chiến dịch bạn yêu cầu” will shows in the center of explore screen.</p>
Priority:	Medium
Frequency of Use:	Usually

Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 25 – UC: Search organization, project, campaign

2.2.2 <Volunteer> Overview Use Case



[Figure 7 – Overview Use Case – Mobile App – Volunteer](#)

2.2.2.1 <Member> Login

ID and Name:	UC-01 Login
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Created By:	DucTMC	Date Created:	02/4/2022
Primary Actor:	Member	Secondary Actors:	N/A
Description:	Use case allows user to log in to the system.		
Trigger:	A member indicates that he/she wants to login		
Pre-conditions:	PRE-1. User has not logged in		
Post-conditions:	POST-1. User is redirected to homepage		
Normal Flow:	<p>UC-01.0 Log in</p> <ol style="list-style-type: none"> 1. User clicks the “Đăng ký/ Đăng nhập” button at the profile screen.(UC-01.0.E6) 2. Displays a “Login” screen with the required input field: phone number. 3. User inputs required field information and clicked the “Tiếp tục” button. (see UC-01.0.E1, UC-01.0.E2, UC-01.0.E6) 4. Conneno send a text message with 6-digit OTP for phone verification. 5. User input 6-digit OTP into required field and select “Tiếp tục” button. (UC-01.0.E3, UC-01.0.E4, UC-01.0.E6) 6. The system validates the OTP successfully and checks the existing account if yes user is redirected to the “Input password” screen, if not use case continue step 7 in UC-02. Register.(UC-01.0.E6) 7. User inputs password into required field and select “Tiếp tục” button. (UC-01.0.E5, UC-01.0.E6) 8. The system authenticates the login information successfully and user is redirected to homepage screen.(UC-01.0.E6) 		

Alternative Flows:	<p>1a. User clicks the “Đăng ký/ Đăng nhập” button at the history screen.</p> <p>1a1. Return to step 2 in normal flow.</p> <p>1b. User clicks the “Quyên góp” button.</p> <p>1b1. Return to step 2 in normal flow.</p> <p>1c. User clicks the “Tham gia” button.</p> <p>1c1. Return to step 2 in normal flow.</p>
Exceptions:	<p>UC-01.0.E1 User inputs invalid phone number</p> <p>1a. Conneno shows error message “Số điện thoại không đúng định dạng”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>1a2. User re-enter phone number – use case continue UC-01.0.2</p> <p>UC-01.0.E2 User leaves phone number empty</p> <p>1a. Conneno shows error message “Số điện thoại không để trống!”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>1a2. User re-input phone number – use case continue UC-01.0.2</p> <p>UC-01.0.E3 User inputs incorrect 6-digit OTP</p> <p>1a. Conneno shows error message “Sai mã OTP”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>1a2. User re-enter OTP code – use case continue UC-01.0.5</p> <p>UC-01.0.E4 User inputs expired 6-digit OTP</p> <p>1a. Conneno shows an error message “Mã OTP hết hạn”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>1a2. User select “Gửi lại” button – use case continue UC-01.0.5</p> <p>UC-01.0.E5 User inputs incorrect password</p> <p>1a. Conneno shows error message “Mật khẩu không đúng”</p> <p>1a1. User clicks the “back” button – use case stops.</p>

	<p>1a2. User re-enter password – use case continue UC-01.0.7</p> <p>UC-01.0.E6 Internet connection lost</p> <p>1a. Conneno shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”.</p> <p>1a1. User select “X” button on the pop up – use case stops.</p>
Priority:	High
Frequency of Use:	High
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 26 – UC: Login

2.2.2.2 <Member> Logout

ID and Name:	UC-12 Log out		
Created By:	DucTMC	Date Created:	02/04/2022
Primary Actor:	Member	Secondary Actors:	N/A
Description:	Use case allows user to log out of the system.		
Trigger:	A member indicates that he/she wants to log out		
Pre-conditions:	PRE-1. User has logged in successfully		

Post-conditions:	POST–1. User has logged out successfully and redirected to homepage
Normal Flow:	<p>UC–12.0 Log out</p> <ol style="list-style-type: none"> 1. User clicks on “Đăng xuất” button (see UC–04.0.E1) 2. Conneno confirm logout successfully and redirected homepage screen
Alternative Flows:	N/A
Exceptions:	<p>UC–12.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1a. Conneno shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. 1a1. User select “X” button on the pop up – use case stops.
Priority:	High
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions :	N/A

Table 27 – UC: Logout

2.2.2.3 <Member> Manage profile

a. View profile

ID and Name:	UC–13 View profile
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Created By:	DucTMC	Date Created:	02/04/2022
Primary Actor:	Member	Secondary Actors:	N/A
Description:	This feature allows user to view their profile		
Trigger:	Member indicates that he/she wants to view their profile		
Pre-conditions:	PRE-1. User has logged in successfully		
Post-conditions:	N/A		
Normal Flow:	<p>UC-13.0 View profile's details</p> <ol style="list-style-type: none"> 1. User tap on "Profile" icon in the navigation bar 2. System displays logged in user's profile (see UC05.0.E1) 		
Alternative Flows:	N/A		
Exceptions:	<p>UC-13.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1a. Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. 1a1. User select “X” button on the pop up – use case stops. 		
Priority:	Low		
Frequency of Use:	Low		
Business Rules:	BR-12		
Other Information:	N/A		
Assumptions:	N/A		

Table 28 – UC: View profile

Table 62 – <Use Case> View account's profile

b. Update profile's details

ID and Name:	UC–14 Update profile		
Created By:	DucTMC	Date Created:	02/03/2022
Primary Actor:	Member	Secondary Actors:	N/A
Description:	This feature allows user to edit their profile		
Trigger:	Member indicates that they want to edit their profile		
Pre–conditions:	PRE–1. User has logged in successfully PRE–2. User must be on the “Tài khoản” screen		
Post–conditions:	POST–1. New user profile is updated in the system		
Normal Flow:	UC–14.0 Update profile's details <ol style="list-style-type: none"> 1. User clicks on “Chỉnh sửa thông tin” button 2. System displays “Update profile” screen 3. User inputs information into required fields and clicks “Lưu lại” button 4. User select “Đồng ý” button (see UC–06.0.E1, UC–06.0.E2) 5. System displays result message 		
Alternative Flows:	N/A		
Exceptions:	UC–06.0.E1 Internet connection lost <ol style="list-style-type: none"> 1a. Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. 1a1. User select “X” button on the pop up – use case stops. 		

	UC–06.0.E2 Blank fields 1. Conneta shows error message “Please fill out this field”
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR–06
Other Information:	N/A
Assumptions:	N/A

Table 29 – UC: Update profile

2.2.2.4 <Member – Volunteer> Enjoy campaigns

a. Donate money to donation campaign

ID and Name:	UC–15 Donate money to donation campaign		
Created By:	HieuNT	Date Created:	01/02/2022
Primary Actor:	Volunteer	Secondary Actors:	N/A
Description:	This feature allows volunteers to donate money to a donation campaign.		
Trigger:	Volunteer indicates that he wants to donate money to a campaign.		
Pre-conditions:	PRE–01. User logged in with Volunteer Role. PRE–01. Campaign must be active, not expired.		

Post-conditions:	<p>POST–01.</p> <ul style="list-style-type: none"> Success: System navigate to Donate Success screen. <p>POST–02.</p> <ul style="list-style-type: none"> Fail: System navigate to Donate Failed screen.
Normal Flow:	<p>UC–15 Donate to a Campaign.</p> <ol style="list-style-type: none"> User clicks on the “Quyên góp” button in the Campaign details screen. Application forwards user to Payment screen. User inputs money amount, message (optional) and chooses if the user wants to be incognito or not. Users click on the “Tiếp tục” button in the Payment screen. Application navigate user to payment platform to do the payment. Application navigate back to Donate Success screen.
Alternative Flows:	<ol style="list-style-type: none"> User clicks on the Donate button on the Campaign item in the Home Page or Explore screen. Return to step 2 of normal flow.
Exceptions:	<p>UC–15.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. User select “Đồng ý” button on the pop up – use case stops. <p>UC–15.0.E2 Transaction error</p> <ol style="list-style-type: none"> System shows a message dialog. User select “Đồng ý” button on the pop up – use case stops.
Priority:	High

Frequency of Use:	Usually
Business Rules:	BR-11, BR-27
Other Information:	N/A
Assumptions:	N/A

Table 30 – UC: Donate money to donation campaign

b. Participate in recruitment Campaign

ID and Name:	UC-16 Participate in recruitment Campaign		
Created By:	HieuNT	Date Created:	01/02/2022
Primary Actor:	Volunteer	Secondary Actors:	N/A
Description:	This feature allows volunteers to participate in a specific Campaign.		
Trigger:	Volunteer indicates that he/ she wants to participate in a recruitment campaign.		
Pre-conditions:	PRE-01. User logged in with Volunteer Role.		
Post-conditions:	POST-01. · Success: System shows message dialog “Đăng ký thành công”. POST-02. · Fail: System shows error message.		

Normal Flow:	<p>UC-16 Donate to a Campaign.</p> <ol style="list-style-type: none"> 1. Users click on the “Tham gia” button in the specific Campaign details screen. 2. Application shows confirm dialog. 3. Users click on the “Đồng ý” button in the Register screen. 4. Application shows status message dialog and redirect to History screen.
Alternative Flows:	<ol style="list-style-type: none"> 1a. User clicks on the Join component on the Campaign item in the Home Page or Explore screen. 1a1. Return to step 2 of normal flow.
Exceptions:	<p>UC-16.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1a. Conneno shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. 1a1. User select “X” button on the pop up – use case stops.
Priority:	High
Frequency of Use:	Usually
Business Rules:	BR-13
Other Information:	N/A
Assumptions:	N/A

Table 31 – UC: Participate in recruitment campaign

2.2.2.5 <Member – Volunteer> View History

a. View history of donations

UC ID and Name:	UC–17 View history of donations		
Created By:	DucTMC	Date Created:	02/01/2022
Primary Actor:	Volunteer	Secondary Actors:	N/A
Description:	This feature allows user to view their donation history		
Trigger:	Volunteer indicates that he/she wants to view their donation history		
Preconditions:	PRE–1. User has logged in		
Post–conditions:	POST–1. A list of volunteer's donation history will be displayed to the user		
Normal Flow:	<p>UC–17.0 View volunteer's donation history</p> <ol style="list-style-type: none"> 1. User tap on "Lịch sử" icon in the navigation bar (see UC–07.0.E1) 2. User select “quyên góp” tab 3. Conneno displays volunteer's donation history list 		
Alternative Flows:	N/A		
Exceptions:	<p>UC–17.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1a. Conneno shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”. 1a1. User select “X” button on the pop up – use case stops. 		
Priority:	Low		

Frequency of Use:	Low
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 32 – UC: View history of donations

b. View history of participations

UC ID and Name:	UC–18 View history of participations		
Created By:	DucTMC	Date Created:	02/01/2022
Primary Actor:	Volunteer	Secondary Actors:	N/A
Description:	This feature allows user to view their participation history		
Trigger:	Volunteer indicates that he/she wants to view their participation history		
Preconditions:	PRE–1. User has logged in		
Post–conditions:	POST–1. A list of volunteer's participation history will be displayed to the user		
Normal Flow:	UC–18.0 View volunteer's participation history <ol style="list-style-type: none"> 1. User tap on "Lịch sử" icon in the navigation bar (see UC–09.0.E1) 2. User select "tham gia" tab 		

	3. Conneno displays volunteer's participated recruitment history list
Alternative Flows:	N/A
Exceptions:	<p>UC-18.0.E1 Internet connection lost</p> <p>1a. Conneno shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”.</p> <p>1a1. User select “X” button on the pop up – use case stops.</p>
Priority:	Low
Frequency of Use:	Low
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 33 – UC: View history of participations

2.2.2.6 <Member – Volunteer> Get notifications

UC ID and Name:	UC-19 Get notifications		
Created By:	HieuNT	Date Created:	02/01/2022
Primary Actor:	Volunteer	Secondary Actors:	N/A

Description:	This feature allows user to view the notifications.
Trigger:	Volunteer indicates that he/she wants to view their notifications.
Preconditions:	PRE–1. User has logged in
Post–conditions:	POST–1. A list of notifications shows on home page by drop–down list
Normal Flow:	<p>UC–19 Get notifications</p> <ol style="list-style-type: none"> 1. User tap on the bell icon in the home screen. 2. System displays a drop–down list of notifications.
Alternative Flows:	N/A
Exceptions:	<p>UC–18.0.E1 Internet connection lost</p> <p>1a. Conneno shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”.</p> <p>1a1. User select “X” button on the pop up – use case stops.</p>
Priority:	Low
Frequency of Use:	Low
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 34 – UC: Get notifications

2.2.2.7 <Member – Volunteer> Reset password

UC ID and Name:	UC–20 Reset password		
Created By:	HieuNT	Date Created:	02/01/2022
Primary Actor:	Volunteer	Secondary Actors:	N/A
Description:	This feature allows user to reset their password.		
Trigger:	Volunteer indicates that he/she wants to reset their password.		
Preconditions:	PRE–1. User's phone number has been registered into the system.		
Post–conditions:	POST–1. User is redirected to homepage.		
Normal Flow:	<p>UC–20 Reset password</p> <ol style="list-style-type: none"> 1. User tap “quên mật khẩu” on login screen. 2. Displays a “Login” screen with the required input field: phone number. 3. User inputs required field information and clicked the “Tiếp tục” button. (see UC–20.0.E1, UC–20.0.E2, UC–20.0.E6) 4. Conneno send a text message with 6-digit OTP for phone verification. 5. User input 6-digit OTP into required field and select “Tiếp tục” button. (UC–20.0.E3, UC–20.0.E4, UC–20.0.E6) 6. The system validates the OTP successfully and checks the existing account if yes user is redirected to the “Input New Password” screen. 7. User inputs password into required field and select “Tiếp tục” button. (UC–20.0.E5, UC–20.0.E6) 8. The system authenticates the login information successfully and user is redirected to homepage screen.(UC–20.0.E6) 		

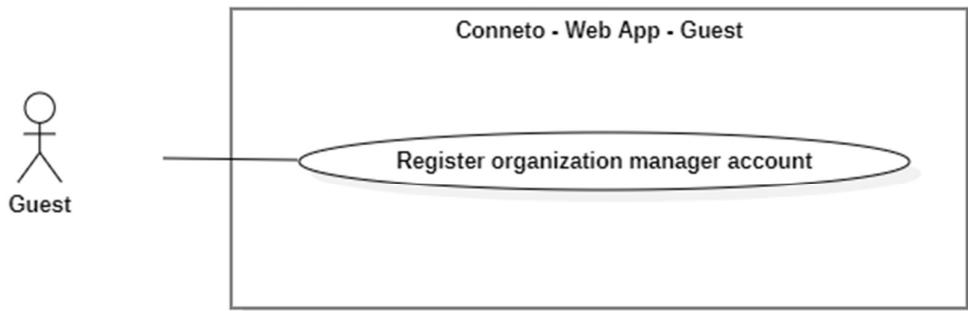
Alternative Flows:	N/A
	<p>UC-20.0.E1 User inputs invalid phone number</p> <p>1a. Conneto shows error message “Số điện thoại không đúng định dạng”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>UC-20.0.E2 User leaves phone number empty</p> <p>1a. Conneto shows error message “Số điện thoại không để trống!”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>UC-01.0.E3 User inputs incorrect 6-digit OTP</p> <p>1a. Conneto shows error message “Sai mã OTP”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>1a2. User re-enter OTP code – use case continue UC-01.0.5</p> <p>UC-01.0.E4 User inputs expired 6-digit OTP</p> <p>1a. Conneto shows an error message “Mã OTP hết hạn”.</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>1a2. User select “Gửi lại” button – use case continue UC-01.0.5</p> <p>UC-01.0.E5 User inputs incorrect password</p> <p>1a. Conneto shows error message “Mật khẩu không đúng”</p> <p>1a1. User clicks the “back” button – use case stops.</p> <p>UC-01.0.E6 Internet connection lost</p> <p>1a. Conneto shows the pop up error “Mất kết nối với Internet, vui lòng thử lại sau!”.</p> <p>1a1. User select “X” button on the pop up – use case stops.</p>
Priority:	Low

Frequency of Use:	Low
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 35 – UC: Reset password

2.3 Web Application

2.3.1 <Guest> Overview Use Case



[Figure 8 – Overview Use Case – Web App – Guest](#)

2.3.1.1 <Guest> Register organization manager account

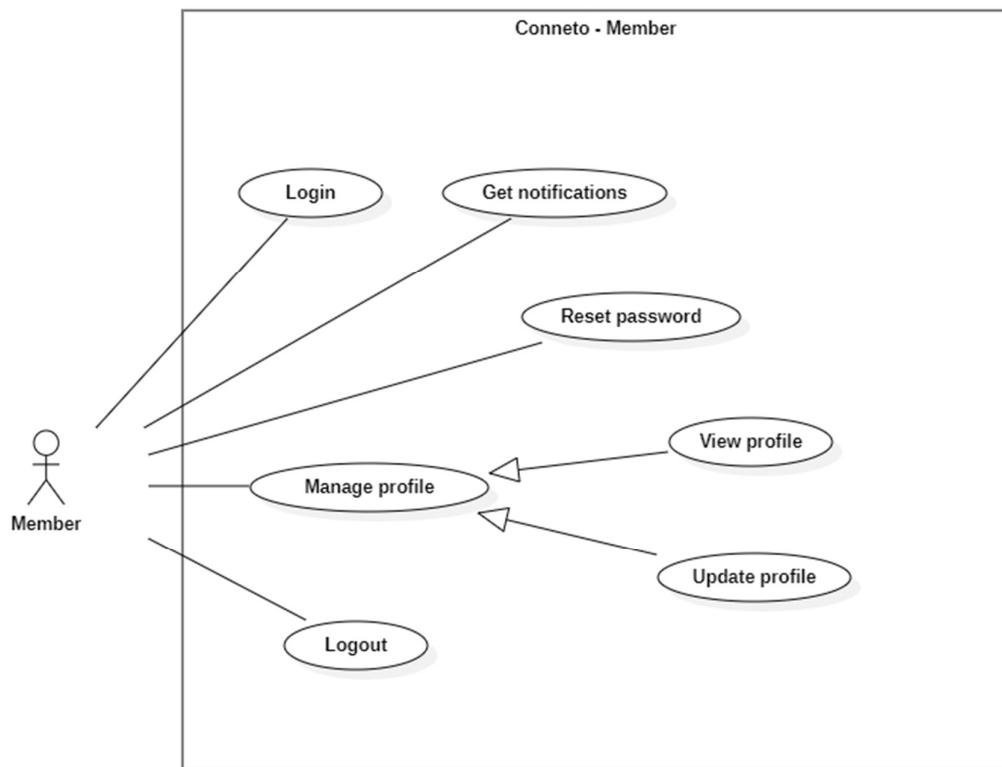
ID and Name:	UC-21 Register organization manager account		
Created By:	PhucNM	Date Created:	07/02/2022
Primary Actor:	Guest	Secondary Actors:	N/A
Description:	This feature allows the actor to sign up for a new account as an organization manager to be able to log in to Conneto system.		
Trigger:	The actor indicates that he/she wants to sign up.		
Pre-conditions:	PRE-01. Actor is not logged in		

Post-conditions:	<p>POST-01.</p> <ul style="list-style-type: none"> ● Success: Conneno creates a new account as an organization manager successfully and shows success messages. ● Fail: Conneno shows error messages.
Normal Flow:	<p>21.0 Register</p> <ol style="list-style-type: none"> 1. Actor click “Tạo tài khoản quản lý tổ chức” link on “Đăng nhập” screen 2. The system requests account information. <ol style="list-style-type: none"> a. Tài khoản: free text input, length 8–32 characters, required b. Mật khẩu: length from 8 characters, includes number and string c. Số điện thoại: 10 length numbers, required , Vietnamese format number d. Họ: text input, required e. Tên: text input, required f. Giới tính: select one of options , 3. Guest click on the “Tạo” button 4. The system validates fill input. 5. The system creates a new account and redirect to the page depending on the role and shows a message.
Alternative Flows:	N/A
Exceptions:	<p>21.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page <p>21.0.E2 Actor inputs invalid information</p> <ol style="list-style-type: none"> 1. The system returns an error request to ask the actor input correctly in the invalid field.
Priority:	Medium.
Frequency of Use:	Sometimes.

Business Rules:	BR-5, BR-6, BR-10
Other Information:	A new account is created in the Conneto system and becomes an authenticated user. The account is assigned the organization manager role.
Assumptions:	N/A

Table 36 – UC: Register organization manager account

2.3.2 <Member> Overview Use Case



[Figure 9 – Overview Use Case – Member](#)

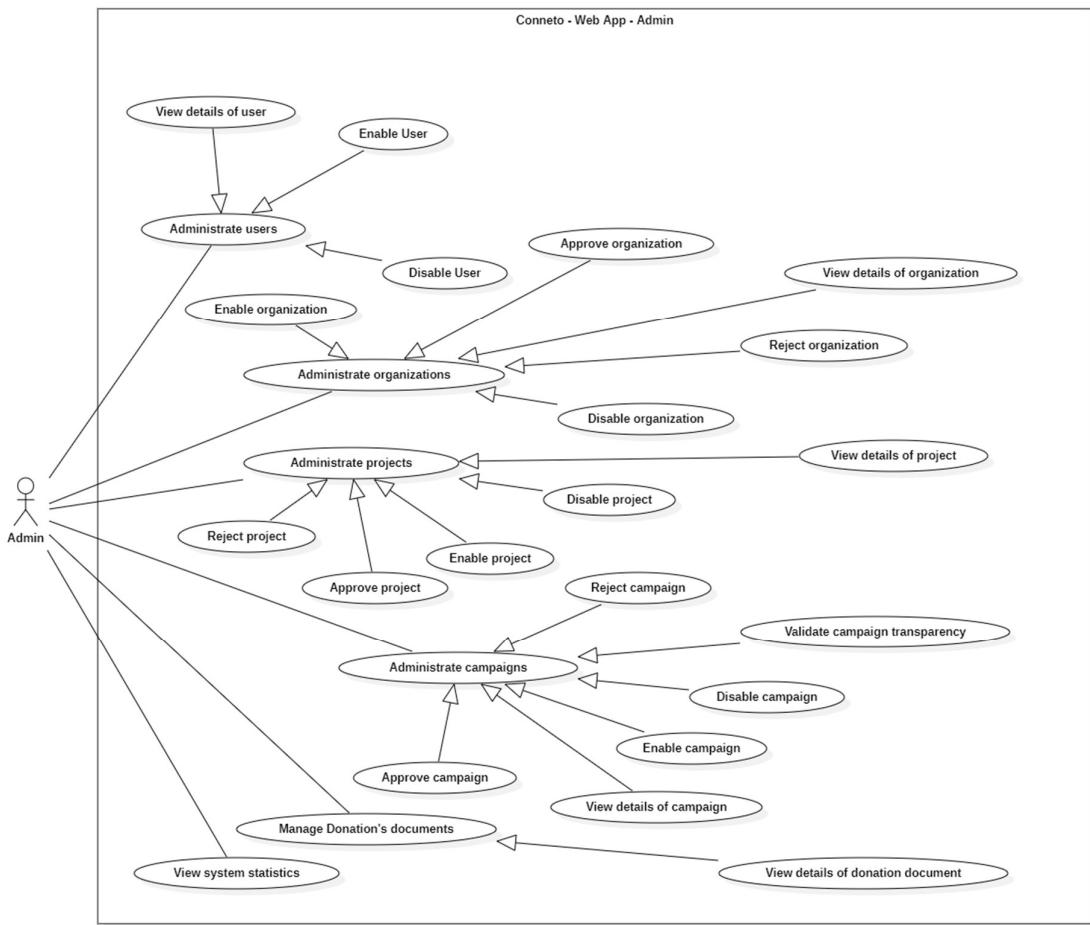
2.3.2.1 <Member> Login

ID and Name:	UC-22 Login		
Created By:	PhucNM	Date Created:	07/02/2022
Primary Actor:	Guest	Secondary Actors:	N/A
Description:	This feature describes how the actor login to system to verify role, give them access to more features in the system		

Trigger:	The actor indicates that he/she wants to login into system.
Pre-conditions:	PRE–01. Actor is not logged in
Post-conditions:	<p>POST–01.</p> <ul style="list-style-type: none"> ● Success: Conneno login for actor and shows a success message ● Fail: Conneno shows an error message.
Normal Flow:	<p>22.0 Login</p> <ol style="list-style-type: none"> 1. Actor sends a request to login into Conneno web system 2. System requests information from the actor: <ol style="list-style-type: none"> a. Tài khoản: text input, required b. Mật khẩu: text input, required 3. Guest click on the “Đăng nhập” button 4. The system validates username and password. (Exception 22.0.E1) 5. The system redirects users to the page depending on the role and shows a message.
Alternative Flows:	N/A
Exceptions:	<p>22.0.E1 .Guest enters wrong password or username</p> <ol style="list-style-type: none"> 1. Conneno shows message MSG <p>22.0.E2. Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium.
Frequency of Use:	Sometimes.
Business Rules:	BR–05, BR–06
Other Information:	N/A
Assumptions:	N/A

Table 37 – UC: Login

2.3.3 <Admin> Overview Use Case



[Figure 10 – Overview Use Case – Web App – Admin](#)

2.3.3.1 <Admin> Administrate user

a. Disable User

ID and Name:	UC-25 Disable user		
Created By:	PhucNM	Date Created:	02/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows the actor to disable a user, preventing this user from logging into the Conneto system.		

Trigger:	The actor indicates that he/she wants to disable a user..
Pre-conditions:	<p>PRE–01. Actor has logged in the web as Admin role</p> <p>PRE–02. Current screen is “Quản lý người dùng”</p> <p>PRE–03: The user must be selected to disabled</p>
Post–conditions:	<p>POST–01:</p> <ul style="list-style-type: none"> ● Success: System disables user, and shows success message. ● Fail: System shows error message.
Normal Flow:	<p>25.0 Disable user (Exception 25.0.E1)</p> <ol style="list-style-type: none"> 1. Actor clicks on “Quản lý người dùng” on the left side bar to get list of user. 2. System shows a list of user. 3. Actor clicks on the “Vô hiệu hóa” button on specific user 4. System shows confirm dialog and two buttons for actor to select: <ul style="list-style-type: none"> – Vô hiệu hóa: button – Hủy: button 5. Actor clicks on the “Vô hiệu hóa” button. (Alternative 25.0,25.1) 6. System disables the selected user and changes this user’s status and shows the success message.
Alternative Flows:	<p>25.0 Actor chooses “Hủy” button.</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog. <p>25.1 Actor clicks outside the dialog</p> <ol style="list-style-type: none"> 1. System closes the dialog.
Exceptions:	25.0.E1 Internet connection lost

	1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Sometimes
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 38 – UC: Disable user

b. Enable User

ID and Name:	UC-26 Enable User		
Created By:	PhucNM	Date Created:	02/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows actor to enable a user, allowing this user to log into the Conneno system.		
Trigger:	The actor indicates that he/she wants to enable a user		
Pre-conditions:	PRE-01. Actor has logged in the web as Admin role PRE-02. Current screen is “Quản lý người dùng” PRE-03: The user must be selected to enable		

Post-conditions:	<p>POST-01:</p> <ul style="list-style-type: none"> ● Success: System enables user, and shows success message. ● Fail: System shows error message.
Normal Flow:	<p>26.0 Enable User (Exception 26.0.E1)</p> <ol style="list-style-type: none"> 1. Actor clicks on “Quản lý người dùng” on the left side bar to get a list of users. 2. System shows a list of users. 3. Actor clicks on the “Enable” button on specific user 4. System shows confirm dialog and two buttons for actor to select: <ul style="list-style-type: none"> – Kích hoạt: button – Hủy: button 5. Actor clicks on the “Kích hoạt” button. (Alternative 26.0,26.1) 6. System enables the selected user and changes this user’s status and shows the success message.
Alternative Flows:	<p>26.0. Actor chooses the “Hủy” button.</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog. <p>26.1. Actor clicks outside the dialog</p> <ol style="list-style-type: none"> 1. System closes dialog.
Exceptions:	<p>26.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Sometimes

Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 39 – UC: Enable user

C. View details of user

ID and Name:	UC–24 View details of user		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows actor to get detailed information about the user.		
Trigger:	The actor indicates that he/she wants to get user details.		
Preconditions:	PRE–01. Actor has logged into the web as the Admin role. PRE–02. Current screen is “Quản lý người dùng”		
Post–conditions:	POST–01. The system returns detailed information about the user.		
Normal Flow:	24.0 View user's details (Exception 24.0.E1) <ol style="list-style-type: none"> 1. Actor clicks on a specific user item on the user list shown on the “Quản lý người dùng” screen 2. The system redirect to “Thông tin chi tiết” to view detailed information of the user 		

Alternative Flows:	N/A
Exceptions:	<p>24.0.E1 Internet connection lost</p> <p>1. The system forwards to Lost Internet page</p>
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 40 – UC: View details of user

2.3.3.2 <Admin> Administrate organization

a. Approve Organization

ID and Name:	UC-29 Approve Organization		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows the actor to approve the request create organization		
Trigger:	The actor indicates that he/she wants to approve an organization		
Preconditions:	PRE-01. Actor has logged into the web as the Admin role. PRE-02. Current screen is “Quản lý tổ chức”		
Post-conditions:	POST-01. System updates the status of the organization and shows the success message.		
Normal Flow:	29.0 Approve Organization (Exception 29.0.E1) <ol style="list-style-type: none"> Actor taps on the “Chấp nhận” button on a specific organization’s request System shows confirm dialog: “Bạn có chắc muốn duyệt tổ chức này?” and two buttons for manager to select: <ul style="list-style-type: none"> – Chấp nhận: button – Hủy: button Actor taps on “Chấp nhận” button to approve this organization’s request. (see Alternative 29.0) The system updates the organization status, shows the success message. 		

Alternative Flows:	29.0. Admin chooses “Hủy” button 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog.
Exceptions:	29.0.E1 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR–23, BR–24, BR–25
Other Information:	N/A
Assumptions:	N/A

Table 41 – UC: Approve organization

b. Reject Organization

ID and Name:	UC–30 Reject organization		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows actor to reject the request create organization		

Trigger:	The actor indicates that he/she wants to reject an organization
Preconditions:	PRE-01. Actor has logged into the web as the Admin role. PRE-02. Current screen is “Quản lý tổ chức”
Post-conditions:	POST-01. System updates the status of the organization and shows the success message..
Normal Flow:	<p>30.0 Reject Organization (Exception 30.0.E1)</p> <ol style="list-style-type: none"> 1. Admin taps on the “Từ chối” button on a specific organization’s request 2. System shows confirm dialog: “Bạn có chắc muốn từ chối cái này ?” and two buttons for manager to select: <ul style="list-style-type: none"> – Từ chối: button – Hủy: button 3. Actor taps on “Từ chối” button to request to reject this organization. (see Alternative 30.0) 4. The system updates the organization status, shows the success message.
Alternative Flows:	<p>30.0. Actor chooses “Hủy” button</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog.
Exceptions:	<p>30.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium

Frequency of Use:	Medium
Business Rules:	BR-23, BR-24, BR-25
Other Information:	N/A
Assumptions:	N/A

Table 42 – UC: Reject organization

c. View details of organization

ID and Name:	UC-31 View details of organization		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	Organization Manager
Description:	This feature allows actor to get detailed information about the organization		
Trigger:	The actor indicates that he/she wants to get organization details		
Preconditions:	PRE-01. User has logged into the web as the Admin role or Organization Manager role PRE-02. Current screen is “Quản lý tổ chức”		
Post-conditions:	<ul style="list-style-type: none"> POST-01. The system returns detailed information about the organization . 		
Normal Flow:	31.0 Get Organization Details (Exception 31.0.E1)		

	<p>1. Actor clicks on a specific organization item on the organizations list shown on the “Quản lý tổ chức” screen</p> <p>2. The system redirect to “Chi tiết tổ chức” to view detailed information of the organization.</p>
Alternative Flows:	N/A
Exceptions:	<p>31.0.E1 Internet connection lost</p> <p>1. The system forwards to Lost Internet page</p>
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-23, BR-24, BR-25
Other Information:	N/A
Assumptions:	N/A

Table 43 – UC: View details of organization

d. Enable Organization

ID and Name:	UC-57 Enable organization		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows the actor to enable the organization		
Trigger:	The actor indicates that he/she wants to enable the organization		
Preconditions:	PRE-01. Actor has logged into the web as the admin role. PRE-02. The Organization must be in disabled status.		
Post-conditions:	POST-01. System updates the status of the organization and shows the success message.		
Normal Flow:	<p>57.0 Enable Organization</p> <ol style="list-style-type: none"> 1. Actor click on the “Cấp quyền”button 2. System shows confirm dialog: “Bạn có chắc muốn cấp quyền hoạt động ?” and two buttons for manager to select: <ul style="list-style-type: none"> – Cấp quyền: button – Hủy: button 3. Actor taps on “Cấp quyền” button to request to enable this organization. (see Alternative 57.0) 4. The system updates the organization status, shows the success message. 		
Alternative Flows:	<p>57.0. Actor chooses “Hủy” button</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog. 		

Exceptions:	57.0.E1 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 44 – UC: Enable organization

e. Disable Organization

ID and Name:	UC-58 Disable Organization		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows the actor to disable the organization		
Trigger:	The actor indicates that he/she wants to disable the organization		
Preconditions:	PRE-01. Actor has logged into the web as the Admin role. PRE-02. The Organization must be in enabled status.		
Post-conditions:	POST-01. System updates the status of the organization and shows the success message.		
Normal Flow:	<p>58.0 Disable Organization</p> <ol style="list-style-type: none"> 1. Actor click on the “Vô hiệu hóa”button 2. System shows confirm dialog: “Bạn có chắc muốn vô hiệu hóa ?” and two buttons for manager to select: <ul style="list-style-type: none"> – Vô hiệu hóa: button – Hủy: button 3. Actor taps on “Vô hiệu hóa” button to request to disable this organization. (see Alternative 58.0) 4. The system updates the organization status, shows the success message. 		
Alternative Flows:	<p>58.0. Actor chooses “Hủy” button</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog. 		

Exceptions:	58.0.E1 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 45 – UC: Disable organization

2.3.3.3 <Admin> Administrate project

a. Approve project

ID and Name:	UC-36 Approve project		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows actor to approve the request create project		
Trigger:	The actor indicates that he/she wants to approve a project		
Preconditions:	PRE-01. User has logged into the web as the Admin role.		

