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# **Use Cases**

**for**

# **SeniorConnect**

**Version 5 approved**

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**Team Gru Family**

**21/09/2015**

## Revision History

Name	Date	A*MD	Reason For Changes	Version
Ma Xiaoxue	10/09/2015	A, M	Draft use case list	V1.1
Mao Huiqi	11/09/2015	A,M	Revise use case list	V1.2
Ma Xiaoxue	14/09/2015	A	Add in detailed use cases 1-3, 13-15 and 26-28	V2.1
Mao Huiqi	15/09/2015	A	Add in detailed use cases 4-12	V2.2
Wang Siqi	16/09/2015	A	Add in detailed use cases 16-25	V2.3
Mao Huiqi	17/09/2015	A	Add use case 29 Listen to a voice message	V3.1
Ma Xiaoxue	17/09/2015	A	Add use case 30 Unlike moments shared by a friend	V3.2
Wang Siqi	18/09/2015	A	Add use case 31 Quit a community and use case 32 Decline a friend request	V3.3
Wang Siqi	18/09/2015	M	Revise use case business requirements	V4.1
Mao Huiqi	20/09/2015	A	Add in Revision History as required by CMMI Process Definition section 2.6.5.	V4.2
Wang Siqi	21/09/2015	M	Modify the use case descriptions according to System Requirement Specification Form.	V4.3
Ma Xiaoxue	22/09/2015	M	Finalize use case	V5

\*A - Added M - Modified D - Deleted

## Use Case List

<b>Use Case No.</b>	<b>Primary Actor</b>	<b>Use Cases</b>
1	Registered User	Log-in
2	User	Registration
3	User	Authenticate phone number
4	Authenticated User	Send voice message
5	Authenticated User	Chat with a friend
6	Authenticated User	View chat history
7	Authenticated User	Voice call a friend
8	Authenticated User	Video call a friend
9	Authenticated User	Create new group chat
10	Authenticated User	Add friend to group chat
11	Authenticated User	Chat within a group
12	Authenticated User	Quit group chat
13	Authenticated User	Share photo(s) in moments
14	Authenticated User	View moments shared by friends
15	Authenticated User	Like moments shared by friends
16	Authenticated User	View community list
17	Authenticated User	Join a community
18	Authenticated User	Receive community event notification
19	Authenticated User	View community event list
20	Authenticated User	Join an event
21	Authenticated User	Drop an event
22	Authenticated User	View joined events
23	Authenticated User	View list of friends
24	Authenticated User	Send a friend request
25	Authenticated User	Accept a friend request
26	Authenticated User	View self profile
27	Authenticated User	View own photos
28	Authenticated User	Logout
29	Authenticated User	Listen to a voice message
30	Authenticated User	Unlike moments shared by friends
31	Authenticated User	Quit a community
32	Authenticated User	Decline a friend request

Use Case ID:	1		
Use Case Name:	Log-in		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	10/09/2015

Actors:	Registered User
Description:	This use case describes the event when user logs in to SeniorConnect (SC system). User will use his/her phone number and password to log in to SC system.
Trigger:	User taps corresponding button to log into system using his/her phone number and password.
Preconditions:	1. User is not logged in.
Postconditions:	1. User's identity is authenticated by logging in with his/her phone number and password.
Normal Flow:	1.0.1. User taps SC system button to start the application. 1.0.2. System prompts out an input form for user to use phone number and password to log in. 1.0.3. User inputs phone number and password, and then submit the form. 1.0.4. SC system attempts to authenticate the user with the given information and allows user to log in if the details are valid.
Alternative Flows:	1.1.1. User visits a page that requires authentication without logging in 1.1.2. Back to normal flow 1.0.2.
Exceptions:	1.0.E.1.1 (From 1.0.4) If user does not provide correct login details, system prompts out an error message to show user that either the phone number is not registered or the password is incorrect
Includes:	NIL
Priority:	High
Frequency of Use:	High
Business Rules:	NIL
Special Requirements:	1. The system shall be able to log the user in within 3 seconds provided that the user name matches the password. 2. The system shall be able to log the user in automatically if no logout action is performed by the user.
Assumptions:	1. User has registered his/her phone number and password with our system.
Notes and Issues:	NIL

Use Case ID:	2		
Use Case Name:	Registration		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	10/09/2015

Actors:	User
Description:	This use case describes the event when user register a new account with SeniorConnect (SC system). User must register with SC system before he/she is able to use it. Registration primarily consists of entering a unique phone number for verification and creating a password.
Trigger:	User taps corresponding button to register his/her phone number and password with SC system.
Preconditions:	<ol style="list-style-type: none"> <li>1. User has not registered his/her phone number and password with SC system.</li> <li>2. User has not logged in.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. User's phone number and password are registered with SC system.</li> <li>2. User is logged into SC system.</li> </ol>
Normal Flow:	<ol style="list-style-type: none"> <li>2.0.1. User taps SC system button to start the application followed by the 'New User' button at login page.</li> <li>2.0.2. SC system directs user to the registration page and prompts out an input form for new user registration.</li> <li>2.0.3. User inputs phone number and password, and the conformation password, followed by submitting the form.</li> <li>2.0.4. SC system validates and submits the input form for authentication if the entered information is valid.</li> <li>2.0.5. User authenticates the submitted phone number and is directed to the main page if the phone number is authenticated.</li> </ol>
Alternative Flows:	<ol style="list-style-type: none"> <li>2.1.1. (From 2.0.3) The user selects the cancel option.</li> <li>2.1.2. The system returns the user to the login page without the user being logged in and any information entered has been erased.</li> </ol>
Exceptions:	<ol style="list-style-type: none"> <li>2.0.E.1.1. (From 2.0.4) If user does not provide valid information, e.g. invalid phone number, too simple password, wrong reentered password etc., system displays information with appropriate message to correct invalid information.</li> <li>2.0.E.1.2. User re-enters information, back to normal flow 2.0.3.</li> </ol>
Includes:	User case 3 Authenticate phone number
Priority:	High
Frequency of Use:	Medium
Business Rules:	<ol style="list-style-type: none"> <li>1. Every user is identified by his/her account. As the elderly is more familiar with traditional way of communication like telephone, using telephone number will help bridge the gap when the user to use the system.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. The system shall be able to verify the input information, e.g. unique and valid phone number, complex password.</li> </ol>

	<ol style="list-style-type: none"><li>2. The system shall be able to register user immediately after user authenticates his/her phone number.</li><li>3. The system shall be able to encrypt user's credentials and save encrypted data into database.</li></ol>
Assumptions:	<ol style="list-style-type: none"><li>1. The user will give his/her account reasonable and meaningful name.</li></ol>
Notes and Issues:	NIL

Use Case ID:	3		
Use Case Name:	Authenticate phone number		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	10/09/2015

Actors:	User
Description:	This use case describes the event when user authenticates a new phone number with SeniorConnect (SC system). User must authenticate his/her phone number with SC system before he/she is able to register the account. Authentication primarily consists of verifying a 6-digit time-based one-time secret code generated by the SC system.
Trigger:	A new user taps corresponding button to authenticate his/her phone number with SC system.
Preconditions:	<ol style="list-style-type: none"> <li>1. User has not registered his/her phone number and password with SC system.</li> <li>2. User has submitted his/her phone number and password to SC system.</li> <li>3. User has not logged in.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. User's phone number and password are registered with SC system.</li> <li>2. User is logged into SC system.</li> </ol>
Normal Flow:	<ol style="list-style-type: none"> <li>3.0.1. SC system receives the phone number and confirmed password submitted by the user.</li> <li>3.0.2. SC system generates a 6-digit time-based one-time secret code conforming to RFC6238 TOTP and sends the secret code to the entered phone number via SMS.</li> <li>3.0.3. User checks his/her message box for the message that the SC system sent and gets a 6-digit secret code.</li> <li>3.0.4. User enters the received 6-digit secret code and submits it.</li> <li>3.0.5. SC system verifies the secret code input by the user.</li> <li>3.0.6. If the verification is successful, SC system creates a new user account with the submitted form and logs user into the main page.</li> </ol>
Alternative Flows:	<ol style="list-style-type: none"> <li>3.1.1. (From 3.0.3) The user doesn't enter the secret code within 5 minute .</li> <li>3.1.2. The system returns the user to the registration page without the user being logged in and any information entered been saved.</li> <li>3.1.3. User re-submit the phone number and password, back to normal flow 3.0.1.</li> </ol>
Exceptions:	<ol style="list-style-type: none"> <li>3.0.E.1.1. (From 3.0.6) If user does not provide correct information, i.e. wrong secret code, system prompts out an error message to show user that secret code is wrong.</li> <li>3.0.E.1.2. User re-enters secret code, back to normal flow 3.0.5.</li> </ol>
Includes:	NIL
Priority:	High
Frequency of Use:	Medium

