

SOCIAL NETWORK

Team 3 – Software Requirement Specification

Table of Contents

I. Project Report	6
1. Status Report	6
2. Team Involvements	6
3. Issues/Suggestions	6
II. Software Requirement Specification	7
1. Overall Description	7
1.1 Product Overview	7
1.2 Business Rules	7
2. User Requirements	10
2.1 Overview	10
a. Use Case Diagram	10
Admin	10
Guest & Mentee	11
Mentor	12
Staff	13
b. System Actors	13
c. Use Cases List	14
2.2 Use Case Specification	15
2.2.1. Guest	15
2.2.1.1. Sign up	15
2.2.2. Admin	16
2.2.2.1. View dashboard	16
2.2.2.2 View user info	17
2.2.2.3 View mentor info	17
2.2.2.4 View request info	18
2.2.2.5 View Report	19
2.2.2.6 View technology/skill	19
2.2.2.7 Create technology/skill	20
2.2.2.8 Update technology/skill	20

	2.2.2.9 Delete technology/skill	21
	2.2.2.10 Ban user	22
	2.2.2.11 Unban user	23
	2.2.2.12 View Question info	23
	2.2.2.13 Search mentor	24
2.2	2.3. Staff	24
	2.2.3.1 View point	24
	2.2.3.2 Create point	25
	2.2.3.3 Update point transaction	26
	2.2.3.4 Confirm Register Mentor	27
2.2	2.4. Mentor	27
	2.2.4.1. Register as mentor	27
	2.2.4.2. Sign in	28
	2.2.4.3. Sign out	29
	2.2.4.4. Edit profile	30
	2.2.4.5 Call Audio/Video	30
	2.2.4.6. Share screen	31
	2.2.4.7. Code on IDE	32
	2.2.4.8. Matching	32
2.2	2.5. Mentee	33
	2.2.5.1. Sign in	33
	2.2.5.2. Sign out	34
	2.2.5.3. Change password	34
	2.2.5.4. Forgot password	35
	2.2.5.5. View profile info	36
	2.2.5.6. Edit profile info	36
	2.2.5.7. View Dashboard	37
	2.2.5.8. Create Question	38
	2.2.5.9. View list created question	38
	2.2.5.10 Payment Method	39
	2.2.5.11 View list notification	39

2.2.5.12 Join Session room with Mentor	40
2.2.5.13. Rate Mentor	41
2.2.5.14 Report Mentor	42
2.2.5.15 View list favourite Mentor	42
2.2.5.16 View point in transaction	43
2.2.5.17 View point out transaction	44
2.2.5.18 Delete question	44
2.2.5.19 Update question	45
3. Functional Requirements	46
3.1 System Functional Overview	46
a. Screen Flow	46
b. Screen Details	46
c. Screen Authorization	47
d. Non-Screen Functions	49
e. Entity Relationship Diagram	49
3.2 Home	50
a. Sign in	50
b. Manage Skills	51
c. Create Request	52
e. Session	53
f. Matching	54
g. View All Mentor	55
h. View All Category	56
3.3 User Setting	56
a. User Profile	56
b. Register as Mentor	57
c. View All Category	58
3.4 Mentor Info	59
a. Profile CV	59
b. View Comment and Rating of User	59
3.5 Manage Mentee	60

a. Manage Mentee	60
b. View Mentee Info	61
3.6 Manage Mentor	62
a. Manage Mentor	62
b. View Mentor Info	62
3.7 Dashboard	63
a. View List Created Request	63
3.8 Join Session Room	64
a. Share screen	64
b. Call Audio/Video	65
c. Code on IDE	66
a. Chat Box	67
3.6 Register	68
4. Non-Functional Requirements	69
4.1 External Interfaces	69
a. User Interfaces	69
b. Software Interfaces	69
c. Hardware Interfaces	70
d. Communications Interfaces	70
4.2 Quality Attributes	70
a. Usability	70
b. Reliability	71
c. Performance	71
d. Dependability	72
d1. Security	72
d2. Safety	73
e. Supportability	73
f. Design Constraints	73
g. Support Documents	73
5. Other Requirements	73
5.1 Appendix1 - Notification List	73

I. Project Report

1. Status Report

#	Work Item	Status	Notes (Work Item in Details)
1	Overall Description	Completed	
2	User Requirements	Completed	
3	Functional Requirements	Completed	
4	Non-functional requirements	Completed	
5	Other Requirements	Completed	

2. Team Involvements

#	Task	Member	Notes (Task Details, etc.)
1	Overall Description	NghiaHC	
2	User Requirements	NghiaHC	
3	Functional Requirements	NghiaHC, AnhBC, DatLT	
4	Non-functional requirements	NghiaHC	
5	Other Requirements	NghiaHC	

3. Issues/Suggestions

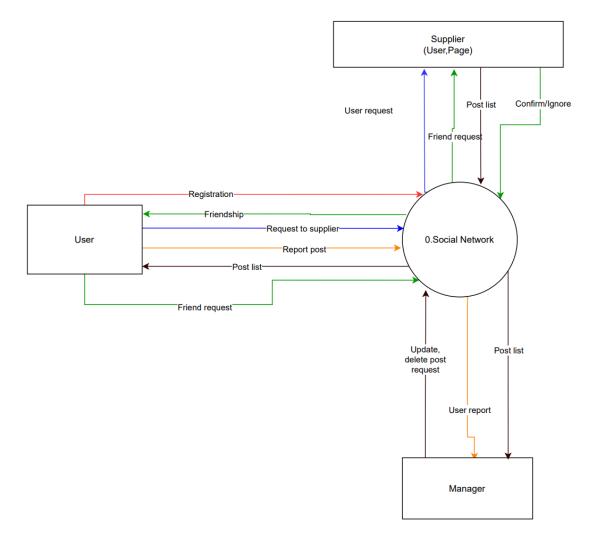
#	Issue	Status	Notes (Solution, Suggestion, etc.)
1		Pending	
2		In Progress	
3		Completed	

II. Software Requirement Specification

1. Overall Description

1.1 Product Overview

A social network can be understood as a website or online platform with many different formats and features, making it easy for people to connect from anywhere. Social networks can be easily accessed from many means and devices such as computers, phones,... Social networks will connect user accounts with individual accounts and other organisations through virtual accounts. created by the user. The goal of a social network is to create a system that allows users to connect, exchange and share useful information on the Internet platform. In addition, social networks also have the goal of creating a valuable community, enhancing the role of users in building relationships. So along with the development of the internet, this project will bring good mentors to students who need to improve their coding skills. Ask and answer in real-time. Everything you think is hard will come easier when you can ask someone who already knows about it.



