# Cairo University Faculty of Computers and Information



# **CS251**

# **Software Engineering I**

## **Project Name**

### Software Requirements Specifications

### **Team Names**

Name	ID
Mohamed Ashour Mahmoud	20170240
Mohamed Hamdy Mohamed	20170227
Mohamed Ali Farouk	20170249
Ahmed Gomma Farouk	20170014

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### **Document Purpose and Audience**

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope, function Requirements, NonfunctionRequirements and overview of the SRS. The aim of this document analyze and give an in-depth insight of the complete **API** by defining the problem statement in detail

The audience to read this document client, project manager, system analysis and system designer

#### 1. Introduction

#### 1.1 Purpose of the system

This document purpose is to make a preview for our new API system which will be a social network, showing the goal of the project, functions that the program will be able to do, the design and how will the program will look like, who will be our audience.

Note: some of our functions may be modified while developing the system.

#### 1.2 Scope of the system

Our project will be an API for a social network .this API will be a simple social network which can be developed later to service a small community like a school.

Our system will be as follow Users which is the main element in this system and it can make a group, page ,post ,like ,massage ,hashtag or adding another user and has many attributes like name ,age ,email ....etc. users can be normal or premier. Groups are one of what user can make and it can be private or public and managed by many users. Users create fan pages which managed by one or many users and it's attribute is the number of likes. Users make like to the posts they

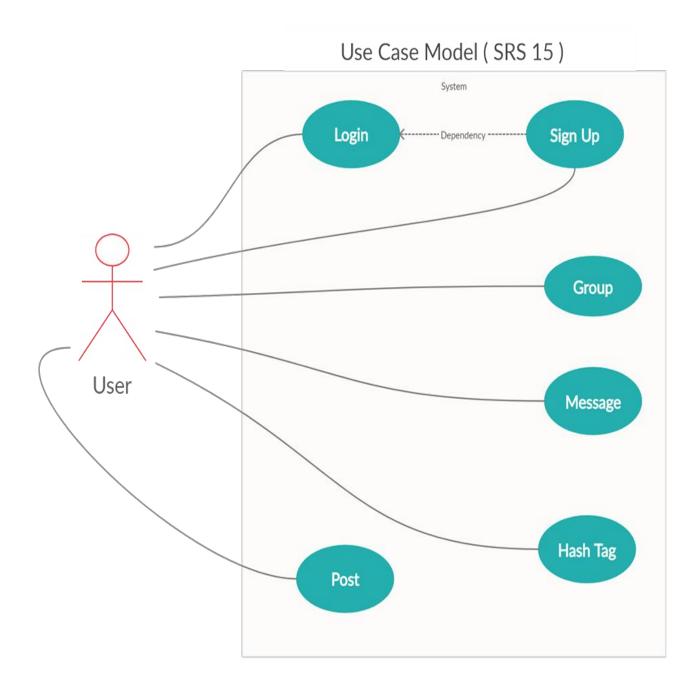
admire. User make hashtag# to organize a specific content of posts. Users send massages to other users in their friend list. Users send friend add request to other users to add them in their friend list.

Concept	Defintion	
User	Anyone can be a user by sing up write his name and password if the name was exist before program ask him to enter again	
Group	Group is a set of users collected together can share their needs in, group can be secret no one see posts accept them and could be not secret (public && private group ) group contain 2 types of users	
	admin user and ordinary user user can write what he want, post	
Post	share it with his friends and they show it and can comment on it and do like	
Message	Message is a private text from user to another no one can see it except them	
Hashtag	Is and ordinary post but contain '#' and must contain '_' that make it shared with any one write this hashtag also can share a specific subject using it	
API	a set of functions and procedures allowing the creation of applications that access the features or data of an operating system, application, or other service.	