	PRE–02. Current screen is “Quản lý dự án”
Post–conditions:	POST–01. System updates the status of the project and shows the success message.
Normal Flow:	<p>36.0 Approve Project (Exception 36.0.E1)</p> <ol style="list-style-type: none"> 1. Actor taps on the “Chấp nhận” button on a specific project’s request 2. System shows confirm dialog: “Bạn có chắc muốn chấp ?” and two buttons for manager to select: <ul style="list-style-type: none"> – Chấp nhận: button – Hủy: button 3. Actor taps on “Chấp nhận” button to request to approve this project’s request. (see Alternative 36.0) 4. The system updates the project status, shows the success message.
Alternative Flows:	<p>36.0. Actor chooses “Hủy” button</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog.
Exceptions:	<p>36.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium

Business Rules:	BR-22, BR-23, BR-24
Other Information:	N/A
Assumptions:	N/A

Table 46 – UC Approve project

b. Reject project

ID and Name:	UC-37 Reject project		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows actor to reject the request create a project		
Trigger:	The actor indicates that he/she wants to reject a project		
Preconditions:	PRE-01. Actor has logged into the web as the Admin role. PRE-02. Current screen is “Quản lý dự án”		
Post-conditions:	POST-01. System updates the status of the project's request and shows the success message..		

Normal Flow:	<p>37.0 Reject Project(Exception 37.0.E1)</p> <ol style="list-style-type: none"> 1. Actor taps on the “Từ chối” button on a specific project’s request 2. System shows confirm dialog: Bạn có chắc muốn từ chối cái này ?” and two buttons for manager to select: <ul style="list-style-type: none"> – Từ chối: button – Hủy: button 3. Actor taps on “Từ chối” button to request to reject this project’s request. (see Alternative 37.0) 4. The system updates the project’s request status, shows the success message.
Alternative Flows:	<p>37.0. actor chooses “Hủy” button</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog.
Exceptions:	<p>37.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-22, BR-23, BR-24
Other Information:	N/A

Assumptions:	N/A
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Table 47 – UC: Reject project

c. View details of project

ID and Name:	UC-38 View details of project		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	Organization Manager
Description:	This feature allows actor to get detailed information about the project		
Trigger:	The actor indicates that he/she wants to get project details		
Preconditions:	PRE-01. Actor has logged into the web as the Admin role or Organization Manager role PRE-02. Current screen is “Quản lý dự án”		
Post-conditions:	POST-01. The system returns detailed information about the project		
Normal Flow:	38.0 Get project details (Exception 38.0.E1) 1. Actor clicks on a specific project item on the project list shown on the “Quản lý dự án” screen 2. The system redirect to “Chi tiết dự án” to view detailed information of the project.		
Alternative Flows:	N/A		

Exceptions:	38.0.E1 Internet connection lost 1. The system forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-22, BR-23, BR-24.
Other Information:	N/A
Assumptions:	N/A

Table 48 – UC: View details of project

d. Disable project

ID and Name:	UC-59 Disable project		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows the actor to disable the project		
Trigger:	The actor indicates that he/she wants to disable the project		
Preconditions:	PRE-01. Actor has logged into the web as the admin role. PRE-02. The project must be in enabled status.		
Post-conditions:	POST-01. System updates the status of the organization and shows the success message.		
Normal Flow:	<p>59.0 Disable Project</p> <ol style="list-style-type: none"> 1. Actor click on the “Vô hiệu hóa”button 2. System shows confirm dialog: “Bạn có chắc muốn vô hiệu hóa ?” and two buttons for manager to select: <ul style="list-style-type: none"> – Vô hiệu hóa: button – Hủy: button 3. Actor taps on “Vô hiệu hóa” button to request to reject this organization. (see Alternative 59.0) 4. The system updates the organization status, shows the success message. 		
Alternative Flows:	<p>59.0. Actor chooses “Hủy” button</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog. 		

Exceptions:	59.0.E1 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 49 – UC: Disable project

e. Enable project

ID and Name:	UC-60 Enable project		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows the actor to enable the project		
Trigger:	The actor indicates that he/she wants to enable the project		
Preconditions:	PRE-01. Actor has logged into the web as the admin role. PRE-02. The project must be in disabled status.		
Post-conditions:	POST-01. System updates the status of the project and shows the success message.		
Normal Flow:	<p>60.0 Enable Project</p> <ol style="list-style-type: none"> 1. Actor click on the “Cấp quyền”button 2. System shows confirm dialog: “Bạn có chắc muốn cấp quyền hoạt động ?” and two buttons for manager to select: <ul style="list-style-type: none"> – Cấp quyền: button – Hủy: button 3. Actor taps on “Cấp quyền” button to request to reject this organization. (see Alternative 60.0) 4. The system updates the organization status, shows the success message. 		
Alternative Flows:	<p>60.0. Actor chooses “Hủy” button</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog. 		

Exceptions:	60.0.E1 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 50 – UC: Enable project

2.3.3.4 <Admin> Administrate campaign

a. Approve campaign

ID and Name:	UC-43 Approve campaign		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows actor to approve the campaign's request		
Trigger:	The actor indicates that he/she wants to approve a campaign		
Preconditions:	PRE-01. Actor has logged into the web as the Admin role.		

	PRE–02. Current screen is “Quản lý dự án”
Post–conditions:	POST–01. System updates the status of the campaign and shows the success message.
Normal Flow:	<p>43.0 Approve Campaign(Exception 43.0.E1)</p> <ol style="list-style-type: none"> 1. Actor taps on the “Chấp nhận” button on a specific campaign’s request 2. System shows confirm dialog: “Bạn có chắc muốn từ chối ?” and two buttons for manager to select: <ul style="list-style-type: none"> – Chấp nhận: button – Hủy: button 3. Actor taps on “Chấp nhận” button to request to approve this campaign’s request. (see Alternative 43.0) 4. The system updates the campaign status, shows the success message.
Alternative Flows:	<p>43.0. Actor chooses “Hủy” button</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog.
Exceptions:	<p>43.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium

Business Rules:	BR-23, BR-24, BR-33
Other Information:	N/A
Assumptions:	N/A

Table 51 – UC: Approve campaign

b. Reject campaign

ID and Name:	UC-44 Reject Campaign		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows actor to reject the campaign's request		
Trigger:	The actor indicates that he/she wants to reject a campaign		
Preconditions:	PRE-01. Actor has logged into the web as the Admin role. PRE-02. Current screen is “Quản lý chiến dịch”		
Post-conditions:	POST-01. System updates the status of the campaign and shows the success message..		

Normal Flow:	<p>44.0 Reject Campaign(Exception 44.0.E1)</p> <ol style="list-style-type: none"> 1. . Actor taps on the “Từ chối” button on a specific campaign’s request 2. System shows confirm dialog: “Bạn có chắc muốn từ chối ?” and two buttons for manager to select: <ul style="list-style-type: none"> – Từ chối: button – Hủy: button 3. Actor taps on “Từ chối” button to request to reject this campaign’s request. (see Alternative 44.0) 4. The system updates the campaign’s request status, shows the success message.
Alternative Flows:	<p>44.0. Actor chooses “Hủy” button</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog.
Exceptions:	<p>44.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-23,BR-24,BR-33
Other Information:	N/A

Assumptions:	N/A
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Table 52 – UC Reject campaign

c. View details of campaign

ID and Name:	UC-45 View details of campaign		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	Organization Manager
Description:	This feature allows actor to get detailed information about the campaign		
Trigger:	The actor indicates that he/she wants to get campaign details		
Preconditions:	PRE-01. Actor has logged into the web as the Admin role or Organization Manager role PRE-02. Current screen is “Quản lý chiến dịch”		
Post-conditions:	POST-01. The system returns detailed information about the campaign.		
Normal Flow:	<p>45.0 Get Campaign Details (Exception 45.0.E1)</p> <ol style="list-style-type: none"> Actor clicks on a specific campaign item on the campaign list shown on the “Quản lý chiến dịch” screen The system redirect to “Chi tiết chiến dịch” to view detailed information of the campaign. 		
Alternative Flows:	N/A		

Exceptions:	45.0.E1 Internet connection lost 1. The system forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-23,BR-24,BR-33
Other Information:	N/A
Assumptions:	N/A

Table 53 – UC: View details of campaign

d. Enable campaign

ID and Name:	UC-61 Enable campaign		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows the actor to enable the campaign		
Trigger:	The actor indicates that he/she wants to enable the campaign		
Preconditions:	PRE-01. Actor has logged into the web as the admin role. PRE-02. The campaign must be in disabled status.		
Post-conditions:	POST-01. System updates the status of the campaign and shows the success message.		
Normal Flow:	1. Actor click on the enable button 2. System shows confirm dialog: “Bạn có chắc cấp quyền hoạt động ?” and two buttons for manager to select: – Cấp quyền: button – Hủy: button 3. Actor taps on “Cấp quyền” button to request to reject this campaign. 4. The system updates the organization status, shows the success message.		
Alternative Flows:	1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog.		

Exceptions:	UC-61.0.E1 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 54 – UC: Enable campaign

e. Disable campaign

ID and Name:	UC–62 Disable campaign		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows the actor to disable the campaign		
Trigger:	The actor indicates that he/she wants to disable the campaign		
Preconditions:	PRE–01. Actor has logged into the web as the admin role. PRE–02. The campaign must be in enabled status.		
Post–conditions:	POST–01. System updates the status of the campaign and shows the success message.		
Normal Flow:	1. Admin click on the disable button 2. System shows confirm dialog: “Bạn có chắc muốn vô hiệu hóa chiến dịch này?” and two buttons for manager to select: – Vô hiệu hóa: button – Hủy: button 3. Actor taps on “Vô hiệu hóa” button to request to reject this campaign. (See Alternative 62.0) 4. The system updates the campaign status, shows the success message.		
Alternative Flows:	1. Actor clicks on the “Hủy” button on the confirm dialog. 2. System closes dialog.		

Exceptions:	62.0.E1 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 55 – UC: Disable campaign

f. Validate campaign transparency

ID and Name:	UC-46: Validate campaign transparency		
Created By:	KhangTL	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	N/A
Description:	This feature allows the actor to validate the campaign's transparency		
Trigger:	The actor indicates that he/she wants to validate the campaign's transparency		
Preconditions:	PRE-01. Actor has logged into the web as the admin role. PRE-02. The campaign must finish and had uploaded donation documents.		
Post-conditions:	POST-01. System updates the status of the campaign and shows the success message.		
Normal Flow:	1. Actor click on the 'Xác thực' button 2. System shows confirm dialog: "Bạn có chắc muốn xác thực minh bạch cho chiến dịch này?" and two buttons for manager to select: – Xác thực: button – Hủy: button 3. Actor taps on "Xác thực" button to request to validate this campaign. 4. The system updates the campaign status, shows the success message.		
Alternative Flows:	1. Actor clicks on the "Hủy" button on the confirm dialog. 2. System closes dialog.		

Exceptions:	46.0.E1 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-24, BR-26, BR-29
Other Information:	N/A
Assumptions:	N/A

Table 56 – UC: Validate campaign transparency

2.2.3.6 <Admin> View system statistics

ID and Name:	UC-50 View system statistics		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Admin	Secondary Actors:	Organization Manager
Description:	This feature allows actor to view the system's statistics.		
Trigger:	The actor indicates that he/she wants to get the system's statistics		
Preconditions:	PRE-01. Actor has logged into the web as the admin role.		
Post-conditions:	POST-01. System displays the system's statistics		

Normal Flow:	50.0.Get System's Statistics (Exception 50.0.E1) 1. Actor taps on the “Báo cáo” button on the leftside bar 2. Actor goes to dashboard page
Alternative Flows:	N/A
Exceptions:	50.0.E1 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 57 – UC: View system statistics

2.3.2 <Organization Manager> Overview Use Case



[Figure 11 – Overview Use Case – Organization Manager](#)

2.3.3.3 <Organization Manager> Manage Organization

a. Create Organization

ID and Name:	UC-32 Create Organization		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows actor to create organization		

Trigger:	The actor indicates that he/she wants to create an organization
Preconditions:	<p>PRE–01. Actor has logged into the web as the Organization Manager role.</p> <p>PRE–02. Current screen is “Quản Lý Tổ Chức”</p>
Post–conditions:	<p>POST–01.</p> <ul style="list-style-type: none"> ● Success: System creates new organization and shows the success message ● Fail: System shows error message
Normal Flow:	<p>32.0 Create Organization (Exception 32.0.E2)</p> <ol style="list-style-type: none"> 1. Actor clicks on ‘Tạo tổ chức’ button to send request to create an organization 2. Conneno displays a forms with fields: <ul style="list-style-type: none"> ● Tên tổ chức: text input ● Giới thiệu: text input ● Tầm nhìn của chúng tôi: text input ● Sứ mệnh của chúng tôi: text input ● Ngày thành lập: date ● Logo: file picker ● Ảnh bìa: file picker 3. Actor fills information and clicks on ‘Tạo’ button. 4. Conneno validate and create a new organization and show message
Alternative Flows:	<p>32.0. Actor cancel create organization</p> <ol style="list-style-type: none"> 1. Actor clicks on the “X” icon . 2. System closes the form.

Exceptions:	<p>32.0.E1 Missing of required fields</p> <p>1. Conneto shows error label messages</p> <p>32.0.E2 Internet connection lost</p> <p>1. System forwards to Lost Internet page</p>
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-22, BR-23, BR-24, BR-25
Other Information:	N/A
Assumptions:	N/A

Table 58 – UC: Create organization

b. Update Organization

ID and Name:	UC-33 Update Organization		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows actor update organization information		
Trigger:	The actor indicates that he/she wants to update their organization		

Preconditions:	<p>PRE–01. Actor has logged into the web as the Organization Manager role.</p> <p>PRE–02. Current screen is “Quản Lý Tổ Chức”</p>
Post–conditions:	<p>POST–01.</p> <ul style="list-style-type: none"> ● Success: System updates organization and shows the success message ● Fail: System shows error message
Normal Flow:	<p>33.0 Update Organization (Exception 33.0.E2)</p> <ol style="list-style-type: none"> 1. Actor clicks on a specific card item organization in the list 2. Conneno displays screen to view details information of organization. 3. Actor clicks on ‘Cập nhật’ button 4. Actor can edit information: <ul style="list-style-type: none"> ● Tên tổ chức:text input ● Giới thiệu:text input ● Tầm nhìn của chúng tôi:text input ● Sứ mệnh của chúng tôi:text input ● Ngày thành lập:date ● Logo:file picker ● Ảnh bìa:file picker <p>(see Alternative 33.0)</p> <ol style="list-style-type: none"> 5. Actor fills information and clicks on ‘Lưu’ button. 6. Conneno validates the information, update information and show success message
Alternative Flows:	<p>33.0. Actor cancel update organization</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button. 2. System closes popup.

Exceptions:	33.0.E1 Missing of required fields 1. Conneto shows error label messages
	33.0.E2 Internet connection lost 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-07, BR-22, BR-23, BR-24, BR-25
Other Information:	N/A
Assumptions:	N/A

Table 59 – UC: Update organization

c. Delete Organization

ID and Name:	UC-34 Delete Organization		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows actor to delete organization		
Trigger:	The actor indicates that he/she wants to delete their organization		

Preconditions:	<p>PRE–01. Actor has logged into the web as the Organization Manager role.</p> <p>PRE–02. Current screen is “Quản Lý Tổ Chức”</p>
Post–conditions:	<p>POST–01.</p> <ul style="list-style-type: none"> ● Success: System delete organization and shows the success message ● Fail: System shows error message
Normal Flow:	<p>34.0 Delete Organization (Exception 34.0.E1)</p> <ol style="list-style-type: none"> 1. Actor clicks on a specific card item organization in the list 2. Conneno displays screen to view details information of organization. 3. Actor clicks on ‘Xóa’ button 4. Conneno shows confirm dialog 5. Actor clicks on ‘Đồng ý’ button 6. Conneno delete organization and show message
Alternative Flows:	<p>34.0.1 Actor cancels view organization detail</p> <ol style="list-style-type: none"> 1. Actor clicks on “X” icon . 2. Conneno closes screen. <p>34.0.2 Actor cancel delete organization</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on confirm dialog 2. System closes popup.

Exceptions:	34.0.E1 Internet connection lost 1.System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-28
Other Information:	N/A
Assumptions:	N/A

Table 60 – UC: Delete organization

2.3.3.3 <Organization Manager> Manage Project

a. Create Project

ID and Name:	UC-39 Create Project		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows actor create a new project		
Trigger:	The actor indicates that he/she wants to create a project		
Preconditions:	PRE-01. Actor has logged into the web as the Organization Manager role.		

	PRE–02. Current screen is “Quản Lý Tổ Chức”
Post-conditions:	<p>POST–01.</p> <ul style="list-style-type: none"> ● Success: System creates new organization and shows the success message ● Fail: System shows error message
Normal Flow:	<p>39.0 Create Project(Exception 39.0.E2)</p> <ol style="list-style-type: none"> 1. Actor clicks on ‘Tạo một dự án’ button to send request to create a new project 2. Conneno displays a pop-up have a form with fields: <ul style="list-style-type: none"> ● Tên dự án:text input ● Giới thiệu:text input ● Ngày bắt đầu:date ● Ngày kết thúc:date ● Logo:file picker ● Ảnh bìa:file picker 3. Actor fills information and clicks on ‘Tạo’ button. 4. Conneno validate and create a new project and show message
Alternative Flows:	<p>39.0. Actor cancel create project</p> <ol style="list-style-type: none"> 1. Actor clicks on the “X” icon . 2. System closes the form.
Exceptions:	<p>39.0.E1 Invalid input</p> <ol style="list-style-type: none"> 1. Conneno shows error label messages <p>39.0.E2 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page

Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-07,BR-22,BR-24,BR-30
Other Information:	N/A
Assumptions:	N/A

Table 61 – UC: Create project

b. Update Project

ID and Name:	UC-40 Update Project		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows Actor update project information		
Trigger:	The actor indicates that he/she wants to update their project		
Preconditions:	PRE-01. Actor has logged into the web as the Organization Manager role. PRE-02. Current screen is “Quản Lý Dự Án”		

Normal Flow:	<p>40.0 Update Project(Exception 40.0.E2)</p> <ol style="list-style-type: none"> 1. Actor clicks on a specific card item project in the list 2. Conneno displays screen to view details information of the project. 3. Actor clicks on ‘Cập nhật’ button 4. Conneno displays a popup to view details information of the project. 5. Actor can edit information: <ul style="list-style-type: none"> • Tên dự án:text input • Giới thiệu:text input • Ngày bắt đầu:date • Ngày kết thúc:date • Logo:file picker • Ảnh bìa:file picker (see Alternative 40.0) 6. Actor fills information and clicks on ‘Lưu’ button. 6.Conneno validates the information,update information and show success message
Alternative Flows:	<p>40.0. Actor cancel update project</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button. 2. System closes popup.
Exceptions:	<p>40.0.E1 Invalid input</p> <ol style="list-style-type: none"> 1. Conneno shows error label messages <p>40.0.E2 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium

Frequency of Use:	Medium
Business Rules:	BR-07,BR-22,BR-24,BR-30
Other Information:	N/A
Assumptions:	N/A

Table 62 – UC: Update project

c. Delete Project

ID and Name:	UC-41 Delete Project		
Created By:	PhucNM	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows Actor delete the project		
Trigger:	The actor indicates that he/she wants to delete their project		
Preconditions:	PRE-01. Actor has logged into the web as the Organization Manager role. PRE-02. Current screen is “Quản Lý Dự Án”		
Post-conditions:	POST-01. <ul style="list-style-type: none"> ● Success: System delete the project and shows the success message ● Fail: System shows error message 		

Normal Flow:	<p>41.0 Delete Project(Exception 41.0.E1)</p> <ol style="list-style-type: none"> 1. Actor clicks on a specific card item project in the list 2. Conneno displays screen to view details information of the project. 3. Actor clicks on 'Xóa' button 4. Conneno shows confirm dialog 5. Actor clicks on 'Đồng ý' button 6. Conneno delete the project and show message
Alternative Flows:	<p>41.0.1 Actor cancels view project detail</p> <ol style="list-style-type: none"> 3. Actor clicks on "X" icon. 4. Conneno closes screen. <p>41.0.2 Actor cancels delete project</p> <ol style="list-style-type: none"> 1. Actor clicks on the "Hủy" button on confirm dialog 2. System closes popup.
Exceptions:	<p>41.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium

Business Rules:	BR-28
Other Information:	N/A
Assumptions:	N/A

Table 63 – UC: Delete project

2.3.3.3 <Organization Manager> Manage campaign

a. Create campaign

ID and Name:	UC-47 Create campaign		
Created By:	KhangTL	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows Actor create a new campaign		
Trigger:	The actor indicates that he/she wants to create a new campaign		
Preconditions:	PRE-01. Actor has logged into the web as the Organization Manager role. PRE-02. Current screen is “Quản Lý Dự Án”		
Post-conditions:	POST-01. <ul style="list-style-type: none"> • Success: System creates a new campaign and shows the success message • Fail: System shows error message 		

Normal Flow:	<p>47.0 Create Campaign(Exception 34.0.E1)</p> <ol style="list-style-type: none"> 1. Actor clicks on ‘Tạo một chiến dịch’ button to send request to create a new campaign 2. Conneno displays a pop-up have a form with fields: <ul style="list-style-type: none"> • Tên chiến dịch:text input • Giới thiệu:text input • Ngày bắt đầu:date • Ngày kết thúc:date • Mục tiêu cần đạt: • Yêu cầu công việc: • Mô tả công việc: • Lợi ích công việc: • Logo:file picker • Ảnh bìa:file picker 3. Actor fills information and clicks on ‘Tạo’ button. 4. Conneno validate and create a new project and show message
Alternative Flows:	<p>47.0. Actor cancels create campaign</p> <ol style="list-style-type: none"> 1. Actor clicks on the “X” . 2. System closes the form.
Exceptions:	<p>47.0.E1 Invalid input</p> <ol style="list-style-type: none"> 1. Conneno shows messages “Sai thông tin” <p>47.0.E2 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to lost internet page
Priority:	Medium
Frequency of Use:	Medium

Business Rules:	BR-07, BR-11, BR-22, BR-24, BR-30, BR-31, BR-32, BR-46
Other Information:	N/A
Assumptions:	N/A

Table 64 – UC: Create campaign

b. Update campaign

ID and Name:	UC-48 Update campaign		
Created By:	KhangTL	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows actor update campaign information		
Trigger:	The actor indicates that he/she wants to update their campaign.		
Preconditions:	PRE-01. Actor has logged into the web as the Actor role. PRE-02. Current screen is “Quản Lý Chiến Dịch”		
Post-conditions:	POST-01. <ul style="list-style-type: none"> • Success: System updates campaign and shows the success message • Fail: System shows error message 		

	<p>48.0 Update Campaign (Exception 48.0.E2)</p> <ol style="list-style-type: none"> 1. Actor clicks on a specific card item campaign in the list 2. Conneno displays screen to view details information of the campaign. 3. Actor clicks on ‘Cập nhật’ button 4. Conneno displays a popup to view details information of campaign . 5. Actor can edit information: <ul style="list-style-type: none"> • Tên chiến dịch: text input • Giới thiệu: text input • Ngày bắt đầu: date • Ngày kết thúc: date • Mục tiêu cần đạt: text input • Yêu cầu công việc: text input • Mô tả công việc: text input • Lợi ích công việc: text input • Logo: file picker • Ảnh bìa: file picker 6. Actor fills information and clicks on ‘Lưu’ button. 7. Conneno validates the information, update information and show success message
Alternative Flows:	<p>48.0. Actor cancels update campaign</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button. 2. System closes popup.
Exceptions:	<p>48.0.E1 Invalid input</p> <ol style="list-style-type: none"> 1. Conneno shows messages “Sai thông tin” <p>48.0.E2 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page

Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR–07, BR–11, BR–22, BR–24, BR–30, BR–31, BR–32, BR–46, BR–48
Other Information:	N/A
Assumptions:	N/A

Table 65 – UC: Update campaign

c. Delete campaign

ID and Name:	UC–49 Delete campaign		
Created By:	KhangTL	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows Organization Manager delete the campaign		
Trigger:	The actor indicates that he/she wants to delete their campaign		
Preconditions:	PRE–01. Actor has logged into the web as the Organization Manager role. PRE–02. Current screen is “Quản Lý Chiến Dịch”		
Post–conditions:	POST–01.		

	<ul style="list-style-type: none"> • Success: System delete the campaign and shows the success message • Fail: System shows error message
Normal Flow:	<p>49.0 Delete Campaign(Exception 49.0.E1)</p> <ol style="list-style-type: none"> 1. Actor clicks on a specific card item campaign in the list 2. Conneno displays screen to view details information of the campaign. 3. Actor clicks on 'Xóa' button 4. Conneno shows confirm dialog 5. Actor clicks on 'Đồng ý' button 6. Conneno delete the campaign and show message
Alternative Flows:	<p>49.0.1 Actor cancels view campaign detail</p> <ol style="list-style-type: none"> 5. Actor clicks on "X" button. 6. Conneno closes screen. <p>49.0.2 Actor cancels delete campaign.</p> <ol style="list-style-type: none"> 1. Actor clicks on the "Hủy" button on confirm dialog 2. System closes popup.
Exceptions:	<p>49.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium

Business Rules:	
Other Information:	N/A
Assumptions:	N/A

Table 66 – UC: Delete campaign

d. Approve volunteer participate in recruitment campaign

ID and Name:	UC–55 Approve volunteer participate in recruitment campaign		
Created By:	KhangTL	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows Organization Manager approve volunteer to participate in recruitment campaign		
Trigger:	The actor indicates that he/she wants to approve their volunteers		
Preconditions:	PRE–01. Actor has logged into the web as the Organization Manager role. PRE–02. Current screen is “Quản lý Tình nguyện viên” PRE–03. Volunteer must registered to Organization’s campaign before		
Post–conditions:	POST–01. <ul style="list-style-type: none"> • Success: System approve volunteer to participate in recruitment campaign and push notification to volunteer • Fail: System shows error message 		

Normal Flow:	<p>55.0 Approve Volunteer</p> <ol style="list-style-type: none"> 1. Actor clicks on 'Phê duyệt' button on a specific volunteer in the list 2. Conneno shows confirm dialog 3. Actor clicks on 'Đồng ý' button 4. Conneno approve volunteer and show message
Alternative Flows:	<p>55.0.1 Actor cancels approve volunteer</p> <ol style="list-style-type: none"> 1. Actor clicks on the "Hủy" button on confirm dialog 2. System closes popup.
Exceptions:	<p>55.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 3. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-34, BR-28

Other Information:	N/A
Assumptions:	N/A

Table 67 – UC: Approve volunteer participate in recruitment campaign

e. Reject volunteer participate in recruitment campaign

ID and Name:	UC–56 Reject volunteer participate in recruitment campaign		
Created By:	KhangTL	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows Organization Manager reject volunteer to participate in recruitment campaign		
Trigger:	The actor indicates that he/she wants to reject their volunteers		
Preconditions:	PRE–01. Actor has logged into the web as the Organization Manager role. PRE–02. Current screen is “Quản lý Tình nguyện viên” PRE–03. Volunteer must registered to Organization’s campaign before		
Post–conditions:	POST–01. <ul style="list-style-type: none"> • Success: System reject volunteer to participate in recruitment campaign and push notification to volunteer • Fail: System shows error message 		

Normal Flow:	<p>56.0 Reject Volunteer</p> <ol style="list-style-type: none"> 1. Actor clicks on ‘Tù chối’ button in a specific volunteer in the list 2. Conneno shows confirm dialog 3. Actor clicks on ‘Tù chối’ confirm button 4. Conneno approve volunteer and show message
Alternative Flows:	<p>56.0.1 Actor cancels approve volunteer</p> <ol style="list-style-type: none"> 1. Actor clicks on the “Hủy” button on confirm dialog 2. System closes popup.
Exceptions:	<p>56.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A

Assumptions:	N/A
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Table 68 – UC: Reject volunteer participate in recruitment campaign

2.3.3.3 <Organization Manager> Manage donation documents

a. Upload donation document

ID and Name:	UC–52 Upload donation document		
Created By:	KhangTL	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows actor to upload document files		
Trigger:	The actor indicates that he/she wants to upload the document files		
Preconditions:	PRE–01. Actor has logged into the web as the Organization Manager role. PRE–02. Current screen is “Quản Lý Chiến Dịch”		
Post–conditions:	POST–01. <ul style="list-style-type: none"> ● Success: System upload document files and shows the success message ● Fail: System shows error message 		

Normal Flow:	<p>52.0 Upload Document (Exception 52.0.E2)</p> <ol style="list-style-type: none"> 1. Actor clicks on 'Tải lên' button to send request to upload document files 2. Conneno shows a File chooser dialog to user. 3. Actor select document files and click 'Lưu'.. 4. Conneno upload the document files and shows success message .
Alternative Flows:	<p>52.0. Actor cancels create upload</p> <ol style="list-style-type: none"> 1. Actor clicks on the "X" . 2. System closes the form.
Exceptions:	<p>52.0.E1 Invalid file</p> <ol style="list-style-type: none"> 1. Conneno shows error label messages <p>52.0.E2 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-09, BR-47

Other Information:	N/A
Assumptions:	N/A

Table 69 – UC: Upload donation document

b. Delete donation document

ID and Name:	UC–53 Delete donation document		
Created By:	KhangTL	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	N/A
Description:	This feature allows actor to delete document of a campaign		
Trigger:	The actor indicates that he/she wants to delete the document files		
Preconditions:	PRE–01. Actor has logged into the web as the Organization Manager role. PRE–02. Current screen is “Quản Lý Chiến Dịch”		
Post–conditions:	POST–01. <ul style="list-style-type: none"> ● Success: System updates documents and shows the success message ● Fail: System shows error message 		

Normal Flow:	<p>53.0 Delete Document</p> <ol style="list-style-type: none"> 1. Actor clicks on a specific card item campaign in the list 2. Conneno displays screen to view details information of the campaign. 3. Actor clicks on the specific icon 4. Conneno shows a File chooser dialog to user. 5. Actor select document files and click 'Lưu'. 6. Conneno upload the document files and shows success message
Alternative Flows:	<p>53.0. Actor cancel update the document</p> <ol style="list-style-type: none"> 1. Actor clicks on the "Hủy" button. 2. System closes popup.
Exceptions:	<p>53.0.E1 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	N/A
Other Information:	N/A
Assumptions:	N/A

Table 70 – UC: Delete donation document

c. Get list of donation documents

ID and Name:	UC-51 Get list of donation documents
--------------	---

Created By:	KhangTL	Date Created:	02/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	Admin
Description:	This feature allows actor to get the list of documents of donation's campaign		
Trigger:	The actor indicates that he/she wants to get the documents list		
Pre-conditions:	PRE-01. Actor has logged in the web as Organization Manager role or Admin role.		
Post-conditions:	<p>POST-01:</p> <ul style="list-style-type: none"> • Success: The system returns the list of documents. • Fail: The system shows an error message. 		
Normal Flow:	<p>51.0 Get documents list (Exception 51.0.E2)</p> <ol style="list-style-type: none"> 1. Actor clicks on the specific campaign card 2. System shows a detail screen of the campaign. 3. Actor clicks on the tab 'Tài liệu' on the screen. 4. System shows a list of documents (see Exception 51.0.E1). 		
Alternative Flows:	N/A		
Exceptions:	<p>51.0.E1 Organization manager has no document to manage</p> <ol style="list-style-type: none"> 1. System displays empty with error message <p>51.0.E2 Internet connection lost</p> <ol style="list-style-type: none"> 1. System forwards to Lost Internet page 		

Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-09
Other Information:	N/A
Assumptions:	N/A

Table 71 – UC: Get list of donation documents

d. View details of donation document

ID and Name:	UC-54 View details of donation document		
Created By:	KhangTL	Date Created:	03/02/2022
Primary Actor:	Organization Manager	Secondary Actors:	Admin
Description:	This feature allows actor to get detailed information about the documents of donation's campaign		
Trigger:	The actor indicates that he/she wants to get the document details		
Preconditions:	PRE-01. Actor has logged into the web as the Organization Manager role or Admin role. PRE-02. Current screen is “Quản Lý Chiến Dịch”		
Post-conditions:	POST-01. The system returns detailed information about the document.		