1.2 Business Rules

ID	Description	
1	The email address must be valid	
2	Each user must verify phone or email address when registering	
3	OTP is required for registering an account	
4	Password must be at least 8 characters in length and no special characters	
5	When registering or changing password, a user must enter the new password twice	
6	Usernames cannot be duplicated	
7	User must provide username (email) and password when logging into the website	
8	When changing a password, a new password must not be the same as the current password	
9	A user must belong to one of 2 roles: User, Manager	
10	When an account is registered, the initial role of the account is User	
11	The image upload for the avatar must be 5MB or less.	
12	The user can drop emotions into posts, posts, comments, photos,	
13	The account after getting banned has 30 days for appeal.	
14	Different users can make friends through the site's accounts	
15	The users can report a post when it violates the rules of the social network	

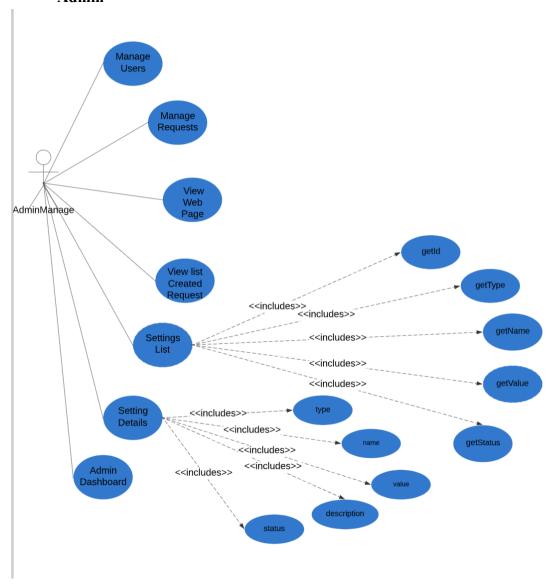
16	The admin of the site is authorised to browse articles suitable for the site
17	If users comment too much, the user may be spam commenting
18	Video uploaded from user will set 720p as default
19	Users can search for friends to add in friend list
20	Users can create pages to serve personal or community interests
21	Only admin of group can add new manager and delete group
22	The user can manually disable or delete the account
23	Users can send message to any contact
24	When sharing temporary moments, users can post to stories with a duration of 24 hours

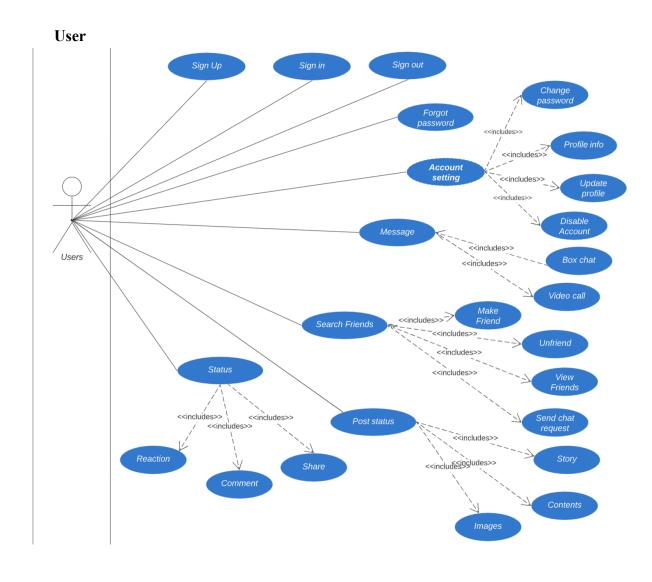
2. User Requirements

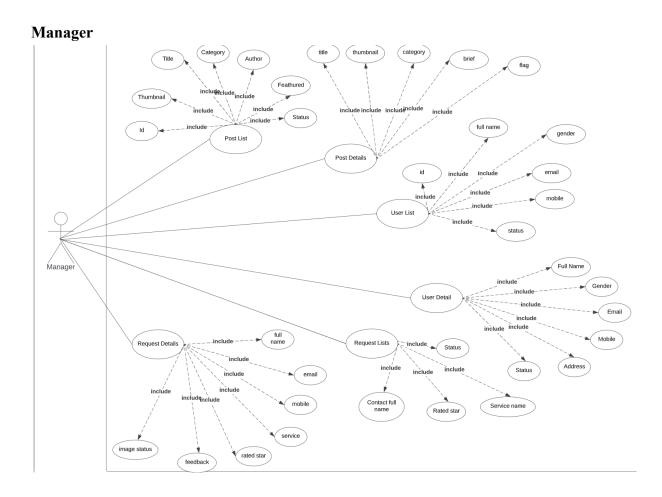
2.1 Overview

a. Use Case Diagram

Admin







b. System Actors

#	Actors	Description	
1	Admin	People who manage the Social Network	
2	User	The user that has an account and can contact with the web	
3	Manager	People who manage user lists, posts and requests	

c. Use Cases List

ID	Use Case	Primary Actors	Secondary Actor
UC-01	Sign up	User	N/A
UC-02	View dashboard	Admin	N/A
UC-03	View user info	Admin	N/A
UC-04	View manager info	Admin	N/A

UC-05	View request info	Admin	N/A
UC-06	View Report	Admin	N/A
UC-07	View settings list	Admin	N/A
UC-08	View setting details	Admin	N/A
UC-09	View posts list	Manager	N/A
UC-10	View post details	Manager	N/A
UC-11	Manage posts list	Manager	N/A
UC-12	Manage post details	Manager	N/A
UC-13	View users list	Manager	N/A
UC-14	View user details	Manager	N/A
UC-15	Manage users list	Manager	N/A
UC-16	Manage user details	Manager	N/A
UC-17	View requests list	Manager	N/A
UC-18	View request details	Manager	N/A
UC-19	Manage requests list	Manager	N/A
UC-20	Manage request details	Manager	N/A
UC-21	Sign in	User	N/A
UC-22	Sign out	User	N/A
UC-23	Forgot password	User	User
UC-24	Account setting	User	User
UC-25	Message	User	User
UC-26	Search friend	User	N/A
UC-27	Make friend	User	N/A
UC-28	Post status	User	N/A
UC-29	Share status	User	N/A
UC-30	Comment status	User	N/A
UC-31	Reaction status	User	N/A

