



SCIT

School of Computing and Information Technology

CSIT321 - Project

Project Topic: Crowdfunding for the Sick

Topic Code: CSIT-20-S4-01

Design Specification

Version 1.7

19/02/2021

Supervisor: Teo Loo See

Assessor: Mr Premarajan

Group: FYP-20-S4-20

Name	UOW ID	SIM ID	Email
Lek Jing Kai	6737894	10212636	jklek001@mymail.sim.edu.sg
Luong Hong Khanh	6572212	10182540	luong007@mymail.sim.edu.sg
Ng Ming Yao	6342930	10202187	myng013@mymail.sim.edu.sg
Saw Zhe Jian	6738114	10213050	zjsaw002@mymail.sim.edu.sg
Pearlyn Ooi Pei Ling	5711381	10179806	pplooi001@mymail.sim.edu.sg

Table of Contents

Document Control	3
Distribution List	3
Record of Revision	4
Overview	4
Functional Requirement Specification	5
Overview	5
Use Case Diagrams	6
Actor: All Roles	6
Actor: Admin	7
Actor: User	8
Actor: Moderator	9
User Stories	10
Actor: Admin	10
Actor: User	10
Actor: Moderator	11
Use Case Descriptions, Sequence Diagrams & Wireframes	12
Actor: Admin	12
Actor: User	22
Actor: Moderator	61
Future Implementations	63
Actor: User	63
Actor: Moderator	63
Non-Functional Requirements	64
Platform Requirements	64
Design Specification	66
Architecture Diagram	66
Hierarchical Diagram	67
Database Design	68

Document Control

Title	Crowdfunding for the Sick (CFS)
Documentation Name	Design Specification

Owner	Current Version	Last Change On		Approved By
		Date	Time	
Pearlyn Ooi	V1.7	19th February 2021	5PM	Whole Team

Distribution List

Name	Roles
Mr Premarajan	Assessor
Teo Loo See	Supervisor
Saw Zhe Jian	Team Leader & Backend Developer
Lek Jing Kai	Frontend Developer & UX/UI Lead
Ng Ming Yao	Secretary & Technical Writer
Luong Hong Khanh	Business Manager & Technical Writer
Pearlyn Ooi Pei Ling	Documentation Manager & Technical Writer

Record of Revision

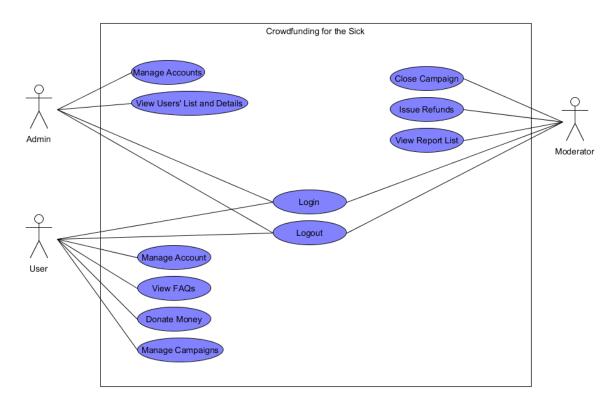
Revision Date	Description	Section Affected	Changes Made By	Version After Revision
11 th January 2021	1 st draft of the document	Entire Document	Pearlyn Ooi	V0.1
13 th January 2021	Update Sequence	User &	Ng Ming Yao	V0.2
	Diagrams	Moderator		
14 th January 2021	Add in Use Case	User	Ng Ming Yao	V0.3
	Descriptions			
15 th January 2021	Add in Sequence	User	Hong Khanh	V0.4
	Diagrams			
18 th January 2021	Add in Wireframes	Admin, User &	Pearlyn Ooi	V0.5
		Moderator		
18 th January 2021	Update Use Case Stories	Admin, User &	Pearlyn Ooi	V0.6
		Moderator		
27 th January 2021	Update Use Case	Admin	Ng Ming Yao	V0.7
	Descriptions			
28 th January 2021	Update Use Case	User &	Ng Ming Yao	V0.8
	Descriptions	Moderator		
	Update Week 15 Meeting	Meeting Minutes	Ng Ming Yao	V0.9
	Minutes			
	Add in Test Cases	Admin		V1.0
5 th February 2021	Add in Test Cases	User	Ng Ming Yao	V1.1
	Add in Test Cases	User	Hong Khanh	V1.2
10 th February 2021	Add in Test Cases	User	Pearlyn Ooi	V1.3
	Add in Test Cases	Moderator	Pearlyn Ooi	V1.4
	Add in Database Design	Design	Saw Zhe Jian	V1.5
		Specification		
15 th February 2021	Add in Test Cases / Logs	Test Cases / Logs	Pearlyn Ooi	V1.6
19 th February 2021	Final draft of the	Entire Document	Pearlyn Ooi	V1.7
	document			

Overview

Our business is a non-profit organization in Singapore consisting of a small group of people that wants to help the sick who are fighting a serious disease like cancer, etc. Moreover, they are in need for money for their medical treatment. Treatment for these diseases will cost a fortune for the patients as it requires long term treatment and it might become a heavy burden for them and their family members. Therefore, we wish to develop and host a website with the aim of supporting patients to support their treatment cost starting from Singapore and then expanding to all the needy around the world in near future by fundraising donations through our platform.

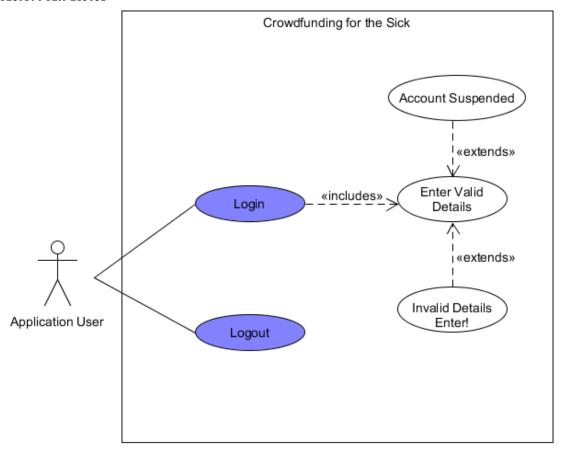
Functional Requirement Specification

Overview

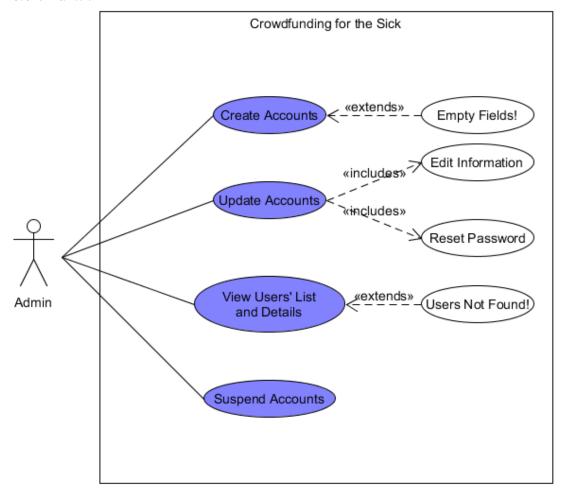


Use Case Diagrams

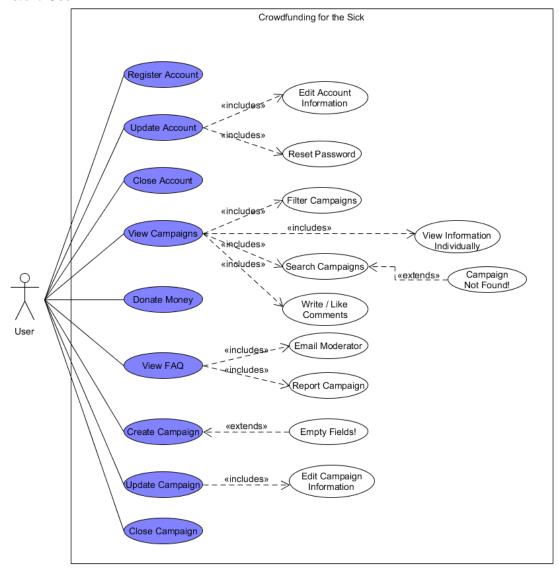
Actor: All Roles



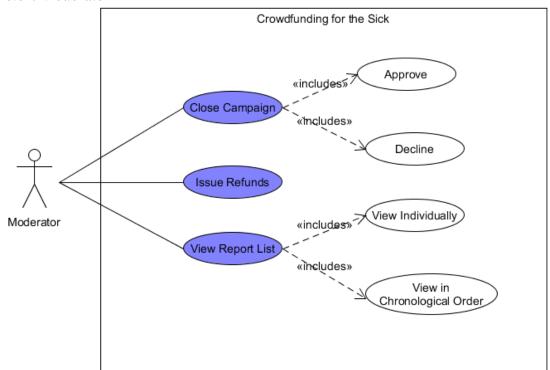
Actor: Admin



Actor: User



Actor: Moderator



User Stories

Actor: Admin

S/No.	Descriptions
1	As an Admin, I want to be able to create different users' account so that I can test
	the system.
2	As an Admin, I want to be able to retrieve the list of all users' account so that I can
	keep track of the number of users on the learning platform and view the accounts'
	information.
3	As an Admin, I want to be able to search for a user's account so that I can find the
	user more efficiently and effectively.
4	As an Admin, I want to be able to update an account so that I can help to reset the
	password or change other information if needed.
5	As an Admin, I want to be able to suspend accounts so that I can keep the platform
	safe and regulated.

Actor: User

S/No.	Descriptions				
Suppor	Supporting				
1	As a User, I want to be able to register for an account so that I have the platform				
	privileges, to be able to learn about the different campaigns and help those in need.				
2	As a User, I want to be able to login to my account so that I can access the				
	platform to make donations to raise funds for people struggling with healthcare expenses.				
3	As a User, I want to be able to log out of my account so that I can end my session				
	on the platform.				
4	As a User, I want to update my personal details so that I can keep my information				
	about me up to date.				
5	As a User, I want to view the campaigns without needing to login so that I'm able				
	to understand what this platform is about without forcing me to create an account and login.				
6	As a User, I want to view the campaigns that have ended so that I can see what				
	campaigns have been created in the past.				
7	As a User, I want to be able to view the campaigns I followed so that I can keep				
	track of them easily.				
8	As a User, I want to be able to view the campaigns I have created so that I can				
	keep track of them easily.				
9	As a User, I want to donate money through a payment platform on the website so				
	that I can support the campaigns.				
10	As a User, I wish to filter through the campaigns so that I can view campaigns that				
	are relevant to a certain tag.				
11	As a User, I want to be able to search for a specific campaign so that I am able to				
	find the campaign that I want to support.				
12	As a User, I want to see the full information about a campaign so that I'm able to				
	understand what the campaign is about.				
13	As a User, I wish to subscribe to a campaign so that I can stay updated about the				
	campaigns I'm interested in.				
14	As a User, I want to be able to share the campaign to social media so that I can				
	increase awareness.				

15	As a User, I want to be able to close my account so that I am no longer associated		
	with the platform.		
16	As a User, I want to be able to leave comments so that I can share my opinion on		
	the platform.		
17	As a User, I wish to email a moderator or write a support ticket so that I the		
	moderator can help me on an existing issue that I currently have.		
18	As a User, I want to report against a campaign if I find that this campaign		
	inadequate or suspicious.		
Organia	Organising		
19	As a User, I want to be able to create a campaign so that I seek financial assistance		
	from users that are willing to support my cause.		