# Requirements

Functional Requirements	Comment
2.1.1 User	1. Anyone can be a user by sing up write his name and password, gender, valid code, or sign in by enter name and password
2.1.2 Group	
2.1.3 Post	
2.1.4 Message	
2.1.5 Hashtag	

### Use case model



### **Use case tables**

Use case ID	1

Use case name	Log in		
actor	User		
precondition	User sign up, sign in	User sign up, sign in	
Post-conditions	User already exist so sign in or new so register to create new user		
Flow of events	User Action	System interaction	
	Sign in	Check on name and password if correct sign in else ask user to resign in or register	
	Register at it by enter his data name ,pass ,other ordered information	Check on name and pass and create account	
Includes	None		
exception	Invalid information	Print error message	
Notes and Issues	None		

Use case ID	2

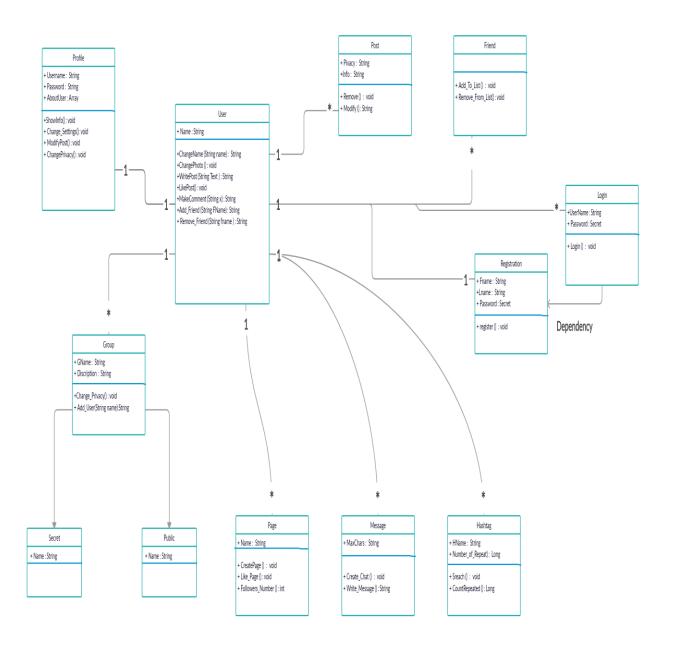
Use case name	Create group	
actor	User	
precondition	User login and create gro	up
Post-conditions	Group be Available for users	
Flow of events	User Action	System interaction
	User create group	Ask user for name, secret or public and description and some other info
	User enter all data ordered by system group	
Includes	None	
exception	None	None
Notes and Issues	This case owner for case 1 who create it	

Use case ID	3			
Use case name	Write post			
actor	User	User		
precondition	User log in then write pos	st		
Post-conditions	The Post arise and be available to anyone who has the authority to see it			
Flow of events	User Action	System interaction		
	User write post and share it	System make it available to anyone who has the authority to see it		
		If any one make like or comment appear on the post		
Includes	None			
exception	Unwritten(empty)post	Invalid process to write post		
Notes and Issues	None			

Use case ID	4		
Use case name	Write message		
actor	User		
precondition	User log in then write me	ssage and send it to other user	
Post-conditions	Gets the message to the other user		
Flow of events	User Action	System interaction	
	User write message and select other user to send this message to it		
		Send message and let the other user see it	
Includes	None		
exception	None	None	
Notes and Issues	No one can see message Except them		

Use case ID	5		
Use case name	Write Hashtag		
actor	User		
precondition	User write post and write mark of hash tag '#'		
Post-conditions	Post add to the hash tag written		
Flow of events	User Action	System interaction	
	User write post and write hash tag	Check if the hash tag exist if yes add post to it	
		If no create hash tag then add post to it	
Includes	None		
exception	Writing Hashtag without " " -	Undefined Hashtag	

### **Class diagram**



## Traceability Matrix

(NetWork / Functional Recuirement number)	Use case id	Class name
1	#1	User
2	#2	Group
3	#3	Post
4	#4	Message
5	#5	Hashtag

### **Ownership Report**

Item	Owners
Introduction , System Purpose ,Scope	Mohamed ali farouk ali
	Mohamed ashour Mahmoud
Functional recuirements , Use case tables	Mohamed ali farouk ali
	Mohamed ashour Mahmoud
	Ahmed gomaa farouk
Non functional Recuirments	Ahmed gomaa farouk
	Mohamed hamdy mohamed
Use case model , Class diagram , traceability matrix	Mohamed hamdy Mohamed
	Mohamed ashour mahmoud