2.2 Use Case Specification

Use Case ID	UC - 01	Use Case Name	Sign up	
Created By		Created Date	13/03/2022	
Primary Actor	User	Secondary Actor	N/A	
Description	Sign up for an account	on the system.		
Pre-conditions	N/A			
Post-conditions		When the normal flow completes successfully, a new account will be created with the role of the user and saved into a database.		
Normal Flow	 Go to the Home Page. Click "Sign Up". System displays Sign up form. Input full name, username, email, password, re-password. Click the Sign up button. System displays a toast success message. Redirect to Login Screen. 			
Alternative Flow	N/A			
Exceptions	The system displays an error message when: 1. Not input all fields in Sign up form. 2. Username or Email existed. 3. Cannot connect to the server.			
Priority	Medium			
Frequency of Use	Medium			
Business Rules				
Other Information	N/A			
Assumptions	N/A			

Use Case ID	UC - 02	Use Case Name	View dashboard
Created By		Created Date	13/03/2022
Primary Actor	Admin	Secondary Actor	N/A
Description	View dashboard screen about general information.		
Pre-conditions	Admin has signed into the admin website.		
Post-conditions	N/A		
Normal Flow	1. Go to the Admin Page.		

	2. Click on "Dashboard" on the sidebar.	
	3. The system displays all the number of users, number of	
	posts in a month, number of requests, number of feedbacks.	
Alternative Flow	N/A	
Exceptions	The system displays an error message when:	
Exceptions	1. Cannot connect to the server.	
Priority	High	
Frequency of Use	High	
Business Rules		
Other Information	N/A	
Assumptions	N/A	

Use Case ID	UC – 03	Use Case Name	View user info
Created By		Created Date	13/03/2022
Primary Actor	Admin	Secondary Actor	N/A
Description	View information of a	ll registered users in t	the system.
Pre-conditions	Admin has signed into	the admin website.	
Post-conditions	N/A		
Normal Flow	 Go to the Admin Page. Click on Manage Users on the sidebar. The system displays a list of all users with email, role, and action. Admin click the user name, the system displays all the information of registered users. 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.		
Priority	High		
Frequency of Use	High		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC - 04	Use Case Name	View manager info	
Created By		Created Date	13/03/2022	
Primary Actor	Admin	Secondary Actor	N/A	
Description	View information of a	ll managers in the sys	stem.	
Pre-conditions	Admin has signed into	the admin website.		
Post-conditions	N/A			
Normal Flow	 Go to the Admin Page. Click on Manage Managers on the sidebar. The system displays a list of all managers with email, role, and action. Admin click manager name, the system displays all the information of registered users, rate. 			
Alternative Flow	N/A	· · · · · · · · · · · · · · · · · · ·		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.			
Priority	High			
Frequency of Use	High			
Business Rules				
Other Information	N/A			
Assumptions	N/A			

Use Case ID	UC – 05	Use Case Name	View request info
Created By		Created Date	13/03/2022
Primary Actor	Admin	Secondary Actor	N/A
Description	View all requests in the system		
Pre-conditions	Admin has signed into the admin website.		
Post-conditions	N/A		
Normal Flow	 Go to Admin Page Click Manage Requests in sidebar The system displays all the information of existing requests in the system. 		
Alternative Flow	N/A		

Exceptions	The system displays an error message when: 1. Cannot connect to the server.	
Priority	High	
Frequency of Use	High	
Business Rules		
Other Information	N/A	
Assumptions	N/A	

Use Case ID	UC – 06	Use Case Name	View Report	
Created By		Created Date	25/01/2021	
Primary Actor	Admin	Secondary Actor	N/A	
Description	View all requests in th	e system.		
Pre-conditions	2. Having at least	ned into the admin we t 1 conflict request on	the system.	
Post-conditions		When the normal flow completes successfully, the request will be updated in the database.		
Normal Flow	 Go to Admin Page Click Manage Feedback in sidebar The system displays all the information of existing feedbacks in the system Select Feedback. Click the Accept button. System displays status in request change Not yet to Accepted. 			
Alternative Flow	N/A			
Exceptions	The system displays an error message when: 1 Cannot connect to the server.			
Priority	High			
Frequency of Use	High			
Business Rules				
Other Information	N/A			
Assumptions	N/A			

Use Case ID	UC – 07	Use Case Name	View Settings List
Created By		Created Date	13/03/2022

Primary Actor	Admin	Secondary Actor	N/A	
Description	View all settings in the system.			
Pre-conditions	Admin has sig	ned into the admin w	ebsite.	
Post-conditions	N/A	N/A		
Normal Flow	 Go to the Admin Page. Click Settings List in the sidebar. The system displays the list of all settings existing 			
Alternative Flow	N/A			
Exceptions	The system displays an error message when: 1. Cannot connect to the server.			
Priority	High			
Frequency of Use	High			
Business Rules				
Other Information	N/A			
Assumptions	N/A			

Use Case ID	UC - 08	Use Case Name	View setting details	
Created By		Created Date	13/03/2022	
Primary Actor	Admin	Secondary Actor	N/A	
Description	View the information	of each setting in the	system.	
Pre-conditions	Admin has sig	ned into the admin we	ebsite.	
Post-conditions	N/A	N/A		
Normal Flow	 Go to the Admin Page. Click Settings List in the sidebar. Click the name of the setting you want to view and edit. The screen of the setting's information will be shown. 			
Alternative Flow	N/A			
Exceptions	The system displays an error message when: 1. Cannot connect to the server.			
Priority	High			
Frequency of Use	High			
Business Rules				
Other Information	N/A			

Assumptions	N/A
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Use Case ID	UC – 09	Use Case Name	View posts list
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	View the list of posts	on the web.	
Pre-conditions	Manager has signed in	to the manager webs	ite.
Post-conditions	N/A		
Normal Flow	 Go to the Manager Page. Click the Posts List in the sidebar. The web will show the list of posts 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.		
Priority	High		
Frequency of Use	High		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC – 10	Use Case Name	View post details
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	View detailed informa	tion of post	
Pre-conditions	Manager has signed into the manager website.		
Post-conditions	N/A		
Normal Flow	 Go to the Manager Page. Click the Posts List in the sidebar. Click the name of the post you want to view and edit. The screen of the setting's information will be shown. 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.		