Actor: Moderator

	S/No.	Descriptions	
Ī	1	As a Moderator, I want to be able to view a list of reports so that I can moderate	
		any fraudulent activities or toxic behaviours.	

Use Case Descriptions, Sequence Diagrams & Wireframes

Actor: Admin

1. As an Admin, I want to be able to create different users' accounts so that I can create moderator or admin account if required.

Use Case: Admin Create Accounts ID:	
Stakeholders and Goals:	Admin User – To create account
Description: Admin User can create an account for any user.	
Actors:	Admin
Pre-Condition:	Admin must be logged in
Post-Condition: Admin has created an account for a User, Moderator, or an Admin	
Trigger:	The admin wants to create an account for others

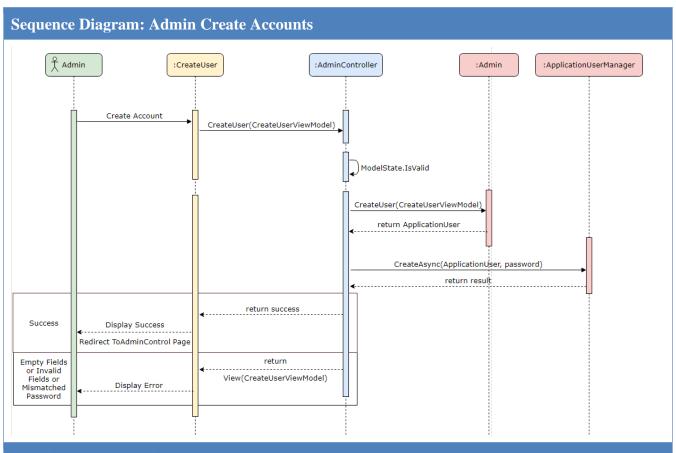
Normal Flow:

- 1. Admin user clicks on the "Admin" button.
- 2. The system displays the list of all users' accounts with their details.
- 3. Admin user clicks the "Create User" button.
- 4. The system displays the Create User form for the Admin.
- 5. Admin user completes the form and clicks the "Create" button.
- 6. The system registers the new user into the system.
- 7. Admin completes the account creation successfully.
- 8. The system redirects back to the "Admin" page.
- 9. End

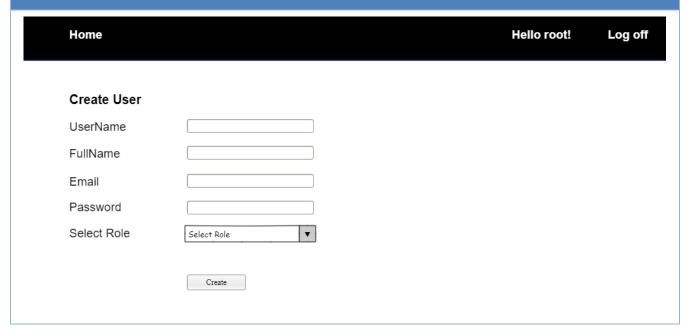
Sub-Flows:	None		
------------	------	--	--

Alternative/Exceptional Flows:

- 5a. Empty fields: The system displays an error message for each empty field and the Admin must complete the fields.
- 5b. Invalid Username: The system displays an error message and the Admin must enter a different username.
- 5c. Invalid Email: The system displays an error message and the User must enter a valid email.
- 5d. Email already exists: The system displays an error message and the Admin must enter another email.
- 5e. Invalid Password: The system displays an error message and the Admin must enter a password that matches the given criteria.
- 5f. Passwords do not match: The system displays an error message and the Admin must match both passwords.

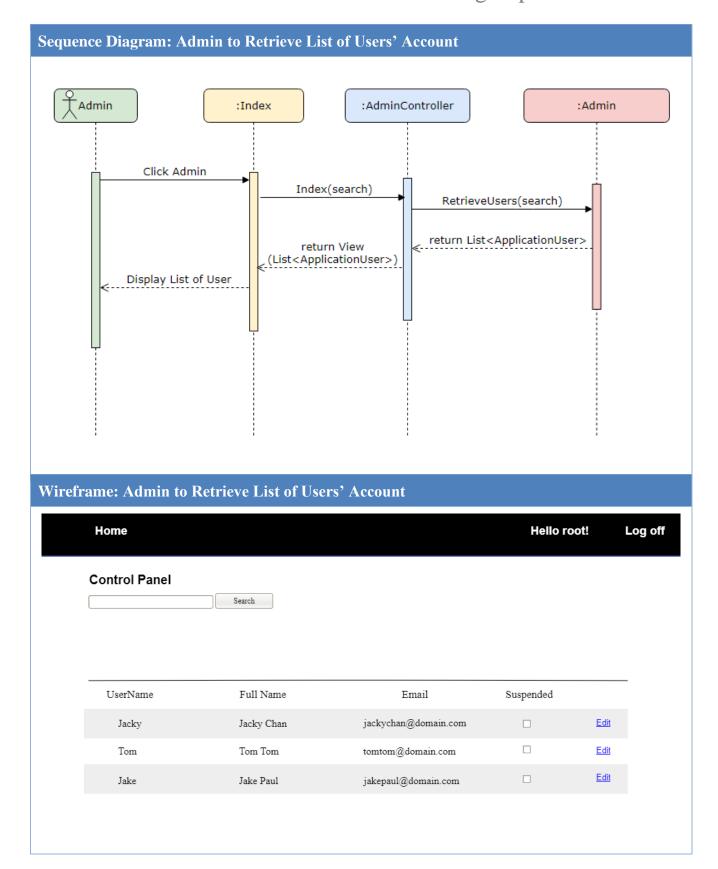


Wireframe: Admin Create Accounts



2. As an Admin, I want to be able to retrieve all the list of all users' accounts so that I can keep track of the number of users on the learning platform and view the accounts' information.

Use Case: Admin to Retrieve List of Users' Account ID: #	
Stakeholders and Goals:	Admin – Wants to view the list of all users' accounts with details
Description:	An Admin wants to view the list of all users' accounts with details so that he/she can keep track of the number of users on the platform.
Actors:	Admin
Pre-Condition:	Admin must be logged in
Post-Condition:	The list of users' accounts with their details is displayed to the Admin
Trigger:	The Admin wants to view the list of all users' accounts.
Normal Flow: 1. The Admin clicks on the "Admin" button. 2. The system displays the list of all users' accounts with their details. 3. End.	
Sub-Flows:	None
Alternative/Exceptional Flows: None	



3. As an Admin, I want to be able to search for a user's account so that I can find the user more efficiently and effectively.

Use Case:	ID: #
Stakeholders and Goals:	Admin – wants to search for a user
Description:	An Admin wants to search for a user in the list of all users' accounts.
Actors:	Admin
Pre-Condition:	Admin must be logged in.
Post-Condition:	The searched user's account is displayed to the Admin.
Trigger:	The Admin opens the list of user accounts and wants to find a specific user quickly.

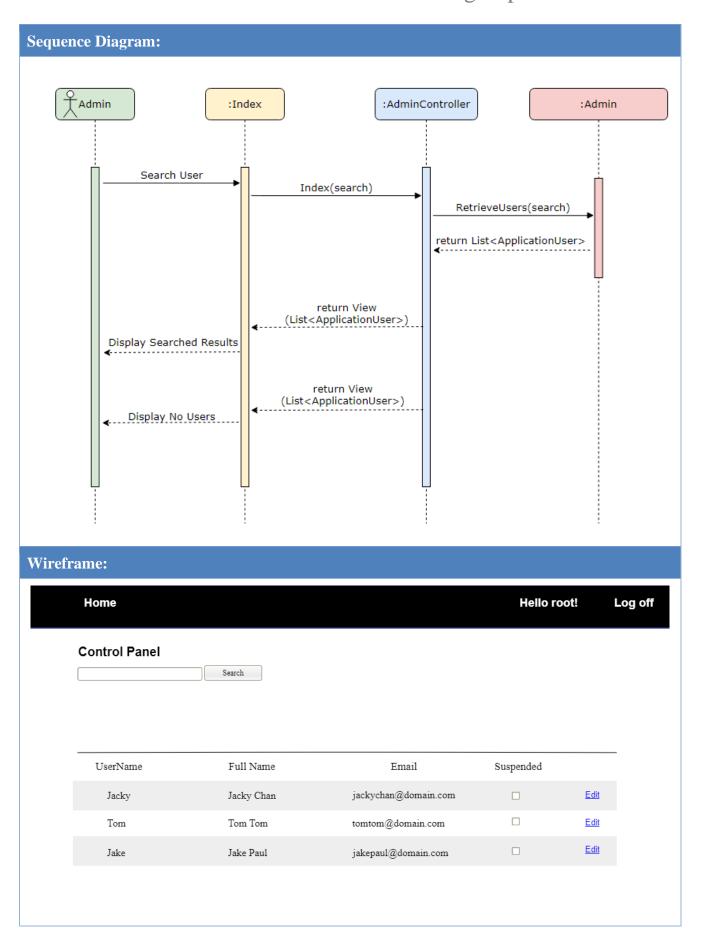
Normal Flow:

- 1. The Admins goes to the top of the list and clicks the search field.
- 2. The Admin fills in the search bar and clicks the "Search" button.
- 3. The system retrieves the information from the search string.
- 4. The system displays the list of the account(s) where the username partially or fully matches the searched string.
- 5. End.

Sub-Flows:

Alternative/Exceptional Flows:

4a. No matching User: The system does not display any user.



4. As an Admin, I want to be able to update an account so that I can help to reset the password or change other information if needed.

Use Case: Admin to Update User's Account ID: #	
Stakeholders and Goals:	Admin – wants to update account information for others
Description:	An Admin wants to update a user's account information or reset a user's password if needed.
Actors:	Admin
Pre-Condition:	Admin must be logged in
Post-Condition:	Admin has updated the information or has reset the password of an account
Trigger:	The User/Moderator requests to reset or update account information

Normal Flow:

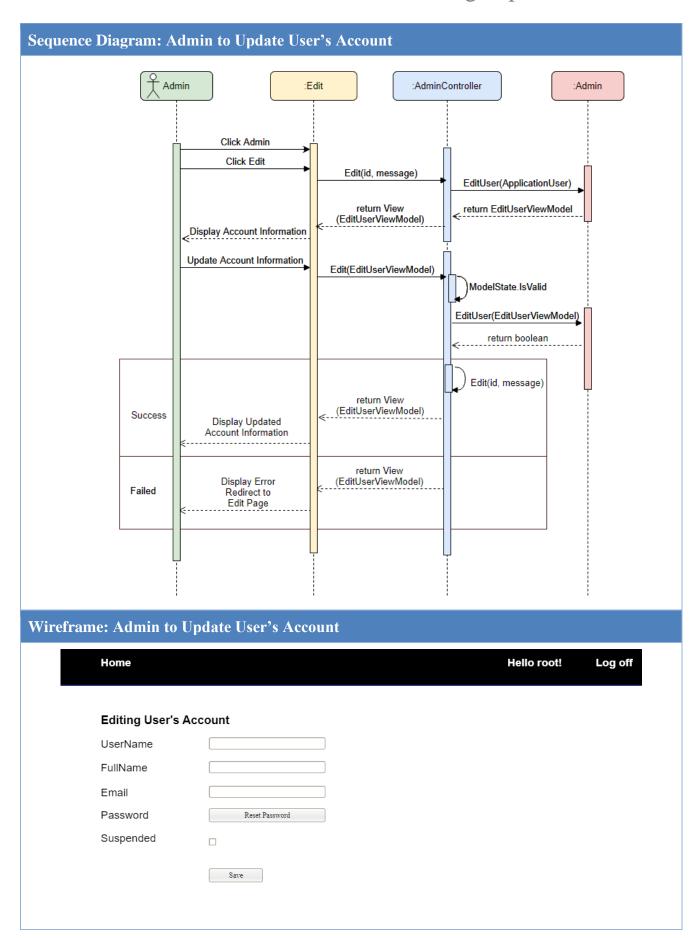
- 1. The Admin clicks on the "Admin" button.
- 2. The system displays the list of all users' accounts.
- 3. The Admin clicks on "Edit" beside the account he/she wishes to update.
- 4. The system displays the selected account's current information with editable fields.
- 5. The Admin updates the form and clicks "Save".
- 6. The system redirects back to the list of all users' accounts.
- 7. End.