Normal Flow:	<p>54.0 View document's details</p> <p>1. Actor clicks on a specific document item on the documents list shown on the “Quản Lý Chiến Dịch” screen</p> <p>2. The system show a table to view detailed information of the document.</p>
Alternative Flows:	N/A
Exceptions:	<p>54.0.E1 Internet connection lost</p> <p>1. The system forwards to Lost Internet page</p>
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	BR-09
Other Information:	N/A
Assumptions:	N/A

Table 72 – View details of donation document

3. Functional Requirements

3.1 System Functional Overview

3.1.1 Screen Flow

3.1.1.1 <Guest> Mobile Application Screen Flow

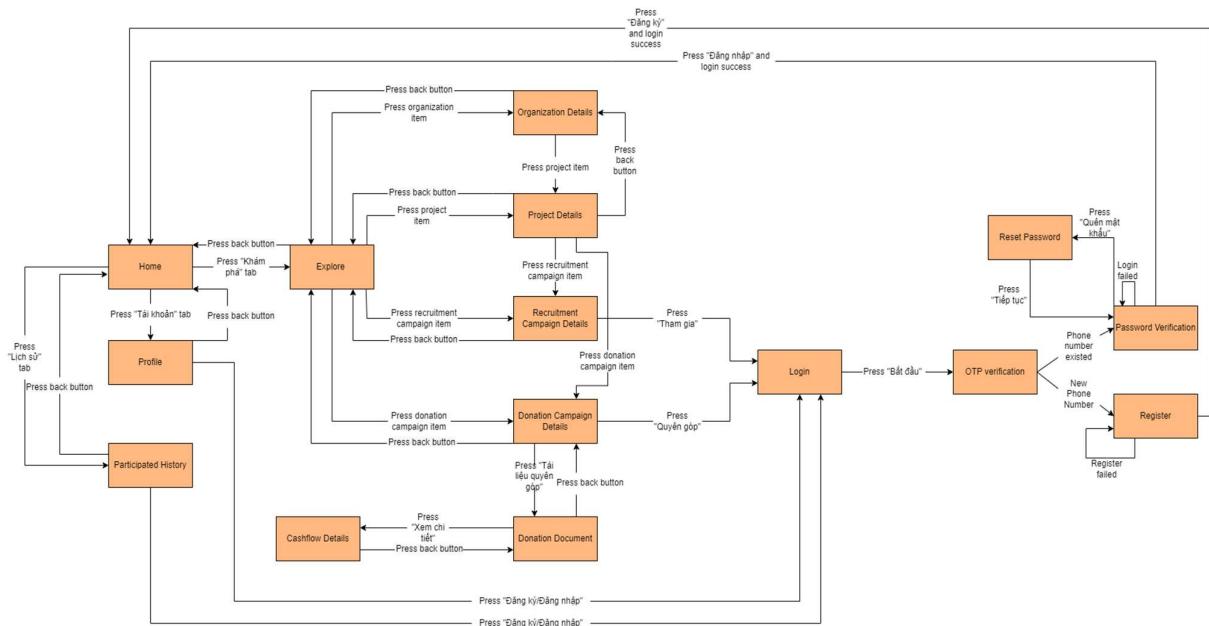


Figure 12 – <Screen Flow Diagram> User Mobile Application

3.1.1.2 <Volunteer> Mobile Application Screen Flow

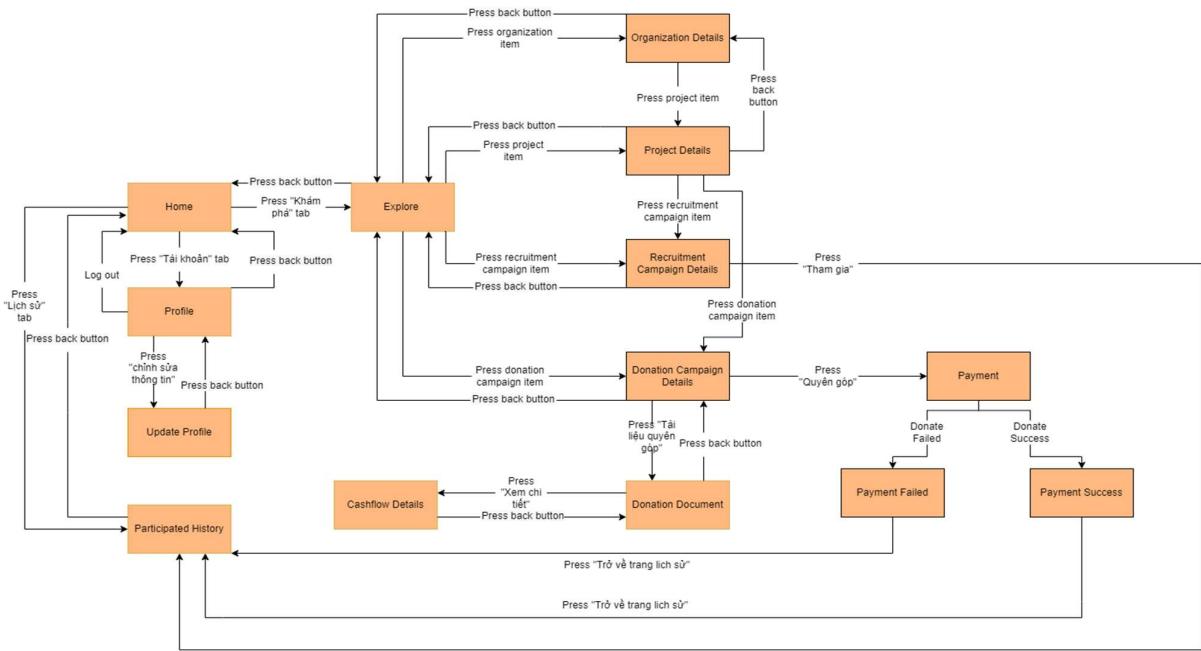


Figure 13 – <Screen Flow Diagram> User Mobile Application

3.1.1.3 <Admin> Web Application Screen Flow

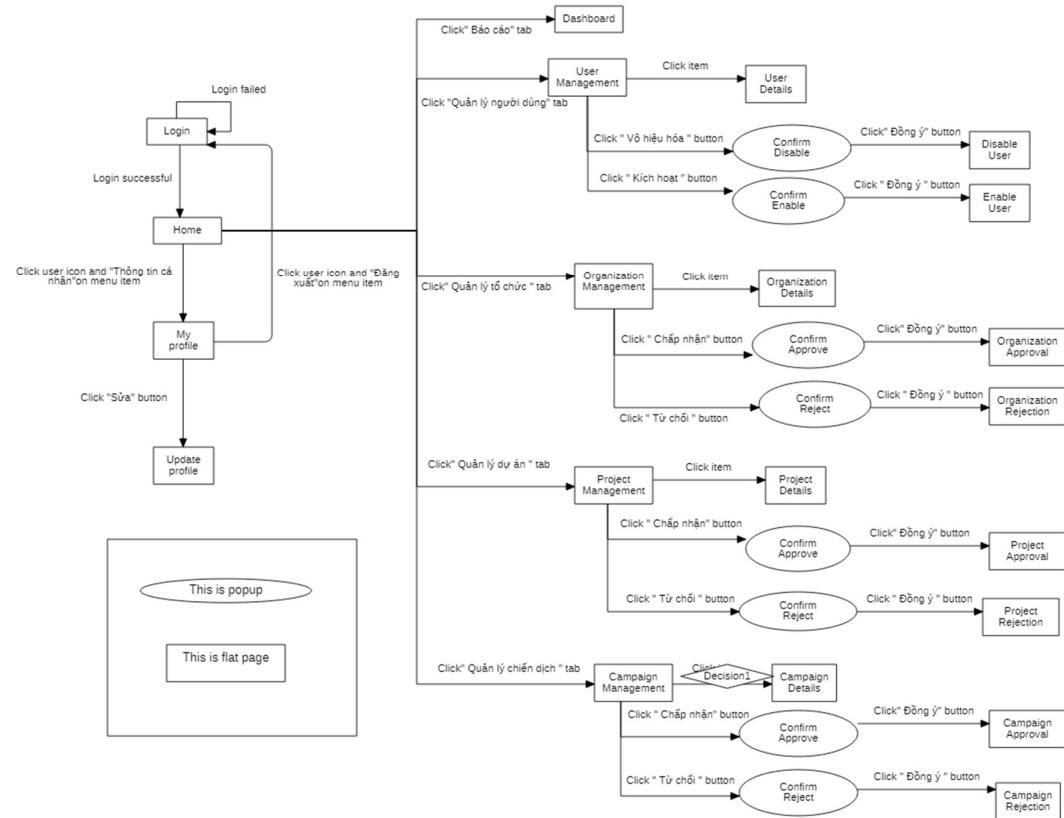


Figure 14 – <Screen Flow Diagram> Admin Web Application

3.1.1.4 <Organization Manager> Web Application Screen Flow

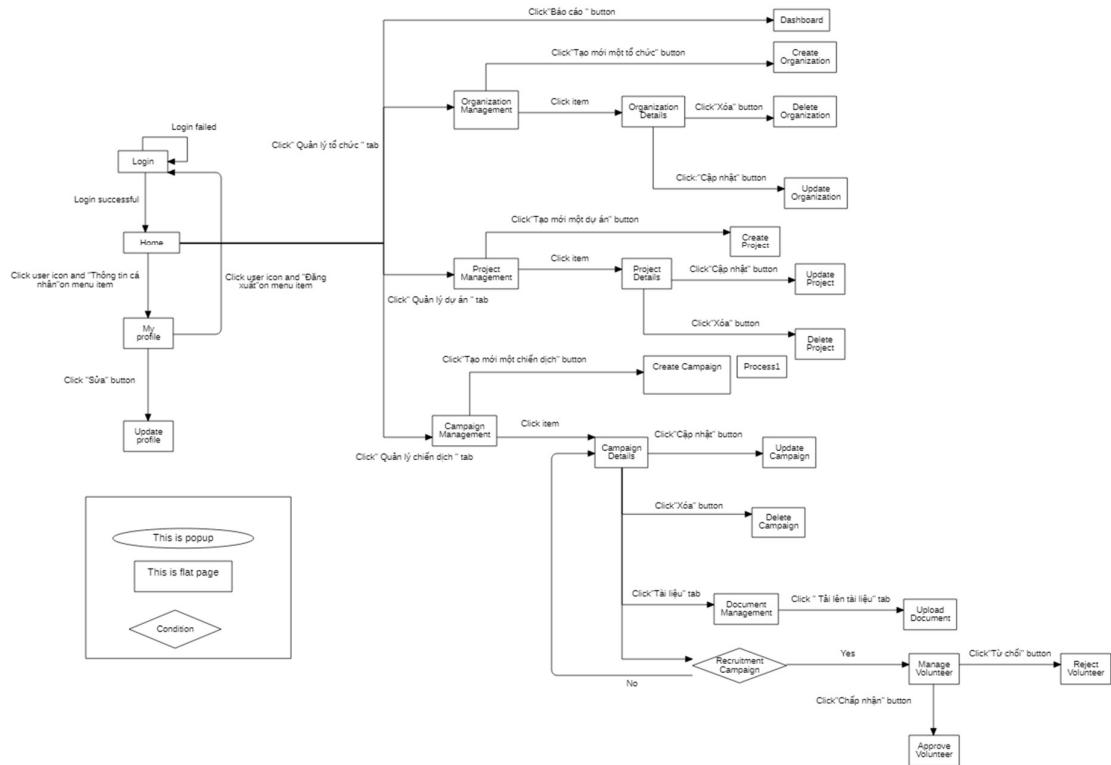


Figure 15 – <Screen Flow Diagram> Organization Manager Web Application

3.1.2 Screen Details

3.1.2.1 <Guest, Volunteer> Mobile Application Screen Details

Id	Feature	Screen/Popup	Description
01	Initialize Application	Splash	A screen for the mobile application to load user information and some required information.
02	Main Page, display general information and ways to navigate.	Home	Provide users navigators, button, etc. Allow user to view general information of the application and choose screen to navigate to.

03	View Profile.	User Profile	Display user profile information. Provide users with button, etc. Allow user to choose screen to navigate.
	Display a login button.	Guest User Profile	Help user know that they hasn't login yet, and show a login/register button allow users to navigate to login/register screen.
04	Allow user to update profile.	Update profile	<p>Edit profile screen includes:</p> <ul style="list-style-type: none"> • Full name (text-input) • Gender (drop-down list) • Date of birth (date picker) • Phone (text-input) • Email (text-input) • Avatar (upload file button) • Password (text-input) • Cancel (button) • Save (button) <p>Update profile screen allows user to update their profile information.</p>
05	Retrieve password and make new one.	Reset Password	Allow guest to reset their account's forgotten password.
07	List participated history	Participated History	Show a list of participated campaign history, display 2 tabs for donation and recruitment type.
	Display a login button.	Guest Participated History	Help user know that they hasn't login yet, and show a login/register button

			allow users to navigate to login/register screen.
08	List Projects, Campaigns, Organizations. Allow to search any Projects, Campaigns, Organizations.	Explore	This is the most frequent visit in the app, where users can browse lists of Campaigns, Projects, Organizations. This screen also provides a search bar for user to find any Campaigns, Projects, Organizations
09	Allows user to input phone number.	Login/Register	This is the screen where user input their phone number and press a button to check the OTP code before system decide if the user is existed or not to navigate to appropriate screen.
10	OTP verify.	OTP verification	Allows users to input OTP code for verification.
11	Authorize user	Password Verification	Allows users to input password, and a forgot password link to navigate to reset password page.
12	Allow user to register into system	Register	Allows users to input all the necessary information and a button to register to system.
13	Show donation documents	Donation Document	Contains a list of relevant documents about the donation campaign, it also has a board with total number of incoming and spending money of the campaign

14	Show cashflow with details	Cashflow Details	Contains two tabs, one contains a list of donated money from donors, one contains a list of item that the organization has spent for the charity campaign, with an amount of each item next to, an image of prove, it also has a board with total number of incoming and spending money of the campaign
15	Show organization with details	Organization Details	Organization details allows user to view details of a specific organization has three tabs: Activities tab : Will display the list project of the Organization Achievement tab: Display the organization's achievements and milestones Other information tab: Display the remaining information of the organization (date of establishment, field of operation, area of operation, ...)
16	Show project with details	Project Details	Project details allows user to view details of a specific project has two tabs: Donation tab: Displays a list of that project's donation campaigns Recruitment tab: Display the list of recruitment campaigns of that project
17	Show recruitment campaign with details, allow user to join the campaign	Recruitment Campaign Details	Recruitment campaign details allows user to view details of a specific recruitment campaign and allow users to join the campaign

18	Show donation campaign with details, allow user to donate for the campaign	Donation Campaign Details	Donation campaign details allows user to view details of a specific donation campaign and allow users to donate for the campaign
19	Allow users to enter donation information	Payment	Payment allows users to enter donation information including: donation amount, donation form, message and incognito option
20	Notice of payment's status	Payment Failed	Notify user of payment failure
21	Notice of payment's status	Payment Success	Notify user of successful payment which leads user to payment history screen

Table 73 – <Guest, Volunteer> Mobile Application Screen Details

3.1.2.2 <Admin, Organization Manager> Web Application Screen Details

Id	Feature	Screen	Description
1	Login	Login	Login screen includes: <ul style="list-style-type: none"> - Text input: username, password - Checkbox: Remember me - Button: “Đăng nhập”
2	Display general information	Dashboard	Allow admin to view general information and choose the screen to navigate
3	Get list of notifications	Notification List	Displays a list of notifications.
4	Get notification details	Notification Details	Notification detail popup includes text: title, content, date
5	Get profile	My Profile	<ul style="list-style-type: none"> ● My profile screen includes: <ul style="list-style-type: none"> ○ Personal information:

			<ul style="list-style-type: none"> ■ Text input: first name, last name, birthday, number phone, email ■ Image upload: avatar ■ Dropdown: gender ○ Button: “Cập nhật” ● My profile screen allows the user to view, update the personal profile information.
6	Get list of user	User list	Display a list of users.
7	View user details	User's details	<ul style="list-style-type: none"> ● User's detail includes information: first name, last name, birthday, gender, number phone, email, avatar. ● The user's details screen allows the admin to see the details of the specific user.
8	Get list of organizations	List of organizations	<ul style="list-style-type: none"> ● Display list of organizations ● Allows administrators to review or enable/ disable organizations
9	View details of organization	Details of organization	<ul style="list-style-type: none"> ● Details of organization screen display in a page includes: <ul style="list-style-type: none"> ○ Organization's information: name, description, mission, vision, founding date, operating license,... ○ Button: “Tạo dự án” (if user role is Organization Manager) ○ Button: “Hoạt động”/”Vô hiệu hóa” (if user role is Admin) ● Details of organization screen allows the admin to view details of a organization
10	Get list of projects	List of projects	<ul style="list-style-type: none"> ● Display list of organizations ● Allows administrators to review or enable/ disable organizations
11	View details of project	Details of project	<ul style="list-style-type: none"> ● Details of project screen display in a page includes:

			<ul style="list-style-type: none"> ○ Project's information: name, description, start date, end date,... ○ Button: "Tạo chiến dịch" (if user role is Organization Manager) ○ Button: "Hoạt động"/"Vô hiệu hóa" (if user role is Admin) ● Details of project screen allows the admin to view details of a project
12	Get list of campaigns	List of campaigns	<ul style="list-style-type: none"> ● Display list of organizations ● Allows administrators to review or enable/ disable organizations
13	View details of campaign	Details of campaign	<ul style="list-style-type: none"> ● Details of campaign screen display in a page includes: <ul style="list-style-type: none"> ○ Campaign's information: name, description, start date, end date, target number,... ○ Button: "Đăng tải tài liệu chứng thực gây quỹ" (if user role is Organization Manager) ○ Button: "Hoạt động"/"Vô hiệu hóa" (if user role is Admin) ● Details of campaign screen allows the admin to view details of a campaign
14	Get list of donation documents	List of donation documents	Display list of donation documents
15	View details of donation document	Details of donation document	<ul style="list-style-type: none"> ● Details of donation document screen display in a page includes: <ul style="list-style-type: none"> ○ Campaign's information: name, description, start date, end date, target number,... ○ Button: "Xóa tài liệu" (if user role is Organization Manager) ● Details of donation documents screen allows the admin to view details of a donation document

16	Get list of donation transaction	List of donation transaction	Display list of donation transaction
17	Get list of participant	List of participant	Display list of participant
18	View system statistic	Dashboard	View system statistics: chart, table, list,...

Table 74 – <Admin, Organization Manager> Web Application Screen Details

3.1.3 Screen Authorization

3.1.3.1 Mobile Application Screen Authorization

Screen/Popup	Volunteer	App Guest
Splash	X	X
Home	X	X
User Profile	X	
Guest User Profile		X
Update profile	X	
Reset Password	X	
Participated History	X	
Guest Participated History		X
Explore	X	X
Login/Register		X

OTP verification		X
Password Verification		X
Register		X
Donation Document	X	X
Cashflow Details	X	X
Organization Details	X	X
Project Details	X	X
Recruitment Campaign Details	X	X
Donation Campaign Details	X	X
Payment	X	
Payment Failed	X	
Payment Success	X	

Table 75 – Mobile Application Screen Authorization

3.1.3.2 Web Application Screen Authorization

Screen	Web Guest	Admin
Login	X	X
Dashboard	X	X
Notification List	X	X
Notification Details	X	X

My Profile	X	X
User list	X	X
User's details	X	X
List of organizations	X	X
Details of organization	X	X
List of projects	X	X
Details of project	X	X
List of campaigns	X	X
Details of campaign	X	X
List of donation documents	X	X
Details of donation document	X	X
List of donation transaction	X	X
List of participant	X	X
Dashboard	X	X
Login	X	X

Table 76 – Web Application Screen Authorization

In which:

- Guest: The user has no account or has not logged in system
- Volunteer: The user who has logged in system successfully
- Organization Manager: The user who has logged in system successfully
- Admin: The user who manages accounts, location, and camera

3.1.4 Non–screen Functions

#	System Function	Description
1	Push notification	VCCS sends notification to users

Table 77 – Non–screen Functions

3.1.5 Entity Relationship Diagram

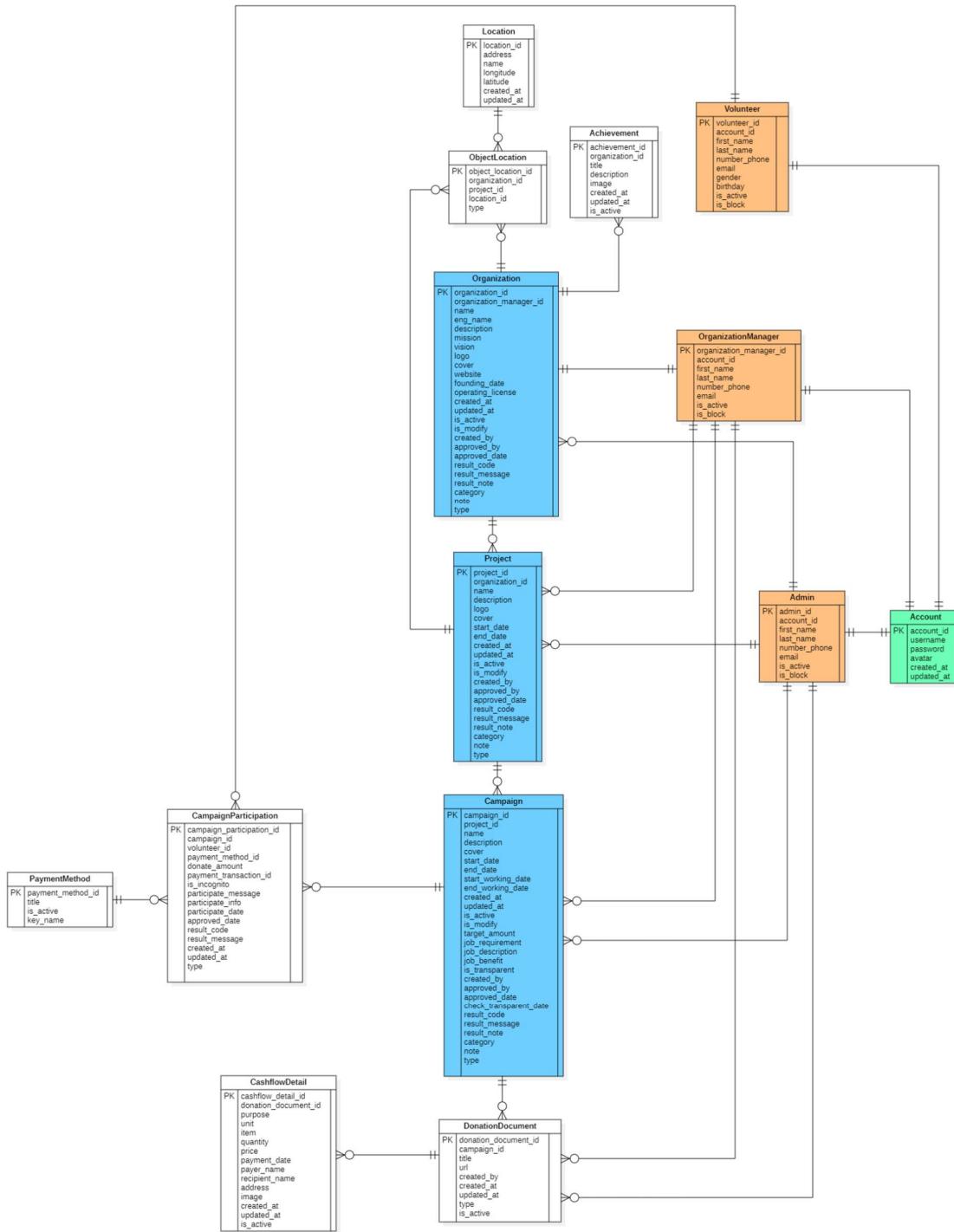


Figure 16 – ERD

4. Non-Functional Requirements

4.1 External Interfaces

4.1.1 User Interfaces

UI-1: GUI must be simple, friendly.

UI-2: Icons used must be easy to recognize.

UI-3: Language used in the application is Vietnamese.

UI-4: UI can be responsive on multiple screens, allowing the main content to display without scrolling horizontal appearance.

UI-5: Background and font colors have great contrast.

4.1.2 Software Interfaces

SI-1: Web Application: browser Google Chrome (version 96 or higher) and Firefox (version 60 or higher), Internet Explorer (version 10 or higher) or with any web browser that supports HTML5 & CSS3.

SI-2: Mobile Application: Android Oreo, v8.0 or newer.

4.2 Quality Attributes

4.2.1 Usability

- All text, label and message should be uniformly written in Vietnamese.
- Mobile and Web UI/UX follows Material Design to be convenient and easy for use.
- It takes less than an hour to train our user to use the VCCS System.
- Users are not required to have technical knowledge before using.

4.2.2 Reliability

- The likelihood of the system failure is less than 10%
- The availability of the system is over 80%.

4.2.3 Performance

- Response time is equal to or less than 03 seconds for each request.
- Processing time is 03 – 05 seconds for each frame.

4.2.4 Dependability

4.2.4.1 Security

- JWT is used for authentication and authorization.
- Each role can only access its own functions.

- Using MD5 with secret key to hash passwords.
- All data must be validated before saving to the database.

4.2.4.2 Safety

- The internet connection must always be stable during the use of the system, especially in money-related features.

4.2.5 Supportability

- VCCS has a mobile app for Volunteer and a web app for Admin and Organization Manager
- System is modularized to support maintenance and further development.

4.2.6 Design constraints

- Language used for Web Application and Mobile Application is Vietnamese.
- Using technologies:
 - Mobile Application: Flutter, Dart, GET pattern
 - Web Application: Angular framework
 - Server: Spring Boot
 - Database management system: MySQL

4.2.7 Support documentations

- User Guides are provided for guiding to assist users using the VCCS System, written in step-by-step, with Visual content, including images, annotated screenshots, graphics.
- Documenting the requirement specification, system design, and testing to support maintenance and further development.

4.2.8 Purchased components

- Ubuntu server
- Domain: conneto.org

IV. Software Design Description

1. Overall Description

1.1 Assumptions

This system is designed based on these following assumptions:

- **Software:**
 - Chrome v96 or higher
 - Firefox v60 or higher
 - IE v10 or higher
 - Any other browsers that support HTML5 and CSS.
 - MySQL 8.0.23
- **Operating System:**
 - Android Oreo, v8 or newer
 - Window 10
- **End-user characteristics:**
 - **General users (guest/ volunteer):** Use the system to view information about charity campaigns and choose to participate in those campaigns. These people have a basic understanding of using mobile apps
 - **Administrators:** Use the system to moderate, manage information about organizations – projects – charity campaigns as well as view statistics on items related to the platform. These people are the ones who know the best about the system and the business rules to be able to administer it. These people have a basic understanding of how to use the website
 - **Organization Managers:** Use the system to create an organization and its charity projects and campaigns for the purpose of sharing and receiving donations from the community and managing the processes related to your organization's campaigns. These people have a basic understanding of how to use the website

1.2 Design Constraints

This system should be compiled with following items:

- **Network:**
 - This system works entirely on the internet
 - Data transmission over the Internet
- **Performance & Reliability:**

- The system must ensure that the user's cash flow transactions are secure and not attacked by any other third party.
- The system must be capable of multitasking and multi-threading to avoid transaction bottlenecks

2. System Architecture Design

2.1 Overall System Architecture

2.1.1 Overall Architecture

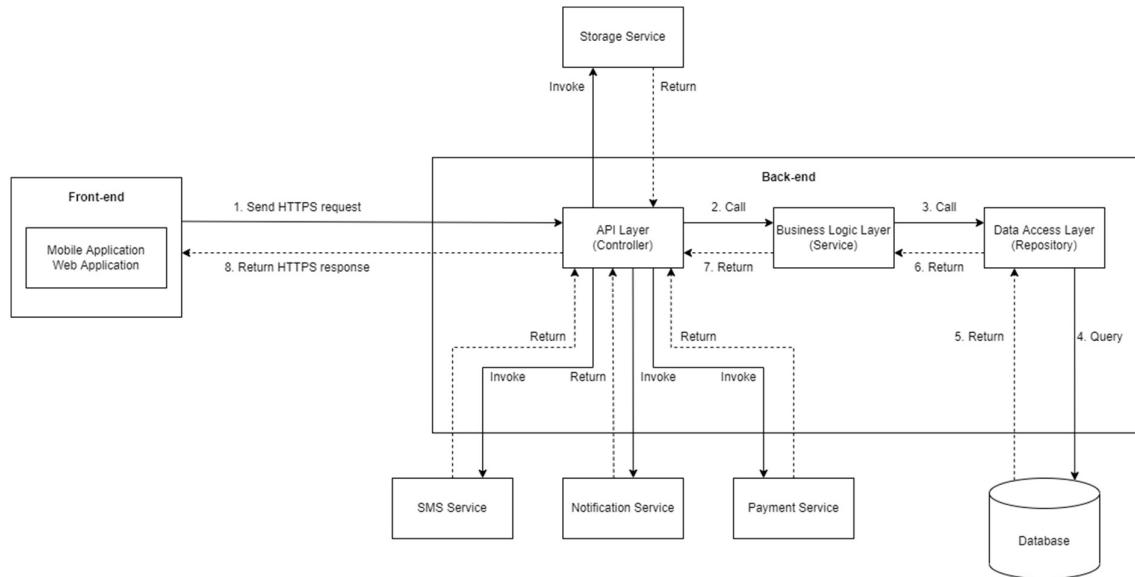
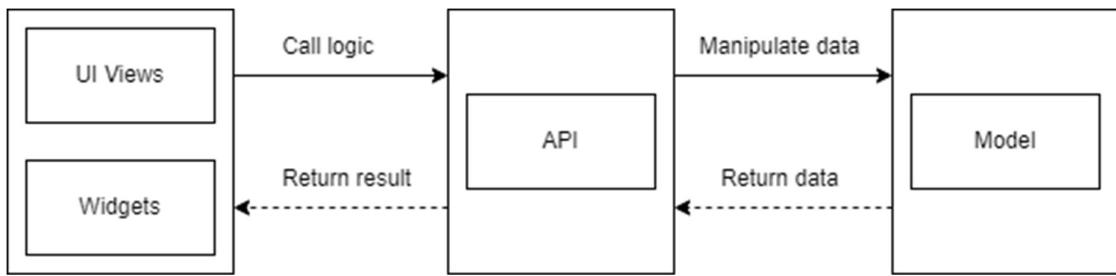


Figure 17 – Overall Architecture Design

2.2.1 Mobile App Architecture



2.2 Package Diagram

2.2.1 Back-end Package Diagram

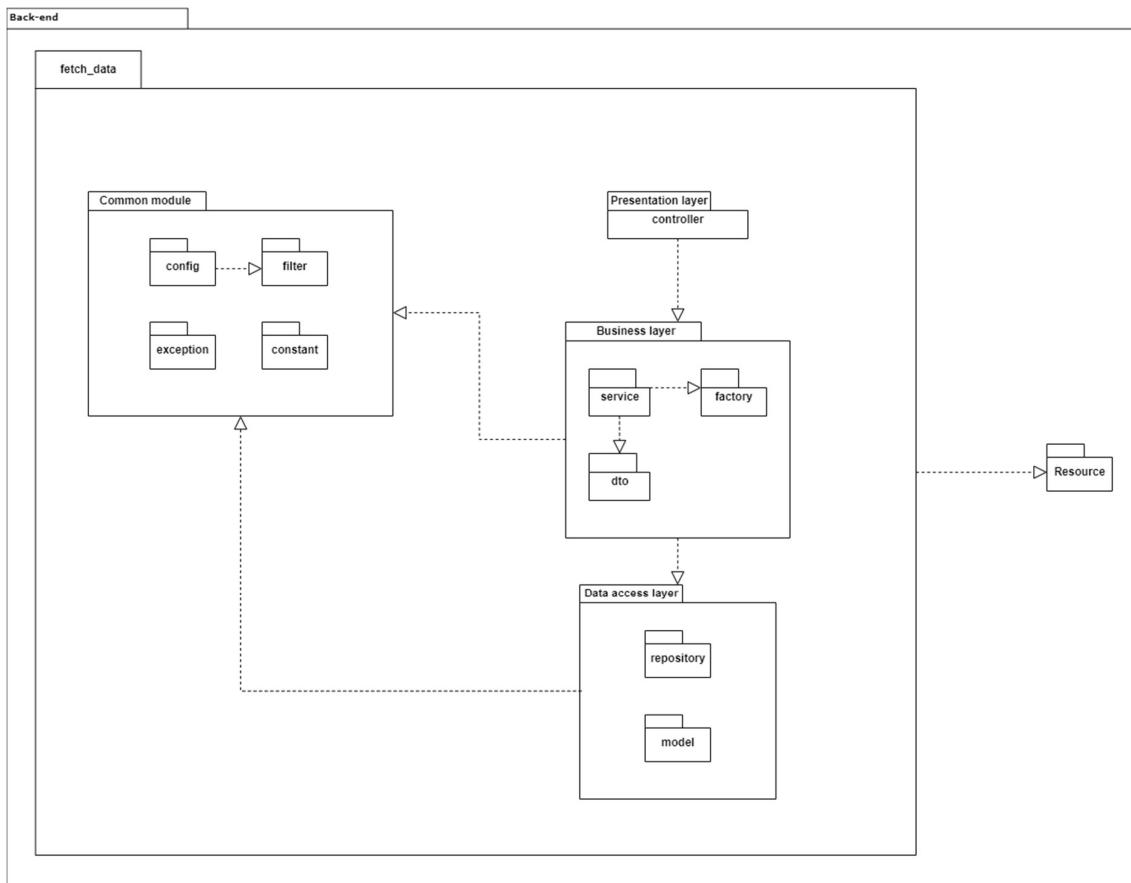


Figure 19 – Backend Package Diagram

3. System Detailed Design

3.1 Overall

3.1.1 Class Diagram

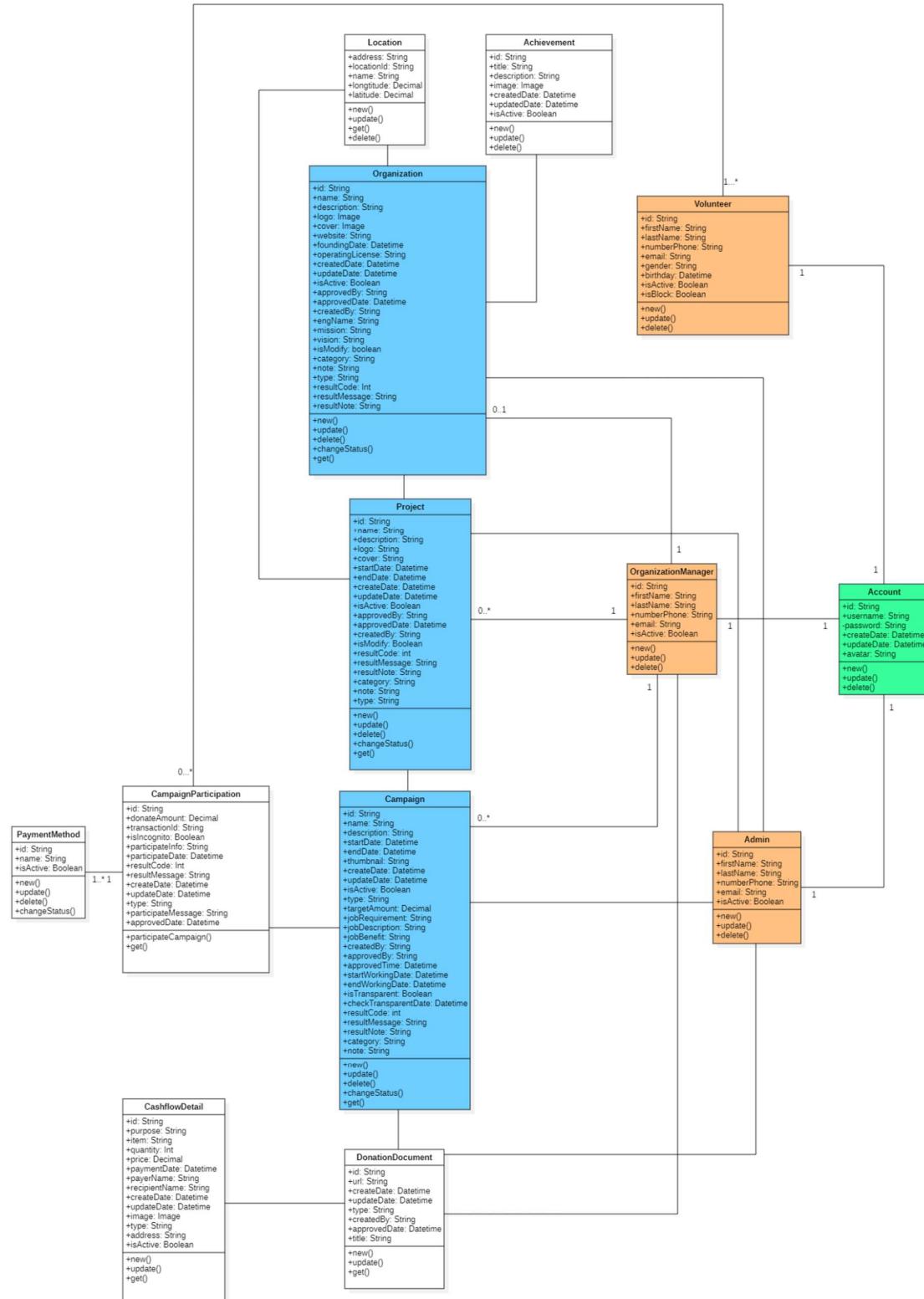


Figure 20 – Class diagram

3.1.2 Class Specification

3.1.2.1 Account Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of an account
2	Avatar	String	Public	Profile avatar of an account
3	Username	String	Public	Username of an account
4	Password	String	Private	Password of an account
5	CreateDate	DateTime	Public	The date of creation
6	UpdateDate	DateTime	Public	The date of update

