



CS251: Phase 1 –FCI Socialist, Social Network Software Requirements Specifications

Project Name

SOCIAL NETWORK

Course Name:

Software Engineering 1

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Social Network project Specifications

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CS251: Phase 1 –FCI Socialist, Social Network

Software Requirements Specifications

Contents

Team	3
Document Purpose and Audience	3
Introduction	3
Software Purpose	3
Software Scope	4
Overview	5
Definitions, acronyms, and abbreviations	6
Requirements	8
Functional Requirements	8
Non Functional Requirements	16
System Models	17
Use Case Model	17
Use Case Tables	18
Ownership Report	30
Refrences	31



CS251: Phase 1 –FCI Socialist, Social Network

Software Requirements Specifications

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Document Purpose and Audience

- The Document purpose is to organize or plant The basis for agreement between customers and suppliers , on what the software product is to do as well as what it is not expected to do.

Introduction

Software Purpose

-The software purpose of the Social Network project is to develop back-end API for social network. Something like Facebook API .

develop back-end API that is able to manage interactions between users, create and manage groups and pages, manage different type of posts and retrieve current posts in specific hashtag and sort these posts according to the most important post .



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Software Requirements Specifications

Software Scope

- This software system will be a social network for different users with different priorities.

Generally, this software will be a back-end API to any social network but with limited number of user not as huge as Facebook , Twitter ... etc.

This software will be designed to help user deal with it as a local normal user with limited number and that each user will has different features in dealing with this software, but there will be a common features and functions.

- The social network that we will have specific Components:

will allow users make personal profiles , groups (with different types) ,

Pages of any fan or specific products, and each user can post in his personal profile.

There will be other features such as Hashtags if user wants to write any post and label it with

hashtag, and also can search about any hashtag to get information about it A last component is that any user can message another user from his/her friend list and can

message in a group



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Software Requirements Specifications

Overview :

The remainder of this document includes three chapters. The First chapter is an introduction to the software that , provides an overview of the system that define Scope and Purpose of the system.

the chapter also mentions the system constraints and assumptions about the product.

The second chapter provides the requirements specification in detailed terms and a description of the different system interfaces. Different specification techniques are used in order to specify the

requirements more precisely for different audiences.

The third chapter deals with the use cases of those requirements. It includes all results of interaction between user and system and each specify each requirements with a use case and this use case include user action , system response and result of this action.

Definitions, acronyms, and abbreviations:



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Software Requirements Specifications

<u>Word</u>	<u>Definitions</u>
post	Defined as text content written by specific user
Groups	When a user create a group then user can able to creating a community of people and friends to promote, share and discuss relevant topics that the user can join it
pages	page is a public profile specifically created for businesses, brands, celebrities, causes, and other organizations. Unlike personal profiles, pages do not gain "friends," but "fans" - which are people who choose to "like" a page
Hashtag	A hashtag is a word or an unspaced phrase prefixed with the hash character, # to search for subjects of interest .
Message	a piece of information that is sent or given to someone an important idea that someone is trying to express in a text



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Software Requirements Specifications

Favorite	an indication that you like something on a social media or other website
Like	a small sign on a social networking website that shows someone agrees with or enjoys something
cc	Carbon copy
FB	Facebook
LI	LinkedIn
EM	Email
SM	Social Media
TL	Timeline
DM	Direct message
SMM	Social Media Marketing
SN	Social Network



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Software Requirements Specifications

Requirements

Functional Requirements

1-User Functions:

R1: sign up

Description

User can sign up for social network sites and make his/her own account To do some functions in the sites.

Input:

User must enter First name , last name ,password, confirm password, E-mail or mobile number ,gender and date of birth .

- if this information founded before he will asked to change his information and try again

Output :

-Message that Account is making successfully and then user could log in to the site .

R2: log in

Description :

user can log in to his/her own profile that he/she made by sign up in the site to keep contact with friends and do some functions allowed by the site .

Input:

user must enter his/her E-mail or mobile number and password to get into user account .

Output :

- if user enter correct E-mail and password then site will turn him/her to his home page.



CS251: Phase 1 –FCI Socialist, Social Network

Software Requirements Specifications

-if it is not correct user can't log in and he/she must review the personal data that user entered or he/she can sign up again.

R3: profile picture:

Description:

User can upload his/her own profile or cover picture that make easier to his/her friends to identify the user .