Sub-Flows:	 The Admin clicks on the "Admin" button. The system displays the list of all users' accounts.
	3. The Admin clicks on "Edit" beside the account he/she wishes to update.
	4. The system displays the selected account's current information with editable fields.
	5. The Admin clicks on "Reset Password".
	5. The Admin cheks on Reset Password.
	6. The System displays the reset password form.
	7. The Admin completes the form and clicks "Reset password".
	8. The system redirects back to the "Edit" page.
	9. End.
	I.

Alternative/Exceptional Flows:

5a/S7a. Empty fields: The system displays an error message for each empty field and the User Admin has to complete the fields.

- 5b. Invalid Email: The system displays an error message and the User Admin has to enter a valid email.
- 5c. Email already exists: The system displays an error message and the User Admin has to enter another email.



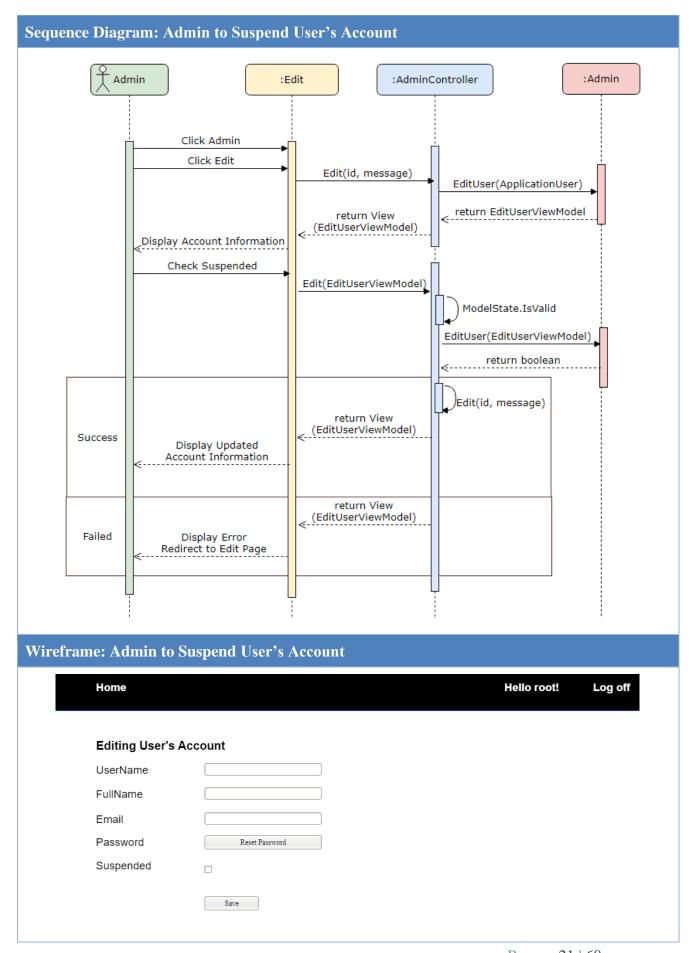
5. As an Admin, I want to be able to suspend accounts so that I can keep the platform safe and regulated.

Use Case: Admin to Suspend User's Account ID: #	
Stakeholders and Goals:	Admin – wants to suspend a user's account
Description:	An Admin wants to suspend a user's account when needed.
Actors:	Admin
Pre-Condition:	Admin must be logged in
Post-Condition:	Admin has suspended an account
Trigger:	The Moderator submits a request to terminate an account due to suspicious activity

Normal Flow:

- 1. The User Admin clicks on the "Admin" button.
- 2. The system displays the list of all users' accounts.
- 3. The User Admin clicks on "Edit" beside the account he/she wishes to suspend.
- 4. The system displays the selected account's current information with editable fields.
- 5. The User Admin checks the "Suspended" checkbox.
- 6. The User Admin clicks on the "Save" button.
- 7. The system redirects back to the list of all users' accounts.
- 8. End

Sub-Flows:	None
Alternative/Exceptional Flows: None	



Actor: User

1. As a User, I want to be able to register for an account so that I have the platform privileges to be able to learn about the different campaigns and help those in need.

Use Case: User to register an account ID: #	
Stakeholders and Goals:	User – wants to register for an account
Description:	A User wants to register for an account to access the crowdfunding platform.
Actors:	User
Pre-Condition:	None
Post-Condition:	User account is created and stored into the database.
Trigger:	User without an account wants to access the platform.

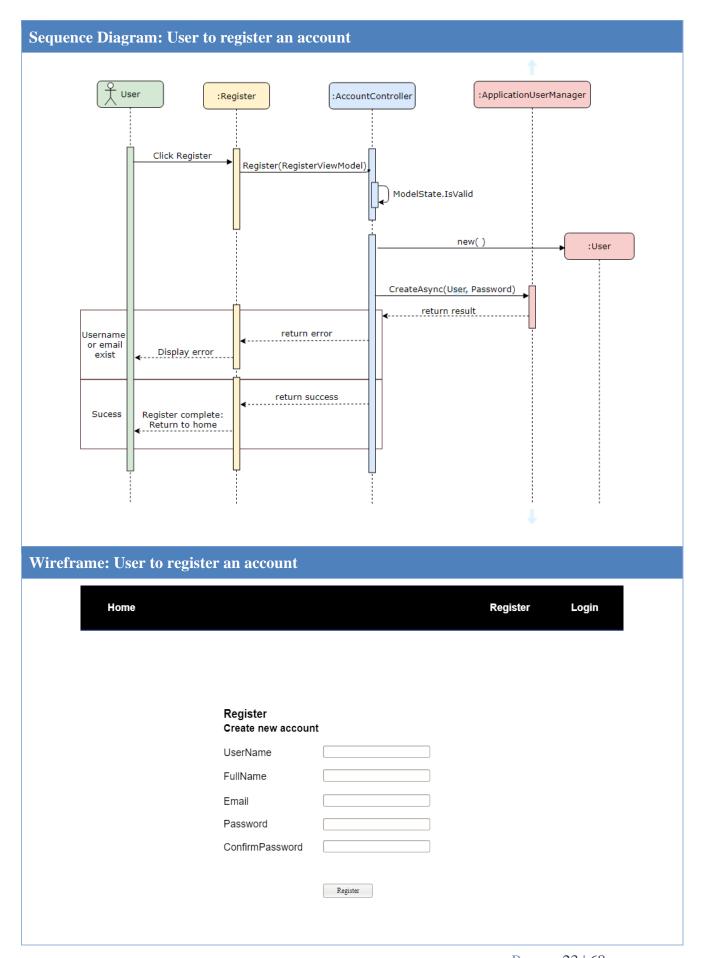
Normal Flow:

- 1. The User clicks the "Register" button.
- 2. The system displays the register form.
- 3. The User completes the form and clicks "Register".
- 4. The system redirects back to the homepage.
- 5. End.

Sub-Flows:	None
-------------------	------

Alternative/Exceptional Flows:

- 3a. Empty fields: The system displays an error message for each empty field and the User has to complete the fields.
- 3b. Invalid Username: The system displays an error message and the User has to enter a different username.
- 3c. Invalid Email: The system displays an error message and
- the User has to enter a valid email.
- 3d. Email already exists: The system displays an error message and
- the User has to enter another email.
- 3e. Invalid Password: The system displays an error message
- and the User has to enter a password that matches the given criteria.
- 3f. Passwords do not match: The system displays an error message and the User have to match both passwords.



2. As a User, I want to be able to log in to my account so that I can access the platform to make donations to raise funds for people struggling with healthcare expenses.

Use Case: User Login to the Platform ID: #	
Stakeholders and Goals:	User – wants to log in to the platform.
Description:	A User wants to log in to the crowdfunding platform so that he/she can create, donate to or share a campaign.
Actors:	User
Pre-Condition:	User must have a registered account
Post-Condition:	User is logged in to the platform
Trigger:	The User opens up the platform and wants to log in

Normal Flow:

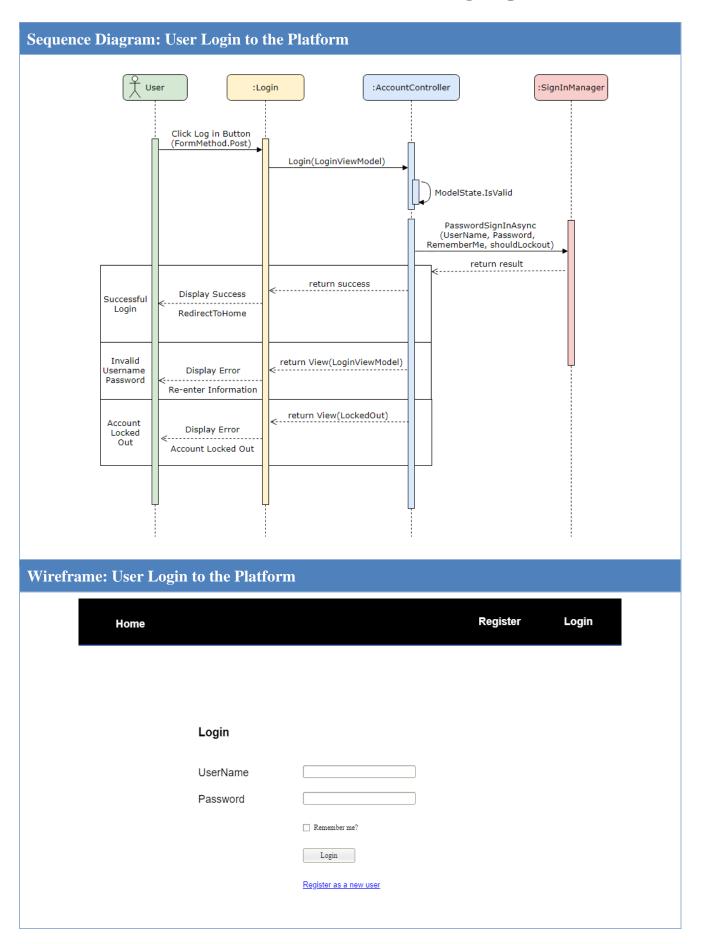
- 1. The User clicks the "Register" button.
- 2. The system displays the login page.
- 3. The User enters his username and password and clicks login.
- 4. The system logs the User in redirects back to the homepage.
- 5. End.