Table 78 – Account class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new account
2	update	Void	Public	To update an account
3	delete	Void	Public	To delete an account

Table 79 – Account class methods

3.1.2.2 Organization Manager Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of organization manager
2	FirstName	String	Public	First name of the organization manager
3	LastName	String	Public	Last name of the organization manager
4	PhoneNumber	String	Public	Phone number of the organization manager

5	Email	String	Public	Email of the organization manager
6	IsActive	boolean	Public	Active status of the organization manager

Table 80 – Organization Manager class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new organization manager
2	update	Void	Public	To update an organization manager
3	delete	Void	Public	To delete an organization manager

Table 81 – Organization Manager class methods

3.1.2.3 Admin Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of admin
2	FirstName	String	Public	First name of the admin
3	LastName	String	Public	Last name of the admin
4	PhoneNumber	String	Public	Phone number of the admin
5	Email	String	Public	Email of the admin
6	IsActive	boolean	Public	Active status of the admin

Table 82 – Admin class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new admin
2	update	Void	Public	To update an admin

3	delete	Void	Public	To delete an admin
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Table 83 – Admin class methods

3.1.2.4 Volunteer Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of volunteer
2	FirstName	String	Public	First name of the volunteer
3	LastName	String	Public	Last name of the volunteer
4	PhoneNumber	String	Public	Phone number of the volunteer
5	Email	String	Public	Email of the volunteer
6	IsActive	boolean	Public	Active status of the volunteer
7	Gender	String	Public	Gender of the volunteer
8	BirthDate	DateTime	Public	BirthDate of the volunteer
9	IsBlock	boolean	Public	Block status of the volunteer

Table 84 – Volunteer class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new volunteer
2	update	Void	Public	To update a volunteer
3	delete	Void	Public	To delete a volunteer

Table 85 – Volunteer class methods

3.1.2.5 Achievement Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of achievement
2	Title	String	Public	Title of achievement

3	Description	String	Public	Description of achievement
4	Image	String	Public	Image of achievement
5	CreatedDate	DateTime	Public	Date of creation
6	UpdatedDate	DateTime	Public	Date of update
7	IsActive	boolean	Public	Active status of achievement

Table 86 – Achievement class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new achievement
2	update	Void	Public	To update an achievement
3	delete	Void	Public	To delete an achievement

Table 87 – Achievement class methods

3.1.2.6 Location Class

No	Attribute	Data Type	Visibility	Description
1	Address	String	Public	Location address
2	LocationId	String	Public	Unique define of location
3	Name	String	Public	Name of location
4	Longitude	Decimal	Public	Longitude of location
5	Latitude	Decimal	Public	Latitude of location

Table 88 – Location class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new location
2	update	Void	Public	To update a location
3	get	DataType	Public	To get attribute value

4	delete	Void	Public	To delete a location
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Table 89 – Location class methods

3.1.2.7 Organization Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of an organization
2	Name	String	Public	Name of an organization
3	Description	String	Public	Description of an organization
4	Logo	String	Public	Logo of an organization
5	Cover	String	Public	Cover of an organization
6	Website	String	Public	Website of an organization
7	FoundingDate	DateTime	Public	Founding date of an organization
8	OperatingLicense	String	Public	Operating license of an organization
9	CreatedDate	DateTime	Public	Date of creation
10	UpdatedDate	DateTime	Public	Date of update
11	IsActive	boolean	Public	Active status of an organization
12	ApprovedBy	String	Public	Id of approved admin
13	ApprovedDate	DateTime	Public	Date of approved
14	CreatedBy	String	Public	Id of created an organization manager
15	EngName	String	Public	English name of an organization
16	Mission	String	Public	Mission of an organization
17	Vision	String	Public	Vision of an organization

18	isModify	Boolean	Public	Modify status of an organization
19	Category	String	Public	Category of an organization
20	Note	String	Public	Note about an organization
21	Type	String	Public	Type of an organization
22	ResultCode	Int	Public	Result Code of an organization
23	ResultMessage	String	Public	Result Message of an organization
24	ResultNote	String	Public	Result Note of an organization

Table 90 – Organization class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new organization
2	update	Void	Public	To update a organization
3	get	DataType	Public	To get attribute values
4	delete	Void	Public	To delete a organization
5	changeStatus	Void	Public	To change IsActive attribute

Table 91 – Organization class methods

3.1.2.8 Project Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of project
2	Name	String	Public	Name of project
3	Description	String	Public	Description of project
4	Logo	String	Public	Logo of project
5	Cover	String	Public	Cover of project
6	StartDate	DateTime	Public	Start date of project

7	EndDate	DateTime	Public	End date of project
8	CreatedDate	DateTime	Public	Date of creation
9	UpdatedDate	DateTime	Public	Date of update
10	IsActive	boolean	Public	Active status of project
11	ApprovedBy	String	Public	Id of approved admin
12	ApprovedDate	DateTime	Public	Date of approved
13	CreatedBy	String	Public	Id of created organization manager
14	IsModify	String	Public	Modify status of project
15	ResultCode	int	Public	Result code of project
16	ResultMessage	String	Public	Result message of project
17	Category	String	Public	Category of project
18	Note	String	Public	Note of project
19	Type	String	Public	Type of project

Table 92 – Project class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new project
2	update	Void	Public	To update a project
3	get	DataType	Public	To get attribute values
4	delete	Void	Public	To delete a project
5	changeStatus	Void	Public	To change IsActive attribute

Table 93 – Project class methods

3.1.2.9 Campaign Class

No	Attribute	Data Type	Visibility	Description

1	Id	String	Public	Unique define of campaign
2	Name	String	Public	Name of campaign
3	Description	String	Public	Description of campaign
4	StartDate	DateTime	Public	Start date of campaign
5	EndDate	DateTime	Public	End date of campaign
6	Cover	String	Public	Cover of campaign
7	CreatedDate	DateTime	Public	Date of creation
8	UpdatedDate	DateTime	Public	Date of update
9	IsActive	boolean	Public	Active status of campaign
10	Type	String	Public	Type of campaign
11	TargetAmount	Decimal	Public	Target amount of campaign
12	JobRequirement	String	Public	Job requirement of campaign
13	JobDescription	String	Public	Job description of campaign
14	JobBenefit	String	Public	Job benefit of campaign
15	CreatedBy	String	Public	Id of created organization manager
16	ApprovedBy	String	Public	Id of approved admin
17	ApprovedDate	DateTime	Public	Date of approved
18	StartWorkingDate	DateTime	Public	Date of starting working
19	EndWorkingDate	DateTime	Public	Date of ending working
20	IsTransparent	Boolean	Public	Transparent status of campaign
21	CheckTransparentDate	DateTime	Public	Date of checking the transparent
22	resultCode	Int	Public	Result code of campaign

23	ResultMessage	String	Public	Result message of campaign
24	ResultNote	String	Public	Result note of campaign
25	Category	String	Public	Category of campaign
26	Note	String	Public	Note of campaign

Table 94 – Campaign class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new campaign
2	update	Void	Public	To update a campaign
3	get	DataType	Public	To get attribute values
4	delete	Void	Public	To delete a campaign
5	changeStatus	Void	Public	To change IsActive attribute

Table 95 – Campaign class methods

3.1.2.10 Donation Document Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of donation document
2	Url	String	Public	Url of donation document
3	CreatedDate	DateTime	Public	Date of creation
4	UpdatedDate	DateTime	Public	Date of update
5	Type	String	Public	String of donation document
6	CreatedBy	String	Public	Id of created organization manager
7	Title	String	Public	Title of donation document
8	ApprovedDate	DateTime	Public	Date of approved

Table 96 – Donation Document class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new donation document
2	update	Void	Public	To update a donation document
3	get	DataType	Public	To get attribute values

Table 97 – Donation Document class methods

3.1.2.11 Cashflow Detail Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of cash flow detail
2	Purpose	String	Public	Purpose of cash flow detail
3	Item	String	Public	Item of money used for
4	Quantity	Int	Public	Quantity of Item
5	Price	Decimal	Public	Price of Item
6	PaymentDate	DateTime	Public	Date of cash flow detail issued
7	Payer	String	Public	Payer name
8	PersonalRecipient	String	Public	Cash flow detail recipient
9	CreatedDate	DateTime	Public	Date of creation
10	UpdatedDate	DateTime	Public	Date of update
11	Image	String	Public	Image of the detail
12	Type	String	Public	Type of the detail
13	Address	String	Public	Address of occurs
14	IsActive	Boolean	Public	Active status of cash flow details

Table 98 – Cashflow Detail class properties

No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new cash flow detail
2	update	Void	Public	To update a cash flow detail
3	get	DataType	Public	To get attribute values

Table 99 – Cashflow Detail class methods

3.1.2.12 Campaign Participation Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of campaign participation
2	DonateAmount	Decimal	Public	Donated amount by participant
3	TransactionId	String	Public	Unique define of donation transaction
4	IsIncognito	boolean	Public	Incognito status of participant
5	ParticipateInfo	String	Public	Participation information
6	ParticipateDate	DateTime	Public	Date of participation
7	resultCode	Int	Public	Code of status
8	ResultMessage	String	Public	More information of result
9	CreatedDate	DateTime	Public	Date of creation
10	UpdatedDate	DateTime	Public	Date of update
11	Type	String	Public	Type of participation
12	ParticipatedMessage	String	Public	Participated message of the participation
13	ApprovedDate	DateTime	Public	Date of approval

Table 100 – Campaign Participation class properties

No	Method	Return Type	Accessibility	Description
1	participateCampaign	Void	Public	To create a new participation ticket
3	get	DataType	Public	To get attribute values

Table 101 – Campaign Participation class methods

3.1.2.13 Payment Method Class

No	Attribute	Data Type	Visibility	Description
1	Id	String	Public	Unique define of payment method
2	Name	String	Public	Payment method name
3	IsActive	boolean	Public	Active status of payment method

Table 102 – Payment Method class properties

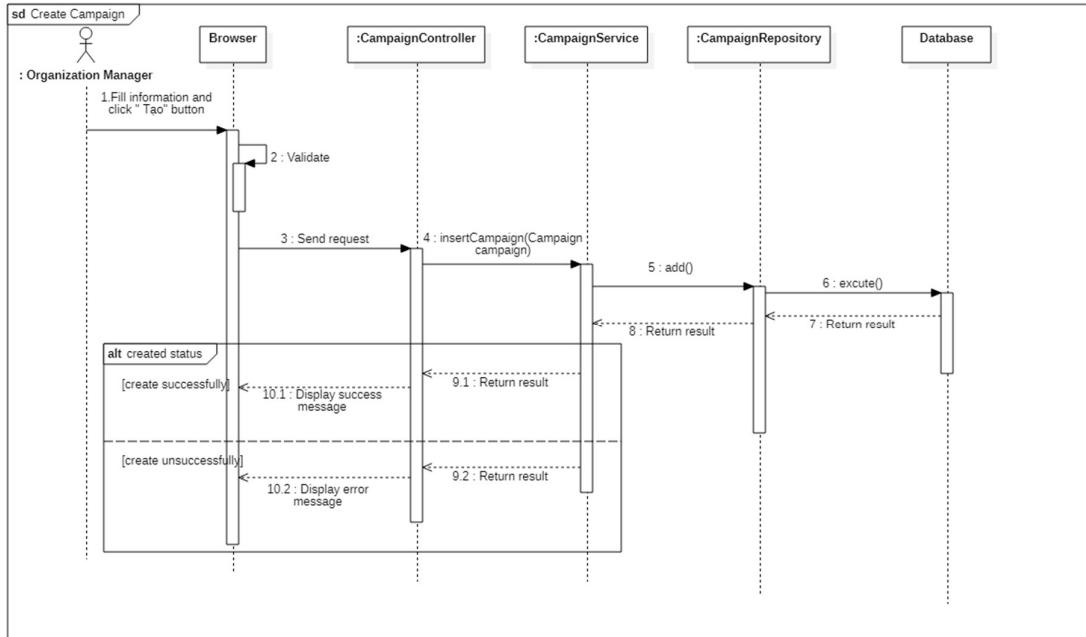
No	Method	Return Type	Accessibility	Description
1	new	Void	Public	To create new payment method
2	update	Void	Public	To update a payment method
4	delete	Void	Public	To delete a payment method
5	changeStatus	Void	Public	To change IsActive attribute

Table 103 – Payment Method class methods

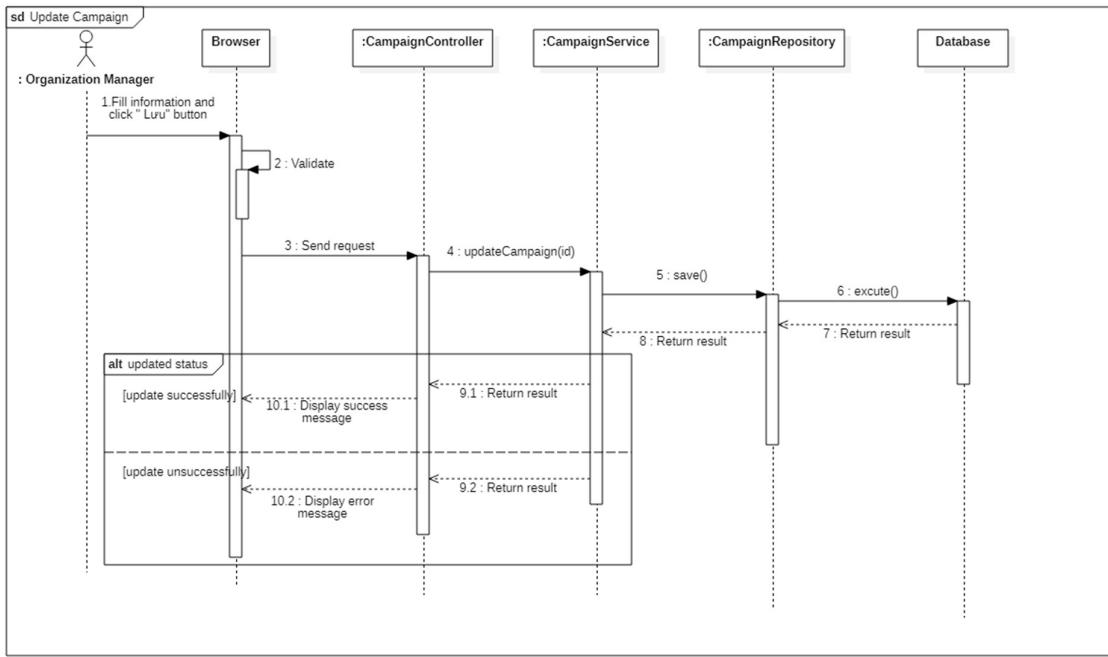
3.1.3 Sequence Diagram(s)

3.1.3.1 <Organization Manager> Sequence Diagram

a. Create Campaign



b. Update Campaign



c. Delete Campaign

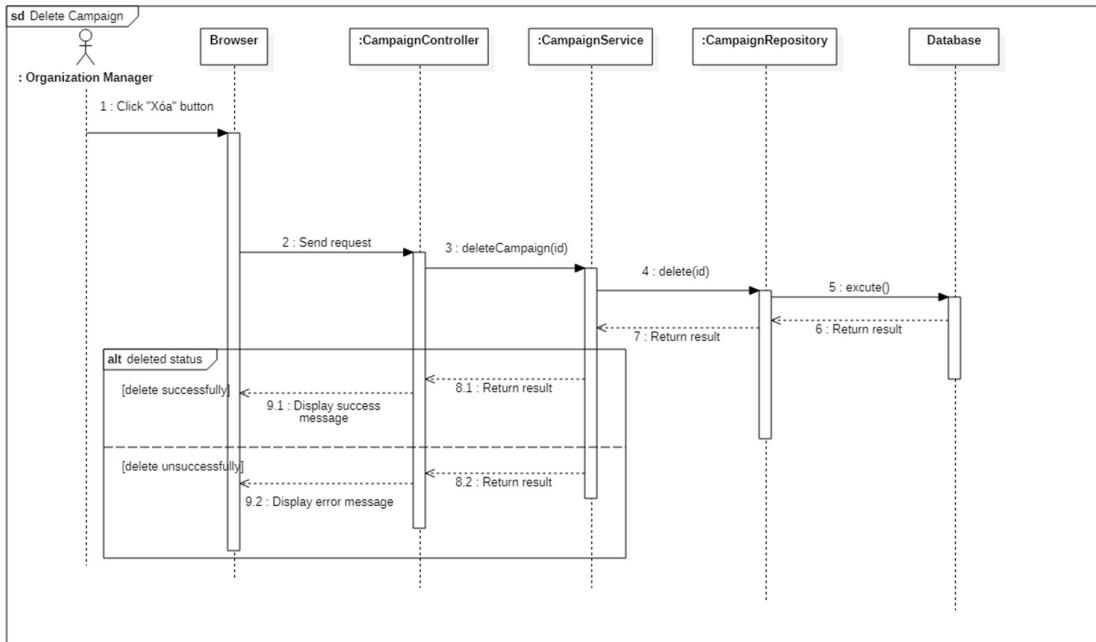


Figure 23 – <Sequence Diagram> Delete Campaign

d. Get Campaign List

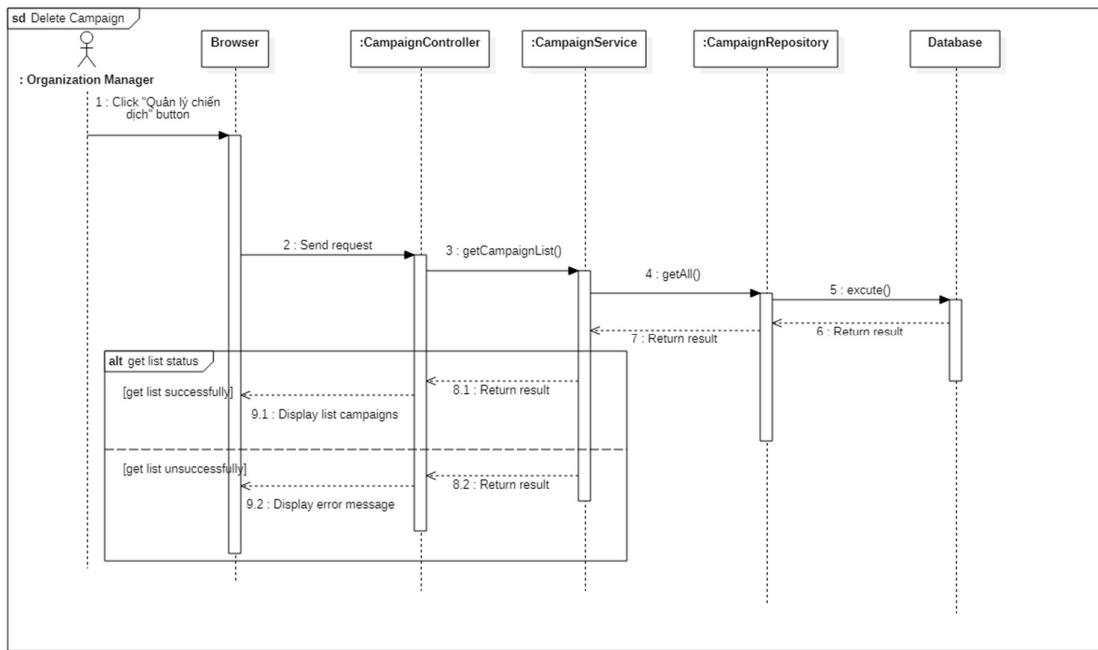


Figure 24 – <Sequence Diagram>Get Campaign List

e. Approve Volunteer

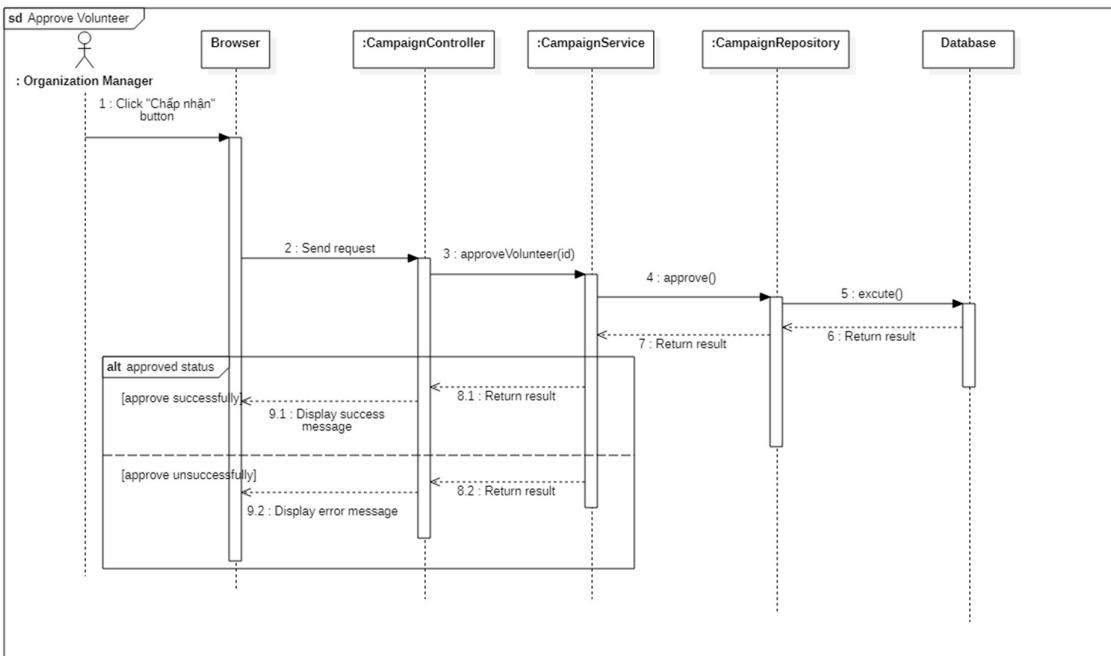


Figure 25 – <Sequence Diagram> Approve Volunteer

f. Reject Volunteer

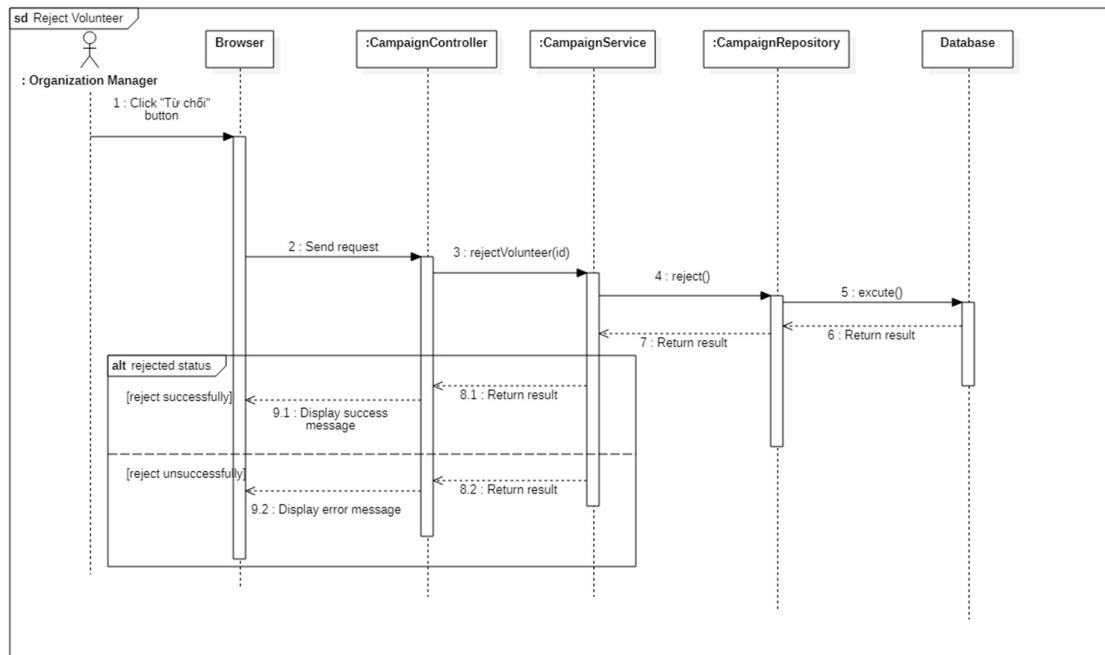


Figure 26 – <Sequence Diagram> Reject Volunteer

3.1.4 Activity Diagram(s)

3.1.4.1 <Guest> Activity Diagram(s)