Priority	High
Frequency of Use	High
Business Rules	
Other Information	N/A
Assumptions	N/A

Use Case ID	UC - 11	Use Case Name	Manage posts list
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	Manage the list of pos	ts on the web.	
Pre-conditions	Manager has signed in	to the manager webs	ite.
Post-conditions	N/A		
Normal Flow	 Go to the Manager Page. Click the Posts List in the sidebar. The web will show the list of posts 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.		
Priority	High		
Frequency of Use	High		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC - 12	Use Case Name	Manage post details
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	Manage the information of posts on the web.		
Pre-conditions	Manager has signed into the manager website.		
Post-conditions	N/A		
Normal Flow	1. Go to the Manager Page.		

	 Click the Posts List in the sidebar. Click the name of the post you want to view and edit. 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.		
Priority	High		
Frequency of Use	High		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC - 13	Use Case Name	View users list
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	Manager can view a li	st of user information	l.
Pre-conditions	Manager has signed in	nto the admin website) .
Post-conditions	N/A		
Normal Flow	 On the page screen dashboard of the manager. Manager click "Quản lý danh sách người dùng". System show list all users info. 		
Alternative Flow	N/A		
Exceptions	N/A		
Priority	High		
Frequency of Use	High		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC - 14	Use Case Name	View user details
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A

Description	Manager can see the details information of user		
Pre-conditions	Manager has signed into the admin website.		
Post-conditions	Show the details information of user		
Normal Flow	 On the page screen dashboard of manager. Manager click "Quản lý danh sách người dùng". Manager click "Thông tin chi tiết" 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.		
Priority	Medium		
Frequency of Use	Medium		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC – 15	Use Case Name	Manage users list
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	Manager can add, edit	and delete a list of us	sers' information.
Pre-conditions	The staff has signed in	to the staff website.	
Post-conditions	N/A		
Normal Flow	 On the page screen dashboard of the manager. Manager click "Quản lý danh sách người dùng". System show list all users info. Manager can add, edit and delete a list of users' information. 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.		
Priority	High		
Frequency of Use	High		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC – 16	Use Case Name	Manage user details
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	Manager can add, edit	and delete details inf	Formation of user
Pre-conditions	The manager has logg	ed into the Manager	Website.
Post-conditions	N/A		
Normal Flow	 On the page screen dashboard of Manager. Manager click "Quản lý danh sách người dùng". Manager click "Thông tin chi tiết" Manager can add, edit and delete the details information of user 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.		
Priority	High		
Frequency of Use	High		
Business Rules			
Other Information	N/A		
Assumptions			

Use Case ID	UC – 17	Use Case Name	View requests list	
Created By		Created Date	13/03/2022	
Primary Actor	Manager	Secondary Actor	N/A	
Description	Manager can view the	requested informatio	on of the user	
Pre-conditions	The manager has logg	The manager has logged into the Manager Website.		
Post-conditions	N/A			
Normal Flow	 On the page screen dashboard of the manager. Manager click "Danh sách thông tin yêu cầu". System show list all request info. 			
Alternative Flow	N/A			
Exceptions	The system displays an error message when: 1. Cannot connect to the server.			
Priority	High			
Frequency of Use	High			

Business Rules	
Other Information	N/A
Assumptions	N/A

Use Case ID	UC - 18	Use Case Name	View request details
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	Manager can see the	details requested of us	ser
Pre-conditions	The manager has logg	ed into the Manager \	Website.
Post-conditions	N/A		
Normal Flow	1.		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server		
Priority	High		
Frequency of Use	Medium		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC - 19	Use Case Name	Manage requests list
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	Manager can reply or	delete the request list	•
Pre-conditions	The manager has logged into the Manager Website.		
Post-conditions	N/A		
Normal Flow	 On the page screen dashboard of Manager. Manager click "Quản lý danh sách thông tin yêu cầu". Manager click "Reply" or "Delete" 		
Alternative Flow	N/A		
Exceptions	1. The system displays an error message when:		

	Cannot connect to the server
Priority	High
Frequency of Use	Medium
Business Rules	
Other Information	N/A
Assumptions	N/A

2.2.4.2. Sign in

Use Case ID	UC - 20	Use Case Name	Manage request details
Created By		Created Date	13/03/2022
Primary Actor	Manager	Secondary Actor	N/A
Description	Show request details f	or manager and edit	
Pre-conditions	The manager can acce	ss the manager syster	n.
Post-conditions	N/A		
Normal Flow	 On the page screen dashboard of Manager. Manager click "Quản lý danh sách thông tin yêu cầu". Manager click "Reply" or "Delete" Manager can reply and delete the details information of user 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server. 2. Account is not exist in database		
Priority	High		
Frequency of Use	High		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC - 21	Use Case Name	Sign in
Created By		Created Date	13/03/2022
Primary Actor	User, Manager, Admin	Secondary Actor	N/A

Description	Sign in the system.
Pre-conditions	Account is exist in database
Post-conditions	N/A
Normal Flow	 On the login screen,the user fills the username and password. User clicks "Sign in". The system will redirect user to the home page.
Alternative Flow	N/A
Exceptions	The system displays an error message when: 3. Cannot connect to the server. 4. Account is not exist in database
Priority	Weak
Frequency of Use	Weak
Business Rules	
Other Information	N/A
Assumptions	N/A

Use Case ID	UC - 22	Use Case Name	Sign out
Created By		Created Date	13/03/2022
Primary Actor	User	Secondary Actor	N/A
Description	User can sign out fron	n web	
Pre-conditions	 Users access the description. The mentor is 	ne system. currently Logged in.	
Post-conditions	N/A		
Normal Flow	 On the home page screen. User clicks "Log out". The user will be taken back to the Login page. 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 5. Cannot connect to the server. 6. User not input in the edit form.		
Priority	Weak		
Frequency of Use	Weak		
Business Rules			
Other Information	N/A		

Assumptions

Use Case ID	UC - 23	Use Case Name	Forgot password
Created By		Created Date	13/03/2022
Primary Actor	User	Secondary Actor	N/A
Description	User can recover forgo	otten or lost password	1
Pre-conditions	Account exists in data	base	
Post-conditions	N/A		
Normal Flow	 On the login screen. User clicks "Forgot password". The user will be asked to enter a confirmation email on a pop up screen. A captcha code will be sent to confirm the email. After successful confirmation, the user will be updated with a new password. 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server. 2. Account is not exist in database		
Priority	Weak		
Frequency of Use	Weak		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC - 24	Use Case Name	Account setting
Created By		Created Date	13/03/2022
Primary Actor	User	Secondary Actor	N/A
Description	User can view his/her information and edit		
Pre-conditions	The user must be signed in.		
Post-conditions	N/A		
Normal Flow	1. On the home page screen.		