Sub-Flows:	None
-------------------	------

Alternative/Exceptional Flows:

2a Username or Password is not found: The system displays an error message and the User has to enter the correct username or password.

2b Account is suspended: The User is unable to log in unless the Admin lifts the suspension.



3. As a User, I want to be able to log out of my account so that I can end my session on the platform.

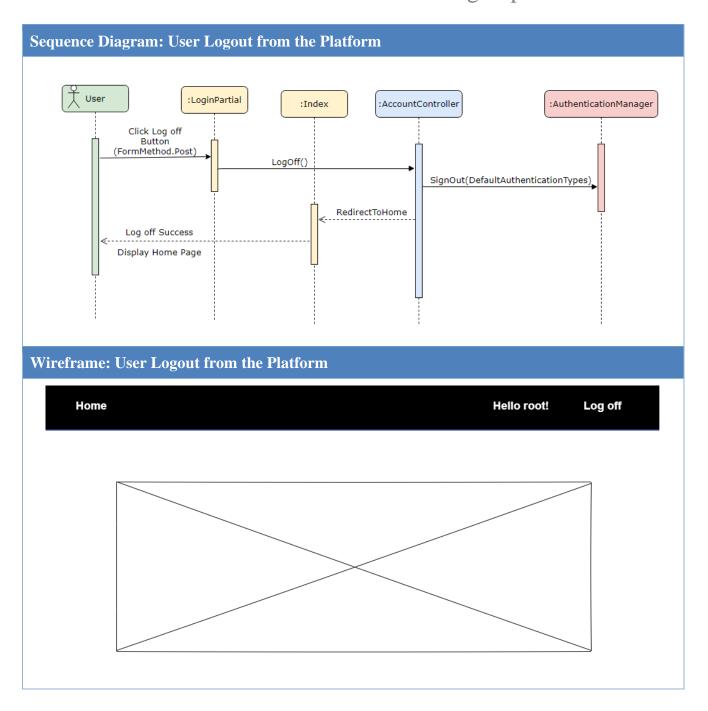
Use Case: User Logout from the Platform ID: #	
Stakeholders and Goals:	User – wants to logout from the platform
Description:	A User wants to end the session after using the crowdfunding platform.
Actors:	User
Pre-Condition:	User must be logged in
Post-Condition:	User is logged out of the platform
Trigger:	The User wants to log out

Normal Flow:

- 1. The User clicks on the "Logout" button.
- 2. The system authenticates the logout.
- 3. The system logs the User out.
- 4. The system redirects to the default homepage of the platform.
- 5. End.

Sub-Flows:	None

Alternative/Exceptional Flows: None



4. As a User, I want to update my personal details so that I can keep my information about me up to date.

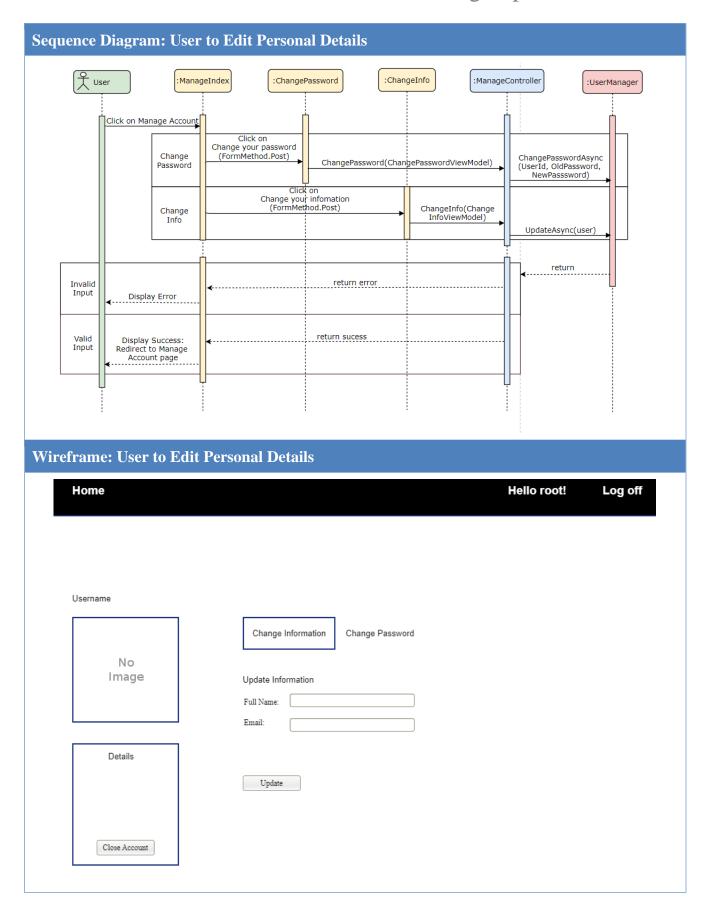
Use Case: User to Edit Personal Details ID: #	
Stakeholders and Goals:	User - wants update personal details
Description:	A User wants to update his personal details on the platform.
Actors:	User
Pre-Condition:	User must be logged in
Post-Condition:	Users' details are updated.
Trigger:	Users want to update personal details.

Normal Flow:

- 1. The User clicks on the "Edit Profile" button.
- 2. The System redirects the user to edit profile pages.
- 3. The User changes all needed fields.
- 4. The User clicks on the "Confirm" button.
- 5. A pop-up screen shows that the details have been saved.
- 6. The System redirects the user back to the campaign main page with the campaign latest news shown.
- 7. End.

Sub-Flows:	 The User clicks on the username dropdown list. The system displays the dropdown list. The User clicks on the "Profile Information" button. The system redirects the user to edit profile pages. The User clicks on the "Change Password" tab. The system displays the "Change Password" form. The User changes all needed fields and clicks on the "Change Password" button. The system redirects back to the update information tab and displays a message that shows that the details have been saved.
	9. End.

Alternative/Exceptional Flows: None



5. As a User, I want to view the campaigns without needing to login so that I'm able to understand what this platform is about without forcing me to create an account.

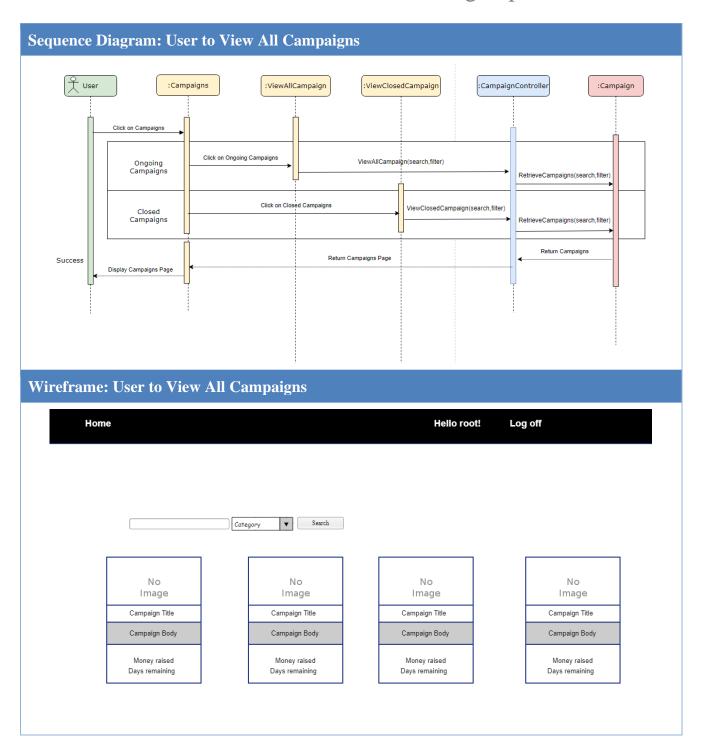
Use Case: User to View All Campaigns ID: #	
Stakeholders and Goals:	User - wants view campaigns without log in into the platform.
Description:	A User wants to view campaigns on the platform without having an account on the platform.
Actors:	User
Pre-Condition:	None
Post-Condition:	Users viewed the campaigns.
Trigger:	Users want to view campaigns on the platform without logging in.

Normal Flow:

- 1. The User enters the platform through a link.
- 2. The System redirects the user to the website.
- 3. The User clicks on the Campaign button at the navbar menu.
- 4. The User then clicks on Ongoing campaigns.
- 5. The User is redirected to View All Ongoing Campaigns.
- 6. End.

Sub-Flows:	None

Alternative/Exceptional Flows: None



6. As a User, I want to view the campaigns that have ended so that I can see what campaigns have been created in the past.

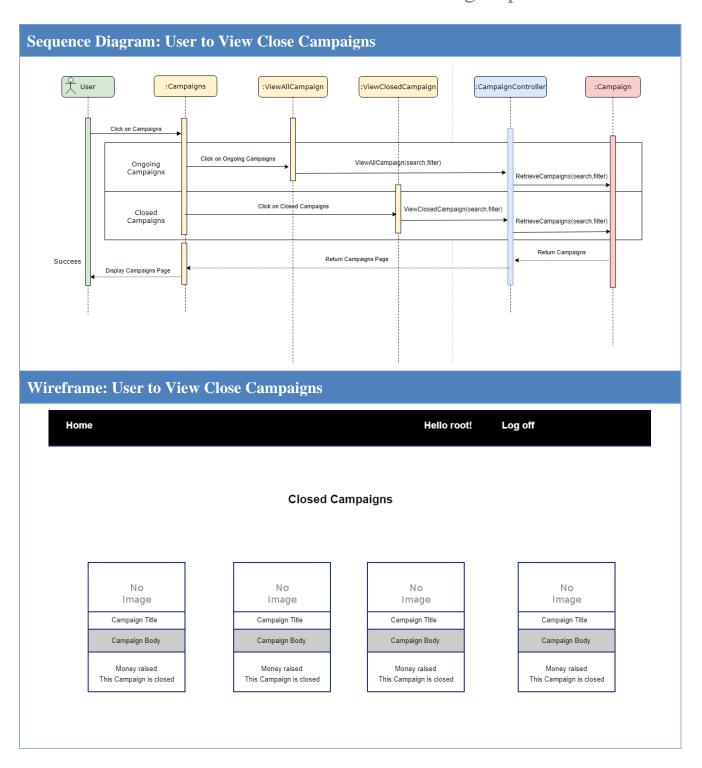
Use Case: User to View Close Campaigns ID: #		
Stakeholders and Goals:	User – want to view past campaigns	
Description:	A User wants to view past campaigns that have ended.	
Actors:	User	
Pre-Condition:	User must be logged in	
Post-Condition:	User viewed past campaigns	
Trigger:	User want to view past campaigns	
Normal Flow: 1. The User clicks on the "Campaigns" dropdown list. 2. The system shows the dropdown list. 3. The User clicks on the "Closed Campaigns" button. 4. The system redirects to the closed campaigns page. 5. End.		