Input :

Go to your profile page and click on picture place then you will be able to choose from upload New picture or choose picture from your photos in your account.

Output :

your picture that you uploaded or you choose it from your photos will appear in your own profile and appears to your friends .

R4 :Add Friends:

Description :

User can add his/her friend to be able to chat with him/her.

Input:

user must go to his/her friend profile and click Add friend button.

Output:

- if your friend accept the friend request user will receive notification that he became friends with the - person he send to him the request.

-If user didn't receive this notification so the person that the user send to him friend request didn't accept -- the request yet.



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Software Requirements Specifications

R5: Message

Description:

it is a some of information that is sent or given to someone.

R5.1: Message Friend

Description :

User can send message to his/her friends or to any one not just friends.

Input:

User must go to the profile page of the person who want to send him/ her message

And then click the message button.

Then message box will appear to the user and user can write the message in it and click send button.

Output :

message will send to the another user and then if he/she replied you will get a message in your message box.

R5.2 : Message group Friend

Description :

User can send message to group of friends not just one friend.

Input :

go to your home page and click new message in the right side down the page.

Then an empty text field will appear you must click names of your friends one by one and click enter button.

Output :



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Software Requirements Specifications

your message will appear to all your friends that user enters their names.

R6: search friend by e-mail

Description:

User can search for his/her friends by using their E-mails then user can get their account on social Network.

Input:

you must know your friends E-mails then go to your home page you will find text field in the north of the "page written in it " search for people ,place, and thing.

In this text field you must write the emails of your friends.

Output:

-If the email is correct you will find the accounts of your friend that you entered his/her email.

-If there is no account appear to the user then this email doesn't have an account or you entered wrong mail.

R7 : posts :

Description:

User can write post or share/like other posts of his/her friends.

R7.1: Make posts :

Description :

Users may want to share their status in social network by writing posts, Posts is one of the building blocks of social media content, Post (in our social network) defined as text content written by specific user.

- User can write post in his/her personal page or in joined groups. If user owns a page, user can write a post in his/her page posts.



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Software Requirements Specifications

Input :

If you want to share your Statues in your timeline (profile) you must write what you want to say in the empty text in the first of the page and click post button you also can choose if you want this post to be

- public : to every one can see it .
- friends: your friends only can see it.
- custom: determine some users to see your posts or users you want them to not see your posts by choose custom and write their names .
- Only me:
that no one can see your posts except you even your friend..

Output :

your statues will be appear to your timeline and according to your choice each statue you want to be shared with friends ,public, etc.

R7.2: Share and like posts:

Description:

- any other friend user can "like" this text content or share it on his/her personal page
- user also can likes posts that shared by friends and share it in user profile .

input :

- if you want to share friends posts you must click share button that appear below the post.
- if you want to like friends posts you must click like button that appear below the post.

Output :

- if you shared your friend post it will appear in your home page.
- if you liked your friend post then your friend will receive notification that you liked his post or picture.



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Software Requirements Specifications

R8: Creation :

Description :

User can create his/her own page or group.

R8.1: create group:

Description:

User will able to create and manage different types of groups (for example: public group, private groups, ...) each group is managed by set of users (including user creates the group)

User can make posts in this group and add friends in it.

Input :

User must go to user home page and in the left side click on create group.

The user must write Group name and determines members of the group by writing their names and determine the privacy of the group (

-public: any one can see the group and posts in it.

-closed : any one can see the group but only members can see the posts in it.

-secret: only members can see the group and what member posts in it .

-Then click create button.

Output :

Social network site will turn you to the group page then user and members will be able to post in it and see member posts.

R8.2: Create page :



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Software Requirements Specifications

Description :

Users may need to create fan page for specific entity or product. It's the same idea as Facebook pages
user should be able to create and manage user pages.

Input :

User must go to user home page and in the left side click on create page.

User must choose the type of the page he want like (business , entertainment brand or product,.. etc).

Then user must write name of the page and click create button .

Output: -

Social network site will turn the user to the page that user created .

R9 : Hashtag:

Description :

Users use hashtags to categorize the content of specific post, if user wants to write a post about "education", user may put the word #education (# the symbol of hashtag) in the post to categorize this post as education post. If another user wants to read some posts about education, so user may request all posts contains #education phrase.

Input :

if the user want to write or search for specific post then user must put the symbol # before the word he want to write or search for it.

Output:

User will get all the posts related to the word he wrote in the hashtag.