	2. Click to Setting.
	3. Click to Personal Information.
	4. The information of user will be shown
Alternative Flow	N/A
T. 4.	The system displays an error message when:
Exceptions	3. Cannot connect to the server.
Priority	Weak
Frequency of Use	Weak
Business Rules	
Other Information	N/A
Assumptions	N/A

Use Case ID	UC - 25	Use Case Name	Message
Created By		Created Date	13/03/2022
Primary Actor	User	Secondary Actor	N/A
Description	User can chat with oth	ner users	
Pre-conditions	The user must be signed in.		
Post-conditions	N/A		
Normal Flow	 On the home page screen. Click Messenger to go to the Chat screen. Here will show your chat boxes with different users. 		
Alternative Flow	N/A		
Exceptions	The system displays an error message when: 1. Cannot connect to the server.		
Priority	Weak		
Frequency of Use	Weak		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC - 26	Use Case Name	Search friend	
Created By		Created Date	13/03/2022	
Primary Actor	User	Secondary Actor	N/A	
Description	User can search friend	in web		
Pre-conditions	The user must be sign	ed in.		
Post-conditions	N/A	N/A		
Normal Flow	 Go to Home Page Click Search. Enter the username you want to search for 			
Alternative Flow	N/A			
Exceptions	Cannot connect to the server.			
Priority	Weak			
Frequency of Use	Weak			
Business Rules				
Other Information	N/A			
Assumptions	N/A			

Use Case ID	UC - 27	Use Case Name	Make friend
Created By		Created Date	13/03/2022
Primary Actor	User	Secondary Actor	N/A
Description	User can make many friends in web		
Pre-conditions	1. The user can access the system.		
Post-conditions	N/A		
Normal Flow	 Go to Home Page Click Search. Enter the username you want to search for Click on their profile Click Add button Wait for the other user to accept your friend request 		
Alternative Flow	N/A		
Exceptions	 Cannot connect to the server User already has enough friends slot 		

Priority	Weak
Frequency of Use	Weak
Business Rules	
Other Information	N/A
Assumptions	N/A

Use Case ID	UC - 28	Use Case Name	Post status
Created By		Created Date	13/03/2022
Primary Actor	User	Secondary Actor	N/A
Description	User can post a status		
Pre-conditions	 Mentee accesses the system. User is currently signed in. 		
Post-conditions	N/A		
Normal Flow	 On the home page screen. A popup screen of posting status will be shown. Users can write something and post it. 		
Alternative Flow	N/A		
Exceptions	Cannot connect to the server		
Priority	Weak		
Frequency of Use	Weak		
Business Rules			
Other Information	N/A		
Assumptions	N/A		

Use Case ID	UC - 29	Use Case Name	Share status
Created By		Created Date	13/03/2022
Primary Actor	User	Secondary Actor	N/A
Description	User can share the status		
Pre-conditions	 User access to the system. The user is currently signed in. 		
Post-conditions	N/A		

NI LEI	1. On the home page screen.	
Normal Flow	2. Many statues will be showed,.	
	3. Users can share that statuses.	
Alternative Flow	N/A	
Exceptions	Cannot connect to the server.	
Priority	Weak	
Frequency of Use	Weak	
Business Rules		
Other Information	N/A	
Assumptions	N/A	

Use Case ID	UC - 30	Use Case Name	Comment status	
Created By		Created Date	13/03/2022	
Primary Actor	User	Secondary Actor	N/A	
Description	User gives comment to	the status		
Pre-conditions		 User access to the system. The user is currently signed in. 		
Post-conditions	N/A	, ,		
Normal Flow	 On the home page screen. Many statues will be showed,. Users can give a comment to that statuses. 			
Alternative Flow	N/A			
Exceptions	Cannot connect to the server.			
Priority	Weak			
Frequency of Use	Weak			
Business Rules				
Other Information	N/A			
Assumptions	N/A			

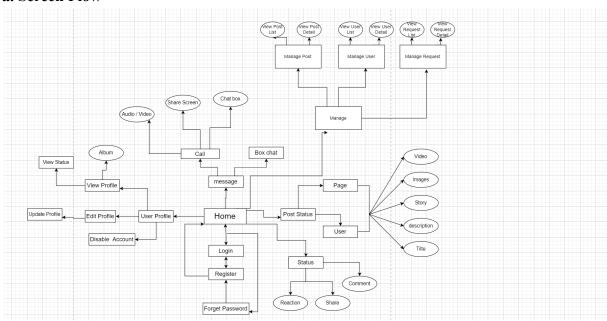
Use Case ID	UC - 31	Use Case Name	Reaction Status
Created By		Created Date	13/03/2022
Primary Actor	User Secondary Actor N/A		
Description	User gives reaction to the status		

Pre-conditions	3. User access to the system.	
1 re-conditions	4. The user is currently signed in.	
Post-conditions	N/A	
	1. On the home page screen.	
Normal Flow	2. Many statues will be showed,.	
	3. Users can give a reaction to that statuses.	
Alternative Flow	N/A	
TE 4:	The system displays an error message when:	
Exceptions	1. Cannot connect to the server.	
Priority	Weak	
Frequency of Use	Weak	
Business Rules		
Other Information	N/A	
Assumptions	N/A	