Business Rules:	<ol style="list-style-type: none"><li>1. Every user must use his/her own phone number for registration so that the connection at later stage can be easily built. The authentication step prevents user from using wrong phone numbers.</li><li>2. Information should not be saved until the authentication is completed. In the case where user has entered a wrong phone number, the phone number will not be blocked in the case that the real owner wishes to use it.</li></ol>
Special Requirements:	<ol style="list-style-type: none"><li>1. The system shall be able to send the secret code to user within 1 minute provided that the phone number is not registered.</li><li>2. The system shall be able to log the user in within 30 seconds provided that the input matches the generated secret code.</li></ol>
Assumptions:	NIL
Notes and Issues:	NIL



Use Case ID:	4		
Use Case Name:	Send voice message		
Created By:	Mao Huiqi	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	20/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when the user sends a voice message in a chat. The voice message is first recorded and sent out when the recording is done. The voice message can be sent in a chat with another user, or be sent in a group chat with several users.
Trigger:	The user is currently in a chat page with another user or in a group chat with several users, and the user activates the voice recording function by tapping the “record a voice message” button.
Preconditions:	<ol style="list-style-type: none"> <li>1. User’s identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. There is enough memory space to store the new message in database.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. A new voice message is sent out in a chat. The system shall then display this message on the chat page.</li> <li>2. A new voice message associated with the sending and receiving user(s) has been created and stored in the database.</li> </ol>
Normal Flow:	<ol style="list-style-type: none"> <li>4.0.1. The user activates voice recording function by tapping “record a voice message” button.</li> <li>4.0.2. The user speaks out the message.</li> <li>4.0.3. The user taps “stop recording and send” button to send the voice message in a chat with a friend or in a group chat.</li> <li>4.0.4. The voice message is processed, stored in database and then sent out to the recipient user</li> <li>4.0.5. SC system displays the new voice message on the chat page as a sent voice message if the sending is successful.</li> </ol>
Alternative Flows:	NIL
Exceptions:	<ol style="list-style-type: none"> <li>4.0.E.1 (From 4.0.4) If SC system fails to process the recorded voice message or fails to store it in database, the system shall display an error message and suggests the user to record again.</li> <li>4.1.E.1 (From 4.0.4) If the voice message fails to be sent to the recipient user due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.</li> </ol>
Includes:	NIL
Priority:	High
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. The elderly refuses to input messages by typing. Some of them are not familiar with the keyboard on the mobile phone. Some of them are not able to type messages due to physical reasons. Thus, voice messages make their social life easy and enjoyable.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. The error message (from 4.0.E.1) shall display within 1 second.</li> <li>2. The error message (from 4.0.E.2) shall display within 10 seconds.</li> </ol>

	3. The successfully sent message shall display within 1 second after the user taps “stop recording and send” button.
Assumptions:	<ol style="list-style-type: none"><li>1. The user is willing to record the voice message again if there is any error sending the message.</li><li>2. The voice messages that have already been recorded successfully can neither be edited nor deleted.</li></ol>
Notes and Issues:	NIL

Use Case ID:	5		
Use Case Name:	Chat with a friend		
Created By:	Mao Huiqi	Last Updated By:	Mao Huiqi
Date Created:	20/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when the user opens the chat page with a friend.
Trigger:	The user is currently in a chat list page or a friend list page, and the user activates chatting with a friend function by tapping the corresponding chat avatar in chat list or friend profile in friend list.
Preconditions:	<ol style="list-style-type: none"> <li>1. User's identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user has at least one friend in the friend list.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The chat page is opened.</li> </ol>
Normal Flow:	<ol style="list-style-type: none"> <li>5.0.1 In a chat list page, the user opens a chat with a friend by tapping on the corresponding chat avatar.</li> <li>5.0.2 The user can continue with viewing chat history, sending/receiving and listen to voice messages and making voice or video calls described in Use Case 4,6,7,8.</li> </ol>
Alternative Flows:	<ol style="list-style-type: none"> <li>5.1.1. (From 5.0.1) The user scrolls down the chat list page to find a chat avatar.</li> <li>5.1.2. Back to normal flow 5.0.1</li> <li>5.2.1. (From 5.0.1) The users opens the friend list page.</li> <li>5.2.2. The user scrolls down the friend list to find a friend to chat with.</li> <li>5.2.3. The user opens a chat with a friend by tapping on the user's profile image.</li> <li>5.2.4. Back to normal flow 5.0.2.</li> </ol>
Exceptions:	5.0.E.1 (From 5.0.1) If the user cannot find a chat with a certain friend in the chat list page, then the user shall proceed to 5.2.1 to start chatting with the intended friend.
Includes:	Use Case 4 Send voice message, Use Case 29 listen to a voice message
Priority:	High
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. The user may have a lot of past chats with friends and it can be difficult for the user to find an old chat in a long chat list. So the user is also allowed to open a chat with a friend from the friend list.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. (From 5.0.1 and 5.2.3) The chat page shall display within 1 second.</li> </ol>
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	6		
Use Case Name:	View chat history		
Created By:	Mao Huiqi	Last Updated By:	Ma Xiaoxue
Date Created:	12/09/2015	Date Last Updated:	14/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when the user views the voice message chat history with another user or with several users in a group chat. The past voice message should be displayed in chronological order, with the most recent messages showing first.
Trigger:	The user taps the user's/group chat avatar to open the chat page and scrolls down to view earlier history.
Preconditions:	<ol style="list-style-type: none"> <li>1. User's identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. There is at least one existing chat message with the associated user/group.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. SC system displays the voice message chat history in chronological order, with the most recent messages showing first.</li> </ol>
Normal Flow:	<ol style="list-style-type: none"> <li>6.0.1 The user visits the chat list page.</li> <li>6.0.2 The user taps on a chat avatar and enters the chat page.</li> <li>6.0.3 SC system lists out the most recent 10 voice messages in chronological order.</li> <li>6.0.4 The user scrolls down to view earlier chat history.</li> </ol>
Alternative Flows:	<ol style="list-style-type: none"> <li>6.1.1 (From 6.0.2) The user scrolls down the chat list page to find the friend.</li> <li>6.1.2 Back to normal flow 6.0.2.</li> <li>6.2.1 (From 6.0.4) The user proceeds to listen to a voice message that is listed in the chat history.</li> <li>6.2.2 Back to normal flow 6.0.4.</li> </ol>
Exceptions:	6.0.E.1 (From 6.0.3) If there is no chat history, the system shall display "No messages, Start chatting" in the page.
Includes:	NIL
Priority:	High
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. It is easy for the elderly to forget what he/she has sent due to bad memory. Thus, it is necessary to provide a convenient way for them to listen to chat history.</li> <li>2. The user should be able to review the voice chat history. For the past voice messages, the user should not be able to edit or delete the voice message, but should be able to listen to the voice message.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. The chat history (from 6.0.3) shall display within 1 second.</li> <li>2. The previous chat history (from 6.1.1) shall display within 1 seconds after the user scrolls down to view.</li> </ol>
Assumptions:	<ol style="list-style-type: none"> <li>1. The SC system shall display the sent date and time of each voice message.</li> <li>2. The system shall display the length of each voice message</li> </ol>

	according to the duration.
Notes and Issues:	NIL

Use Case ID:	7		
Use Case Name:	Voice call a friend		
Created By:	Mao Huiqi	Last Updated By:	Ma Xiaoxue
Date Created:	14/09/2015	Date Last Updated:	14/09/2015

Actors:	Authenticated User		
Description:	This use case describes the event when the user makes voice call with a friend. The user will initiate a voice call and wait for friend's response to start voice communication.		
Trigger:	The user activates voice call to a friend by tapping on the "voice call" button in a chat page.		
Preconditions:	<ol style="list-style-type: none"> <li>1. User's identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user initiating voice call has added the other user into friend list.</li> </ol>		
Postconditions:	<ol style="list-style-type: none"> <li>1. SC system establishes a voice connection between a user and his/her friend</li> </ol>		
Normal Flow:	<ol style="list-style-type: none"> <li>7.0.1 The user visits a chat page of a friend.</li> <li>7.0.2 The user taps on the "voice call" button to initiate a voice call with a friend.</li> <li>7.0.3 SC system sends the invitation to user's friend and displays a waiting page to wait for the response.</li> <li>7.0.4 The invited friend accepts the voice call invitation by tapping the "accept" button.</li> <li>7.0.5 SC system receives confirmation response and establishes a voice communication channel between two users.</li> <li>7.0.6 The user is able to voice chat with a friend.</li> <li>7.0.7 The user ends the voice call by tapping on a corresponding end button.</li> </ol>		
Alternative Flows:	<ol style="list-style-type: none"> <li>7.1.1 (From 7.0.5) SC system receives declining response of the voice call request.</li> <li>7.1.2 SC system terminates the voice call invitation session.</li> <li>7.1.3 SC system notifies the user that the request has been declined.</li> <li>7.1.4 SC system directs the user to the chat page.</li> </ol>		
Exceptions:	<ol style="list-style-type: none"> <li>7.0.E.1 (From 7.0.5) If SC system does not receive response from the invited user for more than 120 seconds, the session will be considered as a timeout. <ol style="list-style-type: none"> <li>7.0.E.1.1 SC system terminates the voice call invitation session.</li> <li>7.0.E.1.2 SC system notifies the user about the timeout of the voice call invitation.</li> <li>7.0.E.1.3 SC system directs the user to the chat page.</li> </ol> </li> <li>7.0.E.2 (From 7.0.6) If SC system encounters some low quality connectivity or disconnection for the voice call, the voice call session will end. <ol style="list-style-type: none"> <li>7.0.E.1.1 SC system terminates the voice call.</li> <li>7.0.E.1.2 SC system notifies the user about the disconnection of the voice call.</li> <li>7.0.E.1.3 SC system directs the user to the chat page.</li> </ol> </li> </ol>		