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Software Requirements Specifications

2-Developer Functions :

R1: manage social media network:

Description:

Developer must approve what the user upload to the site .

R2: manage membership:

Description:

Developer must manage membership on the site .Developer determines specific cost for the account (premium user) and check if the user pay membership fees at the detect time or not if the user didn't pay Developer will remove user account.

R3: current active users:

Description:

Developer can get the number of active users in specific time by this function .



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Software Requirements Specifications

Non Functional Requirements

<u>Requirement</u>	<u>Function</u>
Performance	-withdrew operation will be done in almost 7 seconds.
Usability	<ul style="list-style-type: none">- The system should be easy to use- All delays in the system longer than 5 seconds will produce a dialog box that says "Please wait."
Reliability	<ul style="list-style-type: none">- Users have to trust the system, even after using it for a long time.- data created in the system will be retained for a number of years without the data being changed by the system.
Security	<ul style="list-style-type: none">- Ensure that any computer you use to connect to a social media site has proper security measures in place.- Use caution when clicking a link to another page or running an online application even if it is from someone you know.- Be careful who you add as a friend or what groups or pages you join. The more "friends" you have or groups/pages you join the more people who have access to your information.
Scalability	- a system will remain effective when there is a significant increase in the number of resources and the number of users.
Portability	<ul style="list-style-type: none">- software can be installed on different platforms and the platforms is expected to run- Software can adapt to changes in its environment or with its requirements.



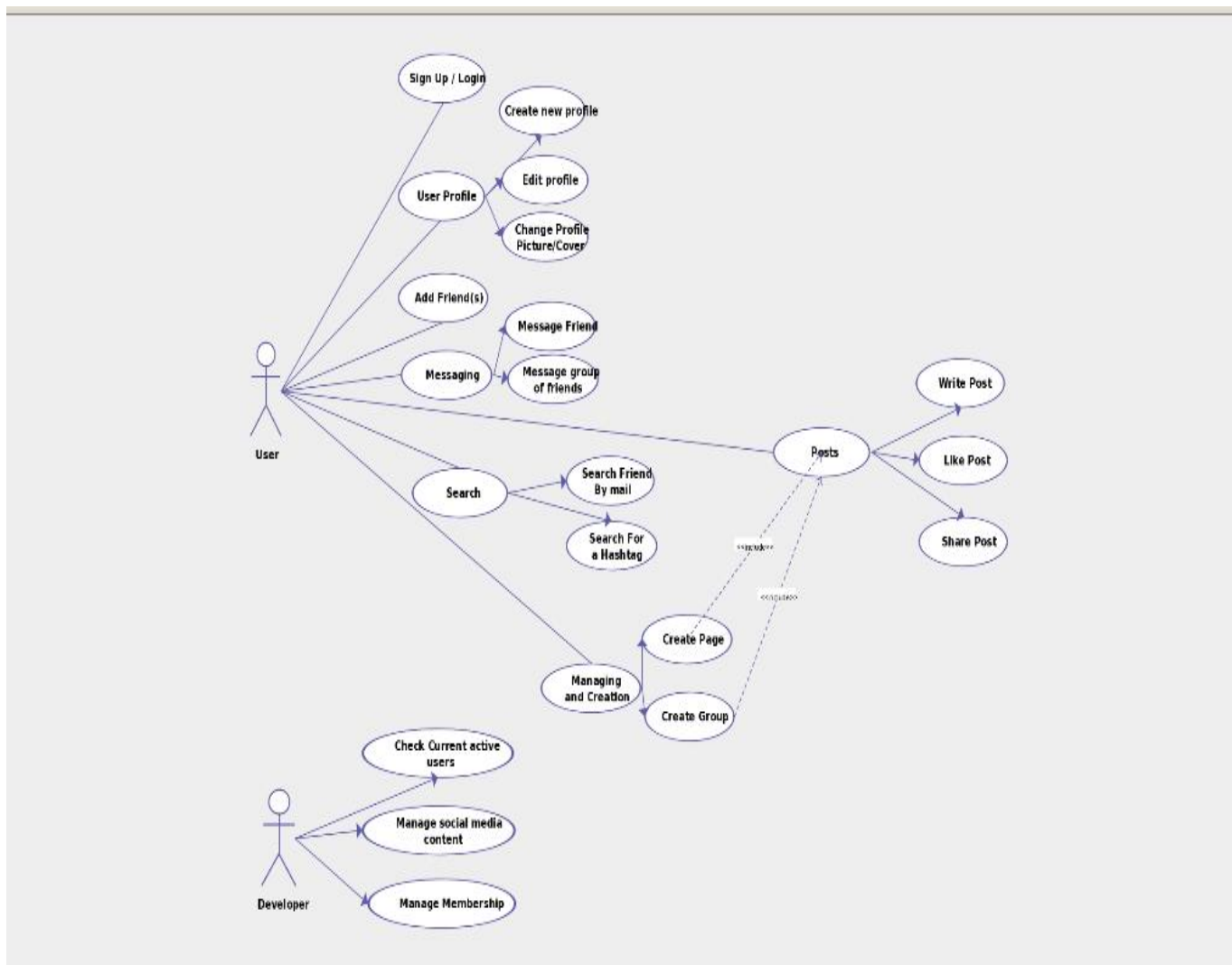
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Maintainability	- identify and fix the fault within the software component.
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System Models