Alternative/Exceptional Flows: None

Sub-Flows:

None

Page 32 | 68



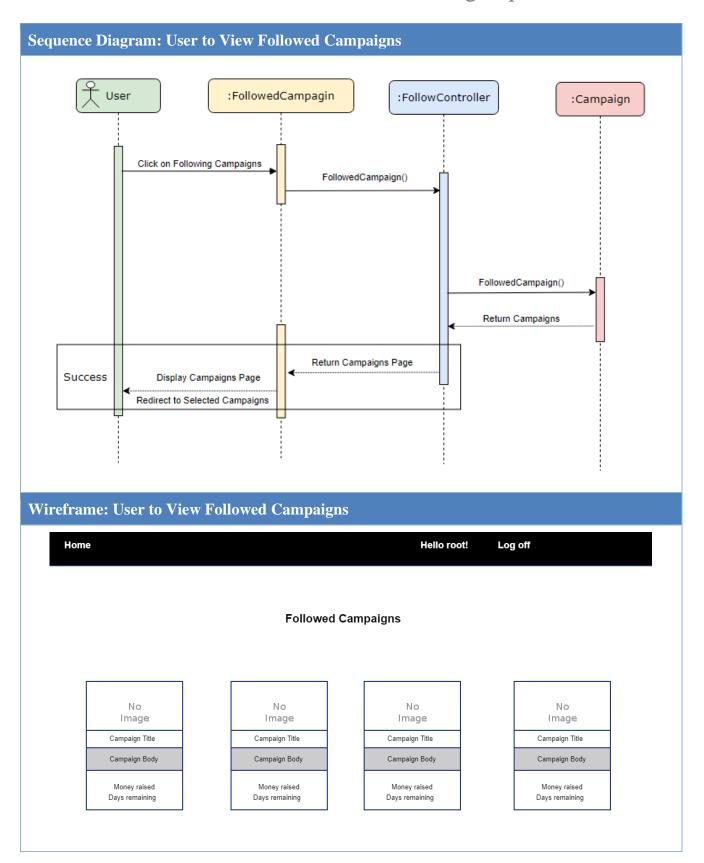
7. As a User, I want to be able to view the campaigns I followed so that I can keep track of them easily.

Use Case: User to View Followed Campaigns ID: #	
Stakeholders and Goals:	User – want to keep track of followed campaigns
Description:	A User wants to view followed campaigns to keep track of them easily.
Actors:	User
Pre-Condition:	User must be logged in
Post-Condition:	User viewed followed campaigns
Trigger:	User want to view followed campaigns to keep track easily.

Normal Flow:

- 1. The User clicks on the username dropdown list.
- 2. The system displays the dropdown list.
- 3. The User clicks on the "Following Campaigns" button.
- 4. The system redirects the user to following campaigns pages.
- 5. End.

Sub-Flows:	None
Alternative/Exceptional Flows: None	



8. As a User, I want to be able to view the campaigns I have created so that I can keep track of them easily.

Use Case: User to View Created Campaigns ID: #		
Stakeholders and Goals:	User – wants to keep track of campaigns created by themselves	
Description:	A User want to view campaigns created to keep track of them easily.	
Actors:	User	
Pre-Condition:	User must be logged in	
Post-Condition:	User viewed created campaigns	
Trigger:	User want to view campaigns created to keep track easily.	

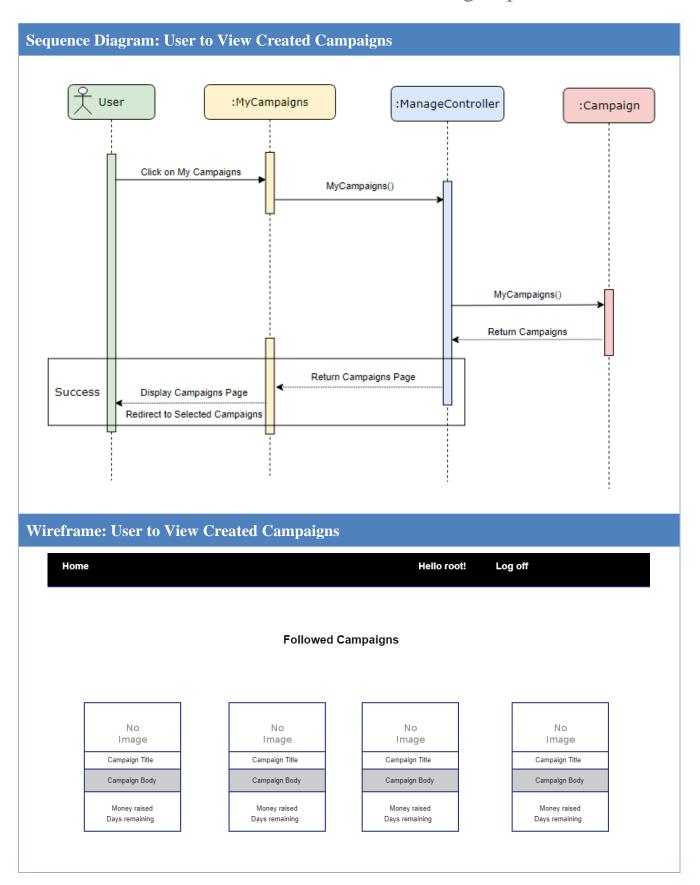
Normal Flow:

- 1. The User clicks on the username dropdown list.
- 2. The system displays the dropdown list.
- 3. The User clicks on the "My Campaigns" button.
- 4. The system redirects the user to created campaigns pages.
- 5. End.

Sub-Flows:	None
------------	------

Alternative/Exceptional Flows:

4. Created Campaign not found: The system redirects to an empty page of created campaigns.



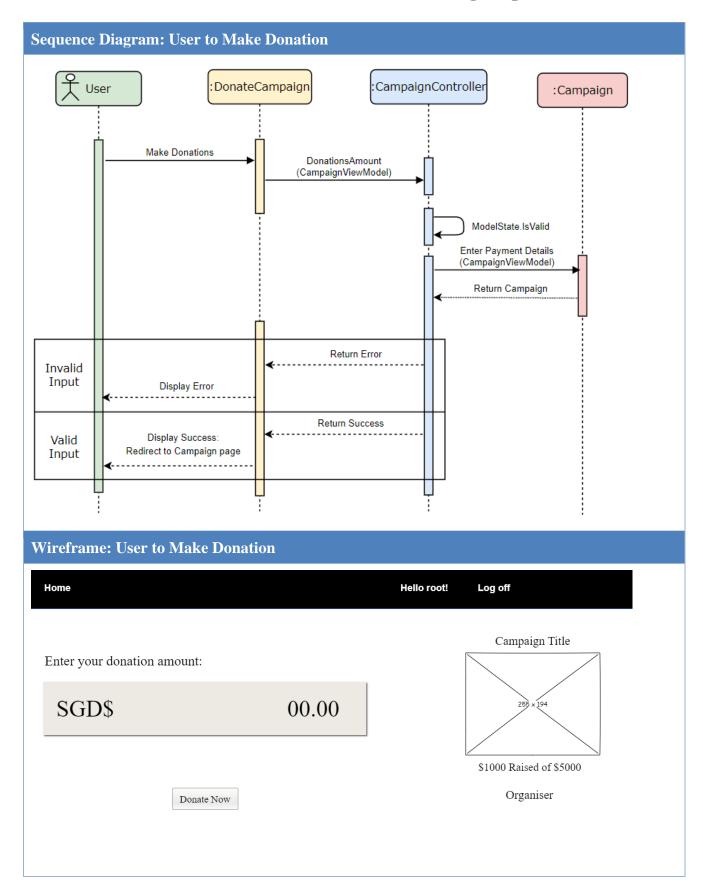
9. As a User, I want to donate money through a payment platform on the website so that I can support the campaigns.

Use Case: User to Make Donation ID: #		
Stakeholders and Goals:	User - wants to donate money to support campaigns.	
Description:	A User wants support campaigns by donating money to them through the platform.	
Actors:	User	
Pre-Condition:	User must be logged in	
Post-Condition:	Users donated money for the campaigns.	
Trigger:	Users want to donate money.	

Normal Flow:

- 1. The User clicks on a campaign he wants to support.
- 2. The system redirects the user to the campaign details page.
- 3. The User clicks on the "Donate" button.
- 4. The system redirects the user to the payment page.
- 5. The User fills in the payment details and clicks on the "Checkout" button.
- 6. The system redirects the user to the Stripe payment page to fill in his card details and clicks on the "Donate" button.
- 7. The system redirects the user back to the campaign main page after payment.
- 8. End.

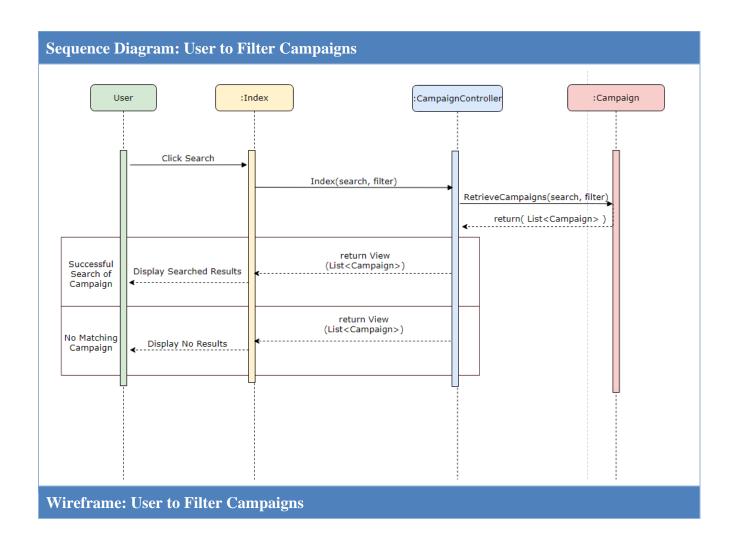
Sub-Flows:	None
Alternative/Exceptional Flows: None	

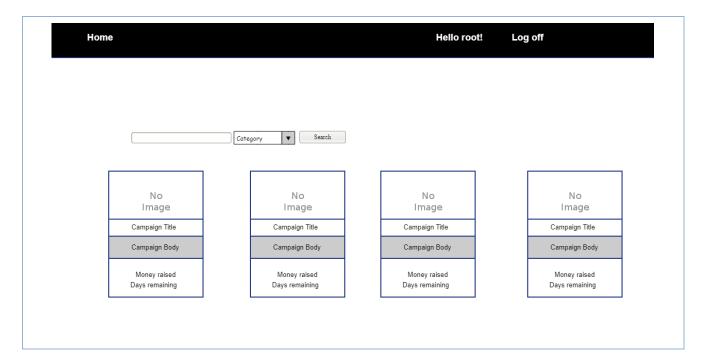


10. As a User, I wish to filter through the campaigns so that I can view campaigns that are relevant to a certain tag.

Use Case: User to Filter Campaigns ID: #		
Stakeholders and Goals:	User - wants to filter campaigns through certain tags.	
Description:	A User wants to filter campaigns by different tags to have a better view of the list of campaigns.	
Actors:	User	
Pre-Condition:	User must be logged in	
Post-Condition:	Campaigns are sorted according to the tag.	
Trigger:	Users want to sort the campaigns.	
Normal Flow: 1. The User clicks on the "All Category" button at the Ongoing Campaign page. 2. The system displays the dropdown list of tags. 3. The User selects on the tag he wants and clicks on the "Search" button. 4. The sorted campaign list is displayed on the platform. 5. End.		
Sub-Flows:	None	