3. Functional Requirements

3.1 System Functional Overview

a. Screen Flow



b. Screen Details

#	Easture	Canaan	Description
	Feature	Screen	Description
1	Home	Sign in	Screen for the user to sign in into the system.
2	Home	Register	Screen for guests to create an account.
3	Home	Forgot Password	Screen for the user to find the password.
4	UserProfile	Home	The screen that shows general information of the website: list online mentors, list requests, list skills, logo, slogan, etc.
5	UserProfile	View Profile	The screen for the user to view his/her profile
6	UserProfile	Disable Account	The screen shows lock the account can not be used anymore
7	UserProfile	Edit Profile	The screen where users edit their profiles
8	UserProfile	Update Profile	The update screen where users update profile
9	UserProfile	View Status	The screen for user to view his/her posts, articles
10	UserProfile	Album	The popup for users to view, post, create album, image
11	Message	Call Audio/Video	The screen for users to communicate via video or audio
12	Message	Box chat	The screen for users to chat with friends
13	Message	Share Screen	The screen if the session presenter screen sharing
14	Post Status	Status	The popup for the mentee to rate mentor after finishing the session
15	Post Status	Images	The popup for users to add images for the post
16	Post Status	Story	The popup for users to up stories for the post
17	Post Status	Description	The popup for users to add a hashtag or icon for the post
18	Post Status	Title	The popup for users to overview about story for the post
19	Status	Reaction	The popup for users to drop emotions into the article
20	Status	Share	The popup for users to share the post
21	Status	Comment	The popup for users to comment on post
22	Admin	Manage Users	The screen where the admin manages users
23	Admin	Manage Requests	The screen where the admin managers requests and inquiries on media sites
24	Admin	View Web Page	The screen for admins to monitor site analytics to see what types of content are responding to the most by followers
25	Admin	View List Created Request	The screen for manager view list created a request
26	Admin	Settings List	The screen shows the paginated list of settings
27	Admin	Setting Details	The screen shows detailed user information which allow the admin to add new, view or edit setting information

28	Admin	Admin Dashboard	The screen shows statistic of new users, posts, images, feedbacks
29	Manager	Posts List	The screen shows the paginated list of posts
30	Manager	Post Details	The screen shows detailed post information
31	Manager	Users List	The screen shows the list of users
32	Manager	User Details	The screen show detailed user/contact information, from that allow the manager to input, view or edit them

c. Screen Authorization

Screen	Role 1	Role 2	Role 3
Sign in	X	X	X
Register	X		
Forgot Password	X	X	X
Home	X		
View Profile	X	X	X
Disable Account	X	X	X
Edit Profile	X	X	X
Update Profile	X	X	X
View Status	X		
Album	X		
Call Audio/Video	X		
Box chat	X		
Share Screen	X		
Status	X		
Images	X		
Story	X		
Description	X		
Title	X		
Reaction	X		
Share	X		
Comment	X		
Manage Users		X	X
Manage Requests		X	X
View Web Page			X
View List Created Request			X
Settings List			X
Setting Details			X
Admin Dashboard		X	X
Posts List		X	X
Post Details		X	X
Users List		X	X

In which:

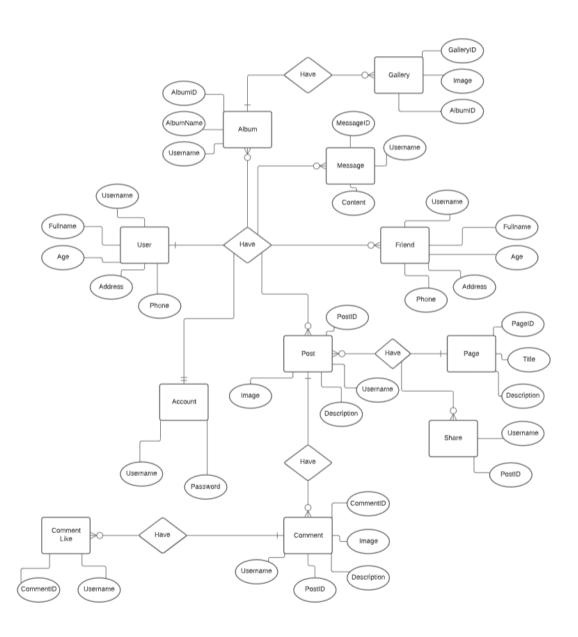
Role1: UserRole2: Manager

• Role3: Admin

d. Non-Screen Functions

#	Feature	System Function	Description
1	Home	Sign out	Users sign out of the system.

e. Entity Relationship Diagram



Entities List

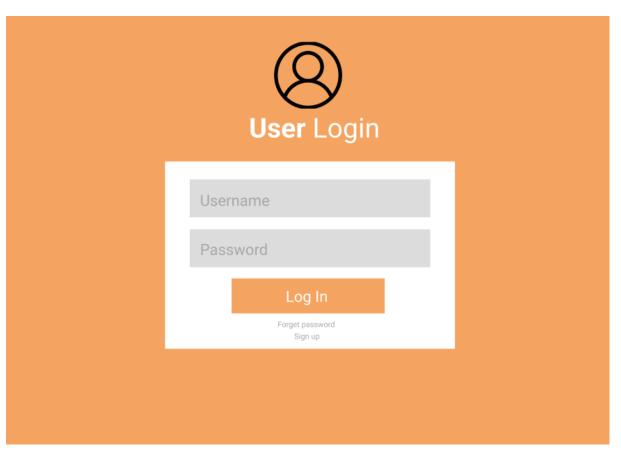
#	Entity	Description
1	Notification	The notification of the user in the system.
2	Code IDE	Code on IDE in Session of mentee and mentor.
3	Profile	Detail of registered users.

4	Video Call/ Share	Video Call/ Share Screen in Session of mentee and	
	Screen	mentor.	
5	Chax box	Chat box in Session of mentee and mentor.	
6	Session	The Session of mentee and mentor	
7	Matching	Mentor selects a question to match with the mentee.	
8	LCM point	The point of LCM	
9	Money Transaction	The money in transaction	
10	Achievement	The achievement of the mentor.	
11	BankCard	The bank card of the user	
12	WithdrawalHistory	The withdrawal history.	
13	Mentee	The mentee of the LCM system.	
14	Mentor	The mentor of the LCM system.	
15	PointExchangeHistory	The point exchange history	
16	Skills	The tag skills.	
17	Request	The request of mentee	
18	Staff	The staff of the LCM system	
19	Admin	The admin of the LCM system	

3.2 Login

a. Sign in

- Function trigger: This function is triggered when the user clicks Sign in from Homepage
- Function description: User sign in into the system.
- Screen layout: mock-up prototype of the screen, sample below is for the Sign in screen.



• Function Details: When the user is in the state not logged in, at the home page there will be a Sign in button after sign in into the system, the Sign in button will become Sign out.

b. Register

- Function trigger: This function is triggered when the user clicks Sign in from Homepage
- Function description: The admin manages skills such as delete skills, update skills, ...
- Screen layout: mock-up prototype of the screen, sample below is for the Manage Skills.
- Function Details: After sign in, the admin selects Manage Skills, here the admin will add, edit, delete or update skills.