Includes:	NIL
Priority:	Low
Frequency of Use:	High
Business Rules:	1. The user should send a request to another user if he/she wishes to make a voice call. If the request is agreed, the voice communication channel will then be established and two parties can start the voice communication.
Special Requirements:	1. The voice call connection (from 7.0.5) shall be established within 5 seconds after receive the confirmation response. 2. The system (from 7.1.1, 7.0.E.1 and 7.0.E.2) shall directs the user to the chat page within 1 second.
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	8		
Use Case Name:	Video call a friend		
Created By:	Mao Huiqi	Last Updated By:	Ma Xiaoxue
Date Created:	14/09/2015	Date Last Updated:	14/09/2015

Actors:	Authenticated User		
Description:	This use case describes the event when the user makes video call with a friend. The user will initiate a video call and wait for friend's response to start video communication.		
Trigger:	The user activates video call to a friend by tapping on the "video call" button in a chat page.		
Preconditions:	<ol style="list-style-type: none"> <li>1. User's identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user initiating video call has added the other user into friend list.</li> </ol>		
Postconditions:	<ol style="list-style-type: none"> <li>1. SC system establishes a video connection between a user and his/her friend</li> </ol>		
Normal Flow:	<ol style="list-style-type: none"> <li>8.0.1 The user visits a chat page of a friend.</li> <li>8.0.2 The user taps on the "video call" button to initiate a video call with a friend.</li> <li>8.0.3 SC system sends the invitation to user's friend and displays a waiting page to wait for the response.</li> <li>8.0.4 The invited friend accepts the video call invitation by tapping the "accept" button.</li> <li>8.0.5 SC system receives confirmation response and establishes a video communication channel between two users.</li> <li>8.0.6 The user is able to video chat with a friend.</li> <li>8.0.7 The user ends the video call by tapping on a corresponding end button.</li> </ol>		
Alternative Flows:	<ol style="list-style-type: none"> <li>8.1.1 (From 8.0.5) SC system receives declining response of the video call request.</li> <li>8.1.2 SC system terminates the video call invitation session.</li> <li>8.1.3 SC system notifies the user that the request has been declined.</li> <li>8.1.4 SC system directs the user to the chat page.</li> </ol>		
Exceptions:	<ol style="list-style-type: none"> <li>8.0.E.1 (From 8.0.5) If SC system does not receive response from the invited user for more than 120 seconds, the session will be considered as a timeout.               <ol style="list-style-type: none"> <li>8.0.E.1.1 SC system terminates the video call invitation session.</li> <li>8.0.E.1.2 SC system notifies the user about the timeout of the video call invitation.</li> <li>8.0.E.1.3 SC system directs the user to the chat page.</li> </ol> </li> <li>8.0.E.2 (From 8.0.6) If SC system encounters some low quality connectivity or disconnection for the video call, the video call session will end.               <ol style="list-style-type: none"> <li>8.0.E.1.1 SC system terminates the video call.</li> <li>8.0.E.1.2 SC system notifies the user about the disconnection of the video call.</li> <li>8.0.E.1.3 SC system directs the user to the chat page.</li> </ol> </li> </ol>		



Includes:	NIL
Priority:	Low
Frequency of Use:	High
Business Rules:	1. The user should send a request to another user if he/she wishes to make a video call. If the request is agreed, the video communication channel will then be established and two parties can start the video call.
Special Requirements:	1. The video call connection (from 8.0.5) shall be established within 10 seconds after receiving the confirmation response. 2. The system (from 8.1.1, 8.0.E.1 and 8.0.E.2) shall directs the user to the chat page within 1 second. 3. During video chat, each user is able to see a real-time video of the other user.
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	9		
Use Case Name:	Create a new group chat		
Created By:	Mao Huiqi	Last Updated By:	Ma Xiaoxue
Date Created:	14/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when the user creates a group chat with two or more friends. The chat can only be created when the user adds two or more friends in the chat and a valid name is given.
Trigger:	The user initiates the process by tapping on “Create a new group chat” button.
Preconditions:	<ol style="list-style-type: none"> <li>1. User’s identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user currently has at least two friends.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. A new group chat with associated users is created. The system shall display this chat in the chat list page</li> <li>2. A new group chat associated with three or more users has been created and stored in the database.</li> </ol>
Normal Flow:	<ol style="list-style-type: none"> <li>9.0.1 The user visits the chat list page.</li> <li>9.0.2 The user taps the “Create a new group chat” button to initiate creating a new group chat.</li> <li>9.0.3 SC system prompts a form for user to input general information of the group chat.</li> <li>9.0.4 The user inputs the name of the group chat.</li> <li>9.0.5 The user selects at least 2 friends to be added in this group chat by scrolling down and up the friend list.</li> <li>9.0.6 The user submits the form.</li> <li>9.0.7 SC system creates new group chat with the given name and acknowledge the successful creation of the group by displaying the new group chat in the associated users’ chat list pages.</li> </ol>
Alternative Flows:	<ol style="list-style-type: none"> <li>9.1.1 (From 9.0.3) The user selects the cancel option.</li> <li>9.1.2 The system returns the user to the chat list page without the group chat being created and any information entered has been erased.</li> </ol>
Exceptions:	<ol style="list-style-type: none"> <li>9.0.E.1 (From 9.0.4) If the user does not input a group chat name, SC system will name the group chat using the usernames of users in this group chat.</li> <li>9.0.E.2 (From 9.0.5) If the user only selects one friend to be added in the group chat, SC system will disable the submit button for creating the group.</li> </ol>
Includes:	Use Case 10 Add a friend to a group chat
Priority:	Low
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. A group chat should have at least 3 users. For a group chat less than 3 users, it is essentially the same as the chat page with the other user. In this way, repetitive function is avoided as there is only one way for user to perform a specific function. And thus</li> </ol>

	SC system decreases the burden of the first time user.
Special Requirements:	1. (From 9.0.3) The system shall display the new group chat in the chat list page within 5 second after successful submission of the request.
Assumptions:	1. The name of the group chat can be repetitive and does not need to be unique. 2. A user can create a group chat and add any of his/her friends into the group chat. Adding a friend into a group chat does not require confirmation from a friend.
Notes and Issues:	NIL

Use Case ID:	10		
Use Case Name:	Add friend(s) into a group chat		
Created By:	Mao Huiqi	Last Updated By:	Ma Xiaoxue
Date Created:	16/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when the user adds one or more friends to an existing group chat. The friends being added to a group chat will be able to receive messages from the group chat.
Trigger:	The user adds new member(s) to a group chat by tapping on the “add friends” button followed by selecting the friend(s) from his/her friend list.
Preconditions:	<ol style="list-style-type: none"> <li>1. User’s identity has been authenticated by logging in with his/her phone number and password</li> <li>2. The user currently has an existing group chat.</li> <li>3. The user has added the target user(s) into his/her friend list.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. One or more users are added to an existing group chat.</li> <li>2. The user(s) added is/are able to receive messages from the group chat.</li> <li>3. The group chat shall be updated with one or more members in the database</li> </ol>
Normal Flow:	<p>10.0.1 The user visits the group chat page.</p> <p>10.0.2 The user taps on the “add friends” button to add new members to group chat.</p> <p>10.0.3 SC system displays a list of user’s friends for selection to be added to the group chat.</p> <p>10.0.4 The user selects one or more friends and confirms the action.</p> <p>10.0.5 SC system shall update the member list of this group chat.</p> <p>10.0.6 The new member will receive chat messages from the group chat and SC system displays this group chat in the new member’s chat list when first chat message is received.</p> <p>10.0.7 SC system directs the user back to the group chat page and notifies the joining of new members in the group chat.</p>
Alternative Flows:	<p>10.1.1 (From 10.0.3 and 10.0.4) The user selects the cancel option.</p> <p>10.1.2 The system returns the user to the group chat page without the new member(s) being added and any information entered has been erased.</p>
Exceptions:	10.0.E.1 (From 10.0.5) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.
Includes:	NIL
Priority:	High
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. A user inside a group chat should be able to add any of his/her friends in his/her group chat. This provides a convenient way for the elderly of similar interests to talk with each other. Also,</li> </ol>

	the elderly knows more and more friends through his/her friend in this way. As a result, more and more elderly will join SC system due to convenience and needs concern.
Special Requirements:	1. (From 10.0.7) The system shall return to the group chat page and send notifications within 3 seconds.
Assumptions:	1. Adding a friend into a group chat should not require confirmation from the friend. If the added user is not willing to stay in the group, he/she can perform the “quit group” option.
Notes and Issues:	NIL