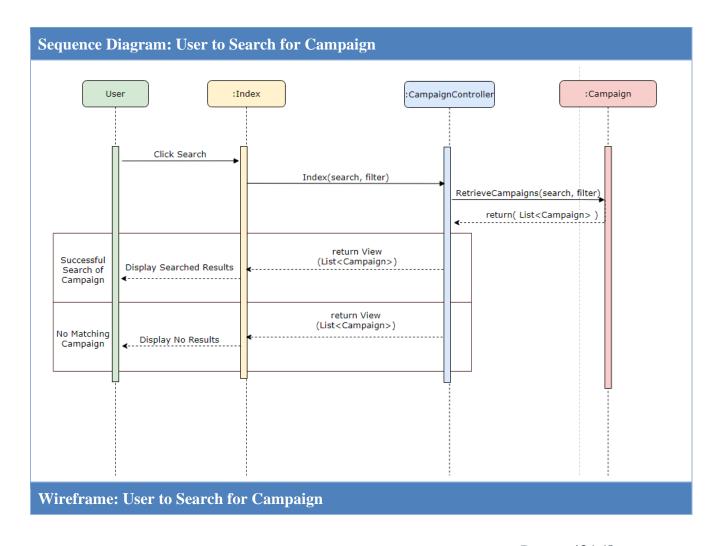
Alternative/Exceptional Flows: None

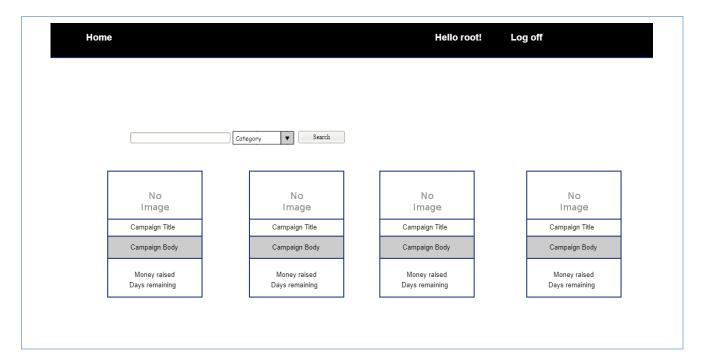




11. As a User, I want to be able to search for a specific campaign so that I am able to find the campaign that I want to support.

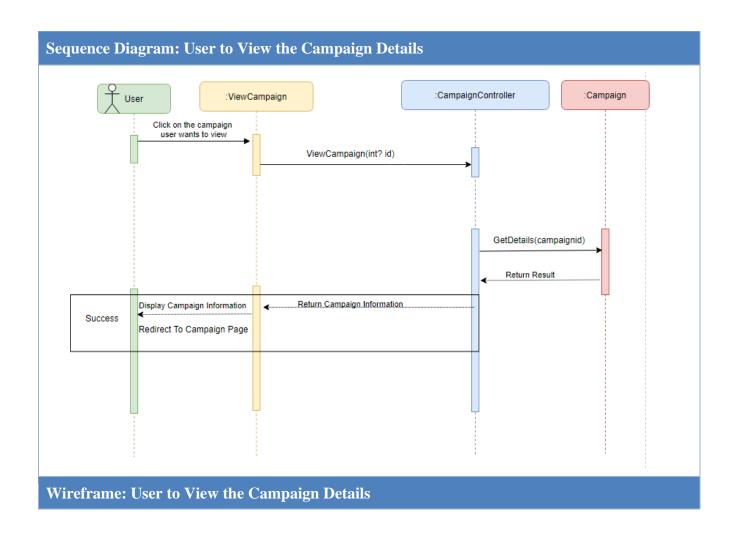
Use Case: User to Search for Campaign ID: #		
Stakeholders and Goals:	User - wants to search for a specific campaign	
Description:	A User wants to search for a specific campaign on the platform through the search engine.	
Actors:	User	
Pre-Condition:	User must be logged in	
Post-Condition:	The specific campaign is shown.	
Trigger:	Users want to search for a campaign.	
 Normal Flow: The User enters the keyword at the search bar in the Ongoing Campaign page and clicks on the "Search" button. The campaigns that are related to the keyword are displayed on the platform. End. 		
Sub-Flows:	None	
Alternative/Exceptional Flows: 4a Campaign is not found: The system displays that the campaign is not found.		

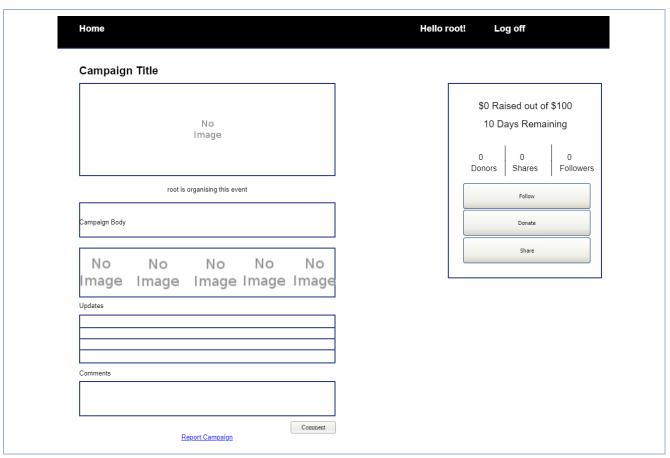




12. As a User, I want to see the full information about a campaign so that I'm able to understand what the campaign is about.

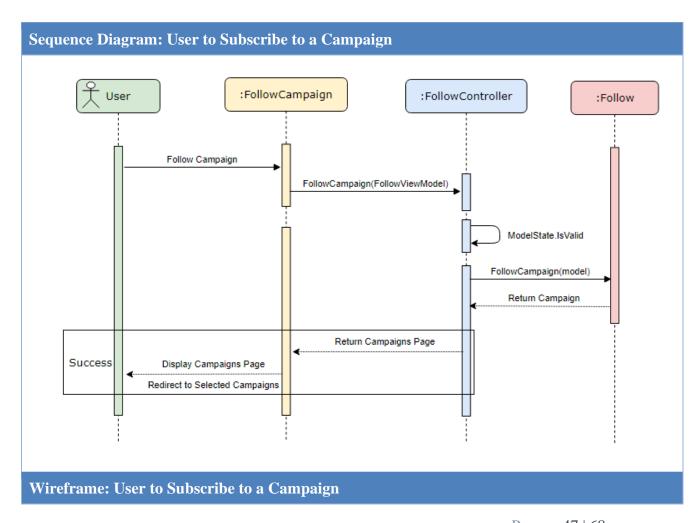
Use Case: User to View the Campaign Details ID: #		
Stakeholders and Goals:	User - wants to see event details	
Description:	A User wants to view the details of a campaign to know more about it.	
Actors:	User	
Pre-Condition:	User must be logged in	
Post-Condition:	The campaign details are shown.	
Trigger:	Users want to view event details.	
Normal Flow: 1. The User clicks on the campaign he wants to view on the Ongoing Campaigns page. 2. The System redirects the user to the campaign detailed page. 3. End.		
Sub-Flows:	None	
Alternative/Exceptional Flows: None		

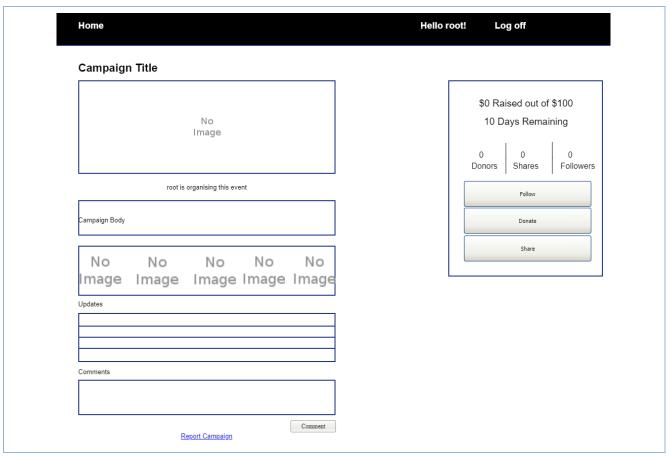




13. As a User, I wish to subscribe to a campaign so that I can stay updated about the campaigns I'm interested in.

campaigns i in morestea in	
Use Case: User to Subscribe to a Campaign ID: #	
Stakeholders and Goals:	User - wants to subscribe to a campaign
Description:	A User wants to subscribe to a campaign they are interested in.
Actors:	User
Pre-Condition:	User must be logged in
Post-Condition:	Users can subscribe to the campaign.
Trigger:	Users want to subscribe to a campaign
Normal Flow: 1. The User clicks on the campaign he wants to view on the Ongoing Campaigns page. 2. The System redirects the user to the campaign detailed page. 3. End.	
Sub-Flows:	None
Alternative/Exceptional Flows: 1a. No "Follow" button available in the campaign detailed page: the user needs to login to the website.	





14. As a User, I want to be able to share the campaign to social media so that I can increase awareness.

Use Case: User to Share a Campaign ID: #		ID: #
Stakeholders and Goals:	User - wants to share a campaign	
Description:	A User wants to share a campaign on social media.	
Actors:	User	
Pre-Condition:	Use must be logged in	
Post-Condition:	Campaign details are shared on social media	
Trigger:	Users want to share a campaign to social media.	

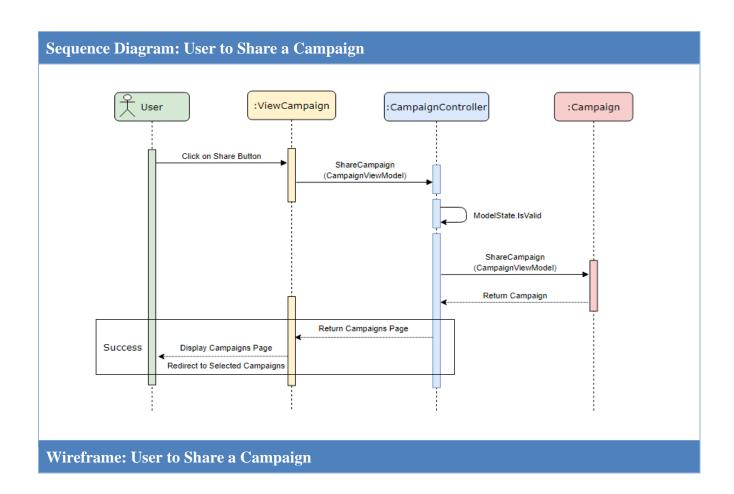
Normal Flow:

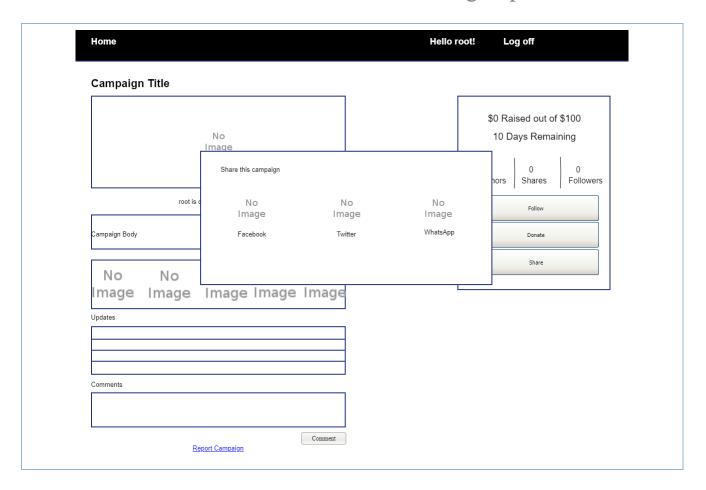
- 1. The User clicks on the "Share" button on the campaign detailed page.
- 2. The system shows a pop-up page that allows the user to choose the social media platform.
- 3. The User selects on one social media.
- 4. The system redirects the user to the social media page to share the campaign.
- 5. The User shares it on his social media.
- 6. The system redirects the user back to the campaign detailed page.
- 7. End.