Create Account

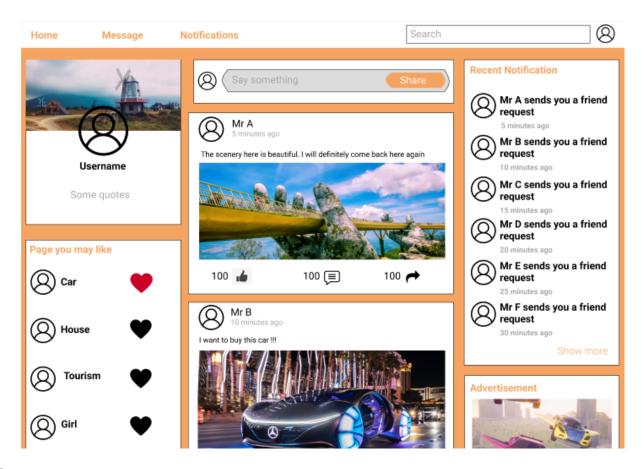
Username		
Email		
Phone		
Password		
	Sign up	
	Olgii up	

I have an account, sign in

3.3. Home

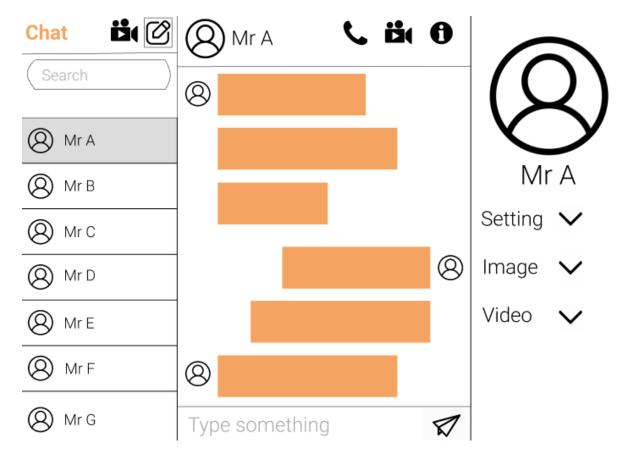
a. Home Page

- Function trigger: This function is triggered when the mentee clicks Create Request from the Homepage.
- Function description: The mentee created a question to ask the mentor.
- Screen layout: mock up a prototype of the screen, the sample below is for the Create Request.
- Function Details: After sign in, the mentee selects Create Request, here the mentee will input into fields and chooses the programming language, ...



b. Message

- Function trigger: This function is triggered when the Mentee requests to start the session with the mentor.
- Function description: The mentee and mentor start the session.
- Screen layout: mock-up prototype of the screen, sample below is for the Manage Skills.
- Function Details: After matching together, the mentee and mentor will create a session to resolve the problem of the mentee.



c. Personal Page

- Function trigger: This function is triggered when the Mentor chooses the question of mentee.
- Function description: Mentor choose questions of mentee by skill.
- Screen layout: mock-up prototype of the screen, sample below is for the Manage Skills.
- Function Details: After matching with the mentor, the mentee can see the information of the mentor who just matched.



Username

Live in Ha Noi, Viet Nam

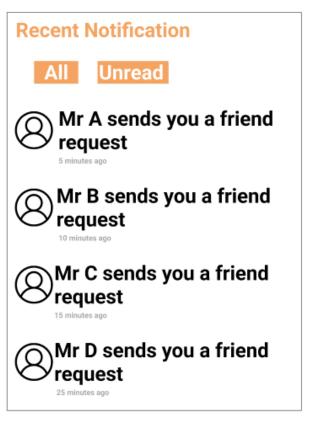
100
Followers

100
Following

+10

d. Notification

- Function trigger: This function is triggered when the guest chooses View All Mentors on the Homepage
- Function description: The mentee views all mentors of LCM.
- Screen layout: mock-up prototype of the screen, sample below is for the View All Mentor.
- Function Details: After going to the homepage, guests can see a list of all mentors.



3.4 User Setting

a. Setting

- Function trigger: This function is triggered when the guest goes to the Homepage
- Function description: The guest can see all categories
- Screen layout: mock-up prototype of the popup, sample below is for the View All Categories.
- Function Details: After going to the homepage, guests can see a list of all categories.

Setting

Account	Setting for account	
Privacy		
Notification		
Security and login		
AD Advertisement		

b. User Profile

- Function trigger: This function is triggered when the user chooses to see Profile
- Function description: The user can view their profile.
- Screen layout: mock-up prototype of the screen, sample below is for the User profile.
- Function Details: After login into the system, users can see their profile.

Edit Profile

Avatar



Update

Background



Indate

Information

Name

Address

Workplace

Update

Hobbies

4. Non-Functional Requirements

4.1 External Interfaces

a. User Interfaces

- UI-1: The websites will have a user-friendly interface and are easy to use.
- UI-2: The layout of the screen is streamlined, easy to operate, and implement for the user.
- UI-3: Buttons have distinctive features and colors but are in sync with the interface.
- UI-4: When the user is on a screen or function, the position of that function displayed on the sidebar will be bright and synchronized with the interface.
- UI-5: Notifications displayed on the screen have a friendly banner outlining the content for the user.
- UI-6: The LCM screen displays shall conform to the Process Impact Internet Application User Interface Standard, Version 2.0 [3].
- UI-7: The system will provide a website help link that is displayed explaining how to use that page to the user.
- UI-8: Web pages will allow users to copy and paste using a mouse, in addition to using a mouse and keyboard combination.

b. Software Interfaces

- SI-1: Login System
 - SI-1.1: The LCM will pass the username and password of the user to the sign-in system through a programming interface.

- SI-1.2: The sign-in system will notify LCM that the user exists or not.
- SI-1.3: When the sign-in system notifies LCM that the user exists or does not exist, LCM will take the user to the homepage or send a notification that the user does not exist.

SI-2: Manage System

- The LCM shall communicate with the Manage System through a programmatic interface for the following operations:
- SI-2.1: To allow an Admin to view all Users.
- SI-2.2: To allow an Admin to view all Mentors.
- SI-2.3: To allow an Admin to view all Requests.
- SI-2.4: To allow an Admin to view all Skill.
- SI-2.5: To inquire whether an Admin creates, updates, server or deletes skills.

SI-3: Payment System

- SI-3.1: LCM will give the amount of one LCM point for user reference through the Payment System.
- SI-3.2: The Payment system will allow users to top up their account then notify the LCM.
- SI-3.3: After recharging an account via the Payment System, users can buy LCM points.
- SI-3.4: After changing the LCM point to the Payment System, the LCM point number of the user will be updated by the LCM.

c. Hardware Interfaces

No hardware interfaces have been identified.

d. Communications Interfaces

- CI-1: The LCM shall send an email or text message (based on user account settings) to the Patron to confirm acceptance of forgotten password.
- CI-2: The LCM provides mentees and mentors with a chat box to communicate with each other.