a. Login And Register

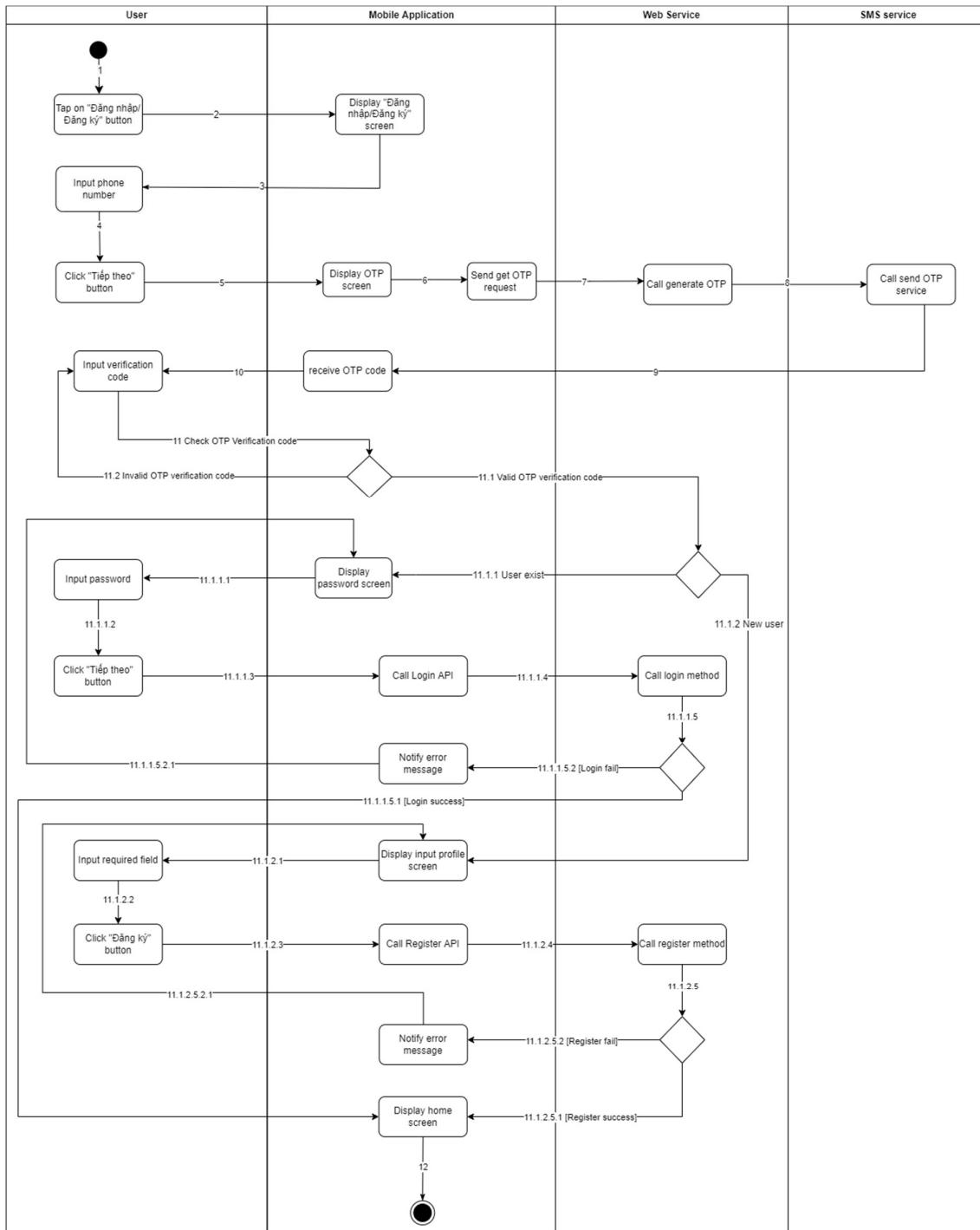


Figure 27 – <Activity Diagram> Login and Register

b. Get Project List

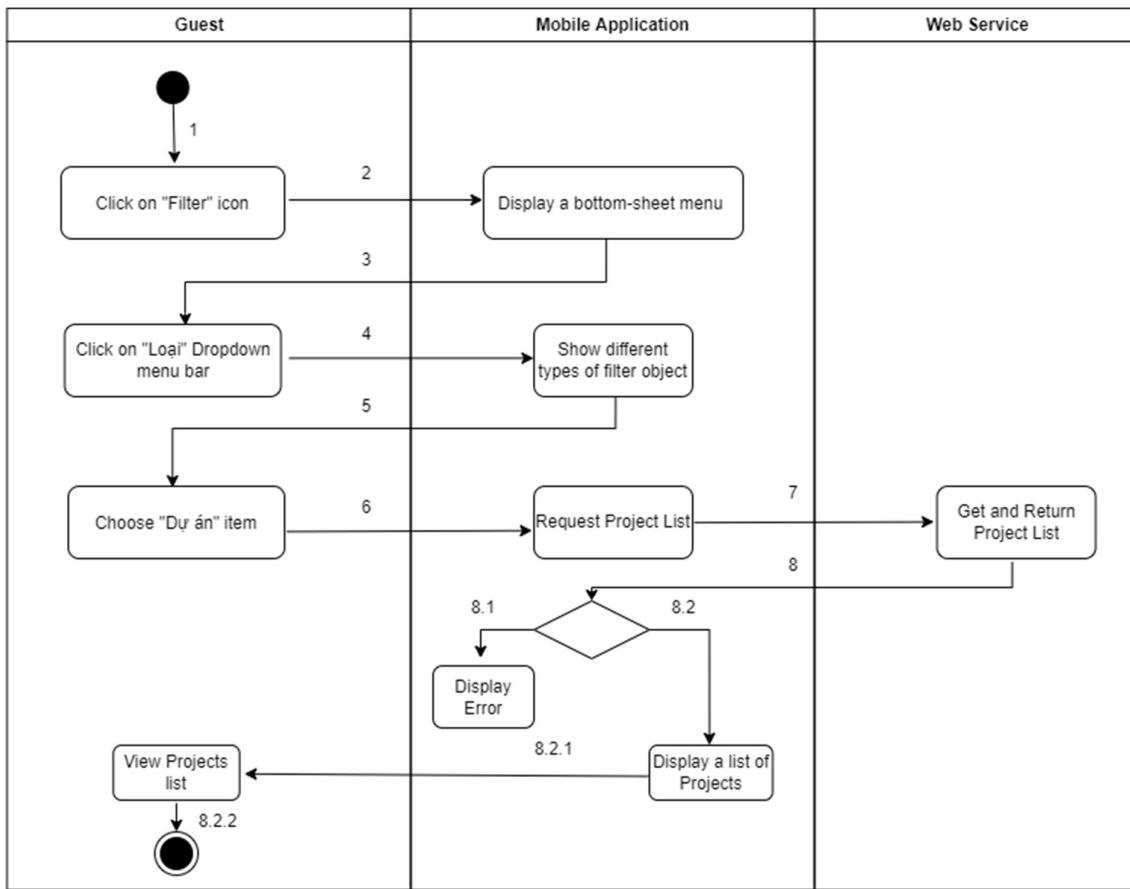


Figure 28 – Get list of projects

c. Get Project Detail

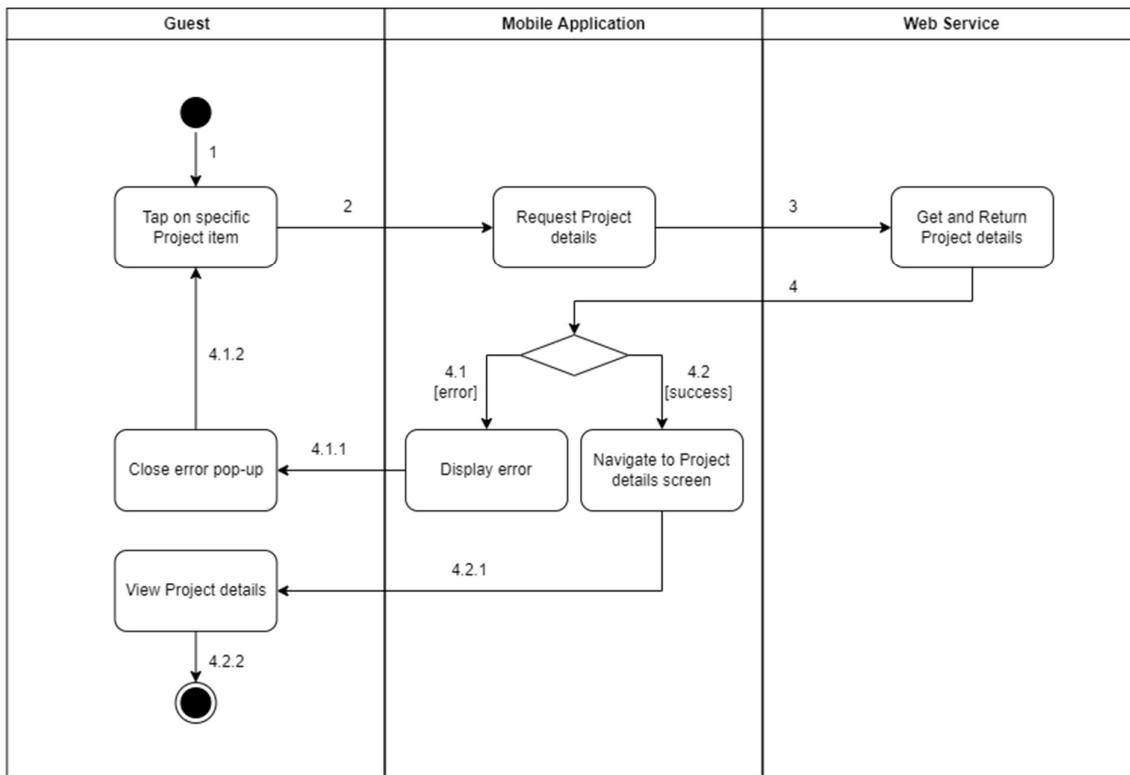


Figure 29 – Get Project Detail

d. Search

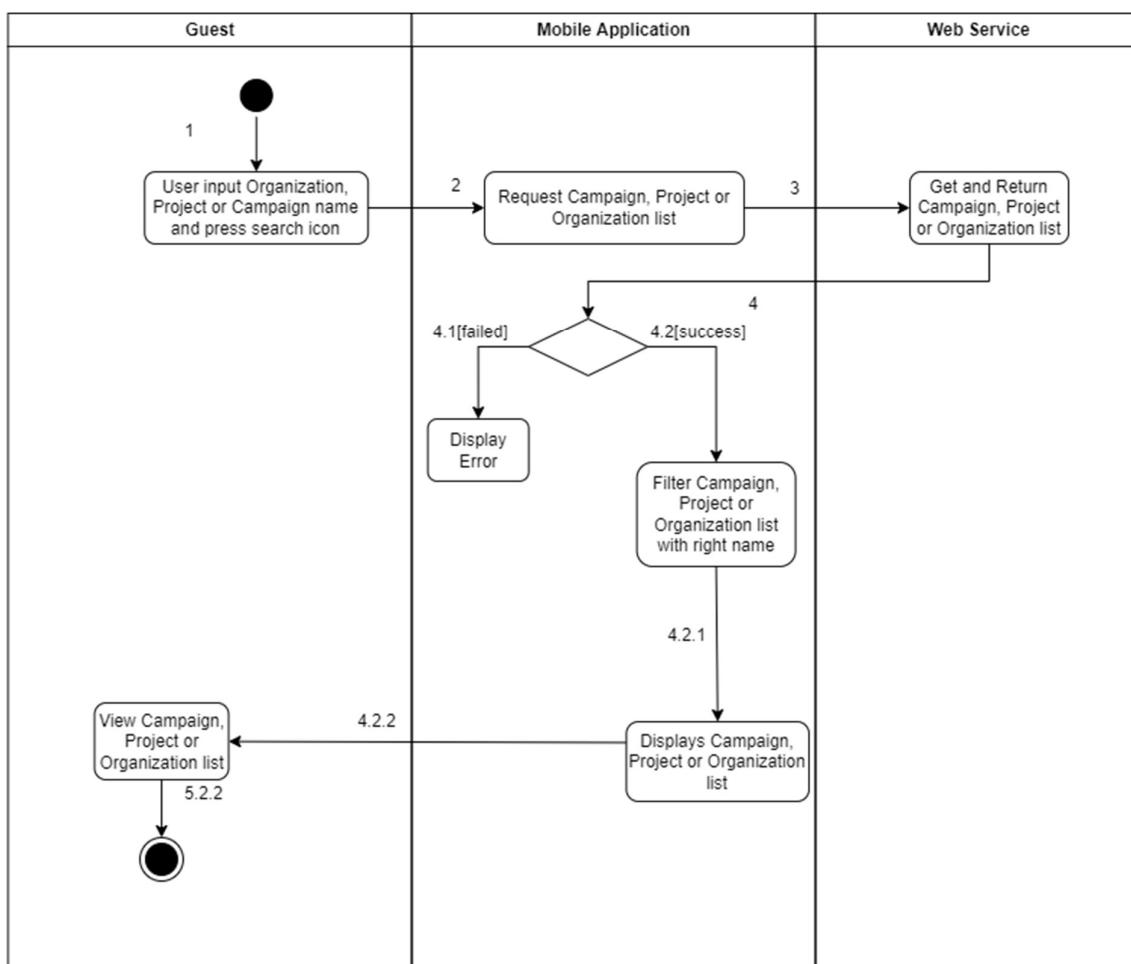
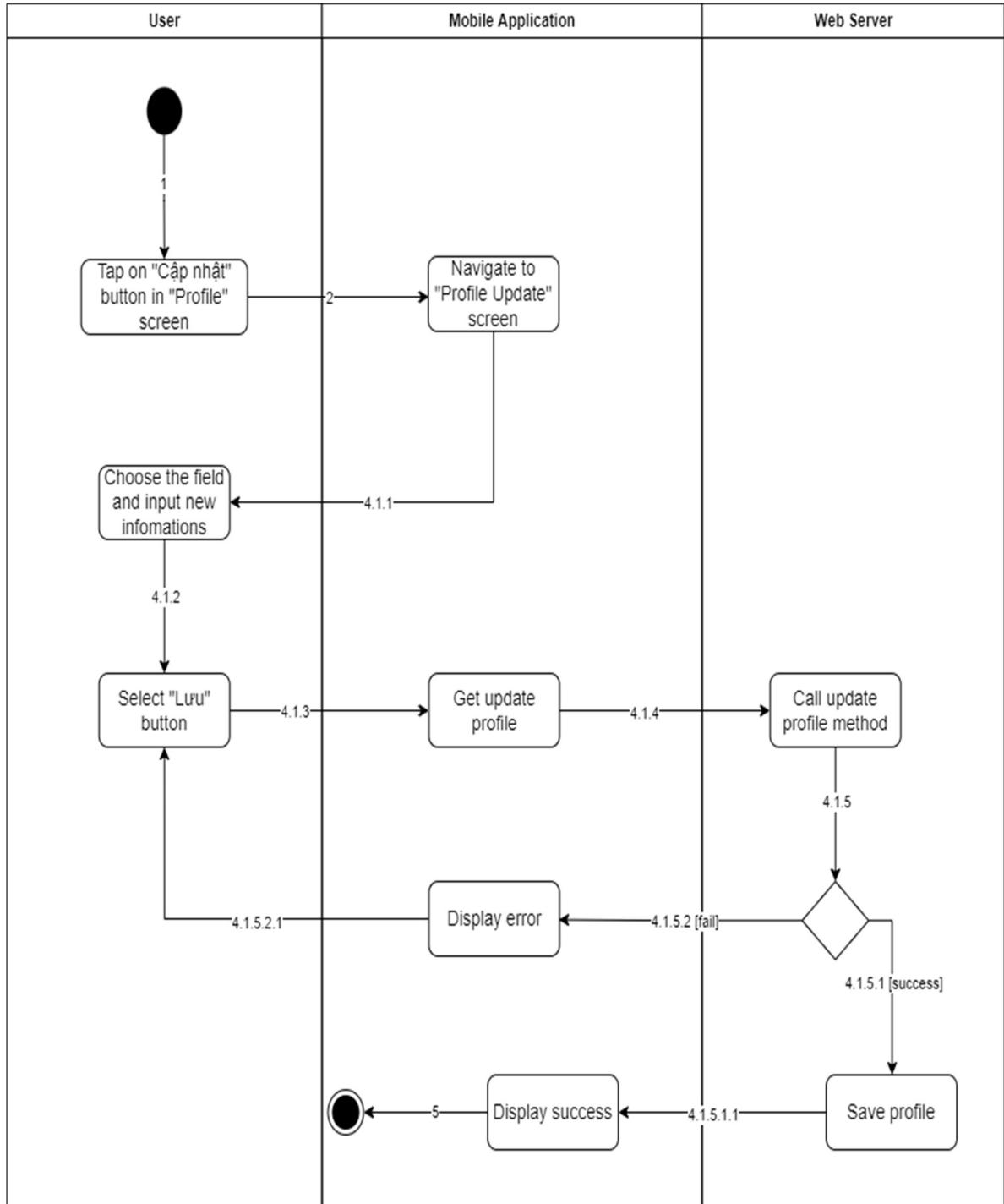


Figure 30 – Search

3.1.4.2 <Member> Activity Diagram(s)

a. Update Profile



3.1.4.3 <Authenticated User – Volunteer> Activity Diagram(s)

a. View Donation's History

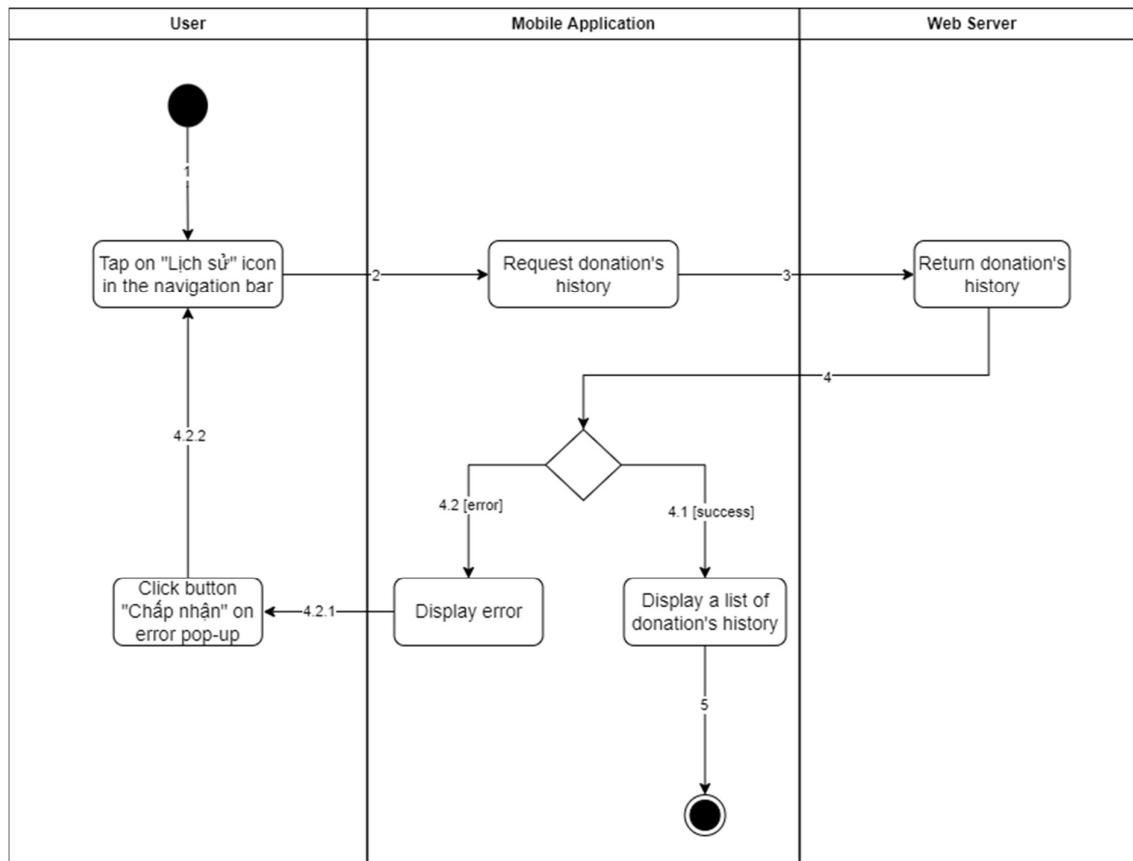


Figure 32 – View Donation's History

b. View Participation's History

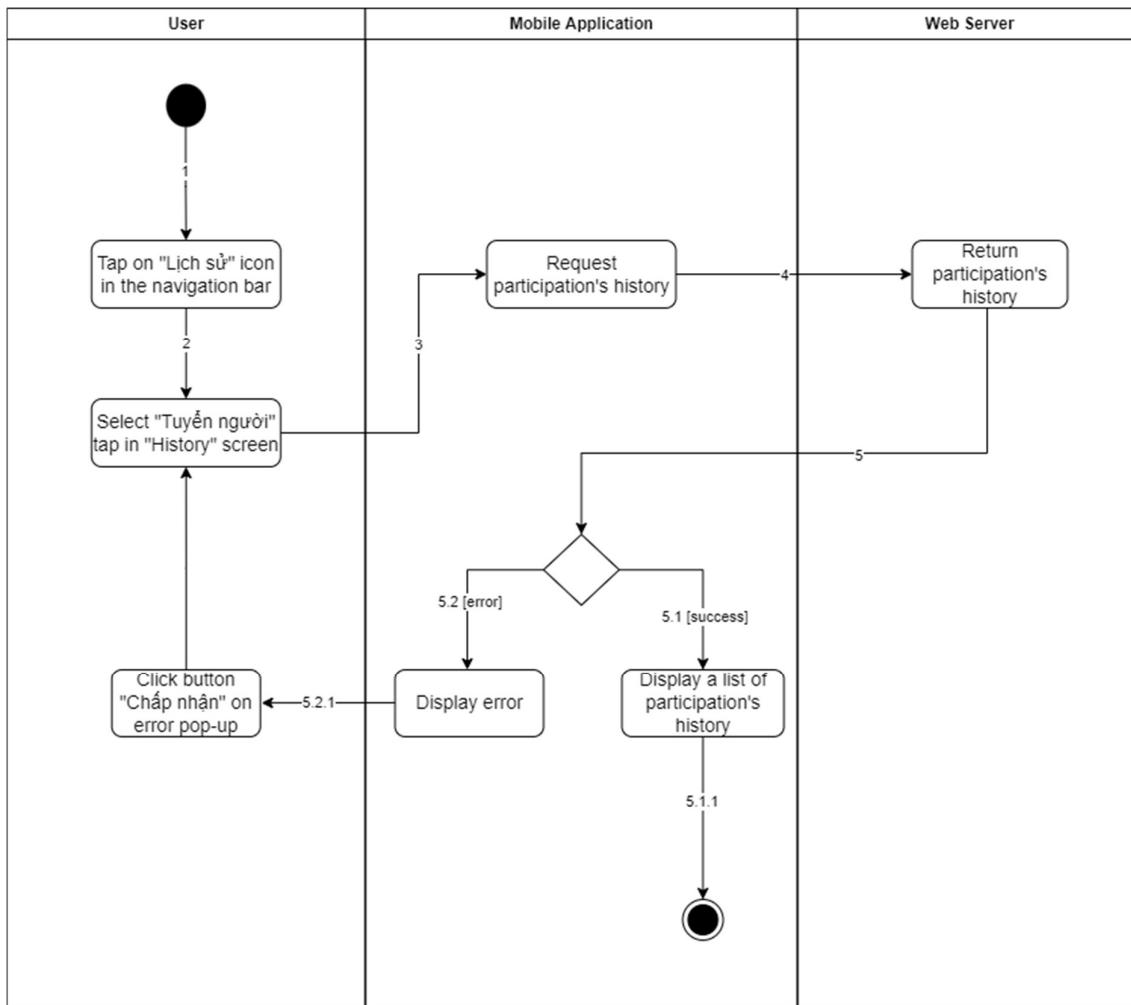


Figure 33 – View Participation's History

c. Donate To A Campaign

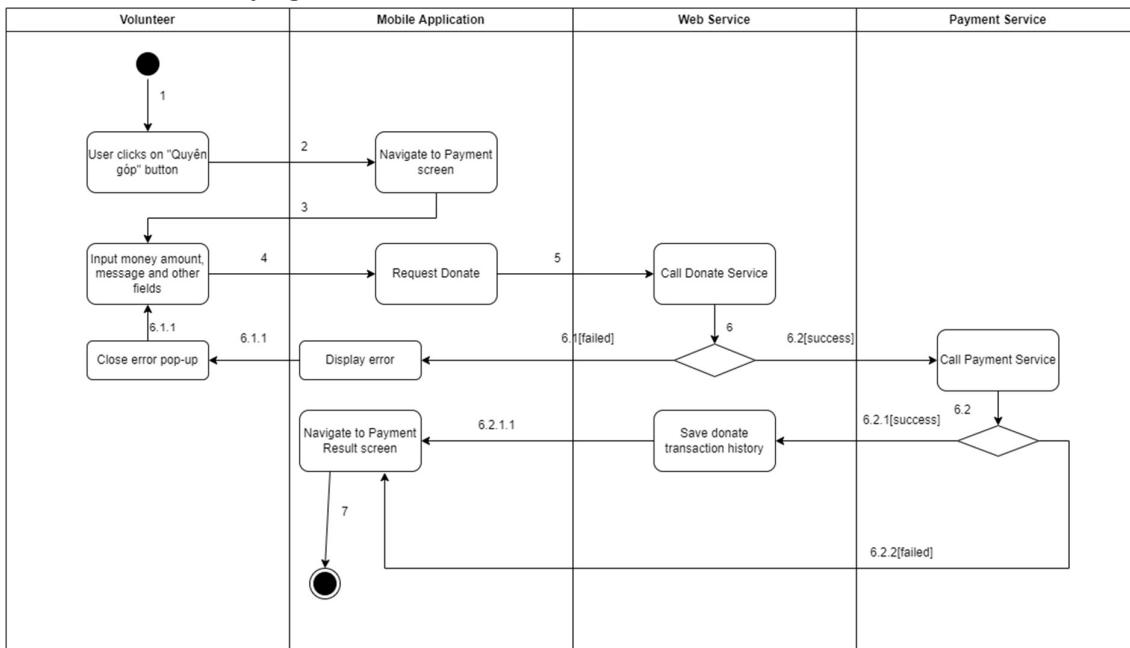


Figure 34 – Donate money to donation campaign

d. Participate in recruitment campaign

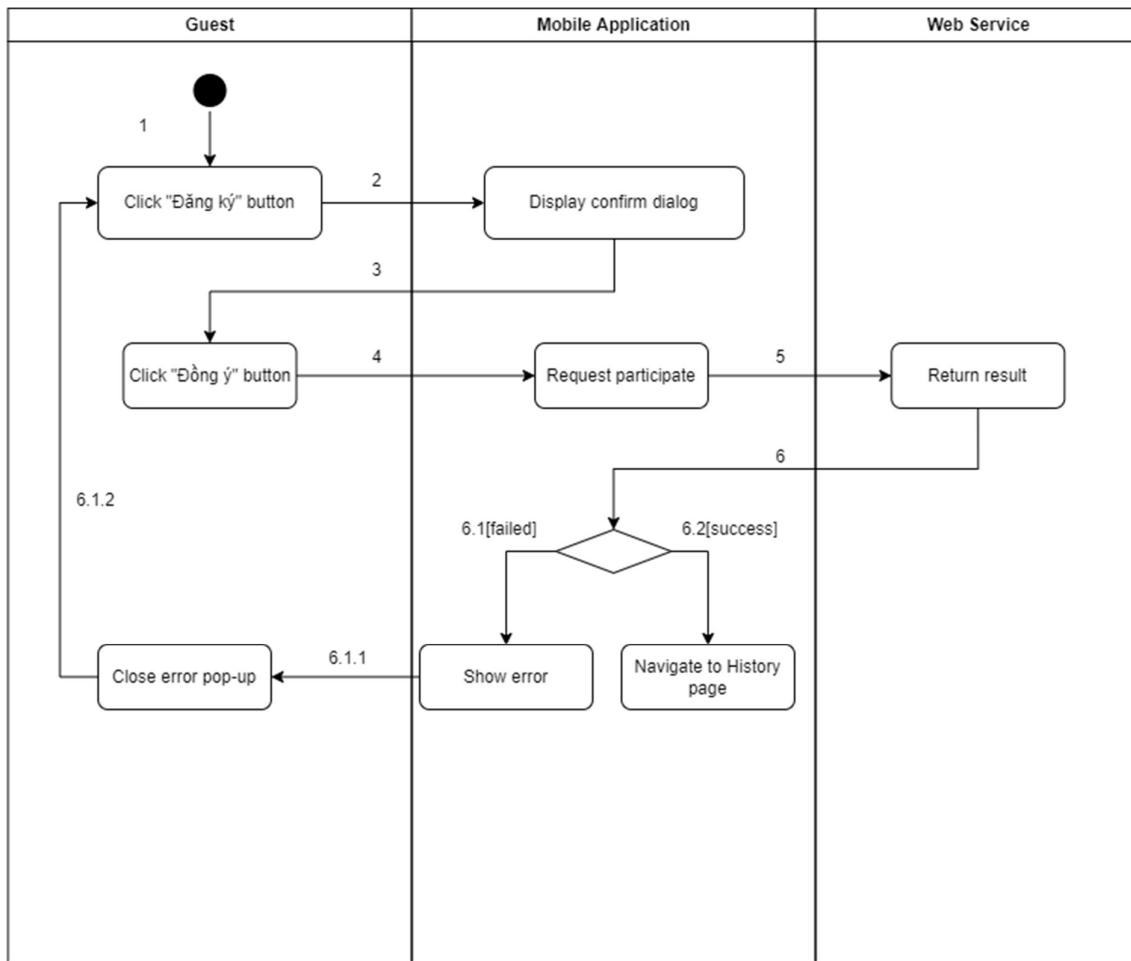


Figure 35 – Participate in recruitment campaign

4. Data & Database Design

4.1 Database Design

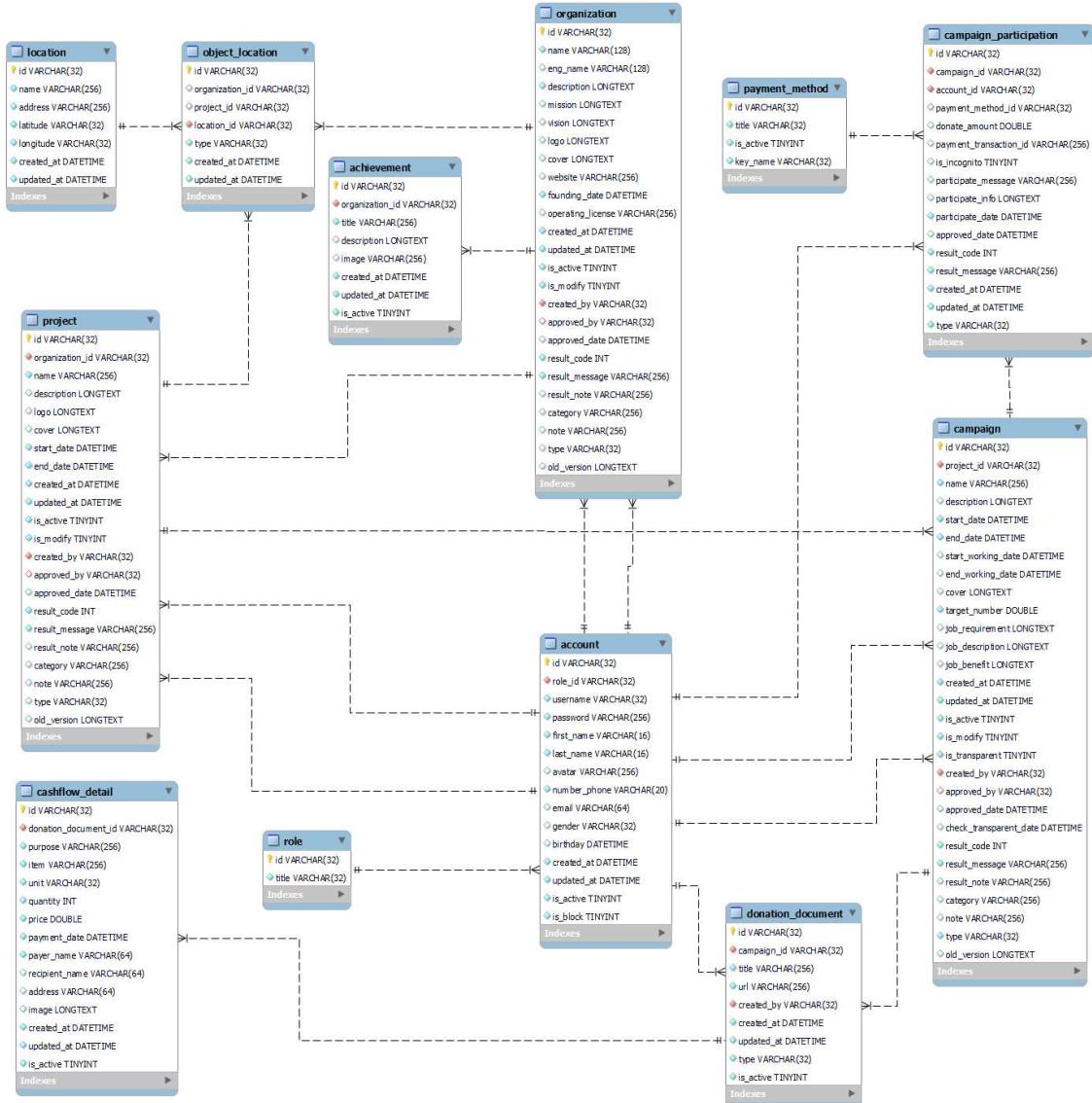


Figure 36 – Database Design

4.2 Data File Design

4.2.1 Table account

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of an account	PK	X	X

role_id	VARCHAR(32)	Identifier code of role of an user	FK	x	
username	VARCHAR(32)	Name of an account		x	x
password	VARCHAR(256)	Password of an account		x	
first_name	VARCHAR(16)	First name of user's account		x	
last_name	VARCHAR(16)	Last name of user's account		x	
avatar	VARCHAR(256)	Link to the image of avatar of user's account			
number_phone	VARCHAR(20)	Number phone of user's account		x	
email	VARCHAR(64)	Email of user's account			
gender	VARCHAR(32)	Gender of user's account			
birthday	DATETIME	Birthday of user's account			
created_at	DATETIME	The time that data is created in the system		x	

updated_at	DATETIME	The time that the data is updated in the system		x	
is_active	TINYINT	Active status of the account		x	
is_block	TINYINT	Status indicating whether the account is blocked or not		x	

Table 104 – Table account

4.2.2 Table achievement

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of achievement data	PK	x	x
organization_id	VARCHAR(32)	Identifier code of an organization	FK	x	
title	VARCHAR(256)	Title of achievement		x	
description	LONGTEXT	Detailed description of the organization's achievements		x	

image	VARCHAR(256)	Link to the image of achievements		x	
created_at	DATETIME	The time that data is created in the system		x	
updated_at	DATETIME	The time that the data is updated in the system		x	
is_active	TINYINT	Active status of the achievement		x	

Table 105 – Table achievement

4.2.3 Table activity

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of achievement data	PK	x	x
project_id	VARCHAR(32)	Identifier code of a project	FK	x	
content	LONGTEXT	Post content for a project activity		x	
image	LONGTEXT	Link to the image of activity		x	
created_at	DATETIME	The time that data is created in the system		x	

updated_at	DATETIME	The time that the data is updated in the system		x	
is_active	TINYINT	Active status of the activity		x	

Table 106 – Table activity

4.2.4 Table campaign

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of this campaign	PK	x	x
project_id	VARCHAR(32)	Identifier code of a project owns this campaign	FK	x	
name	VARCHAR(256)	Name of the campaign		x	
description	LONGTEXT	Detailed description of all campaign information			
start_date	DATETIME	The date when the campaign start		x	
end_date	DATETIME	The date when the campaign end		x	

start_working_date	DATETIME	The date when volunteers start to work		x	
end_working_date	DATETIME	The date when volunteers finish work		x	
cover	LONGTEXT	Links to campaign background images			
target_number	DOUBLE	The objective of the campaign's quantity (amount, number of members, ...)		x	
job_requirement	LONGTEXT	Information about job requirements of member recruitment campaign			
job_description	LONGTEXT	Job description of member recruitment campaign			
job_benefit	LONGTEXT	Job benefits information of member recruitment campaign			

created_at	DATETIME	The time that data is created in the system		x	
updated_at	DATETIME	The time that the data is updated in the system		x	
is_active	TINYINT	Active status of campaign		x	
is_modify	TINYINT	Information showing if the campaign is being modified		x	
is_transparent	TINYINT	Campaign transparency status		x	
created_by	VARCHAR(32)	Identifier of the creator of this campaign	FK	x	
approved_by	VARCHAR(32)	Identifier of this campaign reviewer	FK		
approved_date	DATETIME	Review date of campaign			
check_transparent_date	DATETIME	Review date of campaign's transparency			

result_code	INT	Result code of campaign create or update request		x	
result_message	VARCHAR(256)	Result message of campaign create or update request		x	
result_note	VARCHAR(256)	Result note from administrator of campaign create or update request			
category	VARCHAR(256)	Code used to categorize campaigns			
note	VARCHAR(256)	Message from campaign creator or update			
type	VARCHAR(32)	Type of campaign		x	

Table 107 – Table campaign

4.2.5 Table campaign_participation

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of campaign participation	PK	x	x

campaign_id	VARCHAR(32)	Identifier code of a campaign with volunteer participate	FK	x	
account_id	VARCHAR(32)	Identifier code of an account of volunteer	FK	x	
payment_method_id	VARCHAR(32)	Identifier code of a payment method volunteer use to donate			
donate_amount	DOUBLE	Amount donated by volunteer			
payment_transaction_id	VARCHAR(256)	Transaction code of intermediary payment platform			
is_incognito	TINYINT	Anonymous donation status			
participate_message	VARCHAR(256)	Message of volunteers when participating in the campaign			
participate_info	LONGTEXT	Campaign participation information noted by the			

		organization manager			
participate_date	DATETIME	Start date of registration to participate in the volunteer campaign		x	
result_code	INT	Result code of volunteer's participation request		x	
result_message	VARCHAR(256)	Result message of volunteer's participation request		x	
created_at	DATETIME	The time that data is created in the system		x	
updated_at	DATETIME	The time that the data is updated in the system		x	
type	VARCHAR(32)	Type of volunteer participation in the campaign		x	

Table 108 – Table campaign_participation

4.2.6 Table cashflow_detail

Field name	Data Type	Description	PK/ FK	Not Null	Unique

id	VARCHAR(32)	Identifier code of cashflow details	PK	x	x
donation_document_id	VARCHAR(32)	Identifier code of donation documents contain this details of cashflow	FK	x	
purpose	VARCHAR(256)	Spending purpose of the transaction		x	
item	VARCHAR(256)	Transaction item		x	
quantity	INT	Quantity of transaction item		x	
price	DOUBLE	Price of a transaction item		x	
payment_date	DATETIME	Payment date of transaction item		x	
payer_name	VARCHAR(64)	Transaction item payer		x	
recipient_name	VARCHAR(64)	Unit receiving relief money			
address	LONGTEXT	Address of the unit receiving the relief money			

image	LONGTEXT	Transaction confirmation image		x	
created_at	DATETIME	The time that data is created in the system		x	
updated_at	DATETIME	The time that the data is updated in the system		x	
is_active	TINYINT	Cashflow details document active status		x	

Table 109 – Table cashflow_detail

4.2.7 Table donation_document

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of donation document	PK	x	x
campaign_id	VARCHAR(32)	Identifier code of campaign owns this donation document	FK	x	
title	VARCHAR(256)	Title of donation document		x	
url	VARCHAR(256)	Link to donation document		x	

created_by	VARCHAR(32)	Identifier code of creator of donation document	FK	x	
created_at	DATETIME	The time that data is created in the system		x	
updated_at	DATETIME	The time that the data is updated in the system		x	
type	VARCHAR(32)	Type of document to be uploaded		x	

Table 110 – Table donation_document

4.2.8 Table location

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of location	PK	x	x
name	VARCHAR(256)	Name of location		x	
address	VARCHAR(256)	Address of location		x	
latitude	VARCHAR(32)	Latitude of location		x	
longitude	VARCHAR(32)	Longitude of location		x	

created_at	DATETIME	The time that data is created in the system		x	
updated_at	DATETIME	The time that the data is updated in the system		x	

Table 111 – Table location

4.2.9 Table object_location

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of object's location	PK	x	x
organization_id	VARCHAR(32)	Identifier code of organization relate to location	FK		
project_id	VARCHAR(32)	Identifier code of project relate to location	FK		
location_id	VARCHAR(32)	Identifier code of related location	FK	x	
type	VARCHAR(32)	Object's location type		x	
created_at	DATETIME	The time that data is created in the system		x	

updated_at	DATETIME	The time that the data is updated in the system		x	
------------	----------	---	--	---	--

Table 112 – Table object_location

4.2.10 Table organization

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of organization	PK	x	x
name	VARCHAR(256)	Name of organization		x	
eng_name	VARCHAR(256)	English name of organization			
description	LONGTEXT	Description of information about the organization		x	
mission	LONGTEXT	Charity mission of the organization			
vision	LONGTEXT	Strategic vision in the activities of the organization			

logo	LONGTEXT	Logo of organization			
cover	LONGTEXT	Covers of organization			
website	VARCHAR(256)	Website about the organization			
founding_date	DATETIME	Organization's founding date		x	
operating_license	VARCHAR(256)	License to operate the organization			
created_at	DATETIME	The time that data is created in the system		x	
updated_at	DATETIME	The time that the data is updated in the system		x	
is_active	TINYINT	Active status of organization		x	
is_modify	TINYINT	Information showing if the organization is being modified		x	

created_by	VARCHAR(32)	Identifier of the creator of this organization	FK	x	
approved_by	VARCHAR(32)	Identifier of this organization reviewer	FK		
approved_date	DATETIME	Review date of organization			
result_code	INT	Result code of organization create or update request		x	
result_message	VARCHAR(256)	Result message of organization create or update request		x	
result_note	VARCHAR(256)	Result note from administrator of organization create or update request			

category	VARCHAR(256)	Code used to categorize organizations			
note	VARCHAR(256)	Message from organization creator or update			
type	VARCHAR(32)	Type of organization			

Table 113 – Table organization

4.2.11 Table payment_method

Field name	Data Type	Description	PK/ FK	Not Null	Unique
id	VARCHAR(32)	Identifier code of payment method	PK	x	x
title	VARCHAR(32)	Title of payment method		x	
is_active	TINYINT	Payment method active status		x	
key_name	VARCHAR(32)	Short abbreviation of payment method		x	

Table 114 – Table payment_method

4.2.12 Table project

Field name	Data Type	Description	PK/ FK	Not Null	Unique

id	VARCHAR(32)	Identifier code of project	PK	x	x
organization_id	VARCHAR(32)	Identifier code of organization owns this project	FK	x	
name	VARCHAR(256)	Name of project		x	
description	LONGTEXT	Description of project			
logo	LONGTEXT	Link to logo of project			
cover	LONGTEXT	Link to cover of project			
start_date	DATETIME	The date when the project start		x	
end_date	DATETIME	The date when the project end		x	
created_at	DATETIME	The time that data is created in the system		x	
updated_at	DATETIME	The time that the data is updated in the system		x	
is_active	TINYINT	Active status of project		x	

is_modify	TINYINT	Information showing if the project is being modified		x	
created_by	VARCHAR(32)	Identifier of the creator of this project	FK	x	
approved_by	VARCHAR(32)	Identifier of this projectreviewer	FK		
approved_date	DATETIME	Review date of project			
result_code	INT	Result code of project create or update request		x	
result_message	VARCHAR(256)	Result message of project create or update request		x	
result_note	VARCHAR(256)	Result note from administrator of project create or update request			
category	VARCHAR(256)	Code used to categorize projects			
note	VARCHAR(256)	Message from project creator or update			

type	VARCHAR(32)	Type of project		
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Table 115 – Table project

V. Software Testing Documentation

1. Overall Description

1.1 Test Model

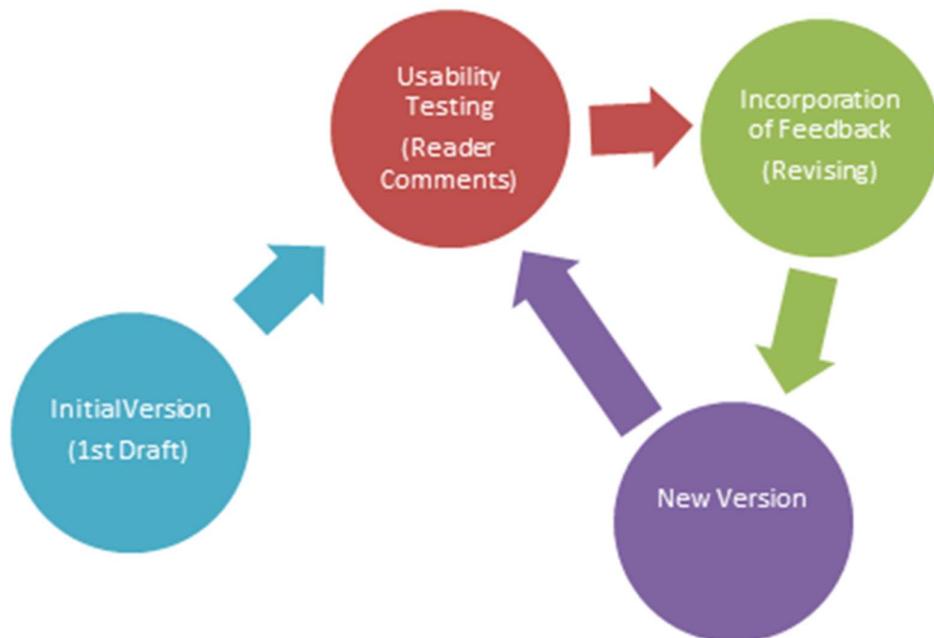


Figure 37 – Test model

In the planning stage, we decided to use the Iterative Model for testing our system. This model process provides flexibility for a short development time application but still helps to manage and test easily. Moreover, we could also identify the issue earlier and working on it to make a quality deliverable.