/. Liu.	
Sub-Flows:	None

Alternative/Exceptional Flows:

2a. Social media not logged in: The user needs to login to his social media account to share the campaign.





15. As a User, I want to be able to close my account so that I am no longer associated with the platform.

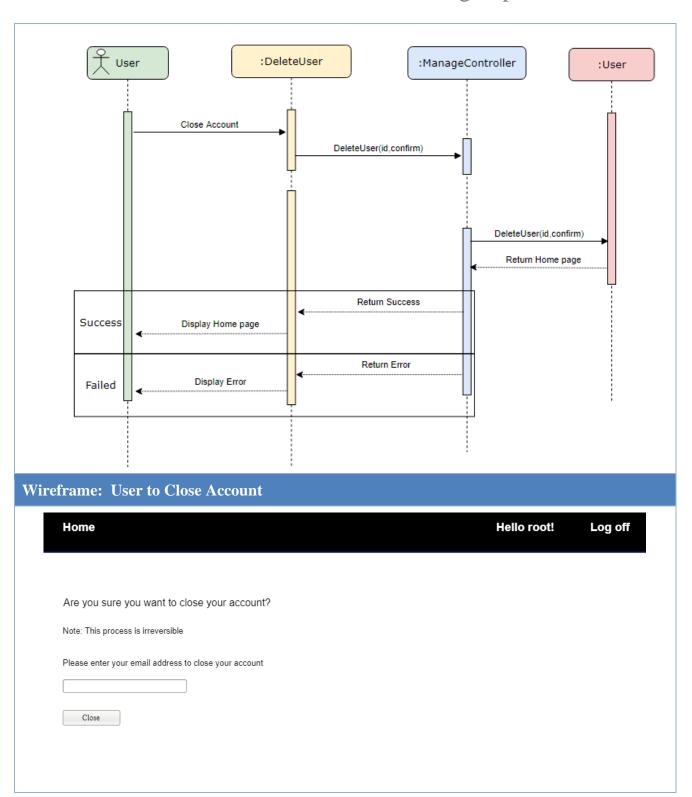
Use Case: User to Close Account ID: #		
Stakeholders and Goals:	User - wants to close the account	
Description:	A User wants to close his/her account for the crowdfunding platform.	
Actors:	User	
Pre-Condition:	User must be logged in User must not have any ongoing campaigns	
Post-Condition:	User closes his/her account successfully.	
Trigger:	User want to close the account	

Normal Flow:

- 1. The User clicks on the "Close Account" button on the Edit Profile page.
- 2. The system redirects the user to the close account form.
- 3. The User enters his email and clicks the "Delete" button.
- 4. The System redirects to the login page.
- 5. End.

Sub-Flows:	None
Alternative/Exceptional Flows:	
3a. User not able to close account as he/she have ongoing campaigns.	

Sequence Diagram: User to Close Account



16. As a User, I want to be able to leave comments so that I can share my opinion on the platform.

Use Case: User to Leave Comments ID: #		ID: #
Stakeholders and Goals:	User - wants to leave comments	
Description:	A User wants to leave comments on the campaign page.	
Actors:	User	
Pre-Condition:	User must be logged in	
Post-Condition:	Comments successfully leave on the campaign page.	
Trigger:	Users want to leave a comment	

Normal Flow:

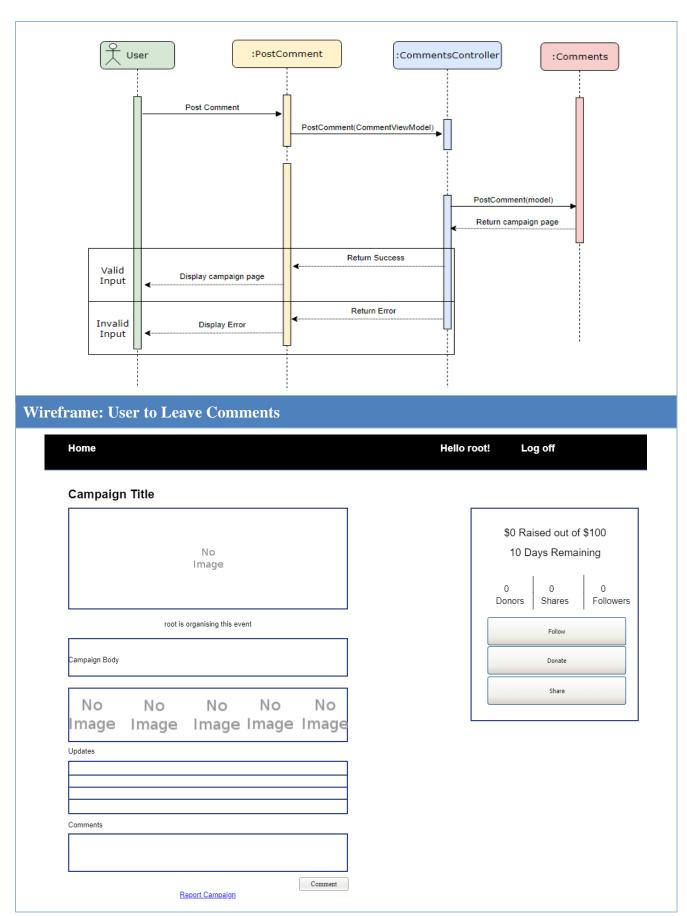
- 1. The User enters his comments in the comment text field in the campaign detailed page and clicks on the "Add Comment" button.
- 2. The system redirects the user back to the campaign detailed page with the comments shown.
- 3. End.

Sub-Flows:	None
------------	------

Alternative/Exceptional Flows:

2a. The user is not able to post comments: the user has to write some words in the comment textbox.

Sequence Diagram: User to Leave Comments



17. As a User, I wish to email a moderator or write a support ticket so that I the moderator can help me on an existing issue that I currently have.

Use Case: User to Email/Write Support Ticket ID: #		D: #
Stakeholders and Goals:	User - want to submit a support ticket	
Description:	A User wants to report an existing issue.	
Actors:	User	
Pre-Condition:	User must be logged in	
Post-Condition:	User's support ticket is submitted.	
Trigger:	Users want to report an issue.	

Normal Flow:

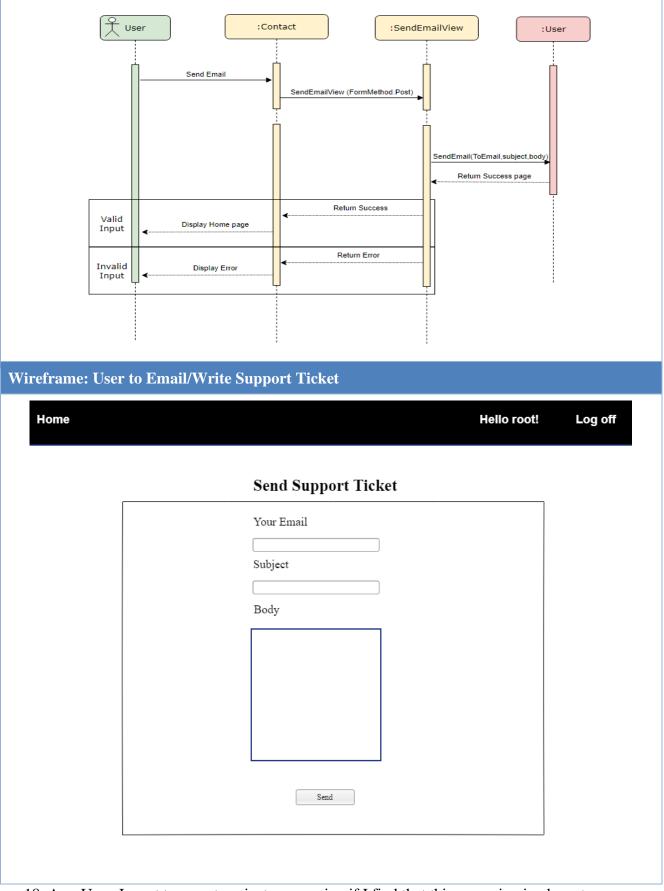
- 1. The User clicks on the "Contact Us" button.
- 2. The system displays the support page.
- 3. The User fills in the support ticket form and clicks the "Send" button.
- 4. The system redirects the user back to the homepage.
- 5. End.

Sub-Flows:	None
-------------------	------

Alternative/Exceptional Flows:

3a. Empty fields: The system displays an error message for each of the empty fields the user has to complete the fields.

Sequence Diagram: User to Email/Write Support Ticket



18. As a User, I want to report against a campaign if I find that this campaign inadequate or suspicious.

Use Case: User to Report Campaigns		ID: #
Stakeholders and Goals:	User - want to report an ongoing campaign	
Description:	A User wants to report a campaign on the platform.	
Actors:	User	
Pre-Condition:	User must be logged in	
Post-Condition:	The report is submitted and waiting to be investigated.	
Trigger:	Users want to report a campaign.	

Normal Flow:

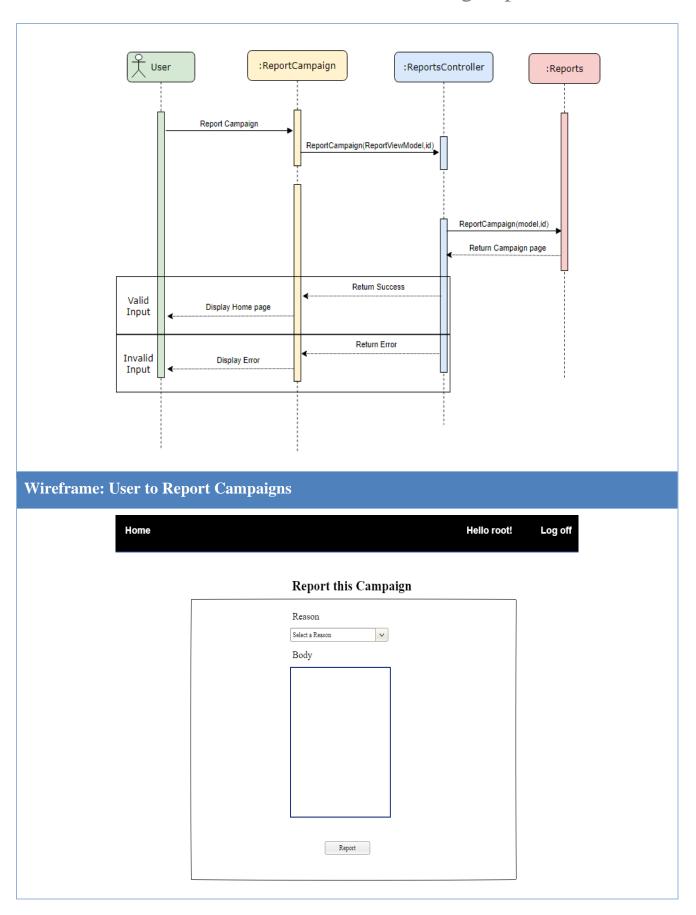
- 1. The User clicks on the "Report campaign" button on the detailed campaign page.
- 2. The system displays the report page.
- 3. The User fills in the report form and clicks the "Report" button.
- 4. The system displayed a message showing that the report has been submitted and redirects the user back to the homepage.
- 5. End.