Use Case ID:	11		
Use Case Name:	Chat within a group		
Created By:	Mao Huiqi	Last Updated By:	Mao Huiqi
Date Created:	20/09/2015	Date Last Updated:	20/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when the user opens the chat page of a group.
Trigger:	The user is currently in a chat list page, and the user activates chatting within a group function by tapping the corresponding chat avatar in chat list.
Preconditions:	<ol style="list-style-type: none"> <li>1. User's identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user has joined at least one group.</li> </ol>
Postconditions:	1. The group chat page is opened
Normal Flow:	<p>11.0.1 In a chat list page, the user opens a chat within a group by tapping on the corresponding chat avatar.</p> <p>11.0.2 The user can continue with functions viewing chat history, sending/receiving and listen to voice messages described in Use Case 4,6 and 29.</p>
Alternative Flows:	<p>11.1.1 (From 11.0.1) The user scrolls down the chat list page to find a group chat avatar.</p> <p>11.1.2 Back to normal flow 11.0.1</p>
Exceptions:	NIL
Includes:	Use Case 4 Send voice message, Use Case 29 listen to a voice message
Priority:	Low
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. Group chat will only be stored and shown in chat list rather than in the user's friend list since a group chat involves many users.</li> <li>2. There is no need to enable the voice/video call function within a group. Most of the time, the real-time voice/video call channel is established for one-to-one communication only. Thus, users can voice/video a friend by entering the chat page with the corresponding friend instead of a group page.</li> </ol>
Special Requirements:	1. (From 11.0.1) The group chat page shall display within 1 second.
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	12		
Use Case Name:	Quit a group chat		
Created By:	Mao Huiqi	Last Updated By:	Mao Huiqi
Date Created:	14/09/2015	Date Last Updated:	14/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when the user quits a group chat. The group chat will be deleted from the user's chat list and the user will no longer receive chat messages from this group chat.
Trigger:	The user is currently in a group chat page and the user activates the quit a group chat function by tapping the "quit" button.
Preconditions:	<ol style="list-style-type: none"> <li>1. User's identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user is a member of a group chat.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user is deleted from the group chat member list.</li> <li>2. The group chat is deleted from the user's chat list</li> <li>3. The deletion of a member in the group chat is updated in database.</li> </ol>
Normal Flow:	<p>12.0.1 The user activates quitting a group chat by tapping on the "quit" button.</p> <p>12.0.2 SC system deletes the user from the group chat member list.</p> <p>12.0.3 SC system deletes the group chat from the user's chat list.</p> <p>12.0.4 SC system returns the user back to the chat list page.</p>
Alternative Flows:	NIL
Exceptions:	<p>12.0.E.1 (From 12.0.2) If after the user is deleted from a group chat member list and there are only 2 users left in a group chat, the group chat will be kept although there are less than 3 members in the chat.</p> <p>12.1.E.1 (From 12.0.2) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.</p>
Includes:	NIL
Priority:	Low
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. The user can quit any group chat where he/she is a member. After quitting a group chat, the chat and the chat history will be automatically deleted from the user's device.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. (From 12.0.4) SC system shall return the user back to the chat list page within 1 second.</li> </ol>
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	13		
Use Case Name:	Share photo(s) in moments		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	11/09/2015

Actors:	Authenticated user
Description:	This use case describes the event when user shares photo in moments. User can upload a photo from mobile phone photo library or take a picture via mobile phone camera. User can share up to 9 photos in every moment.
Trigger:	User taps “New Photo” button located at the top of “moments” page.
Preconditions:	User is logged in.
Postconditions:	Photo(s) is/are shared as a moment in user’s “moments”.
Normal Flow:	<p>13.0.1. User taps the “New Photo” button located at the top of “moments” page.</p> <p>13.0.2. System prompts out a dialog for user to choose either uploading from mobile phone photo library or taking a new photo via mobile phone camera.</p> <p>13.0.3. User selects to take a new photo.</p> <p>13.0.4. System prompts the interface for taking photo provided by the native mobile phone system.</p> <p>13.0.5. User taps corresponding button to take a new photo.</p> <p>13.0.6. System prompts a page where photo(s) already selected or taken is/are displayed. There is also a “+” sign, by tapping which user can add up to 9 photos in a moment.</p> <p>13.0.7. User taps “upload” button to share all photos as one moment.</p> <p>13.0.8. System prompts a dialog informing the user that the upload is successful.</p> <p>13.0.9. System directs user back to main page of “moments” to view the uploaded photo(s).</p>
Alternative Flows:	<p>13.1.1. (From 13.0.3) User chooses to upload existing photo(s) from mobile phone photo library.</p> <p>13.1.2. System displays a gallery of existing photos in mobile phone for user to choose.</p> <p>13.1.3. User taps photo(s) which he/she intends to upload. User can choose up to nine photos in a moment.</p> <p>13.1.4. User taps corresponding button to confirm the selection.</p> <p>13.1.5. Back to normal flow 13.0.6.</p> <p>13.2.1. (From 13.0.6) User taps “+” sign to choose more photos from mobile phone photo library for uploading.</p> <p>13.2.2. Back to alternative flow 13.1.2.</p> <p>13.3.1. (From 13.0.2 and 13.0.6) User selects the cancel option.</p> <p>13.3.2. Back to normal flow 13.0.9.</p>
Exceptions:	13.0.E.1.1 (From 13.0.7) If the upload is unsuccessful, system prompts a dialog informing the user that the upload is unsuccessful and the potential reasons. The system remains in the same page.
Includes:	NIL



Priority:	Medium
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. Sometimes, user wants to share photo(s) from existing mobile phone photo library. Other times, user may want to share instant moments with others. Inclusion of two options, i.e. uploading from mobile phone photo library and taking a new photo via mobile phone camera, gives users more freedom to share moments in the way they are familiar with. Moreover, this avoids intricate instructions and makes the SC system user friendly.</li> <li>2. SC system does not provide text-input function because the elderly does not like to type and their shared photos are self-descriptive most of the times. In addition, this ignites others' curiosity to focus on and to explore what is happening in the photo, thus increases the interaction among the elderly through online chatting and offline face-to-face activity.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. The system shall be able to upload the photos at a speed around 500KB/s, given that the user's mobile network supports such upload speed.</li> </ol>
Assumptions:	<ol style="list-style-type: none"> <li>1. User has basic knowledge in using camera and photo gallery of the phone.</li> <li>2. User are cautious about their actions. Therefore, no confirmation of cancel option is required.</li> </ol>
Notes and Issues:	NIL

Use Case ID:	14		
Use Case Name:	View moments shared by friends		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	11/09/2015

Actors:	Authenticated user
Description:	This use case describes the event when user views photos shared by friends in “moments”
Trigger:	User taps the “moments” button from navigation bar.
Preconditions:	1. User is logged in
Postconditions:	1. The system displays moments shared by friends.
Normal Flow:	<p>14.0.1. User taps the “moments” button from navigation bar.</p> <p>14.0.2. System prompts out a list of moments shared by friends sorted by posting time.</p> <p>14.0.3. In each moment, the user’s icon is at the top left corner, followed by the user’s name at top. User’s photo(s) is/are displayed below.</p> <p>14.0.4. Following every moment, there is a big button for user to like the moment if he/she has not liked it.</p> <p>14.0.5. User taps a specific photo to view more details.</p> <p>14.0.6. User taps the current viewing photo to exit detailed mode.</p> <p>14.0.7. User scrolls down to view moments shared by friends earlier.</p>
Alternative Flows:	<p>14.1.1. (From 14.0.4) If the user has already liked the moment, the system provides user a button to unlike the moment.</p> <p>14.1.2. Back to normal flow 14.0.5.</p> <p>14.2.1. (From 14.0.6) User swipes right or left to view next or earlier photo(s) correspondingly.</p> <p>14.2.2. Back to normal flow 14.0.6.</p>
Exceptions:	14.0.E.1.1. If the user and none of the user’s friends have shared any photo, SC system displays “No moments, Start sharing” in the page.
Includes:	NIL
Priority:	Medium
Frequency of Use:	High
Business Rules:	<p>1. Users are only able to view photos shared by himself/herself and friends due to privacy concerns.</p> <p>2. The elderly is not good at memory. Just viewing profile image or knowing user name only maybe not enough for them to recall the correct person in real life. In order to enhance users’ face-name matching ability, user’s name is always displayed following his/her profile image.</p> <p>3. There is no text comment function available because the elderly does not like to type. It also this ignites others’ curiosity to focus on and to explore what is happening in the photo, thus increases the interaction among the elderly through online chatting and offline face-to-face activity.</p> <p>4. User can show their interest by liking others’ moments. Being</p>

	liked by others is also encouraging to the user who posts the moment. In this way, the moments provide an entry point for users to communicate via voice chatting and offline face-to-face activity.
Special Requirements:	<ol style="list-style-type: none"><li>1. The system shall be able to show moments within 5 seconds.</li><li>2. The system should allow user to scroll down to load more moments in pagination manner.</li></ol>
Assumptions:	<ol style="list-style-type: none"><li>1. The user will give his/her account reasonable and meaningful profile image and name.</li></ol>
Notes and Issues:	NIL