The testing process will be started after a new feature is finished on the testing server (Initial Version), this feature will be tested by users and tester (Usability Testing). After the test phase, testers and users will send feedback to the team (Incorporation of Feedback). We will re-check the feature and release a new version for it and return to the Usability Testing step.

1.2 Testing Levels

a. System testing

System testing tests the Conneto system as a whole and validates the functionalities and verifies if the system meets the end-to-end specifications and requirements.

b. Acceptance testing

The final testing stage before the system is ready for delivery. Acceptance testing is performed by user or customer.

1.3 Testing Types

a. Function testing

Perform individually testing to verify the functionalities of major features under specific conditions.

The detailed descriptions of each test case will be described in Report5_Test Case Document.xlsx

b. User interface testing

Perform testing on UI controls to verify if they work properly according to their desired functionalities.

Further descriptions of each test case will be described in Report5_Test Case Document.xlsx

c. API testing

Perform testing for RESTful APIs implemented for web application and mobile application.

Perform testing on Postman using HTTP methods: GET, POST, PUT, DELETE to check responses from Conneta server.

2. Test Plan

2.1 Test Stages

Type of Test	Stage of Test	
	System	Acceptance
Function testing	X	X
User interface testing	X	X
API testing	X	

Table 116 – Test stages

2.2 Resources

2.2.1. Human Resources

Worker/Doer	Role	Specific Responsibilities/Comments

DucTMC	Member	Manage test/human resources Assign test task Create test plan
KhangTL	Leader	Execute tests Review test cases
HieuNT	Member	Create test reports Execute tests Review test cases
PhucNM	Member	Execute tests Review test cases

Table 117 – Human resources

2.2.2. Environment

Purpose	Tool	Provider
View logs of web application	Chrome DevTools	Chrome
Test case management	Microsoft Excel	Microsoft
Manage API list and manual API testing	Postman	Postman
Backend IDE	IntelliJ	JetBrains
Web application IDE	Visual Studio Code	Microsoft
Android IDE	Android Studio	Google

Execution hardware	<p>Testing is implemented on computers with the following specifications:</p> <ul style="list-style-type: none"> · CPU: Intel i5/i7 · RAM: ≥4GB · Storage device: HDD or SSD 	Any providers
Communication	<p>Offline meeting Online meeting Messenger Trello</p>	<p>Member's home Google Meet Facebook</p>

Table 118 – Environment

2.3 Test Milestones

Milestone Task	Effort (md)	Start Date	End Date
Iteration 1: Test planning for mobile application	6	14/03/2022	22/03/2022
Create test plan	1	14/03/2022	15/03/2022
Review test plan	1	16/03/2022	17/03/2022
Create unit test	2	18/03/2022	21/03/2022
Create test case	2	21/03/2022	22/03/2022
Iteration 2: Test planning for web application	6	14/03/2022	22/03/2022
Create test plan	1	14/03/2022	15/03/2022

Review test plan	1	16/03/2022	17/03/2022
Create unit test	2	18/03/2022	21/03/2022
Create test case	2	21/03/2022	22/03/2022
Iteration 3: Execute tests for mobile and web applications	4	23/03/2022	30/03/2022
Execute test for mobile application	2	23/03/2022	26/03/2022
Execute test for web application	2	27/03/2022	30/03/2022

Table 119 – Test milestones

2.4 Deliverables

No	Deliverables	Due Date
1	Test plan	15/03/2022
2	Review test plan	17/03/2022
3	Test case	22/03/2022
4	Bug report	01/04/2022

Table 120 – Deliverables

3. Test Cases

The detailed test case document will be described at this link: [Report5_Test Case Document.xlsx](#)

4. Test Reports

TEST REPORT

Project Name	Conneto	Creator	DucTMC, HieuNT, PhucNM
Project Code	SP22SE09	Reviewer/Approver	KhangTL
Document Code	SP22SE09 - Test Report_v1.1	Issue Date	21/04/2022
Notes	Including 15 functions test		

No	Module code	Pass	Fail	Untested	N/A	Number of test cases	% Passed of tests
1	Member_Login	7	0	0	0	7	90.00%
2	Guest_Register	7	0	0	0	7	88.57%
3	Member_ResetPassword	6	0	0	0	6	96.67%
4	User_SearchOrganizationProjectCampaign	1	0	0	0	1	90.00%
5	Volunteer_DonateToDonationCampaign	7	0	0	0	7	97.31%
6	Volunteer_GetListDonationDocuments	2	0	0	0	3	100.00%
7	Volunteer_ViewHistory	5	0	0	0	2	100.00%
8	Volunteer_ParticipateToDonationCampaign	5	0	0	0	5	98.00%
9	Admin_OrganizationAdministrate	5	0	0	0	5	100.00%
10	Admin_ProjectAdministrate	5	0	0	0	5	100.00%
11	Admin_CampaignAdministrate	5	0	0	0	5	100.00%
12	OrganizationManager_ManageDonationDocument	3	0	0	0	5	100.00%
13	OrganizationManager_OrganizationManagement	15	0	0	0	15	95.11%
14	OrganizationManager_CampaignManagement	18	0	0	0	18	97.41%
15	OrganizationManager_ProjectManagement	11	0	0	0	11	77.62%
16	Admin_Dashboard	3	0	0	0	3	100.00%
17	Admin_UserManagement	2	0	0	0	2	100.00%
Sub total		107	0	0	0	107	95.92%

Test coverage **100.00 %**
 Test successful coverage **100.00 %**
 Test passed percentage **95.92%**

Figure 38 – Test reports

VI. Release Package & User Guides

1. Deliverable Package

1.1 Source codes & documents

No.	Items	Sub-Items
Code packages		
1	Module Device	VCCS.web_admin.zip VCCS.core_client_app.zip
2	Module Service	VCCS.fetch_data_service.zip VCCS.core_service.zip
Databases		
1	Initial databases	VCCS.conneto.sql
Documents		
1	Final Project Report	VCCS_Final Project Report.docx VCCS_Final Project Report.pdf

Table 121 – Source code & documents

1.2 Known Issues, Limitations & Restrictions

- Projects haven't been packaged as installers yet.
- Some steps are fixed for easy management.
- Some configuration must be configured by setting files: paths, secrets...
- Manual SDKs and runtimes installation
- Databases are initialized using scripts.
- SSL encryption is not supported yet.

2. Installation Guide

2.1 System Requirements

- Tested OS: Windows 7/ 10, Ubuntu Linux 16.04/ 18.04
- Network: LAN, Internet access capability
- Hosting and web server capabilities
- Software requirements:
 - JDK >= 1.8
 - MySQL 8.0.23
 - IntelliJ 2021.1.3

2.2 Setup Files

- VCCS.connerto.sql: Database script for Connerto system
- VCCS.fetch_data_service.zip: API for fetch_data_service
- VCCS.core_service.zip: API for core_service
- VCCS.core_client_app.zip: Mobile application for Volunteer
- VCCS.web_admin.zip: Web application for Admin, Organization Manager

2.3 Installation Instruction

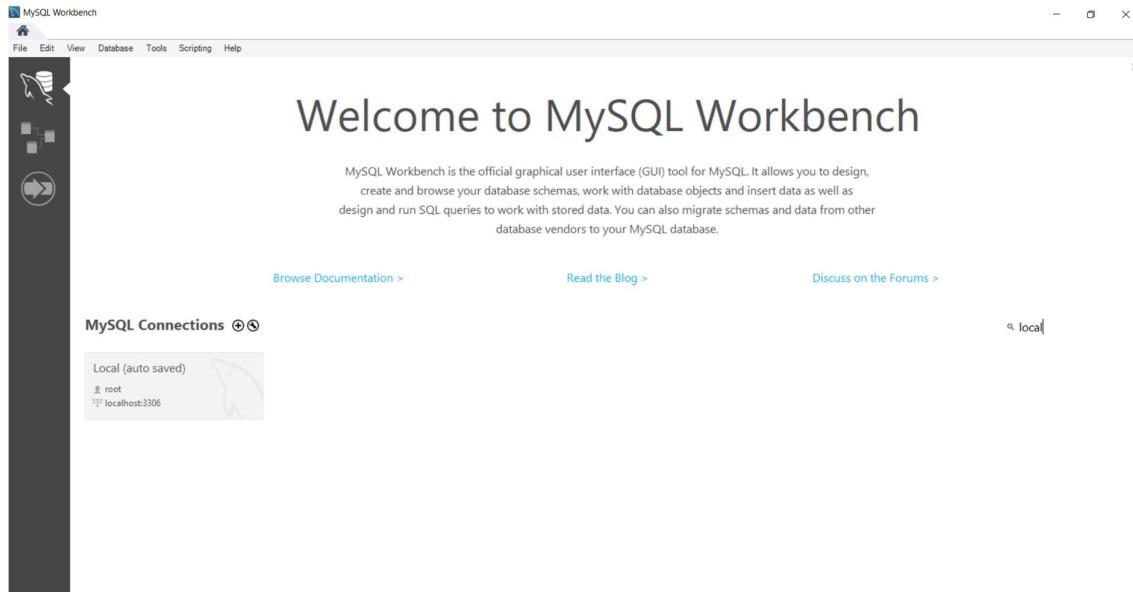
2.3.1 Setup environment:

2.3.2 Setup database:

a. Download and install MySQL follow these guidelines:

<https://openplanning.net/10221/cai-dat-co-so-du-lieu-mysql-tren-windows>

b. Run MySQL:



c. Init database:

- Open conneto.sql in MySQL and execute the script

A screenshot of MySQL Workbench showing the execution of the "conneto.sql" script. The title bar says "MySQL Workbench" and "Local". The main window shows the "Navigator" pane on the left with a tree view of the "conneto" database containing "Tables", "Views", "Stored Procedures", "Functions", and "sys". The "Information" pane below it shows "No object selected". The central pane contains the SQL code of the "conneto.sql" script, which is a MySQL dump file. The right side of the interface has a "SQLAdditions" panel with a note about automatic context help being disabled, and a "Context Help" and "Snippets" panel at the bottom right.

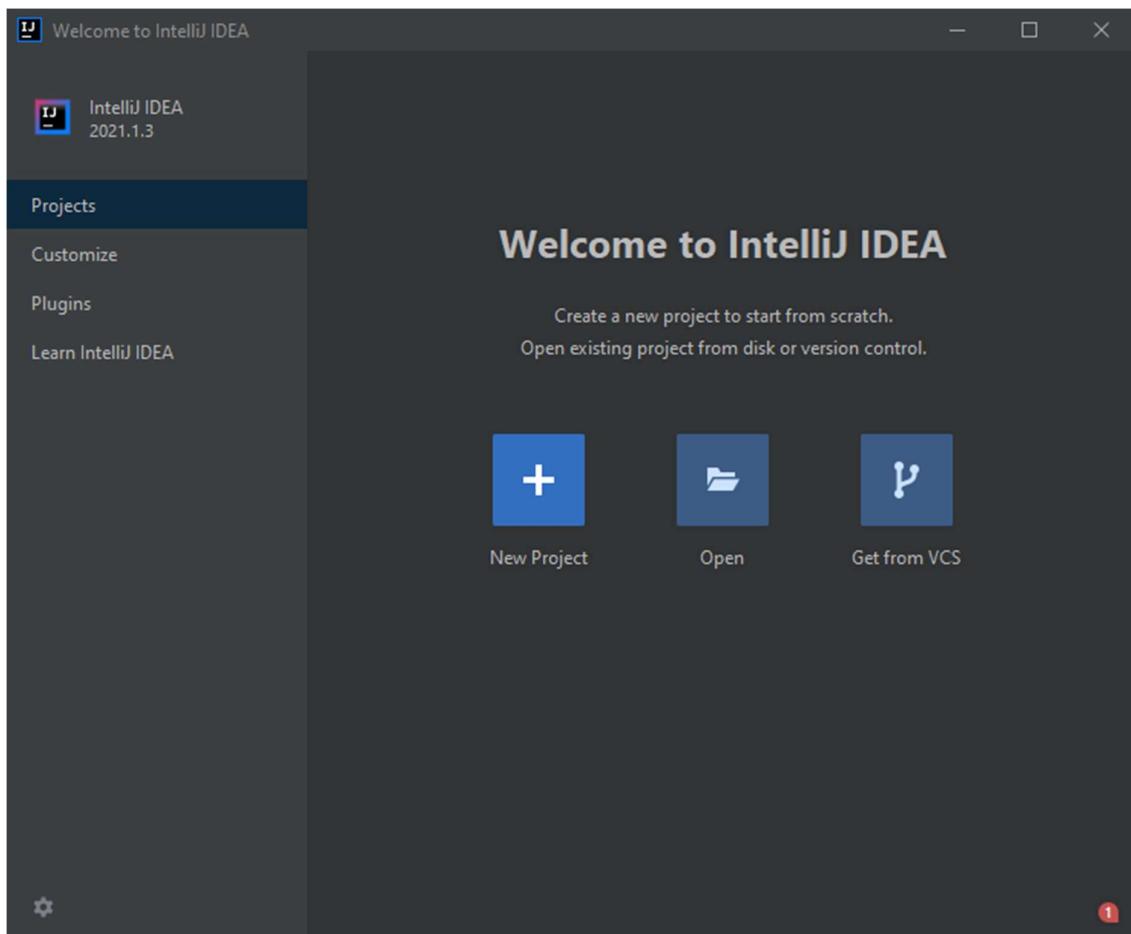
- Check to see if database is successfully created

2.3.3 Setup local backend API:

- Download and install IntelliJ follow these guidelines:

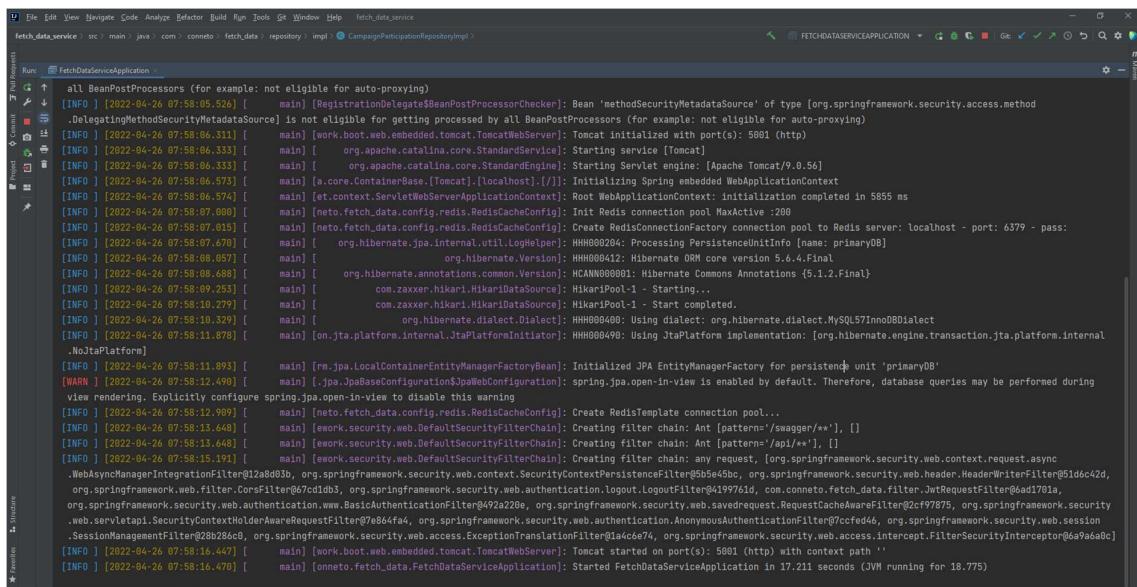
<https://cungdev.com/2018/02/01/huong-dan-intellij-idea/>

b. Run IntelliJ:



- c. Open and extract VCCS.fetch_data_service.zip/ VCCS.core_service.zip to a specific folder**
- d. Open application.properties and edit database connection configuration:**

```
spring.datasource.primary.url=jdbc:mysql://localhost:3306/conneto  
spring.datasource.primary.username=root  
spring.datasource.primary.password=*<input your database password*>  
spring.datasource.primary.driver-class-name=com.mysql.cj.jdbc.Driver
```
- e. Run project fetch_data_service/ core_service with IntelliJ**

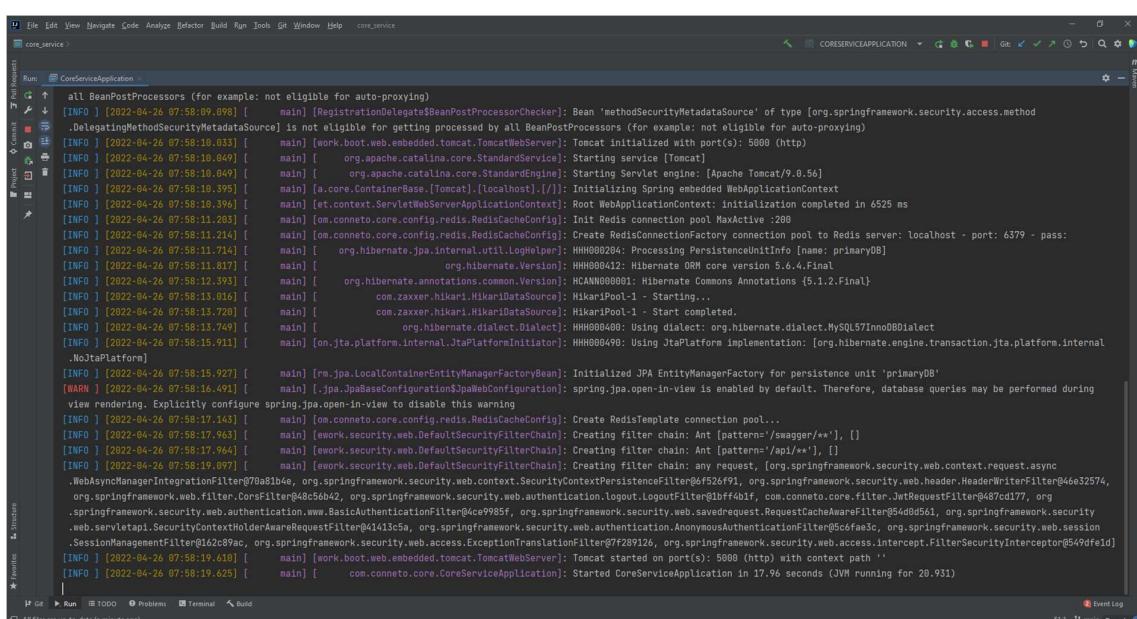


```

all BeanPostProcessors (for example: not eligible for auto-proxying)
[INFO ] [2022-04-26 07:58:05.526] [ main] [RegistrationDelegate$BeanPostProcessorChecker]: Bean 'methodSecurityMetadataSource' of type [org.springframework.security.access.method.DelegatingMethodSecurityMetadataSource] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)
[INFO ] [2022-04-26 07:58:06.311] [ main] [work.boot.web.embedded.tomcat.TomcatWebServer]: Tomcat initialized with port(s): 5001 (http)
[INFO ] [2022-04-26 07:58:06.333] [ main] [ org.apache.catalina.core.StandardService]: Starting service [Tomcat]
[INFO ] [2022-04-26 07:58:06.333] [ main] [ org.apache.catalina.core.StandardEngine]: Starting Servlet engine: [Apache Tomcat/9.0.56]
[INFO ] [2022-04-26 07:58:06.373] [ main] [a.core.ContainerBase.[Tomcat].[localhost].[]]: Initializing Spring embedded WebApplicationContext: initialization completed in 5855 ms
[INFO ] [2022-04-26 07:58:06.374] [ main] [et.context.ServletWebServerApplicationContext]: Root WebApplicationContext: initialization completed in 5855 ms
[INFO ] [2022-04-26 07:58:07.008] [ main] [neto.fetch_data.config.RedisCacheConfig]: Init Redis connection pool MaxActive :208
[INFO ] [2022-04-26 07:58:07.015] [ main] [neto.fetch_data.config.RedisCacheConfig]: Create RedisConnectionFactory connection pool to Redis server: localhost - port: 6379 - pass: 
[INFO ] [2022-04-26 07:58:07.670] [ main] [ org.hibernate.jpa.internal.util.LogHelper]: HH000204: Processing PersistenceUnitInfo [name: primary0B]
[INFO ] [2022-04-26 07:58:08.097] [ main] [ org.hibernate.Version]: HH000412: Hibernate ORM core version 5.6.4.Final
[INFO ] [2022-04-26 07:58:08.468] [ main] [ org.hibernate.annotations.common.Version]: HCANN000001: Hibernate Commons Annotations (5.1.2.Final)
[INFO ] [2022-04-26 07:58:09.253] [ main] [ com.zaxxer.hikari.HikariDataSource]: HikariPool-1 Starting...
[INFO ] [2022-04-26 07:58:10.279] [ main] [ com.zaxxer.hikari.HikariDataSource]: HikariPool-1 Start completed.
[INFO ] [2022-04-26 07:58:10.299] [ main] [ org.hibernate.dialect.Dialect]: HH000400: Using dialect: org.hibernate.dialect.MySQL5InnoDBDialect
[INFO ] [2022-04-26 07:58:11.878] [ main] [on.jta.platform.internal.JtaPlatformInitiator]: HH000490: Using JtaPlatform implementation: [org.hibernate.engine.transaction.jta.platform.internal.NoJtaPlatform]
[INFO ] [2022-04-26 07:58:11.893] [ main] [rm.jpa.LocalContainerEntityManagerFactoryBean]: Initialized JPA EntityManagerFactory for persistence unit 'primary0B'
[WARN ] [2022-04-26 07:58:12.490] [ main] [jpa.JpaBaseConfiguration$JpaWebConfiguration]: spring.jpa.open-in-view is enabled by default. Therefore, database queries may be performed during view rendering. Explicitly configure spring.jpa.open-in-view to disable this warning
[INFO ] [2022-04-26 07:58:12.909] [ main] [neto.fetch_data.config.RedisCacheConfig]: Create RedisTemplate connection pool...
[INFO ] [2022-04-26 07:58:13.468] [ main] [worsk.security.web.DefaultSecurityFilterChain]: Creating filter chain: Ant [patterns='/swagger/**'], []
[INFO ] [2022-04-26 07:58:15.348] [ main] [worsk.security.web.DefaultSecurityFilterChain]: Creating filter chain: Ant [patterns='/api/**'], []
[INFO ] [2022-04-26 07:58:15.971] [ main] [worsk.security.web.DefaultSecurityFilterChain]: Creating filter chain: any request, [org.springframework.security.web.context.request.async.WebAsyncManagerIntegrationFilter@2a8d83b, org.springframework.security.web.context.SecurityContextPersistenceFilter@5b5e45bc, org.springframework.web.filter.CorsFilter@67cd1db3, org.springframework.security.web.context.SecurityContextPersistenceFilter@497a220c, org.springframework.security.web.authentication.www.BasicAuthenticationFilter@402b2868, org.springframework.security.web.savedrequest.RequestCacheAwareFilter@2cf7975, org.springframework.security.web.servletapi.SecurityContextHolderAwareRequestFilter@7e846fa4, org.springframework.security.web.authentication.AnonymousAuthenticationFilter@7ccfed44, org.springframework.security.web.session.SessionManagementFilter@292b2868, org.springframework.security.web.access.ExceptionTranslationFilter@1a6ce74, org.springframework.security.web.access.intercept.FilterSecurityInterceptor@6a9a9a0c]
[INFO ] [2022-04-26 07:58:16.447] [ main] [work.boot.web.embedded.tomcat.TomcatWebServer]: Tomcat started on port(s): 5001 (http) with context path ''
[INFO ] [2022-04-26 07:58:16.476] [ main] [com.connerto.fetch_data.FetchDataServiceApplication]: Started FetchDataServiceApplication in 17.211 seconds (JVM running for 18.775)

Event Log
Build completed successfully in 17 sec, 58 ms (a minute ago)

```

```

all BeanPostProcessors (for example: not eligible for auto-proxying)
[INFO ] [2022-04-26 07:58:09.998] [ main] [RegistrationDelegate$BeanPostProcessorChecker]: Bean 'methodSecurityMetadataSource' of type [org.springframework.security.access.method.DelegatingMethodSecurityMetadataSource] is not eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)
[INFO ] [2022-04-26 07:58:10.033] [ main] [work.boot.web.embedded.tomcat.TomcatWebServer]: Tomcat initialized with port(s): 5000 (http)
[INFO ] [2022-04-26 07:58:10.649] [ main] [ org.apache.catalina.core.StandardService]: Starting service [Tomcat]
[INFO ] [2022-04-26 07:58:10.649] [ main] [ org.apache.catalina.core.StandardEngine]: Starting Servlet engine: [Apache Tomcat/9.0.56]
[INFO ] [2022-04-26 07:58:10.995] [ main] [a.core.ContainerBase.[Tomcat].[localhost].[]]: Initializing Spring embedded WebApplicationContext
[INFO ] [2022-04-26 07:58:10.995] [ main] [et.context.ServletWebServerApplicationContext]: Root WebApplicationContext: initialization completed in 6525 ms
[INFO ] [2022-04-26 07:58:11.203] [ main] [om.connerto.core.config.RedisCacheConfig]: Init Redis connection pool MaxActive :208
[INFO ] [2022-04-26 07:58:11.214] [ main] [om.connerto.core.config.RedisCacheConfig]: Create RedisConnectionFactory connection pool to Redis server: localhost - port: 6379 - pass: 
[INFO ] [2022-04-26 07:58:11.724] [ main] [ org.hibernate.jpa.internal.util.LogHelper]: HH000204: Processing PersistenceUnitInfo [name: primary0B]
[INFO ] [2022-04-26 07:58:11.817] [ main] [ org.hibernate.Version]: HH000412: Hibernate ORM core version 5.6.4.Final
[INFO ] [2022-04-26 07:58:12.393] [ main] [ org.hibernate.annotations.common.Version]: HCANN000001: Hibernate Commons Annotations (5.1.2.Final)
[INFO ] [2022-04-26 07:58:13.016] [ main] [ com.zaxxer.hikari.HikariDataSource]: HikariPool-1 Starting...
[INFO ] [2022-04-26 07:58:13.728] [ main] [ com.zaxxer.hikari.HikariDataSource]: HikariPool-1 Start completed.
[INFO ] [2022-04-26 07:58:13.749] [ main] [ org.hibernate.dialect.Dialect]: HH000400: Using dialect: org.hibernate.dialect.MySQL5InnoDBDialect
[INFO ] [2022-04-26 07:58:15.911] [ main] [on.jta.platform.internal.JtaPlatformInitiator]: HH000490: Using JtaPlatform implementation: [org.hibernate.engine.transaction.jta.platform.internal.NoJtaPlatform]
[INFO ] [2022-04-26 07:58:15.927] [ main] [rm.jpa.LocalContainerEntityManagerFactoryBean]: Initialized JPA EntityManagerFactory for persistence unit 'primary0B'
[WARN ] [2022-04-26 07:58:16.493] [ main] [jpa.JpaBaseConfiguration$JpaWebConfiguration]: spring.jpa.open-in-view is enabled by default. Therefore, database queries may be performed during view rendering. Explicitly configure spring.jpa.open-in-view to disable this warning
[INFO ] [2022-04-26 07:58:17.143] [ main] [om.connerto.core.config.RedisCacheConfig]: Create RedisTemplate connection pool...
[INFO ] [2022-04-26 07:58:17.663] [ main] [worsk.security.web.DefaultSecurityFilterChain]: Creating filter chain: Ant [patterns='/swagger/**'], []
[INFO ] [2022-04-26 07:58:17.964] [ main] [worsk.security.web.DefaultSecurityFilterChain]: Creating filter chain: Ant [patterns='/api/**'], []
[INFO ] [2022-04-26 07:58:19.097] [ main] [worsk.security.web.DefaultSecurityFilterChain]: Creating filter chain: any request, [org.springframework.security.web.context.request.async.WebAsyncManagerIntegrationFilter@7a81b4e, org.springframework.security.web.context.SecurityContextPersistenceFilter@f526f91, org.springframework.web.filter.CorsFilter@48c5b4b2, org.springframework.security.web.authentication.logout.LogoutFilter@1bf4ab1f, com.connerto.core.filter.JwtRequestFilter@6487cd177, org.springframework.security.web.authentication.www.BasicAuthenticationFilter@ce9985f, org.springframework.security.web.savedrequest.RequestCacheAwareFilter@54dd5d61, org.springframework.security.web.servletapi.SecurityContextHolderAwareRequestFilter@41413ca, org.springframework.security.web.authentication.AnonymousAuthenticationFilter@5c6fa3c, org.springframework.security.web.session.SessionManagementFilter@162c89ac, org.springframework.security.web.access.ExceptionTranslationFilter@f289126, org.springframework.security.web.access.intercept.FilterSecurityInterceptor@549dfe3]
[INFO ] [2022-04-26 07:58:19.410] [ main] [work.boot.web.embedded.tomcat.TomcatWebServer]: Tomcat started on port(s): 5000 (http) with context path ''
[INFO ] [2022-04-26 07:58:19.625] [ main] [ com.connerto.core.CoreServiceApplication]: Started CoreServiceApplication in 17.96 seconds (JVM running for 20.931)

Event Log
Build completed successfully in 17 sec, 58 ms (a minute ago)

```

- a. Test project in browser by go to url: <http://localhost:5000/swagger>,
<http://localhost:5001/swagger>

The image contains two side-by-side screenshots of the Swagger UI interface, both titled "OpenAPI definition v0 OAS3".

Screenshot 1 (Top): This screenshot shows the API definition for a project named "core_service". The "Servers" field is set to "http://localhost:5001 - Generated server url". The API structure is organized into three controllers:

- statistic-controller:** Contains one GET endpoint: "/fetch_data/api/v1/statistics".
- file-controller:** Contains four GET endpoints: "/fetch_data/api/v1/show/images", "/fetch_data/api/v1/show/images/{file_name}", "/fetch_data/api/v1/show/files", and "/fetch_data/api/v1/show/files/{file_name}".
- project-controller:** Contains three GET endpoints: "/fetch_data/api/v1/projects", "/fetch_data/api/v1/projects/{id}", and "/fetch_data/api/v1/projects/{id}/campaigns".

Screenshot 2 (Bottom): This screenshot shows the API definition for a project named "core_service". The "Servers" field is set to "http://localhost:5000 - Generated server url". The API structure is organized into four controllers:

- project-controller:** Contains three operations: a PUT endpoint for "/core/api/v1/projects/{id}", a DELETE endpoint for "/core/api/v1/projects/{id}", and a POST endpoint for "/core/api/v1/projects".
- organization-controller:** Contains three operations: a PUT endpoint for "/core/api/v1/organizations/{id}", a DELETE endpoint for "/core/api/v1/organizations/{id}", and a POST endpoint for "/core/api/v1/organizations".
- campaign-controller:** Contains two operations: a PUT endpoint for "/core/api/v1/campaigns/{id}" and a DELETE endpoint for "/core/api/v1/campaigns/{id}".

Figure 45 – Check API core_service

3. User Manual

3.1 Terms and definitions

Conneto is a technology solution that provides utilities and tools for individuals, clubs, associations, teams and groups that are active in the fields of volunteering, humanitarian, charity, social activities, voluntary for the goal of sustainable development organizes community campaigns according to the criteria of publicity, transparency and effectiveness. The application was born with the goal of building a community of individuals pursuing a transparent and sustainable volunteer mission, spreading good values in the community.

1. **Volunteer:** A normal user on the system who give their time to help a non-profit organization or a difficult situation by participating in or donating to a campaign on the system.
2. **Organization Manager:** A high permission user who manage organization, projects, campaigns, are individuals or organizations including but not limited to professions such as journalists, artists, singers, actors, athletes and social activists who have good influence in society, community, have the desire and ability to organize projects, crowdfunding campaigns, uphold the value of transparency in volunteering activities. Individuals and organizations have full civil act capacity as prescribed in Decree 93/2021/NĐ-CP and relevant regulations.
3. **Admins:** A highest permission user. Admin can administrate organization, projects and campaigns. Admin is also manage users and donation documents. Admin access to the VCCS System with a higher usage than Organization Manager.
4. **Donation Document:** It is a transparent document about the charity of a campaign uploaded by the organization manger of that campaign and must be verified and verified through the administrator of the VCCS system.
5. **Donation Campaign:** A type of campaign created by an organization manager and housed within a specific project. Donation campaign allows volunteers to raise money to help those in need.
6. **Recruitment Campaign:** A type of campaign created by an organization manager and housed within a specific project. Participation campaign allows volunteers to join to help those in need.