Use Case Model:





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Software Requirements Specifications

Use Case Tables

Use Case ID:	Use case number 1	
Use Case Name:	sign up	
Actosr:	User	
Pre-conditions:	Out of page	
Post-conditions:	Enter the page	
Flow of events:	User Action	System Action
	1- User Enter First name , last name ,password, confirm password, E-mail or mobile number ,gender and date of birth.	
		2- System check if this information founded before if not .
		3-Print Message that Account is making successfully and then user could log in to the site
Exceptions:	this information founded before ask user to change the information .	
Includes:	Log in to page .	
Notes and Issues:	Information is real .	



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Software Requirements Specifications

Use Case ID:	Use case number 2	
Use Case Name:	Log in	
Actosr:	User	
Pre-conditions:	Out of page	
Post-conditions:	Enter the page	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct .
		3- if correct in formation go to page.
Exceptions:	If user entered E-mail or mobile number and Password incorrect ask user to enter the correct information .	

Use Case ID:	Use case number 3	
Use Case Name:	profile and cover picture.	
Actosr:	User	
Pre-conditions:	The old photo to profile and cover picture.	
Post-conditions:	Chang the profile or cover picture with uploaded photo.	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password to log in.	



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Software Requirements Specifications

		2- System check if E-mail or mobile number and Password is correct and go to profile .
	3-user click on change profile or cover picture.	
		4- system print picture place then you will be able to choose from upload New picture or choose picture from your photos in your account.
	5-user choose the photo.	
		6- your picture that you uploaded or you are chosen from your photos will appear in your own profile and appears to your friends .
Exceptions:	If user doesn't choose photo let old photo or entered incorrect information doesn't go to page .	
Includes:	Log in	

Use Case ID:	Use case number 4
Use Case Name:	Add Friends
Actosr:	User
Pre-conditions:	Doesn't have a friend in his/her friends
Post-conditions:	Become friends



CS251: Phase 1 –FCI Socialist, Social Network

Software Requirements Specifications

Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct and go to page .
	3- enter the name to the friend that he/she want to add.	
		4-lest the names .
	5- choose the friend he/she want to add .	
		6- print the profile that he/she chosen .
	7-press add friend	
		8- if your friend accept the friend request user will receive notification that he became friends with the person he send to him the request
Exceptions:	If user entered E-mail or mobile number and Password incorrect doesn't add friend or If user didn't receive this notification so the person that the user send to him friend request didn't accept the request yet.	
Includes:	Log in	

Use Case ID:	Use case number 5
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Software Requirements Specifications

Use Case Name:	Message Friend	
Actosr:	User	
Pre-conditions:	Doesn't chat with a friend .	
Post-conditions:	chat with a friend.	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct and go to page .
	3- enter the name to the friend that he/she want to call .	
		4-go to profile that use chosen .
	5- press send message .	
		6- out box to user to enter his/her message .
Exceptions:	If user entered E-mail or mobile number and Password incorrect ask user to enter the correct information .	
Includes:	Log in ,search friend.	

Use Case ID:	Use case number 6
Use Case Name:	Message group Friend



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Software Requirements Specifications

Actosr:	User	
Pre-conditions:	Doesn't chat with group of friends .	
Post-conditions:	chat with group of friends .	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct and go to page .
	3-enter the names to the friends that he/she want to call	
		5-get all friends entered name in chat rom.
	5- write the massage he/she want.	
Exceptions:	If doesn't log in , user friend with he want to add in conversation .	
Includes:	Log in , search friend.	
Notes and Issues:	The friend name he want to call is exist.	