Use Case ID:	15		
Use Case Name:	Like moments shared by friends		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	11/09/2015

Actors:	Authenticated user
Description:	This use case describes the event when user likes photo(s) shared by friends in “moments” page.
Trigger:	User taps “like” button under the moment.
Preconditions:	User is logged in and has not liked the moment.
Postconditions:	User has liked the moment.
Normal Flow:	15.0.1 User taps “like” button under a certain moment. 15.0.2 System changes the “like” button under the moment to “unlike” button.
Alternative Flows:	NIL
Exceptions:	15.0.E.1.1 (From 15.0.2) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.
Includes:	NIL
Priority:	Medium
Frequency of Use:	High
Business Rules:	1. User should be able to show interest by liking the moment. Being liked by others is also encouraging to the user who posts the moment. 2. In the scenario when the user likes a moment erroneously, the user should be able to unlike it.
Special Requirements:	1. The request should be completed within 1 second.
Assumptions:	1. Users can view moments shared by themselves and their friends.
Notes and Issues:	NIL

Use Case ID:	16		
Use Case Name:	View community list		
Created By:	Wang Siqu	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user views list of communities available in SC system. Communities user have joined as a member are shown first followed by other communities. All communities are listed in alphabetic order.
Trigger:	The user tabs “community” button in navigation bar to enter community list page.
Preconditions:	1. The user’s identity has been authenticated by logging in with his/her phone number and password.
Postconditions:	1. SC system displays list of communities available in SC system. 2. If there is any update in the communities user have joined, there will be a red dot at the bottom of the group name.
Normal Flow:	16.0.1 The user tabs “community” button in navigation bar to enter community list page. 16.0.2 SC system displays list of communities available in SC system. Communities user have joined as a member are shown first followed by other communities. All communities are listed in alphabetic order. 16.0.3 User scrolls down to view more communities.
Alternative Flows:	NIL
Exceptions:	16.0.E.1.1 (From 16.0.2) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.
Includes:	NIL
Priority:	Medium
Frequency of Use:	High
Business Rules:	1. All communities are named according to its function. All communities are created and registered with concise and meaningful names by system administrators. Users can view the list of communities in order to have a better understanding of what types of events the communities may organize.
Special Requirements:	1. List of communities should display in less than 3 seconds.
Assumptions:	1. There is at least one community exists in SC system created and managed by system administrators.
Notes and Issues:	NIL

Use Case ID:	17		
Use Case Name:	Join a community		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user joins a new community. The user can only join communities available on the community list that they are not a member of. User will receive community event updates after joining it.
Trigger:	The user tabs corresponding community avatar in community list page to join a community.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user's identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. There is at least one community exists in SC system that user is not a member of.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. SC system shows the newly joined community in front of other communities in community list.</li> <li>2. User is able to receive event update of joined communities.</li> <li>3. User is able to join events created and managed by joined communities.</li> </ol>
Normal Flow:	<p>17.0.1 The user tabs "community" button in navigation bar to enter community list page.</p> <p>17.0.2 The user tabs corresponding community avatar in community list page to enter a community.</p> <p>17.0.3 The user tabs "join community" button on the top of the community page that he/she wants to join.</p> <p>17.0.4 The community is added to user's community list in database and user is able to receive event update of it. User is also able to join events created and managed by the community.</p> <p>17.0.5 SC system shows the newly joined community in front of other communities in community list.</p>
Alternative Flows:	NIL
Exceptions:	<p>17.0.E.1.1 (From 17.0.2) If the user is unable to find the community avatar, he/she scrolls down to view more communities.</p> <p>17.0.E.1.2 Back to normal flow 17.0.2.</p> <p>17.0.E.2.1 (From 17.0.4) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.</p>
Includes:	Use Case 18 Receive community event notification
Priority:	Medium
Frequency of Use:	Low
Business Rules:	<ol style="list-style-type: none"> <li>1. Users will only receive events notifications after they join a community. In order to receive notification about events they may be interested in, user should be able to join interested communities.</li> </ol>

Special Requirements:	<ol style="list-style-type: none"><li>1. SC system should display list of events organized by the community in less than 3 seconds.</li><li>2. User is only able to join an event after joining the corresponding community.</li></ol>
Assumptions:	<ol style="list-style-type: none"><li>1. There are only a few communities available in SC system characterized by its name and managed by trained system administrators.</li></ol>
Notes and Issues:	NIL

Use Case ID:	18		
Use Case Name:	Receive community event notification		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user receives notification about newly published event of any joined communities.
Trigger:	The user tabs “community” button in navigation bar and there are some newly broadcasted events of user’s joined communities.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user’s identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user has joined at least one community.</li> <li>3. There is at least one newly published event of user’s joined communities.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. If there is any event update in the communities user have joined, there will be a red dot at the bottom of the group name.</li> </ol>
Normal Flow:	<ol style="list-style-type: none"> <li>18.0.1 SC System displays a red dot on top right corner of the “community” button in navigation bar.</li> <li>18.0.2 The user tabs “community” button to enter community list page.</li> <li>18.0.3 SC system displays list of communities available in SC system. Communities user have joined as a member are shown first followed by other communities. All communities are listed in alphabetic order.</li> <li>18.0.4 If there is any event update in the communities user have joined, there will be a red dot at the bottom of the group name.</li> <li>18.0.5 The user tabs corresponding community avatar in community list page to enter a community page.</li> <li>18.0.6 SC system removes the red dot of communities viewed by the user.</li> <li>18.0.7 SC system removes the red dot on top right corner of the community button in the navigation bar if no community has unread event updates.</li> <li>18.0.8 User scrolls down to view more communities.</li> </ol>
Alternative Flows:	NIL
Exceptions:	18.0.E.1 (From 18.0.7) SC system keeps the red dot on top right corner of the community button in the navigation bar if users exits community page before finishes reading all event updates.
Includes:	NIL
Priority:	Low
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. The elderly can easily forget communities they joined. In order to remind users about available events organized by communities, notification should be sent to members of communities.</li> </ol>



Special Requirements:	<ol style="list-style-type: none"><li>1. The user should be able to receive event update in less than 3 seconds after the new event is published.</li><li>2. If the user lacks internet connection at the time the event is published, the user should still be able to receive event notification once he/she is connected to the internet.</li><li>3. The user should only receive event notification of joined communities. If there are only newly published events in disjointed communities, there should neither be a red dot on top right corner of the community button in navigation bar nor the red dot at the bottom of corresponding community in community list page.</li></ol>
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	19		
Use Case Name:	View community event list		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user views all events organized and published by the communities in SC system. Only events of date no later than current date are shown in chronological order by default. User can scroll upward to view earlier events of selected community.
Trigger:	The user taps “community” button in navigation bar to enter community list page followed by selecting a specific community to enter selected community home page.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user’s identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. There is at least one community exists in SC system organized and managed by system administrators.</li> <li>3. There is at least one published event happening no later than current date in any communities in SC system.</li> </ol>
Postconditions:	1. The user is able to view a list of events organized and published by the community administrators in chronological order.
Normal Flow:	<p>19.0.1 The user taps “community” button to enter community list page.</p> <p>19.0.2 SC system displays list of communities available in SC system. Communities user have joined as a member are shown first followed by other communities. All communities are listed in alphabetic order.</p> <p>19.0.3 If there is any event update in the communities user have joined, there will be a red dot at the bottom of the group name.</p> <p>19.0.4 The user taps corresponding community avatar in community list page to enter a community page.</p> <p>19.0.5 SC system displays all events of date no later than current date in chronological order of the selected community.</p> <p>19.0.6 The user scrolls upward to view earlier events organized and published by the selected community.</p>
Alternative Flows:	<p>19.1.1 (From 19.0.1) The user is currently at the home page of one community.</p> <p>19.1.2 The user taps “back” button at the top left corner of the community home page to exit to community list page.</p> <p>19.1.3 Back to normal flow 19.0.2.</p>
Exceptions:	<p>19.0.E.1.1 (From 19.0.5) SC system displays “no upcoming events” in community home page if there is no published event of date no later than current date.</p> <p>19.0.E.2.1 (From 19.0.5) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.</p>