Sub-Flows:	None
------------	------

Alternative/Exceptional Flows:

3a. Empty fields: The system displays an error message for each of the empty fields the user has to complete the fields.

Sequence Diagram: User to Report Campaigns



19. As a User, I want to be able to create a campaign so that I seek financial assistance from users that are willing to support my cause.

Use Case: User to Create a Campaign	
Stakeholders and Goals:	User - wants to create a campaign
Description:	A User wants to host a campaign on the crowdfunding platform
Actors:	User
Pre-Condition:	User must be logged in
Post-Condition:	Details of campaign submitted to be reviewed
Trigger:	User want to create campaign

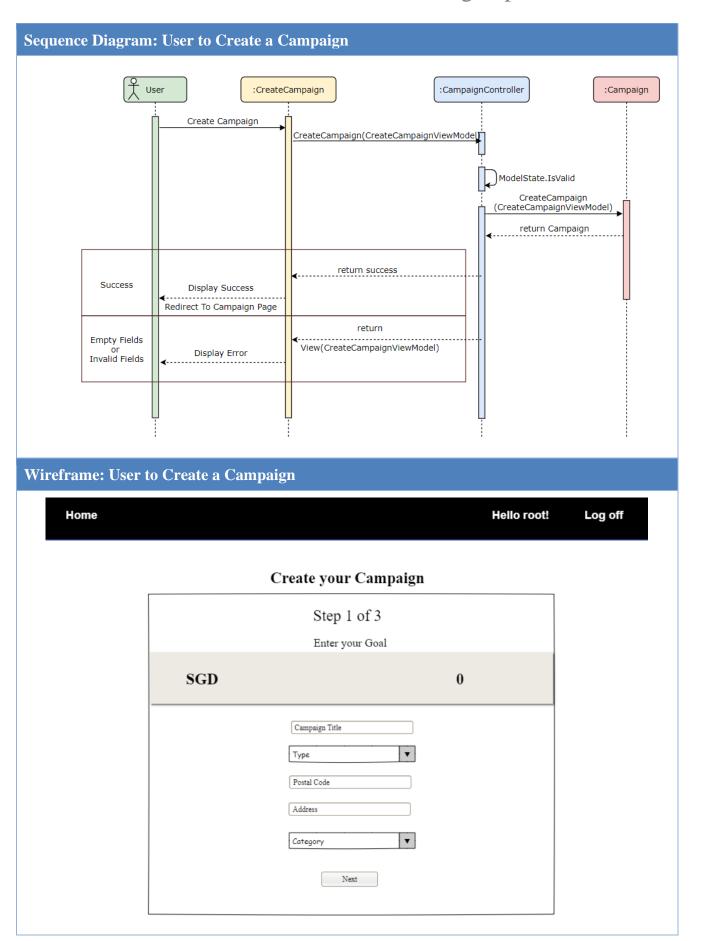
Normal Flow:

- 1. The User clicks on the "Start a Campaign" button.
- 2. The system redirects the User to the create campaign page.
- 3. The User fills in all the required fields in the page.
- 4. The User clicks on the "Submit" button.
- 5. The system redirects to the detailed campaign page of the created campaign.
- 6. End.

Sub-Flows:	None

Alternative/Exceptional Flows:

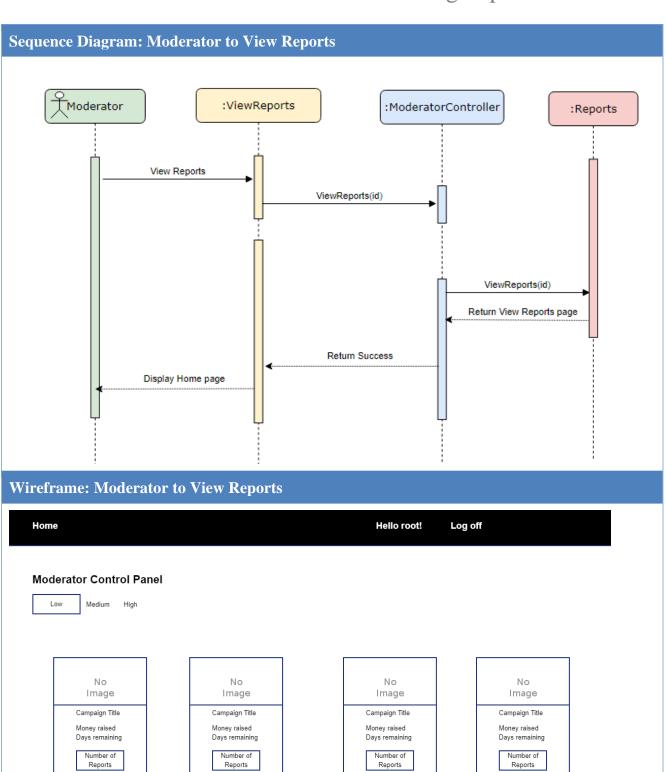
4a. Fields are empty/invalid, return error message



Actor: Moderator

1. As a Moderator, I want to be able to view a list of reports so that I can moderate any fraudulent activities or toxic behaviours.

Use Case: Moderator to View Reports ID: #	
Stakeholders and Goals:	Moderator - view a list of reports
Description:	A Moderator wants to view a list of reports on the platform to prevent inappropriate behaviours from happening.
Actors:	Moderator
Pre-Condition:	Moderator must be logged in
Post-Condition:	Moderator is able to view the reports of the platform.
Trigger:	Moderators want to view a list of reports on the platform.
Normal Flow: 1. The Moderator clicks on the "Moderator" button. 2. The system displays the list of all the campaigns that have been reported. 3. End.	
Sub-Flows:	None
Alternative/Exceptional Flows: None	



Future Implementations

Actor: User

S/No	Descriptions
1	As a User, I want to be able to donate anonymously so that my identity is kept a
	secret.
2	As a User, I want to view a list of the campaigns I've donated so that I'm able to
	see how much I've supported each campaign.
3	As a User, I wish to view a profile of another user so that I can find out information
	about this user.
4	As a User, I wish to view the FAQ (Frequently-Asked-Questions) so that I can clear
	my doubts about the platform or how it works.
5	As a User, I want to be able to like a comment so that I am able to show that I
	sympathise with the person.
6	As a User, I want to be able to edit my campaign so that I can update campaign
	information if necessary.

Actor: Moderator

S/No	Descriptions
1	As a Moderator, I want to be able to send a request to the User Admin to suspend
	an account for improper behaviour or fraudulent activity.

Non-Functional Requirements

Platform Requirements

Usability

Our platform should be user-friendly and easy to use without an in-built user guide so that users can perform their tasks easily. Users should also be able to run the website on multiple devices concurrently and be able to run it on all types of browsers. The website should also be responsive so that it will be mobile-friendly and improve user experience on mobile devices.

Performance

Our platform should always be able to define how fast it is able to respond to a user's action not more than three seconds. This is to ensure the effectiveness and efficiency of the system.

Supportability

Our platform should be capable enough to handle multiple users using the system at once without crashing. The database of the software should be capable enough to store a large number of users without fail.

Reliability

Our online platform should always be up for service. Thus, we should always try to ensure that our service's minimum acceptable uptime is as close to 99.99% as possible and on the other hand keeping the maximum acceptable downtime as low as possible.

Maintainability

Our platform should be easily maintained and allow extension of functionality to this platform. The code written should be neat, structured and well commented with the purpose of the function. Naming for files, classes, functions and variables should be clearly and relevantly. Having any other developer to review the code for maintenance should be easy as the code should be readable to any other developers. The final product should also be extensible and easily modularized in future.

Recoverability

Our platform should ensure that all the operation performed on our website is described in a log before it is performed on your databases. This is done in order to ensure that an operation can be recovered in the event of an untimely platform failure. Backup of the database should also be done in an acceptable interval to ensure that the data is always ready to be recovered in any accident.

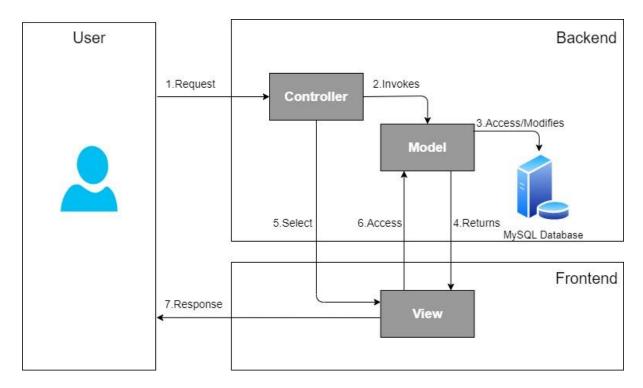
Security

User details such as password, payment information, emails and other personal information should be hashed and encrypted while keeping it safely in the database. Our platform should also try to keep as little information as possible to minimize the damage to the user if any data loss happened. The online platform should also be using secured SSL/TLS protocol and others to ensure that all the activities of users will be secured. Our platform will also not give unauthorized personnel access to important information. The platform will lock users out for

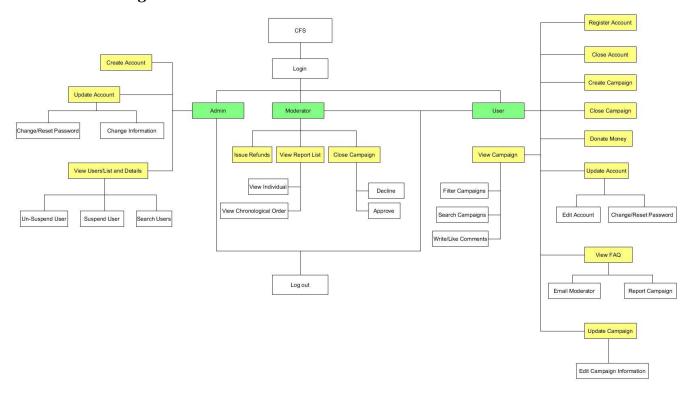
a set period of time if they failed to login within five tries and also to ensure that the user password is strong, it will require registering users to input passwords containing symbols, numbers and letters containing both uppercase and lowercase characters. Furthermore, we should practice all the good practices in security such as the principle of least privilege, having the SSL certificate, installing scanning and monitoring tools, getting a website firewall on our system. All these could help in preventing threats such as SQL injection, cross-site scripting (XSS), Dos/DDoS attack etc.

Architecture Diagram

For the Architecture diagram, we are using the MVC framework which comprises the Model, View and Controller for this project. When the user first accesses the site/page, a HTTP request will be sent to the controller. This controller will then invoke the model to access or modify the database. It will then return a view. The controller will then select this view and this view will access the model to retrieve latest data and this view will be returned to the user and displayed as the webpage which is the frontend.



Hierarchical Diagram



Database Design