4.2 Quality Attributes

a. Usability

- The languages are Vietnamese and English.
- The user interface of the solution should be elegant, easy to navigate, and user-friendly
- All the titles or names of functions should be easy to understand and reflect the purpose of the function.
- All error message should be clear for all users
- All related functions for each type of user should be grouped into categories and placed on a navigation bar for the efficiency of interactions.

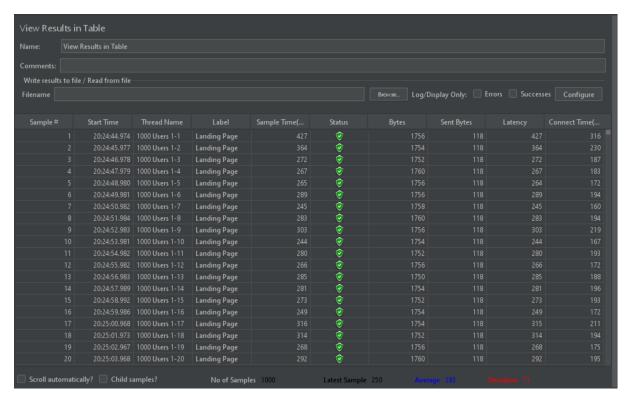
- User should be able to learn to use the specified functions in no time
- Links, buttons are easily clickable.
- Links are easily recognizable, which looks clickable.
- Main functions are organized into tabs for easier access.
- Links, buttons, and checkboxes are easily clickable.
- The Front-end web application should support Chrome and Firefox browsers.

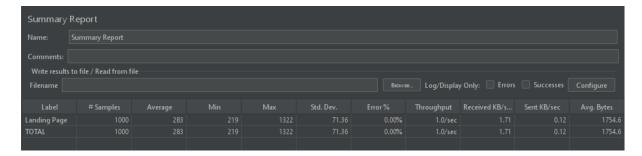
b. Reliability

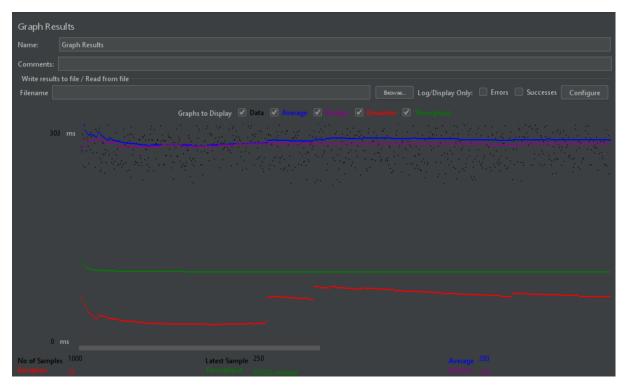
- The system function is carefully observed and learned from the actual needs of users (mentee, mentor) and the LCM's demand.
- The average time it takes to repair the system if a module fails is about 4-8 hours.
- The system is only allowed to stop working for at most 8 hours since the problem occurred so that users can continue using the system.

c. Performance

- The Front-end system uses ReactJS which makes writing Javascript code easier because it uses a special syntax that is JSX syntax.
- The Back-end system uses NodeJS which is a platform that runs on the V8 JavaScript runtime - a very fast JavaScript interpreter that runs on the Chrome browser.







The results obtained when analyzing the results from the listeners with the Landing Page scenario:

- It can be seen that initially when the number of users is increasing, the response time of the server is quite fast, only about 1 second, and when the fixed number of users is 1000 people visit the homepage, children. this number falls to about 0.283s. The number of successful requests made increases slowly as the number of users increases and then very steadily (these lines are drawn next up on).
- The website's throughput after testing is 60,042 / minutes which means that the server processes 60,042 requests per minute
- The deviation of the website after the test is 72 it shows that the current deviation from the average is very low.
- The number of error transactions is only 0.00%, showing that the website works very well.
- The average response time value is 283ms

d. Dependability

d1. Security

 The system must use token-based authentication, in which the authentication server returns an access token after the user logged in with username/email and password. Then the client will include the access token in the subsequent requests to access protected resources. Using token-based authentication brings a lot of benefits to the system including:

Allow cross-domain requests.

Stateless, which improves the scalability of the system.

Allow the separation between front-end and back-end sides. The front-end can be developed as standalone client applications (web, mobile, etc.), while the back-end provides APIs for client consumption.

• All passwords must be hashed using the BCrypt algorithm with at least 10 salt rounds.

d2. Safety

- This product is a web application running on the web browser so it will not affect any other application or user's hardware, which may lead to data loss or system damage. The software is designed mainly for devices with an appropriate wide display so for maintaining the correctness of the user's actions and data, the user should use this application on a device with a wide enough screen so the software can fit the screen.
- However, the solution is an e-commerce application so all transactions and behavior must follow the Law on Commerce of Vietnam No.36/2005/QH11 and Decree No.52/2013/NĐ-CP About eCommerce

e. Supportability

- The system will have maintenance periods to improve user security.
- The system will update content updates for users.
- The system has counselors to support mentees and mentors if they have any problems.

f. Design Constraints

- End-user's Environment: Windows.
- Support languages: Vietnamese, English.
- Web application must be responsive and snappy.
- The user must have a stable connection to the internet.

g. Support Documents

- LCM User guides

5. Other Requirements

5.1 Appendix1 - Notification List

#	Notificatio n code	Notificatio n Type	Context	Content
1	NOT01	Request	The user does not enter information in the fields	Fields cannot be blank.

2	NOT02	Request	The user enters information in one field, leaving the remaining fields blank.	Fields cannot be blank.
3	NOT03	Request	User input correct format of Username, Password, Re-password, Full name, Email	Register Successfully.
4	NOT04	Request	Username already exists	Show message "Username has already existed.
5	NOT05	Request	User input email does not contain the character "@".	Email must contain one character @.
6	NOT06	Request	User input Re-password contains special characters such as:! @ # \$	Passwords do not contain special characters such as: "! @ #\$".
7	NOT07	Request	Register successfully	Register Successfully.
8	NOT08	Request	Input Password's length between 8 to 24 characters	Password's length between 8 to 24 characters.