Includes:	NIL
Priority:	Medium
Frequency of Use:	High
Business Rules:	1. Users should be able view the event list of a community even if they are not members of. The event list consists of brief event description, event date and gathering location. Some events may have comprehensive graphs to facilitate understanding. With these, elderly people would have higher interest and confidence in joining events and thus to socialize with other people.
Special Requirements:	1. SC system should display the list of upcoming events of selected community in chronological order in less than 5 seconds. 2. The user should be able to view upcoming events of any community in SC system, but only able to join events published in joined communities.
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	20		
Use Case Name:	Join an event		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	12/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user joins an event organized and published by joined communities. Users are not allowed to join events of disjointed communities.
Trigger:	The user tabs “community” button in navigation bar to enter community list page followed by selecting a specific community to view list of events organized and published by selected community.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user’s identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. There is at least one community exists in SC system organized and managed by system administrators.</li> <li>3. There is at least one published event happening no later than current date in any communities in SC system.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user is registered as a participant of the selected event and any data associated with the event and the user is updated in database.</li> <li>2. The event is added to user’s calendar of joined events on the corresponding date.</li> </ol>
Normal Flow:	<p>20.0.1 The user tabs community button in navigation bar. The user tabs “community” button to enter community list page.</p> <p>20.0.2 SC system displays list of communities available in SC system. Communities user have joined as a member are shown first followed by other communities. All communities are listed in alphabetic order.</p> <p>20.0.3 The user tabs corresponding community avatar in community list page to enter a community page.</p> <p>20.0.4 SC system displays all events of date no later than current date in chronological order of the selected community.</p> <p>20.0.5 The user views all events and select the one he/she wants to join by tabbing the “click to join” button under the event details.</p> <p>20.0.6 SC system changes the green “click to join” button into red “joined, click to drop” button.</p> <p>20.0.7 SC system registers the user as a participant of the selected event by updating any data associated with the event and the user in database.</p> <p>20.0.8 SC system adds the events into the user’s calendar of joined events list on the corresponding date.</p>
Alternative Flows:	<p>20.1.1 (From 20.0.4) The user scrolls upward to view earlier events organized and published by the selected community.</p> <p>20.1.2 The user tabs the grey “ended” button under events of date earlier than current date.</p> <p>20.1.3 SC system pops out a message box stating “event has already ended”.</p>

	20.1.4 Back to normal flow 20.0.5.
Exceptions:	<p>20.0.E.1.1 (From 20.0.4) SC system displays “no upcoming events” in community home page if there is no published event of date no later than current date.</p> <p>20.0.E.2.1 (From 20.0.6) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.</p> <p>20.0.E.3.1 (From 20.0.5) If the user is not a member of the selected community, SC system pops out a message box stating “Unable to join member exclusive community events. Please join the community first!”</p>
Includes:	NIL
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	<ol style="list-style-type: none"> <li>1. All community events are member exclusive. This is not only for privacy concern. But also, as only users truly interested in the event (who have joined the community) are filtered left, it is much possible for the events to be held successfully.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. SC system should display the list of upcoming events of selected community in chronological order in less than 5 seconds.</li> <li>2. SC system should register the user as a participant of the event and update user’s calendar within 5 seconds.</li> <li>3. The user should only able to join events published in joined communities.</li> </ol>
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	21		
Use Case Name:	Drop an event		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	12/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user drops an event organized and published by joined communities. Users are not allowed to drop events he/she has joined before before the expiration date.
Trigger:	The user tabs “community” button in navigation bar to enter community list page followed by selecting a specific community to view list of events organized and published by selected community.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user’s identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. There is at least one community exists in SC system organized and managed by system administrators.</li> <li>3. There is at least one published event happening no later than current date in any communities in SC system.</li> <li>4. The user has joined at least one event happening no later than current date in any his/her joined communities.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. The user is removed from the participants list of the selected event and any data associated with the event and the user is updated or removed in database.</li> <li>2. The event is removed from user’s calendar of joined events on the corresponding date.</li> </ol>
Normal Flow:	<p>21.0.1 The user tabs community button in navigation bar. The user tabs “community” button to enter community list page.</p> <p>21.0.2 SC system displays list of communities available in SC system. Communities user have joined as a member are shown first followed by other communities. All communities are listed in alphabetic order.</p> <p>21.0.3 The user tabs corresponding community avatar in community list page to enter a community page.</p> <p>21.0.4 SC system displays all events of date no later than current date in chronological order of the selected community. For every event the user has joined and has not expired, there is a red “joined, click to drop” button.</p> <p>21.0.5 The user views all events and select the one he/she wants to drop by tabbing the “joined, click to drop” button under the event details.</p> <p>21.0.6 SC system changes the red “joined, click to drop” button to green “click to join”.</p> <p>21.0.7 SC system removes the user from participants list of the selected event by updating or removing any data associated with the event and the user in database.</p> <p>21.0.8 SC system removes the events from the user’s calendar of joined events list on the corresponding date.</p>
Alternative Flows:	21.1.1 (From 21.0.4) The user scrolls upward to view earlier

	<p>events organized and published by the selected community.</p> <p>21.1.2 The user tabs the grey “ended” button under events of date earlier than current date.</p> <p>21.1.3 SC system pops out a message box stating “event has already ended”.</p> <p>21.1.4 Back to normal flow 21.0.5.</p>
Exceptions:	<p>21.0.E.1.1 (From 21.0.4) SC system displays “no upcoming events” in community home page if there is no published event of date no later than current date.</p> <p>21.0.E.2.1 (From 21.0.6) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.</p>
Includes:	NIL
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	<p>1. This use case should be included in Use Case 31 Quit a community. When user quits a community, all upcoming events he/she has joined should be dropped from his/her calendar as well as the database. However, for the past events he/she joined, the history will be kept in the database for further analysis purpose.</p>
Special Requirements:	<p>1. SC system should display the list of upcoming events of selected community in chronological order in less than 5 seconds.</p> <p>2. SC system should remove the user from participants list of the event and update user’s calendar within 5 seconds.</p>
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	22		
Use Case Name:	View joined events		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	12/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user views all events he/she has joined. Events of the current month are shown in a calendar in chronological order by default. Current date is always highlighted. User can view joined events sorted according to year, month, week and day.
Trigger:	The user tabs “calendar” button in navigation bar.
Preconditions:	1. The user’s identity has been authenticated by logging in with his/her phone number and password.
Postconditions:	1. Events of the current month are shown in a calendar in chronological order by default. Current date is highlighted.
Normal Flow:	<p>22.0.1 The user tabs “calendar” button in navigation bar.</p> <p>22.0.2 SC system displays events of current month that the user has joined in chronological order. Current date is highlighted.</p> <p>22.0.3 The user selects “week” option on top of the calendar.</p> <p>22.0.4 SC system displays events of current week that the user has joined in chronological order.</p>
Alternative Flows:	<p>22.1.1 (From 22.0.3) The user selects “day” option on top of the calendar.</p> <p>22.1.2 SC system displays events of current day that the user has joined in chronological order. Current time is highlighted.</p> <p>22.2.1 (From 22.0.3) The user selects “year” option on top of the calendar.</p> <p>22.2.2 SC system displays events of current year that the user has joined in chronological order. Current year is highlighted.</p> <p>22.3.1 (From 22.0.3) The users selects “next” or “former” option on top of the calendar.</p> <p>22.3.2 SC system displays events of next or former month that the user has joined in chronological order.</p>
Exceptions:	NIL
Includes:	NIL
Priority:	Low
Frequency of Use:	High
Business Rules:	1. Elderly people can easily forget events they have registered. Also, it is difficult for them to remember the exact date and time of an event. With this function available, seniors can easily check the joined events in calendar in order to participate in the events on time.
Special Requirements:	<p>1. Joined events should be presented on the calendar within 3 second.</p> <p>2. Simple and easy reading layout should be applied to the calendar.</p>



Assumptions:	<ol style="list-style-type: none"><li>1. User has logged into our system with his/her phone number and password.</li><li>2. The date and time of native mobile phone system are always set correctly.</li></ol>
Notes and Issues:	NIL