OPERATION PRINCIPLES

1. Conneto application is a solution to apply technology to solve problems of connecting and spreading humanitarian activities, charity, community development, the goal is to become an intensive application for charity. in Viet Nam.
2. Conneto application is a non-profit charity charity platform and does not collect management fees or any costs from users.

3. Conneta application works on the principle of promoting the transparency of charity activities in Vietnam, through a public monitoring mechanism from the community.

PROHIBITED ACTIVITIES

1. Obstructing or forcing organizations and individuals to participate in volunteer activities.
2. Reporting falsely, cheating, appropriating and illegally using money and goods donated and contributed by domestic and foreign organizations and individuals.
3. Taking advantage of volunteering activities for personal gain.

CONNETO APP DEVELOPMENT OBJECTIVES

1. Objective 1: End all forms of poverty everywhere.
2. Objective 2: Eliminate hunger, ensure food security, improve nutrition and promote sustainable agricultural development.
3. Objective 3: Ensure healthy lives and promote well-being for people of all ages.
4. Objective 4: Ensure quality, equitable, and inclusive education and promote lifelong learning opportunities for all.
5. Objective 5: Achieve gender equality; empowering and creating opportunities for women and girls.
6. Objective 6: Ensure adequate and sustainable management of water resources and sanitation for all.
7. Objective 7: Ensure access to affordable, reliable and sustainable energy for all.
8. Objective 8: Ensure sustainable, comprehensive and continuous economic growth; full employment, productivity and decent work for all.
9. Objective 9: Build resilient infrastructure, promote inclusive and sustainable industrialization, and increase innovation.
10. Objective 10: Reduce inequality in society.
11. Objective 11: Sustainable and resilient urban and rural development; ensure a safe living and working environment; rationally allocate population and labor by region.
12. Objective 12: Ensure sustainable production and consumption.
13. Objective 13: Respond promptly and effectively to climate change and natural disasters.
14. Objective 14: Conserve and sustainably use oceans, seas and marine resources for sustainable development.
15. Objective 15: Protect and develop forests sustainably, conserve biodiversity, develop ecosystem services, combat desertification, prevent degradation and restore land resources.

16. Objective 16: Promote a peaceful, democratic, fair, equal and civilized society for sustainable development, creating access to justice for all; building effective, accountable and participatory institutions at all levels.

17. Objective 17: Strengthen implementation and promote global partnerships for sustainable development.

3.2 Application Usage

3.2.1 For mobile application usage:

<Volunteer> Login

Step 1: User open Conneta app for owner mobile application, the home screen will init.



Figure 46 – Home screen

Step 2: User click on “Tài khoản” item on the navigation bar then click on “Đăng nhập/ Đăng ký”



Figure 47 – Profile screen (None login)

Step 3: User input valid phone number and press “Tiếp tục”.

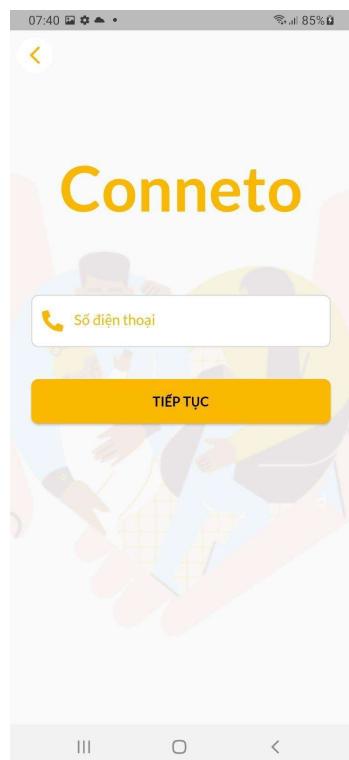


Figure 48 – Input phone number screen

Step 4: User input the otp received then press “Tiếp tục” to continue.

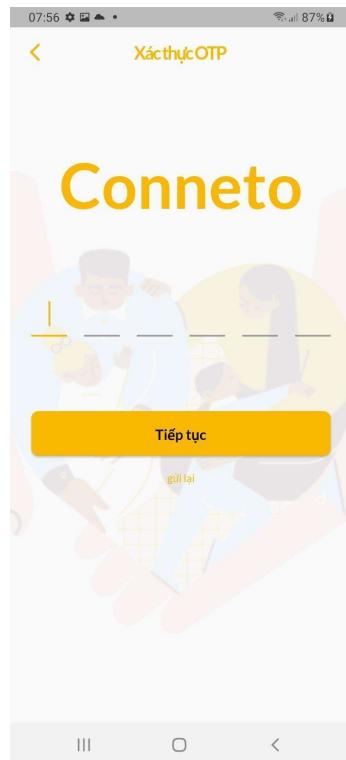


Figure 49 – Input OTP screen

Step 5: Input your password and press “Tiếp tục”.



Figure 50 – Input password screen



Figure 51 – Home screen

Well done! You are now logged in.

<Volunteer> Browse campaigns, projects, organizations



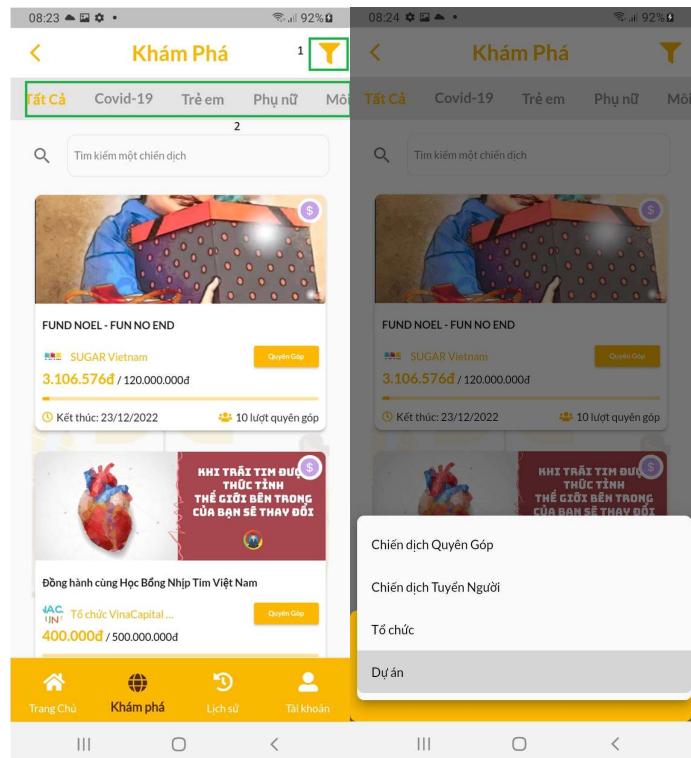
Figure 52 – Search in home



Figure 53 – Search in explore

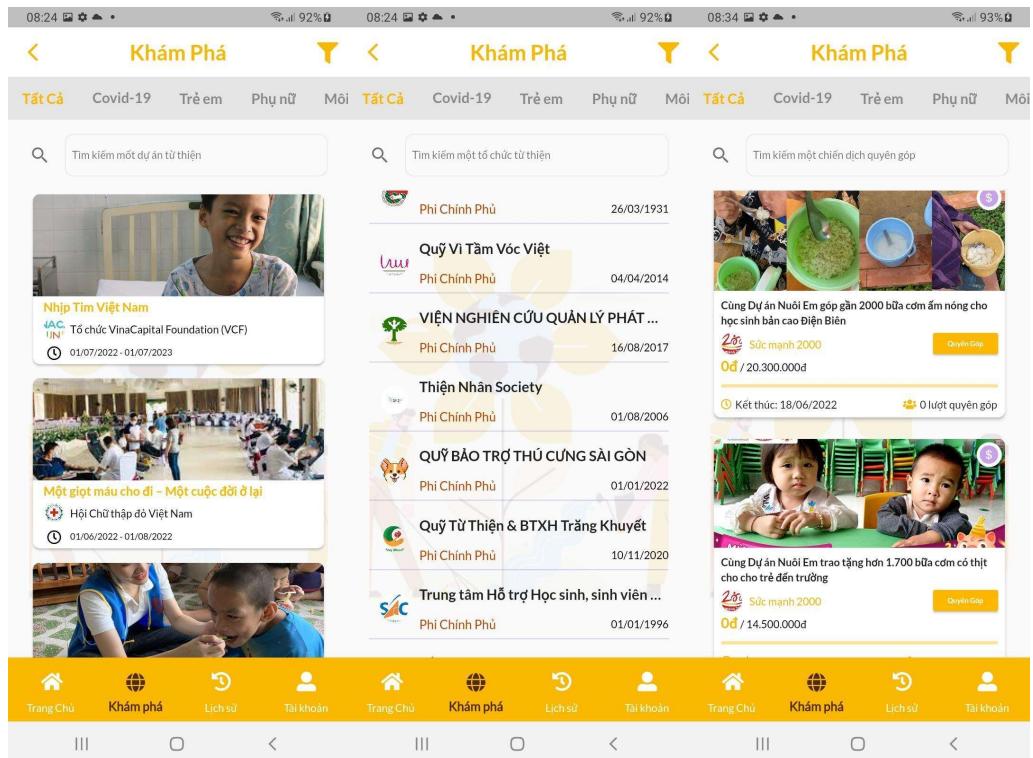
No.	Description
1	This is the notification bell; you can click in to see the notifications
2	A search bar where you can input the campaign name and it will direct you to explore screen with your result.
3	Category box, when you clicked in you will be directed to explore screen with all the campaigns with the category.
4	When you click this button, you will be directed to explore screen with all the donation campaigns.
5	Donation campaign card, when you click in you will be directed to the donation campaign details.
6	This will direct you to the explore screen.
7	When you click this button, you will be directed to explore screen with all the recruitment campaigns.
8	Recruitment campaign card, when you click in you will be directed to the recruitment campaign details.

Table 122 – Home description

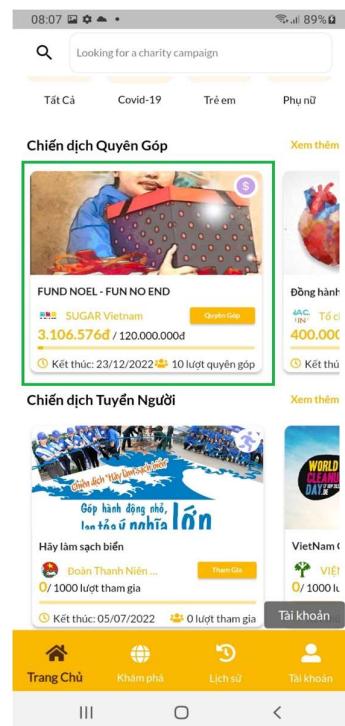


No.	Description
1	This is a filter when you click on it will show a bottom-sheet menu to choose your browsing type.
2	A category will filter the campaign, organizations or projects.

Table 123 – Explore description



<Volunteer> Donate for a Donation Campaign



Step 1. User click on a donation campaign card



Cùng Dự án Nuôi Em góp gần 2000
bữa cơm ấm nóng cho học sinh bản
cao Điện Biên

Đã xác thực

Thông Tin Quyên Góp [Tài liệu chứng thực >](#)

0đ / 20.300.000đ 52 ngày còn lại
Đạt được: 0.0% 0 lượt quyên góp

Thông Tin Chung

trong dự án [Dự án Nuôi em](#)
 18/05/2022 - 18/06/2022
 Project.location
 0 lượt quyên góp

Mô Tả

Chung tay quyên góp gần 2000 bữa cơm ấm nóng cho
học sinh bản cao Điện Biên những bữa cơm có thịt có rau
thay vì không có để ăn hoặc chỉ có cơm trắng... [xem thêm](#)

QUYÊN GÓP

||| □ <

Step 2. The campaign details screen will be displayed, now press the “Quyên góp” button.

08:41 94%

Thanh Toán

Số tiền quyên góp

Lời nhắn

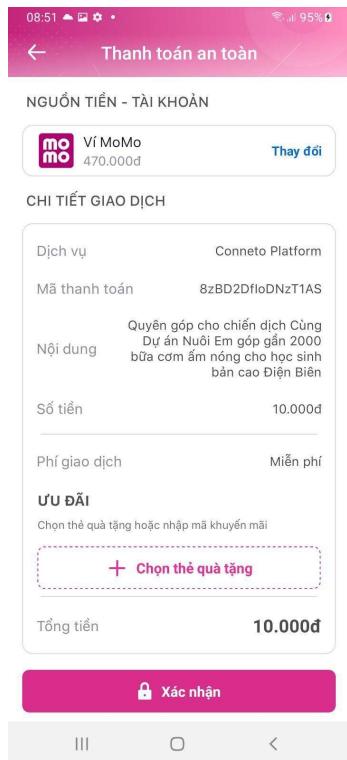
0/150

Quyên góp ẩn danh

Tiếp tục

||| □ <

Step 3. In the payment screen you input the money amount and message, you can also choose if you want to be incognito or not, after that press “Tiếp tục”.



Step 4. You will be redirected to Momo platform (our default payment for now) the you con firm with Momo.



Step 5. After confirm in MOMO platform you now redirected to success page.

<Volunteer> Participate in a recruitment campaign

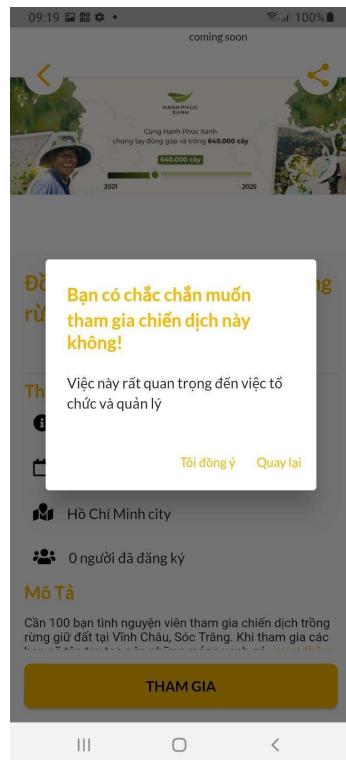
Step 1. User click on a recruitment campaign card



Step 2. Campaign details screen will be displayed, now press the “Tham Gia” button



Step 3. The popup dialog will be displayed, press “tôi đồng ý” to continue



Well done! Now you are able to join the campaign.

<Volunteer> View history

Step 1. User click on “Lịch sử” button.



Step 2. Choose tab to view history type



3.2.2 For web application usage:

Overview: The Conneta web application supports the Admin and Organization manager to manage projects, campaigns, organizations, documents. The web application also supports manage human resources

Features:

<Admin, Organization Manager> Login with account

Step 1: Enter username and password

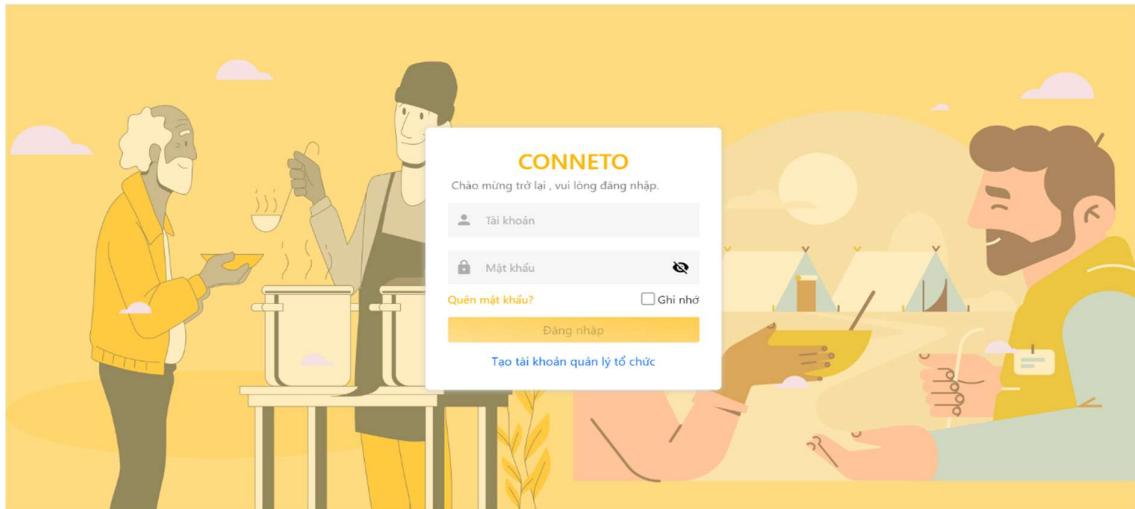


Figure 54 – Login (step 1)

Step 2: Click on the “Đăng nhập” button

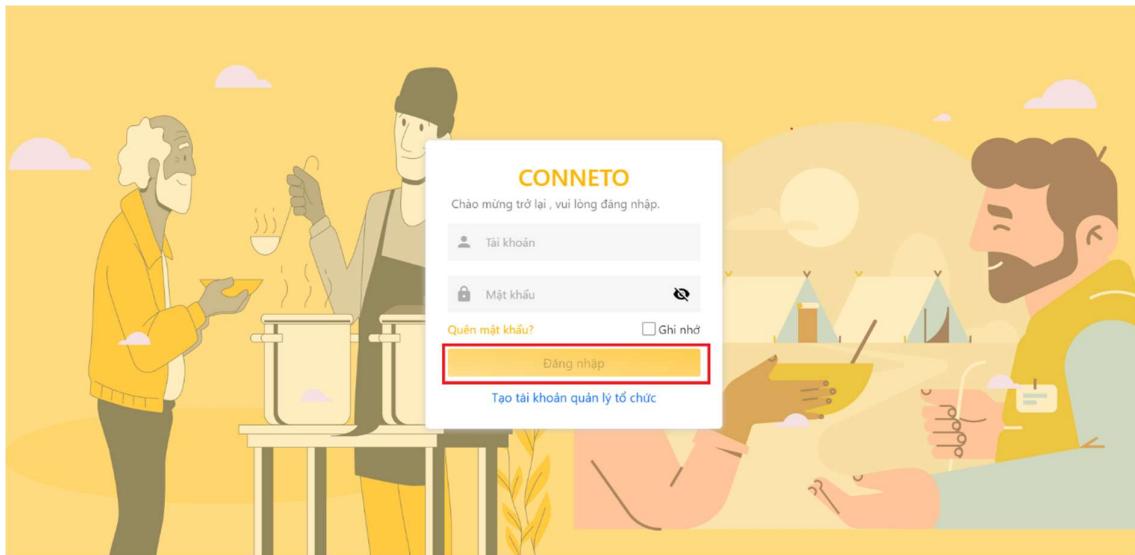


Figure 55 – Login (step 2)

<Admin, Organization Manager> Logout

Step 1: Click on the icon:

Nhà hảo tâm hàng đầu

Thứ hạng	Tên	Số lần quyên góp	Số chiến dịch đã quyên góp	Tổng tiền
1	Diệp Kim Vy	1	1	15.000.000đ
2	Đào Phương Vy	1	1	10.000.000đ
3	Nguyễn Lê Thanh Đức	1	1	2.450.000đ
4	Lê Thành Tín	10	10	1.056.576đ
5	Ngô Chí Hùng	1	1	1.000.000đ
6	Ngô Trọng Phúc	1	1	999.999đ
7	Bùi Anh Khoa	1	1	200.000đ

Tham gia tình nguyện sôi nổi nhất

Thứ hạng	Tên	Lượt tham gia	Số chiến dịch đã tham gia
1	Lê Thành Tín	1	1
2	Nguyễn Lê Thanh Đức	1	1
3	Lợi Mai Công Trung	1	1
4	Tạ Minh Chánh Đức	1	1
5	Tạ Minh Chánh Đức	1	1
6	Nguyễn Thanh Hiếu	1	1

Figure 56 – Logout (step 1)

Step 2: Click on the “Đăng xuất” button:

Nhà hảo tâm hàng đầu

Thứ hạng	Tên	Số lần quyên góp	Số chiến dịch đã quyên góp	Tổng tiền
1	Diệp Kim Vy	1	1	15.000.000đ
2	Đào Phương Vy	1	1	10.000.000đ
3	Nguyễn Lê Thanh Đức	1	1	2.450.000đ
4	Lê Thành Tín	10	10	1.056.576đ
5	Ngô Chí Hùng	1	1	1.000.000đ
6	Ngô Trọng Phúc	1	1	999.999đ
7	Bùi Anh Khoa	1	1	200.000đ

Tham gia tình nguyện sôi nổi nhất

Thứ hạng	Tên	Lượt tham gia	Số chiến dịch đã tham gia
1	Lê Thành Tín	1	1
2	Nguyễn Lê Thanh Đức	1	1
3	Lợi Mai Công Trung	1	1
4	Tạ Minh Chánh Đức	1	1
5	Tạ Minh Chánh Đức	1	1
6	Nguyễn Thanh Hiếu	1	1

Figure 57 – Logout (step 2)

<Admin> Get list of users

Click on the “Quản lý người dùng” tab:

Avatar	Name	Username	Last Login
	Ngô Chí Hùng	@0908772441	Tham gia vào 23/03/2022
	Aa1234566 Aa123456	@manager04	Tham gia vào 20/04/2022
	ONE MILLION LIVES	@oml	Tham gia vào 07/04/2022
	Nguyễn Hoàng Ngọc Trâm	@0909555101	Tham gia vào 31/03/2022
	SUGAR Vietnam	@sugarvietnam	Tham gia vào 16/03/2022
	Trần Thị Thanh Thảo	@0373995939	Tham gia vào 31/03/2022
	Lê Thành Tín	@0902331002	Tham gia vào 19/03/2022
	AA123456 Aa123456	@manager6	Tham gia vào 16/04/2022

Figure 58 – Get list of users

<Admin> Disable user

Step 1: Click on the “Vô hiệu hóa” button:

Avatar	Name	Username	Last Login
	Ngô Chí Hùng	@0908772441	Tham gia vào 23/03/2022
	Aa1234566 Aa123456	@manager04	Tham gia vào 20/04/2022
	ONE MILLION LIVES	@oml	Tham gia vào 07/04/2022
	Nguyễn Hoàng Ngọc Trâm	@0909555101	Tham gia vào 31/03/2022
	SUGAR Vietnam	@sugarvietnam	Tham gia vào 16/03/2022
	Trần Thị Thanh Thảo	@0373995939	Tham gia vào 31/03/2022
	Lê Thành Tín	@0902331002	Tham gia vào 19/03/2022
	AA123456 Aa123456	@manager6	Tham gia vào 16/04/2022

Figure 59 – Disable user (step 1)

Step 2: Click on the “Vô hiệu hóa” confirm button:

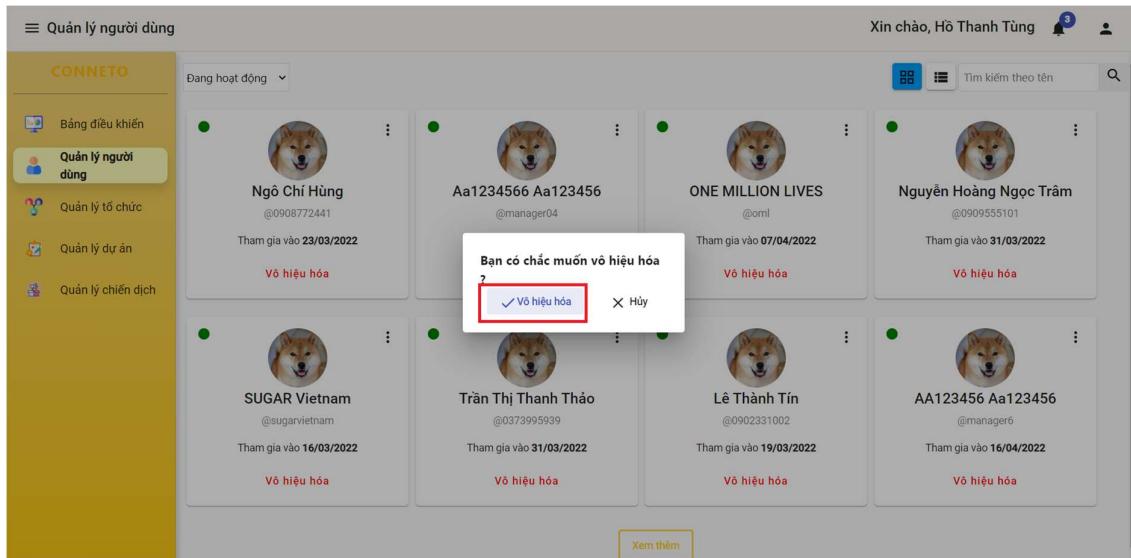


Figure 60 – Disable user (step 2)

<Admin> View details of user

Step 1: Click on the icon on the user card

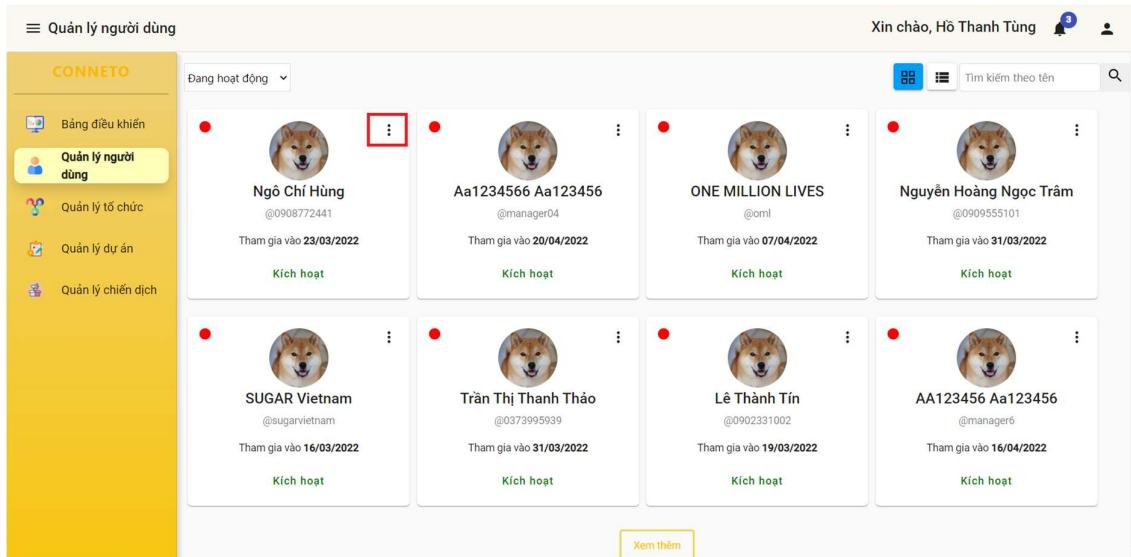


Figure 61 – View details of user (step 1)

Step 2: Click on the “Chi tiết” button

The screenshot shows the Conneto application's user management interface. On the left, a sidebar menu includes 'Bảng điều khiển', 'Quản lý người dùng' (selected), 'Quản lý tổ chức', 'Quản lý dự án', and 'Quản lý chiến dịch'. The main area displays a grid of user profiles under the heading 'Đang hoạt động'. Each profile card includes a user icon, name, ID, email, and joining date. The first profile, 'Ngô Chí Hùng', has a red box around the 'Chi tiết' button. Other visible profiles include 'Aa1234566 Aa123456', 'ONE MILLION LIVES', 'Nguyễn Hoàng Ngọc Trâm', 'SUGAR Vietnam', 'Trần Thị Thanh Thảo', 'Lê Thành Tín', and 'AA123456 Aa123456'. A search bar at the top right allows users to search by name.

Figure 62 – View details of user (step 2)

<Admin> Enable user

Step 1: Click on the “Kích hoạt” button:

This screenshot shows the same Conneto application interface as Figure 62, but with a different state. The 'Ngô Chí Hùng' profile now has a red box around the 'Kích hoạt' button. The other profiles remain the same, and the overall layout is identical to Figure 62.

Figure 63 – Enable user (step 1)

Step 2: Click on the “Kích hoạt” confirm button:

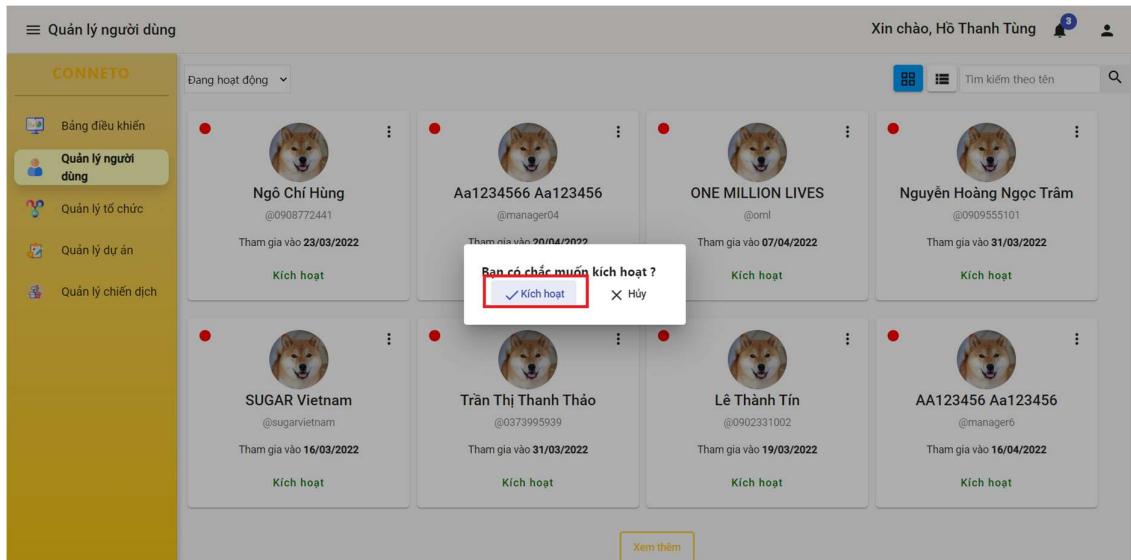


Figure 64 – Enable user (step 2)

<Admin, Organization Manager> Get list of organization

Click on the “Quản lý tổ chức” tab:

Figure 65 – Get list of organization

<Admin> Approve organization

Step 1: Click on the “Chờ duyệt” tab:

Xin chào, Hồ Thanh Tùng

Quản lý tổ chức

CONNETO

- Bảng điều khiển
- Quản lý người dùng
- Quản lý tổ chức**
- Quản lý dự án
- Quản lý chiến dịch

Tổ chức (19)

Tên Tổ chức	Mô tả	Thành viên	Ngày tạo	Trạng thái
Quỹ Từ Thiện & BTXH Trắng Khuyết	Tổ chức phi lợi nhuận	AA123456 AA123456	08/04/2022	Đã duyệt
NHÓM CỘNG TÁC VIÊN MÔI TRƯỜNG VIỆT NAM	Tổ chức phi lợi nhuận	AA123456 AA123456	16/04/2022	Đã duyệt
AIESEC in Vietnam	Tổ chức phi lợi nhuận	AIESEC Vietnam	17/03/2022	Đã duyệt
Quỹ Vì Tâm Võc Việt	Tổ chức phi lợi nhuận	Tổ chức VSF	11/04/2022	Chờ duyệt
QUÝ BẢO TRỢ THỦ CUNG SÀI GÒN	Tổ chức phi lợi nhuận	Cứu Hộ Chó Mèo	11/04/2022	Đã duyệt
Sức mạnh 2000	Tổ chức phi lợi nhuận	Sức Mạnh 2000	08/04/2022	Đã duyệt
Tập đoàn FLC	Tổ chức phi lợi nhuận	Trịnh Văn Quyết	05/04/2022	Đã duyệt
CHICKEN MINDS	Tổ chức phi lợi nhuận	Đoàn Thanh Niên Cộng Sản Hồ Chí Minh	Đoàn Thanh Niên Cộng Sản Hồ Chí Minh	Đã duyệt
Quỹ Sông	Tổ chức phi lợi nhuận	Nguyễn Minh Phúc	03/04/2022	Đã duyệt
VIỆN NGHIÊN CỨU QUẢN LÝ PHÁT TRIỂN BỀN VỮNG	Tổ chức phi lợi nhuận	Tổ Chức MSD	11/04/2022	Đã duyệt
Tổ chức VinaCapital Foundation (VCF)	Tổ chức phi lợi nhuận	VinaCapital Foundation (VCF)	Đã duyệt	Đã duyệt

Tim kiếm theo tên

Figure 66 – Approve organization (step 1)

Step 2: Click on the “Chấp nhận” button

Xin chào, Hồ Thanh Tùng

Quản lý tổ chức

CONNETO

- Bảng điều khiển
- Quản lý người dùng
- Quản lý tổ chức**
- Quản lý dự án
- Quản lý chiến dịch

Tổ chức (2)

Tên Tổ chức	Mô tả	Thành viên	Ngày tạo	Trạng thái
Aa123456789	Tổ chức phi lợi nhuận	Aa1234566 Aa123456	20/04/2022	Chấp nhận
Phat Nua De Debug	Tổ chức phi lợi nhuận	A123456789 A123456797	20/04/2022	Chấp nhận

Tim kiếm theo tên

Figure 67 – Approve organization (step 2)

Step 3: Click on the “Chấp nhận” confirm button

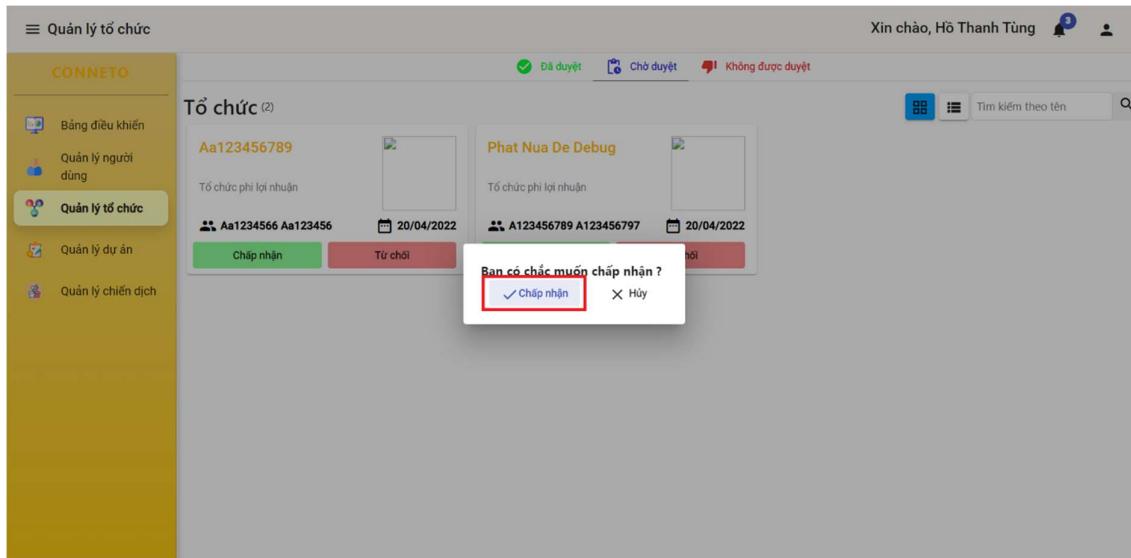


Figure 68 – Approve organization (step 3)