Use Case ID:	Use case number 7
Use Case Name:	search friend by e-mail
Actosr:	User



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Software Requirements Specifications

Pre-conditions:	Can't search to know a friend .	
Post-conditions:	Can search to know a friend and go to his/her profile .	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct and go to page .
	3- enter the name to the friend that he/she want to search .	
		4- list the names .
	5- choose the friend he/she search about .	
		6- print the profile that he/she chosen .
Exceptions:	If user can't log in , If there is no account appear to the user then this email doesn't have an account or you entered wrong mail.	
Includes:	Log in	

Use Case ID:	Use case number 8.
Use Case Name:	make and share posts.
Actosr:	User



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Software Requirements Specifications

Pre-conditions:	Can't make and share posts.	
Post-conditions:	User can make and share posts.	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct and go to page .
	3-write the post that he want and chose if your post public or friends or custom or only me then press share .	
		4-print your post shared and share the post in user profile with status that you chose or share in group .
	5- press like or share post.	
		6- print his like or share on post .
Exceptions:	If user doesn't log in or the group rule don't let you make a post or he /she doesn't friend and doesn't make like .	
Includes:	Log in	

Use Case ID:	Use case number 9
Use Case Name:	Create Group



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Software Requirements Specifications

Actosr:	User	
Pre-conditions:	Can't Create Group.	
Post-conditions:	Create Group.	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct and go to page .
	3- press create group and enter group name and members name and if the group public or closed or private .	
		4- create group with chosen information .
Exceptions:	If user doesn't log in.	
Includes:	Log in .	

Use Case ID:	Use case number 10
Use Case Name:	Create page
Actosr:	User
Pre-conditions:	No page .



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Software Requirements Specifications

Post-conditions:	You have a page .	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct and go to page .
	3- press create page and page name.	
		4-creat page with name.
Exceptions:	If user doesn't log in .	
Includes:	Log in .	

Use Case ID:	Use case number 11	
Use Case Name:	write or search for Hashtag.	
Actosr:	User	
Pre-conditions:	Doesn't have information about hashtag .	
Post-conditions:	have information about hashtag .	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct and go to page .



CS251: Phase 1 –FCI Socialist, Social Network

Software Requirements Specifications

	3- write hashtag he/she want to search .	
		4-print all posts have the same hashtag.
Exceptions:	If user doesn't log in or hashtag doesn't exist .	
Includes:	Log in .	

Use Case ID:	Use case number 12	
Use Case Name:	manage social media network.	
Actosr:	Developer.	
Pre-conditions:	User can't upload anything to the site .	
Post-conditions:	User can upload anything to the site .	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	
		2- System check if E-mail or mobile number and Password is correct and go to page .
	3- Do action that he/she want.	
		4-approve the action .
Exceptions:	If user doesn't log in or Developer doesn't approve the action .	
Includes:	Log in .	



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Software Requirements Specifications

Use Case ID:	Use case number 13	
Use Case Name:	manage membership.	
Actosr:	Developer.	
Pre-conditions:	Developer can't manage membership on the site.	
Post-conditions:	Developer can manage membership on the site.	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password to login .	
		2- check if the user pay membership fees at the detect time or not if the user didn't pay Developer will remove user account.

Use Case ID:	Use case number 13	
Use Case Name:	current active users.	
Actosr:	Developer.	
Pre-conditions:	Developer can't get the number of active users.	
Post-conditions:	Developer can get the number of active users.	
Flow of events:	User Action	System Action
	1- User Enter E-mail or mobile number and Password.	



CS251: Phase 1 –FCI Socialist, Social Network

Software Requirements Specifications

		2- System check if E-mail or mobile number and Password is correct and go to page .
		3-check number of log in users.
Includes:	Log in .	

Ownership Report

Item	Owners
Scope ,Overview ,Use case UML	<i>Suhila Ahmed Salah</i>
Software purpose , Document purpose, Use case tables	<i>Sara Mokhtar Abdo</i>
functional Requirements , Definitions, acronyms, and abbreviations	<i>Shaimaa Farouk Mohamed</i>
Nonfunctional Requirements	<i>Heba Mostafa Tawfek</i>

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CS251: Phase 1 –FCI Socialist, Social Network

Software Requirements Specifications

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