Use Case ID:	23		
Use Case Name:	View list of friends		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	12/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user views his/her friend list. Friends are listed in alphabetic order by default. User can scroll down to view more friends.
Trigger:	The user tabs contact list button in navigation bar.
Preconditions:	1. The user's identity has been authenticated by logging in with his/her phone number and password.
Postconditions:	1. SC system displays the user's friends listed in alphabetic. 2. User can scroll down to view more friends.
Normal Flow:	23.0.1 The user tabs contact list button in navigation bar. 23.0.2 SC system displays the user's friends listed in alphabetic. 23.0.3 User can scroll down to view more friends.
Alternative Flows:	NIL
Exceptions:	23.0.E.1.1 (From 23.0.2) SC system displays "no friend" in friend list page if there is no friend of the user.
Includes:	NIL
Priority:	High
Frequency of Use:	High
Business Rules:	1. Sometime, it is difficult for elderly people to find the friend they want to chat in the chat list. It is important and necessary to provide a convenient way for them to find a friend. In this way, users can find their friend in friend list and start conversation easily.
Special Requirements:	1. The entire friend list should be presented within 2 seconds. 2. User's friends' name and phone number should be clearly viewed by elderly people.
Assumptions:	1. The user gives his/her account reasonable and meaningful profile image and name.
Notes and Issues:	NIL

Use Case ID:	24		
Use Case Name:	Send a friend request		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	12/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user sends friend request to add a new friend. The user can only send friend request to people in contact list of his/her native mobile phone.
Trigger:	The user tabs friend list button in navigation bar followed by “add friend” button at the top of friend list page to view contact list of his/her mobile phone.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user’s identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user has not added the target user into his/her friend list.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. SC system sends a friend request to the target user.</li> <li>2. The target user receives a friend request upon which he/she can perform accept or decline action.</li> </ol>
Normal Flow:	<p>24.0.1 The user tabs friend list button in navigation bar.</p> <p>24.0.2 The user tabs “add friend” button on the top of the friend list page.</p> <p>24.0.3 SC system fetches contact list from the user’s native mobile phone and displays names in alphabetic order. A green “add” button is shown following people’s name on the right end of each row.</p> <p>24.0.4 The user sends friend request to a friend he/she wants to add by tabbing the “add” button.</p> <p>24.0.5 SC system sends a friend request to the corresponding user.</p> <p>24.0.6 The target user receives a friend request upon which he/she can perform accept or decline action.</p>
Alternative Flows:	NIL
Exceptions:	24.0.E.1 (From 24.0.5) If the user has already added the target user into friend list, SC system directs the user to chat page with the corresponding user.
Includes:	NIL
Priority:	High
Frequency of Use:	Medium
Business Rules:	<ol style="list-style-type: none"> <li>1. For privacy and security concerns, users should send friend request before they can add a friend to their friend list. Only people on their phone contact list can be the recipient of the friend request. This is to prevent elderly people from being fraud by strangers after adding them into their friend list.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. All people in the user’s contact list are members of SC system. In the case that the user wishes to send the friend request to his/her friend who is not a member of SC system, he/she will ask them to join SC system in other ways such as face-to-face communication or SMS.</li> </ol>
Assumptions:	NIL

Notes and Issues:	NIL
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Use Case ID:	25		
Use Case Name:	Accept a friend request		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	12/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user accepts a received friend request and add the user initiated the friend request into his/her friend list. The SC system also adds current user into friend list of the user who initiated the friend request.
Trigger:	The user tabs “friend request” button on top of chat list page to accept the received friend request.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user’s identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user has not added the target user into his/her friend list.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. SC system adds the user initiated the friend request and the user accepted the friend request into each other’s friend list.</li> <li>2. Two users are able to stat chatting via sending/receiving voice messages, or to initiate a voice/video call with each other.</li> </ol>
Normal Flow:	<p>25.0.1 The user tabs “friend request” button on top of chat list page to view received friend requests.</p> <p>25.0.2 SC system shows a list of friends requests. A green “accept” button and a red “decline” button are shown on the right hand of every friend request.</p> <p>25.0.3 The user tabs “accept” button to accept friend request.</p> <p>25.0.4 SC system removes the selected request from list and adds the user initiated the friend request and the user accepted the friend request into each other’s friend list.</p> <p>25.0.5 The user is directed to chat page of the newly added friend.</p>
Alternative Flows:	NIL
Exceptions:	<p>25.0.E.1 (From 25.0.2) SC system displays no friend request if there is no unsolved friend request.</p> <p>25.0.E.2 (From 25.0.4) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.</p>
Includes:	NIL
Priority:	High
Frequency of Use:	Medium
Business Rules:	<ol style="list-style-type: none"> <li>1. For privacy and security concerns, users should be able to accept or reject friend request. Users can read message contains the name and phone number of the sender in order to verify the identity of the sender. This is to prevent elderly people from being fraud by strangers after adding them into their friend list.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. System should add the user initiated the friend request and the user accepted the friend request into each other’s friend list within 5 seconds after the request is accepted.</li> <li>2. The users should be able to chat with the newly added friend</li> </ol>

	within 5 second after accepting friend request.
Assumptions:	NIL
Notes and Issues:	NIL

Use Case ID:	26		
Use Case Name:	View self profile		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	Logout	Date Last Updated:	11/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when user views his/her self profile in SC system. User is able to view his/her profile image, name, phone number, statistical analysis of daily active hour since registered.
Trigger:	User taps corresponding button to view self profile.
Preconditions:	NIL
Postconditions:	NIL
Normal Flow:	<p>26.0.1. User taps corresponding button to view his/her self profile.</p> <p>26.0.2. System prompts out a page for user to view his/her profile image, name, phone number, and statistical analysis of daily active hour since registered.</p> <p>26.0.3. User taps a specific date in the statistic diagram to view the number of active hours of selected date.</p> <p>26.0.4. System shows the statistic diagram for active hours.</p>
Alternative Flows:	NIL
Exceptions:	26.0.E.1.1 (From 26.0.3) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.
Includes:	NIL
Priority:	High
Frequency of Use:	Medium
Business Rules:	<ol style="list-style-type: none"> <li>1. The memory of seniors is relatively bad compared to other people. The elderly may forget his/her phone number very often. Thus, it is necessary and important to provide a convenient way for the elderly to view his/her phone number once there is a need.</li> <li>2. The elderly care more about health than others. They are afraid that the long usage of mobile phones may affect their heart or eyesight. However, their children are more sensitive to the social life and mental health of the elderly. Therefore, it is important and necessary to provide a convenient way for both the elderly as well as their children to monitor their usage rate of the SC system.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. The system shall be able to provide the profile without internet connection.</li> <li>2. The system shall be able to provide the profile and statistical diagram of usage rate within 3 seconds.</li> <li>3. The system shall be able to provide the number of active hours of selected date within 1 second.</li> </ol>
Assumptions:	<ol style="list-style-type: none"> <li>1. User has logged into our system with his/her phone number and password.</li> </ol>

	<ol style="list-style-type: none"><li>2. The date and time of native mobile phone system are always set correctly.</li><li>3. The user gives his/her account reasonable and meaningful profile image and name.</li></ol>
Notes and Issues:	NIL



Use Case ID:	27		
Use Case Name:	View own photos		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	11/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when user views his/her own shared photos in SC system.
Trigger:	User taps corresponding button to view own photos.
Preconditions:	NIL
Postconditions:	NIL
Normal Flow:	27.0.1. User taps corresponding button to view own photos. 27.0.2. System prompts out the shared photos sorted by date. 27.0.3. User scrolls down to view photos shared earlier.
Alternative Flows:	20.0.1 User taps a specific photo to view more details. 20.0.2 User swipes right to view next photo. 20.0.3 User taps the current viewing photo to exit detailed mode. 27.2.1. (From 27.1.2) User swipes left to view former photo. 27.2.2. Back to alternative flow 27.1.3.
Exceptions:	27.0.E.1. (From 27.0.3) If the system is unable to process the request due to network problem, no photo will be displayed. The system also shows error and potential reasons to the user explaining that it has encountered a network error.
Includes:	NIL
Priority:	Medium
Frequency of Use:	Medium
Business Rules:	1. The memory of seniors is relatively bad compared to other people. The elderly may forget his/her important moments. Thus, it is necessary to provide a convenient way for them to view their shared photos. 2. Children of elderly are eager to know the life of their parents when they are not around. However, the photos stored in native mobile phone photo phone taken by the elderly maybe too messy to view one by one. It is agreed that they would not share one photo unless it is important and meaningful for them. Thus, this use case provides a way for children to learn about their parents' life easily. In addition, it promotes physical visits to parents' house more frequently.
Special Requirements:	1. The system shall be able to provide the most recent 10 moments without internet connection. 2. The system shall be able to provide the most recent 10 moments within 3 seconds. 3. The system shall be able to provide earlier moments if the user has internet connection.
Assumptions:	1. User has logged into our system with his/her phone number and password. 2. The date and time of native mobile phone system are always set correctly.