<Admin> Reject organization

Step 1: Click on the “Chờ duyệt” tab:

Tổ chức	Mô tả	Ngày tạo
Quỹ Từ Thiện & BTXH Trắng Khuyết	Tổ chức phi lợi nhuận	08/04/2022
NHÓM CỘNG TÁC VIÊN MÔI TRƯỜNG VIỆT NAM	Tổ chức phi lợi nhuận	16/04/2022
AIESEC in Vietnam	Tổ chức phi lợi nhuận	17/03/2022
QUÝ BẢO TRỢ THỦ CUNG SÀI GÒN	Tổ chức phi lợi nhuận	11/04/2022
Tổ Chức MSD	Tổ chức phi lợi nhuận	11/04/2022
Sức mạnh 2000	Tổ chức phi lợi nhuận	08/04/2022
Tập đoàn FLC	Tổ chức phi lợi nhuận	05/04/2022
Quỹ Sống	Tổ chức phi lợi nhuận	03/04/2022
CHICKEN MINDS		
Đoàn Thanh Niên Cộng Sản Hồ Chí Minh		
Tổ chức VinaCapital Foundation (VCF)		

Figure 69 – Reject organization (step 1)

Step 2: Click on the “Từ chối” button

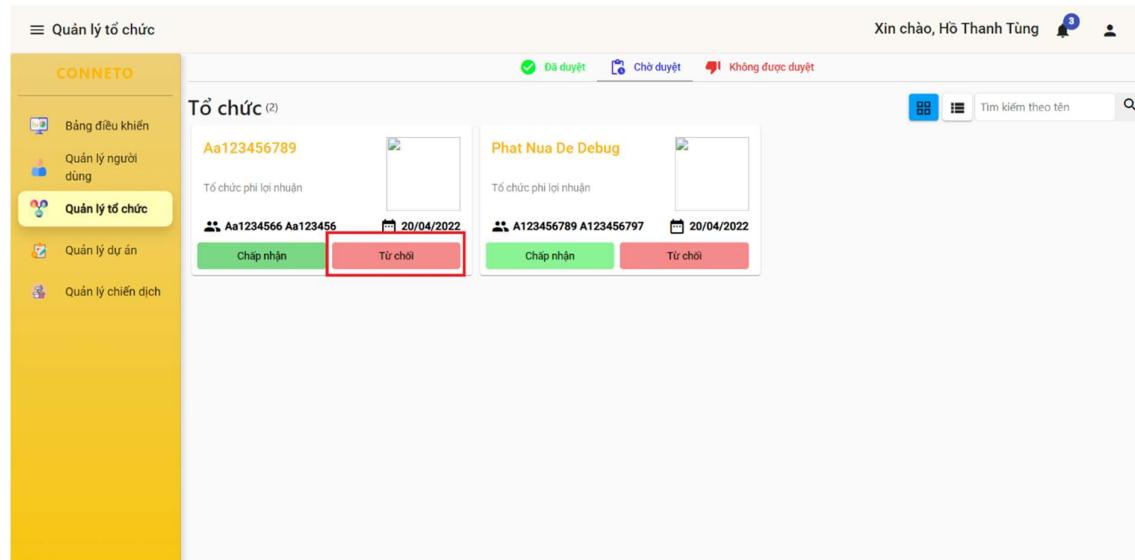


Figure 70 – Reject organization (step 2)

Step 3: Click on the “Từ chối” confirm button

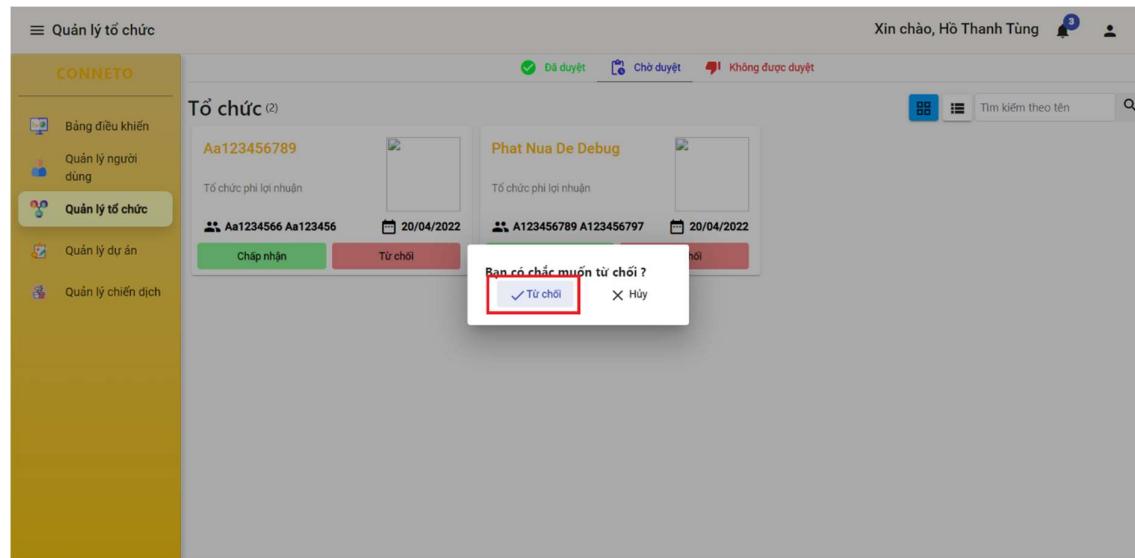


Figure 71 – Reject organization (step 3)

<Admin, Organization Manager> View details of organization

Click on the specific card item:

The screenshot shows a list of organizations under the 'Tổ chức' tab. The highlighted card is 'Quỹ Từ Thiện & BTXH Trắng Khuyết', which was created on 08/04/2022. Other visible cards include 'NHÓM CỘNG TÁC VIÊN MÔI TRƯỜNG VIỆT NAM', 'AIESEC in Vietnam', 'VIỆN NGHIÊN CỨU QUẢN LÝ PHÁT TRIỂN BỀN VỮNG', and 'Tổ chức VinaCapital Foundation (VCF)'. The left sidebar shows navigation tabs like 'Quản lý tổ chức', 'Quản lý dự án', and 'Quản lý chiến dịch'.

<Admin, Organization Manager> Get list of projects

Click on the “Quản lý dự án” tab:

The screenshot shows a list of projects under the 'Dự án' tab. The highlighted card is 'Giáng Sinh Yêu Thương', which was created on 30/03/2022. Other visible cards include 'SUGAR Championship Vietnam' and 'Đường Đến Tri Thức'. The left sidebar shows navigation tabs like 'Quản lý tổ chức', 'Quản lý dự án' (which is selected), and 'Quản lý chiến dịch'.

Figure 73 – Get list of projects

<Admin, Organization Manager> View details of project

Click on the specific card item

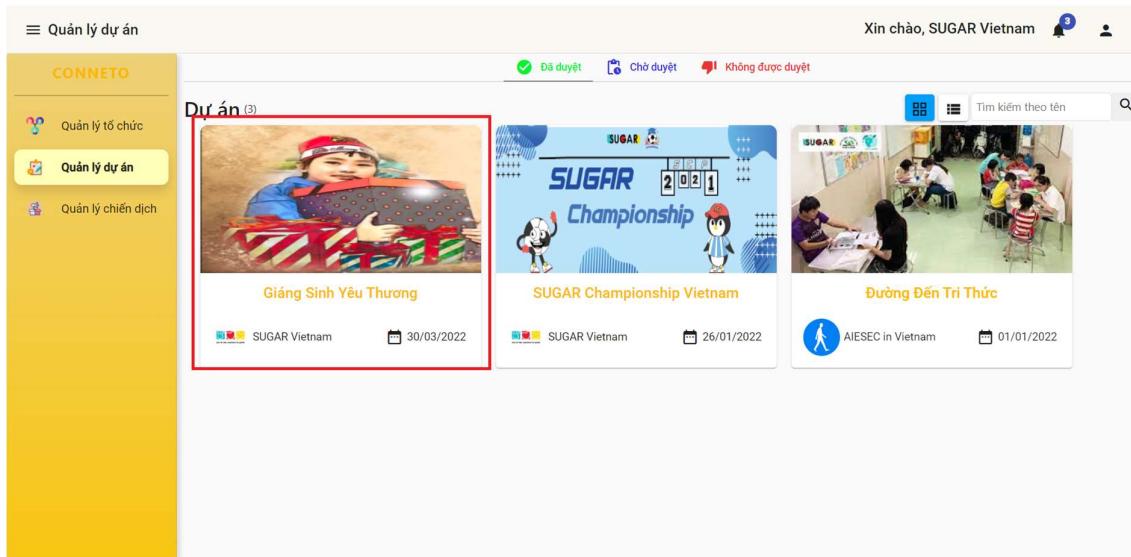


Figure 74 – View details of project

<Admin, Organization Manager> Get list of campaigns

Click on the “Quản lý chiến dịch” tab:

Tên Chiến dịch	Thời gian	Mô tả
FUND NOEL - FUN NO END	02/12/2022 07:00 - 23/12/2022 07:00	Lượt quyên góp: 0 / ₫120,000,000 Đạt được: 0%
CHAMPIONSHIP 2022	03/03/2022 07:00 - 09/04/2022 07:00	Lượt tham gia: 0 / 264 người Đạt được: 0%

<Admin, Organization Manager> View details of campaign

Click on the specific card item

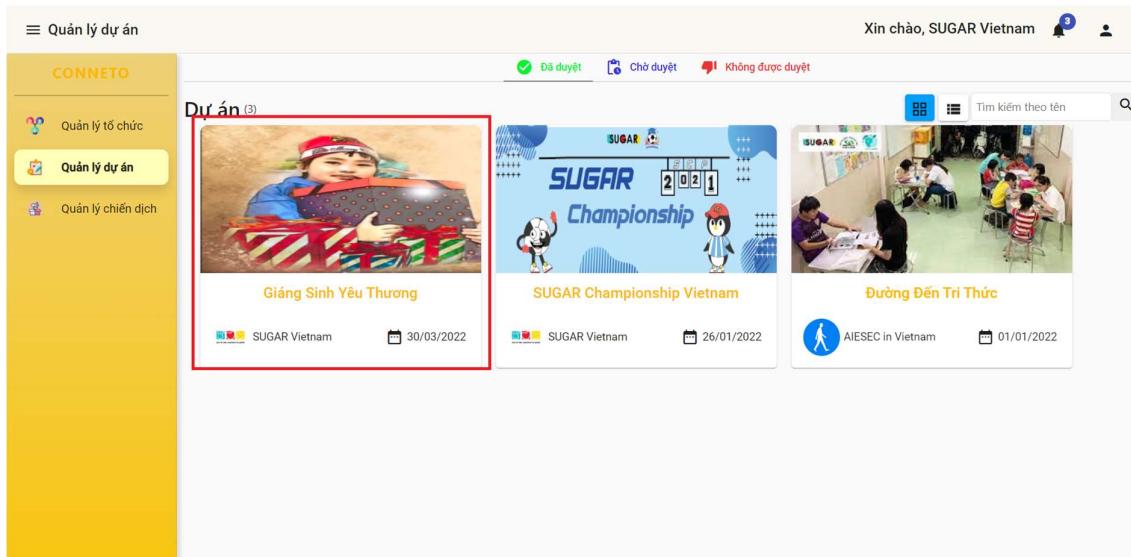


Figure 75 – View details campaign

<Admin> Approve campaign

Step 1: Click on the “Chờ duyệt” tab:

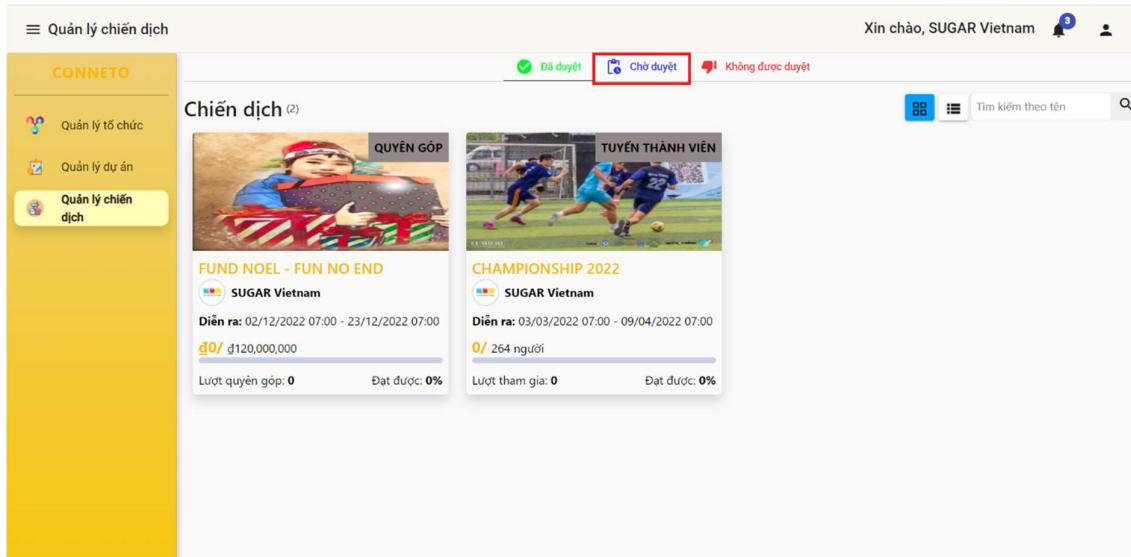


Figure 76 – Approve campaign (step 1)

Step 2: Click on the “Chấp nhận” button

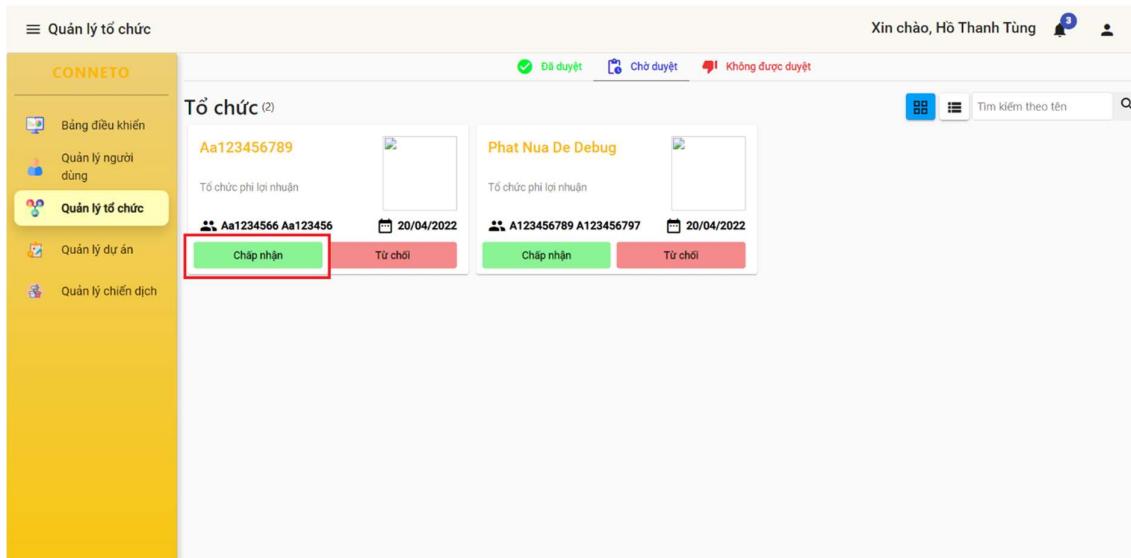


Figure 77 – Approve organization (step 2)

Step 3: Click on the “Chấp nhận” confirm button

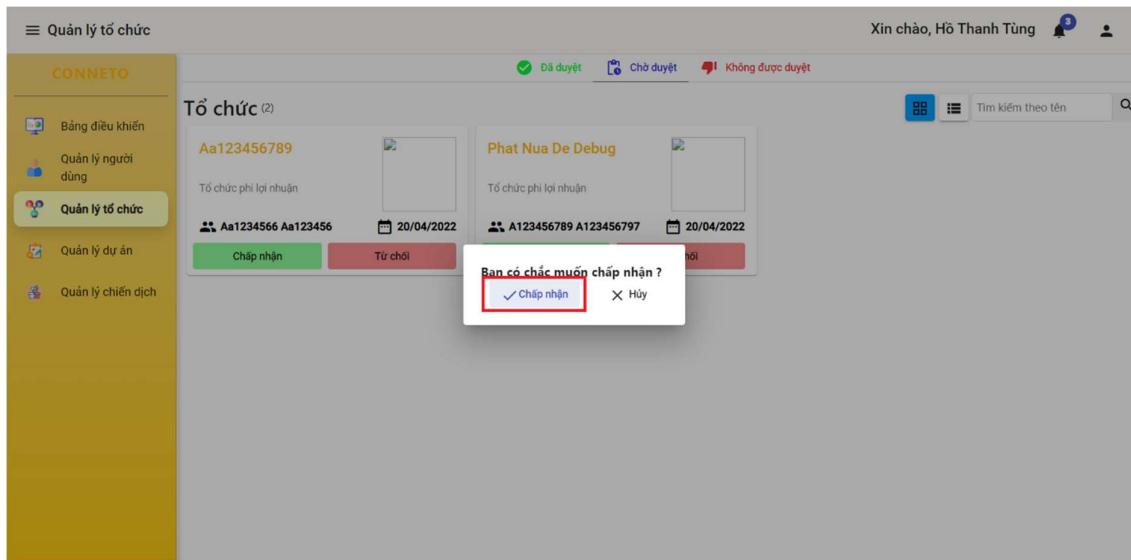


Figure 78 – Approve organization (step 3)

<Admin> Reject campaign

Step 1: Click on the “Chờ duyệt” tab:

Xin chào, Hồ Thanh Tùng

Tổ chức (19)

- Quý Từ Thiện & BTXH Trắng Khuyết
- NHÓM CỘNG TÁC VIÊN MÔI TRƯỜNG VIỆT NAM
- AIESEC in Vietnam
- Quỹ Vì Tâm Võc Việt
- QUÝ BÁO TRỢ THỦ CUNG SÀI GÒN
- VIỆN NGHIÊN CỨU QUẢN LÝ PHÁT TRIỂN BỀN VỮNG
- Sức mạnh 2000
- Tập đoàn FLC
- Quỹ Sông
- CHICKEN MINDS
- Đoàn Thanh Niên Cộng Sản Hồ Chí Minh
- Tổ chức VinaCapital Foundation (VCF)

Bảng điều khiển

Quản lý người dùng

Quản lý tổ chức

Quản lý dự án

Quản lý chiến dịch

Đã duyệt

Chờ duyệt

Không được duyệt

Tìm kiếm theo tên

Figure 79 – Reject organization (step 1)

Step 2: Click on the “Từ chối” button

Xin chào, Hồ Thanh Tùng

Tổ chức (2)

- Aa123456789
- Phat Nua De Debug

Bảng điều khiển

Quản lý người dùng

Quản lý tổ chức

Quản lý dự án

Quản lý chiến dịch

Chấp nhận

Từ chối

Chấp nhận

Từ chối

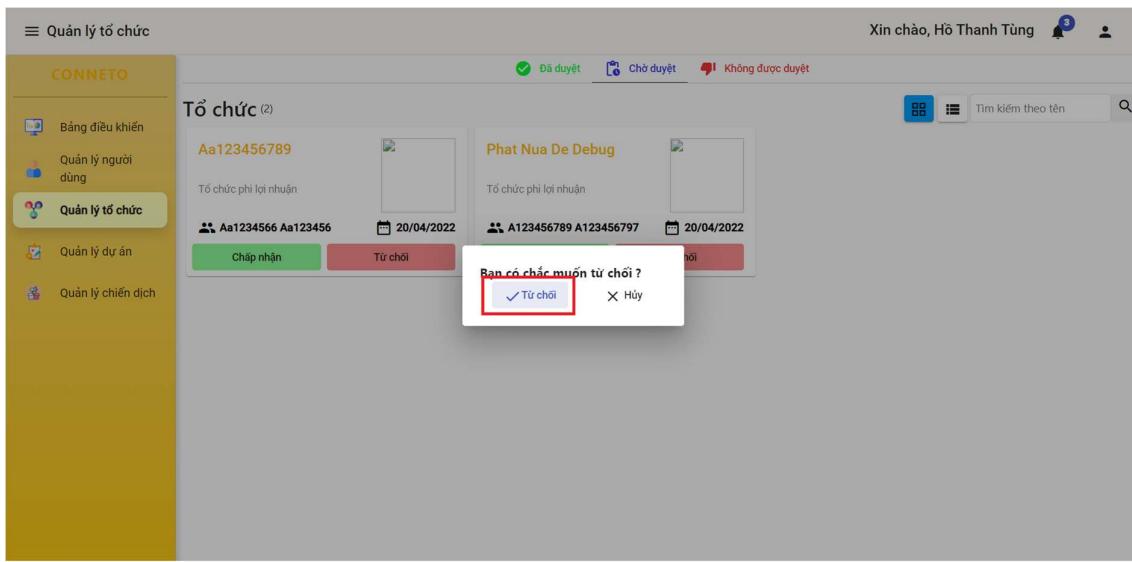
Đã duyệt

Chờ duyệt

Không được duyệt

Tìm kiếm theo tên

Figure 80 – Reject organization (step 2)



Step 3: Click on the “Từ chối” confirm button

<Organization Manager> Create organization

Step 1: Click on the “Tạo tổ chức” button

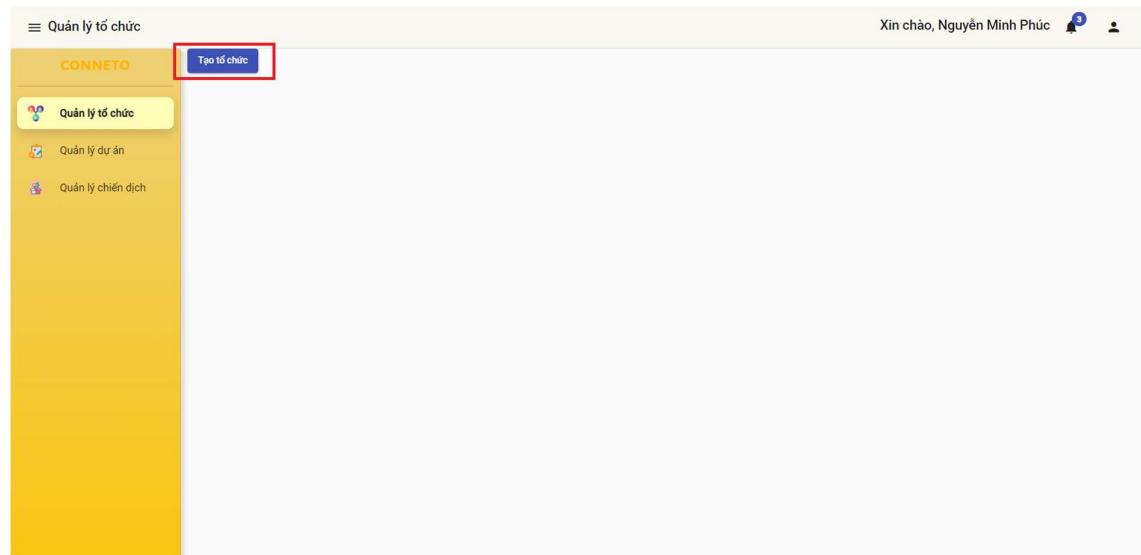


Figure 82 – Create organization (step 1)

Step 2: Enter valid input

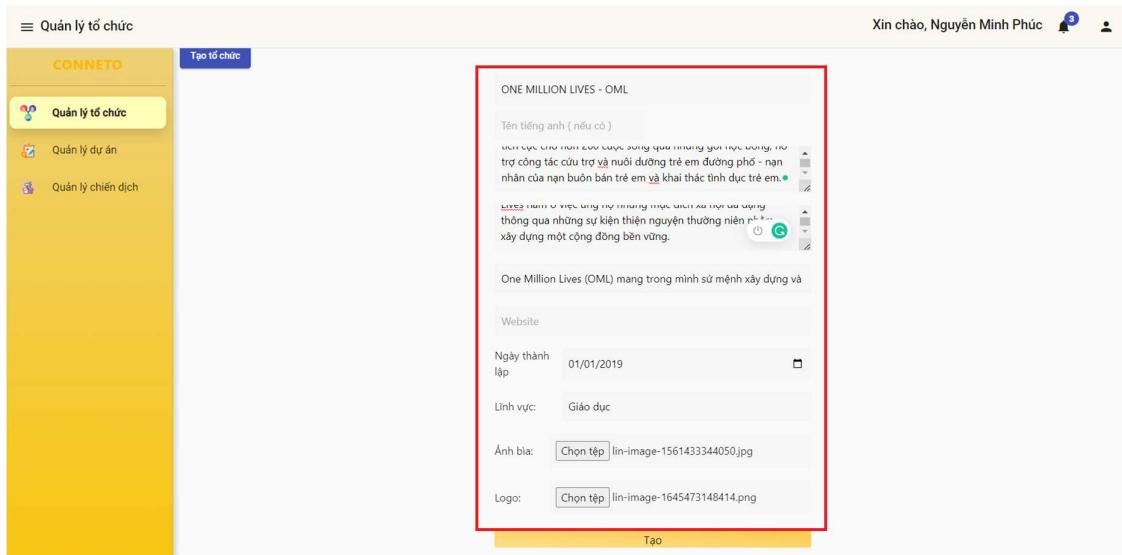


Figure 83 – Create organization (step 2)

Step 3: Click on the “Tạo” button

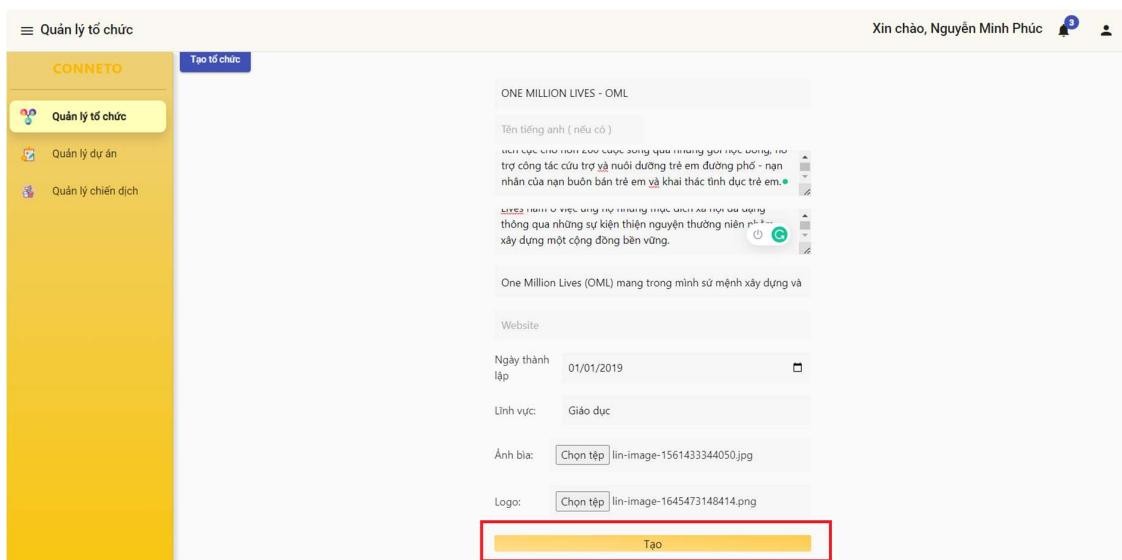


Figure 84 – Create organization (step 3)

<Organization Manager> Delete organization

Step 1: Click on the specific card item

Xin chào, Hồ Thanh Tùng

Tổ chức (19)

Quỹ Từ Thiện & BTXH Tràng Khuyết

NHÓM CỘNG TÁC VIÊN MÔI TRƯỜNG VIỆT NAM

AIESEC in Vietnam

Quỹ Vì Tầm Vóc Việt

QUÝ BÁO TRỢ THỦ CUNG SÀI GÒN

VIỆN NGHIÊN CỨU QUẢN LÝ PHÁT TRIỂN BỀN VỮNG

Sức mạnh 2000

Tập đoàn FLC

Quỹ Sông

CHICKEN MINDS

Đoàn Thanh Niên Cộng Sản Hồ Chí Minh

Tổ chức VinaCapital Foundation (VCF)

Dãy duyệt Chờ duyệt Không được duyệt

Tim kiếm theo tên

Figure 85 – Delete organization (step 1)

Step 2: Click “Xóa” button

CONNETO

Quản lý tổ chức

Quản lý dự án

Quản lý chiến dịch

SUGAR
since 2008

Thông tin Dự án Chiến dịch

SUGAR VIETNAM

Được tạo bởi SUGAR Vietnam Ngày thành lập 01/06/2008

Tổ chức phi lợi nhuận

Giới thiệu tổ chức: SUGAR Vietnam là một tổ chức phi lợi nhuận được thành lập vào 2008 bởi các du học sinh Việt Nam tại Singapore. Chúng tôi hoạt động với mục đích giúp đỡ những trẻ em có hoàn cảnh khó khăn, trẻ em nhiễm HIV/ AIDS, trẻ em mắc khuyết có cơ hội phát triển tốt hơn.

Tầm nhìn của tổ chức: Chúng tôi giúp đỡ trẻ em có hoàn cảnh khó khăn tái hòa nhập cộng đồng và lan tỏa tinh thần thiện nguyện đến giới trẻ.

Nhiệm vụ của tổ chức: Chúng tôi nâng cao kiến thức, vun đắp những giá trị tinh thần, và phát triển kỹ năng mềm cho trẻ em có hoàn cảnh khó khăn. Thông qua đó, chúng tôi mang lại một môi trường làm việc chuyên nghiệp trong những hoạt động cộng đồng và lan tỏa tinh thần thiện nguyện cho các Tỉnh Nguyên Viên.

Website: <https://www.facebook.com/sugarvietnam.org>

Xóa

Figure 86 – Delete organization (step 2)

Step 3: Click on the “Xóa” confirm button

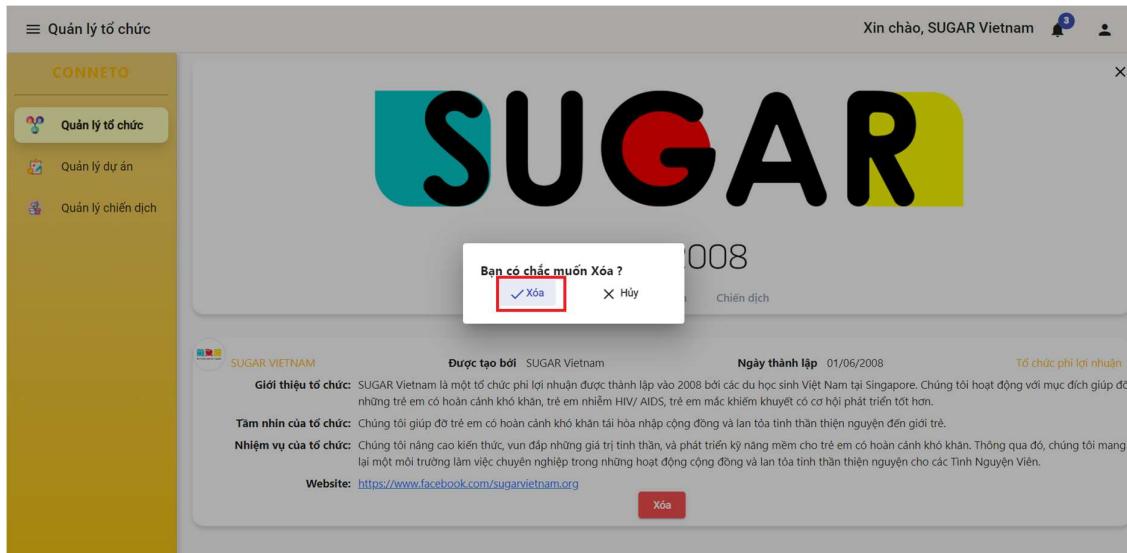


Figure 87 – Delete organization (step 3)

VII. Appendix

1. Glossary

Acronym	Definition
BR	Business Rule
ERD	Entity Relationship Diagram
GUI	Graphical User Interface
UC	Use Case
API	Application Programming Interface
FE	Feature
LI	Limitation
EX	Exclusion
WBS	Work Breakdown Structure
JSON	JavaScript Object Notation
QR	Quick Response
STLC	Software Testing Life Cycle
VCCS	Volunteering Community Connection System
Conneto	Commercial name of the platform VCCS
Organization	Organization is a voluntary organization of members with common purposes, activities related to social work and helping disadvantaged people.
Project	Project is a set of activities related to volunteer work and over a long period of time, run by an organization. A project can contain multiple volunteer campaigns within it.
Recruitment Campaign	Recruitment campaign is a campaign created with the purpose of getting more human resources to serve voluntary social activities.

Donation campaign	Donation campaign is a campaign created with the purpose of raising funds and providing financial relief to difficult situations.
Volunteer	Volunteers are people who give their time to help a nonprofit or a situation in need.
Organization Manager	A representative of the organization that was created on our system.
NPO	A non-profit organization (NPO), also known as a non-business legal entity, non-profit organization or non-profit organization, is a legal entity organized and operated for the collective, public or society, as opposed to a legal entity that acts as a business to generate profits for its owners.
NGO	A non-governmental organization (NGO) is an organization usually established independently of the government. They are usually non-profit organizations and many of them are active in the humanitarian or social sciences; they may also include clubs and associations that provide services to their members and others.

Table 124 – Glossary

2. References

1. **Twilio:** <https://www.twilio.com/docs>
2. **Spring Boot:** <https://spring.io/projects/spring-boot>
3. **Angular:** <https://angular.io/docs>
4. **Material Design:** <https://material.io/design>
5. **Flutter:** <https://flutter.dev/docs>
6. **GET:** <https://pub.dev/packages/get>
7. **MoMo:** <https://developers.momo.vn>