Notes and Issues:	NIL
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Use Case ID:	28		
Use Case Name:	Logout		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	11/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when user logs out of SeniorConnect (SC system).
Trigger:	User taps corresponding button to log out system.
Preconditions:	1. User's identity is authenticated by logging in with his/her phone number and password.
Postconditions:	1. User is not logged in.
Normal Flow:	28.0.1. User taps corresponding button to log out. 28.0.2. System shows log out is successful. 28.0.3. System prompts out an input form for user to use phone number and password to log in later.
Alternative Flows:	NIL
Exceptions:	NIL
Includes:	NIL
Priority:	High
Frequency of Use:	Low
Business Rules:	NIL
Special Requirements:	1. The system shall be able to log the user out within 3 seconds.
Assumptions:	1. User has logged into our system with his/her phone number and password.
Notes and Issues:	NIL

Use Case ID:	29		
Use Case Name:	Listen to a voice message		
Created By:	Mao Huiqi	Last Updated By:	Mao Huiqi
Date Created:	21/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated User
Description:	This use case describes the event when user listens to a voice message sent/received by him.
Trigger:	User taps corresponding button to listen to a voice message in a chat page.
Preconditions:	<ol style="list-style-type: none"> <li>1. User's identity is authenticated by logging in with his/her phone number and password.</li> <li>2. The user has at least sent or received 1 voice message.</li> </ol>
Postconditions:	1. SC system plays the voice message via native system speaker and the user listens to it.
Normal Flow:	<p>29.0.1 User taps a specific voice message to play it.</p> <p>29.0.2 System plays the voice message via native system speaker and at the same time shows the message is being played.</p>
Alternative Flows:	<p>29.1.1 (From 29.0.2) The user taps the voice message again to stop playing it.</p> <p>29.1.2 SC system stops playing the message and stops showing that the voice message is being played.</p>
Exceptions:	29.0.E.1 (From 29.0.2) If the user taps on another voice message when there is a voice message being played, SC system shall stop playing the current voice message and play the selected voice message automatically.
Includes:	NIL
Priority:	High
Frequency of Use:	High
Business Rules:	<ol style="list-style-type: none"> <li>1. The user should be able to listen to new voice message from his/her friends or listen to voice message received earlier again.</li> <li>2. The user should also be able to listen to the voice messages sent by himself/herself. The memory of seniors is relatively bad compared to other people. The elderly may forget what she/he has said. Thus, it is necessary to provide a convenient way for them to listen to their own messages.</li> <li>3. The voice message should be broadcasted by the native mobile phone speaker automatically after being selected without any further action required. This is for the concern of the elderly's convenience. Most of seniors are not sensitive to weak sound. Broadcasting enables them to listen to the sent/received voice messages easily, especially when there are a lot of voice messages they intend to listen to.</li> </ol>
Special Requirements:	1. The system shall be able to start playing a voice message within 1 second after being tapped by the user.
Assumptions:	<ol style="list-style-type: none"> <li>1. User has logged into our system with his/her phone number and password.</li> <li>2. The sent/received voice messages are always stored in the</li> </ol>

	user's native mobile phone system for the convenience of play.
Notes and Issues:	NIL

Use Case ID:	30		
Use Case Name:	Unlike moments shared by friends		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	10/09/2015	Date Last Updated:	11/09/2015

Actors:	Authenticated user
Description:	This use case describes the event when user unlikes photo(s) shared by friends in “moments” page.
Trigger:	User taps “unlike” button under the moment.
Preconditions:	User is logged in and has liked the moment.
Postconditions:	The moment is not liked by the user.
Normal Flow:	30.0.1. User taps “unlike” button under a certain moment. 30.0.2. System changes the “unlike” button under the moment to “like” button.
Alternative Flows:	NIL
Exceptions:	30.0.E.1.1 (From 30.0.2) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.
Includes:	NIL
Priority:	Medium
Frequency of Use:	Low
Business Rules:	1. User should be able to show interest by liking the moment. However, in the scenario when the user likes a moment erroneously, the user should be able to unlike it.
Special Requirements:	1. The request should be completed within 1 second.
Assumptions:	1. Users can view moments shared by themselves and their friends.
Notes and Issues:	NIL

Use Case ID:	31		
Use Case Name:	Quit a community		
Created By:	Ma Xiaoxue	Last Updated By:	Ma Xiaoxue
Date Created:	21/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user quits a joined community. The user can only quit communities available on the community list that they are a member of. User will not receive community event updates after joining it.
Trigger:	The user tabs corresponding community avatar in community list page to quit a community.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user's identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. There is at least one community exists in SC system that user is a member of.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. SC system removes the newly quit community from the joined community list and shows it in alphabetic order together with other disjoined communities.</li> <li>2. SC system removes the user from all upcoming events of the quit community by updating the corresponding database tables.</li> <li>3. SC system removes all upcoming events from the user's calendar of joined events.</li> <li>4. User is not able to receive event update of quit communities.</li> <li>5. User is not able to join events created and managed by quit communities.</li> </ol>
Normal Flow:	<p>31.0.1 The user tabs "community" button in navigation bar to enter community list page.</p> <p>31.0.2 The user tabs corresponding community avatar in community list page to enter a community.</p> <p>31.0.3 The user tabs "quit community" button on the top of the community page that he/she wants to quit.</p> <p>31.0.4 The community is removed from user's community list in database and user is not able to receive event update of it.</p> <p>31.0.5 SC system removes the user from all upcoming events of the quit community by updating the corresponding database tables. SC system also removes all upcoming events from the user's calendar of joined events. User is not able to join events created and managed by the community.</p> <p>31.0.6 SC system removes the newly quit community from the joined community list and shows it in alphabetic order together with other disjoined communities.</p>
Alternative Flows:	NIL
Exceptions:	<p>31.0.E.1.1 (From 31.0.2) If the user is unable to find the community avatar, he/she scrolls down to view more communities.</p> <p>31.0.E.1.2 Back to normal flow 31.0.2.</p> <p>31.0.E.2.1 (From 31.0.4 and 31.0.5) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a</p>

	network error.
Includes:	Use Case 21 Drop an event
Priority:	Medium
Frequency of Use:	Low
Business Rules:	1. Users will always receive events notifications after they join a community. In order to stop receiving notification about events they are not interested in, user should be able to quit communities they have joined.
Special Requirements:	1. This use case should include Use Case 21 Drop an event. When user quits a community, all upcoming events he/she has joined should be dropped from his/her calendar as well as the database. However, for the past events he/she joined, the history will be kept in the database for further analysis purpose.
Assumptions:	<ol style="list-style-type: none"> <li>1. There are only a few communities available in SC system characterized by its name and managed by trained system administrators.</li> <li>2. User are cautious about their actions. Therefore, no confirmation is required.</li> </ol>
Notes and Issues:	NIL



Use Case ID:	32		
Use Case Name:	Decline a friend request		
Created By:	Wang Siqi	Last Updated By:	Ma Xiaoxue
Date Created:	12/09/2015	Date Last Updated:	21/09/2015

Actors:	Authenticated Users
Description:	This use case describes the event when the user declines a received friend request. SC system should notify request user that his/her request is rejected by current user.
Trigger:	The user tabs “friend request” button on top of chat list page to decline the received friend request.
Preconditions:	<ol style="list-style-type: none"> <li>1. The user’s identity has been authenticated by logging in with his/her phone number and password.</li> <li>2. The user has not added the target user into his/her friend list.</li> </ol>
Postconditions:	<ol style="list-style-type: none"> <li>1. SC system removes the friend request from user’s list.</li> <li>2. SC system notifies request user that his/her request is rejected by current user.</li> </ol>
Normal Flow:	<p>32.0.1 The user tabs “friend request” button on top of chat list page to view received friend requests.</p> <p>32.0.2 SC system shows a list of friends requests. A green “accept” button and a red “decline” button are shown on the right hand of every friend request.</p> <p>32.0.3 The user tabs “decline” button to decline friend request.</p> <p>32.0.4 SC system removes the selected request from list.</p> <p>32.0.5 SC system notifies request user that his/her request is rejected by current user.</p> <p>32.0.6 The user is directed to friend request page to accept/request other requests.</p>
Alternative Flows:	NIL
Exceptions:	<p>32.0.E.1 (From 32.0.2) SC system displays no friend request if there is no unsolved friend request.</p> <p>32.0.E.2 (From 32.0.4) If the system is unable to process the request due to network problem, the system shows error and potential reasons to the user explaining that it has encountered a network error.</p>
Includes:	NIL
Priority:	High
Frequency of Use:	Medium
Business Rules:	<ol style="list-style-type: none"> <li>1. For privacy and security concerns, users should be able to accept or reject friend request. Users can read message contains the name and phone number of the sender in order to verify the identity of the sender. This is to prevent elderly people from being fraud by strangers after adding them into their friend list.</li> </ol>
Special Requirements:	<ol style="list-style-type: none"> <li>1. System should add the user initiated the friend request and the user accepted the friend request into each other’s friend list within 5 seconds after the request is accepted.</li> <li>2. The users should be able to chat with the newly added friend within 5 second after accepting friend request.</li> </ol>

Assumptions:	1. The user of SC system will give his/her account reasonable and meaningful name.
Notes and Issues:	NIL