## Project Part 2 - INDIVIDUAL

Name: Rajarshi BasakProject: ChatAppRequirements:

ID	Requirement Description	Topic Area	Actor	Priority
US – 01	As a user, I should be able to register for the service	Authentication	User	Critical
US – 07	As a user, I should be able to add a new contact to my contact list	Contact Management	User	High
US – 08	As a user, I should be able to remove an existing contact from my contact list	Contact Management	User	High
US - 09	As a user, I should be able to accept a request to add a contact	Contact Management	User	High
US – 10	As a user, I should be able to view my contact list	Contact Management	User	High
US – 11	As a user, I should be able to select a contact from my contact list	Contact Management	User	High
US – 12	As a user, I should be able to search a contact from my contact list	Contact Management	User	Medium
US – 13	As a user, I should be able to start a chat with a selected contact	Messaging	User	High
US – 14	As a user, I should be able to resume a chat with a selected contact when I have already started a chat	Messaging	User	High
US – 15	As a user, I should be able to delete a chat with a selected contact	Messaging	User	High

# • Use Case Document(s):

Use Case ID:	UC - 01
Use Case Name:	Register user for service
Description:	A first time user can register for the service by providing a unique and valid username and a valid password

Actors:	Use	r		
Pre- conditions:	A user must have a gmail.com or Colorado.edu email address for username, and the password must have at least 8 characters containing the following: at least 1 lowercase letter, at least 1 uppercase letter, at least 1 digit, at least 1 special character			
Post- conditions:				
Frequency of Use:	One	Once, before the user wants to start using the service		
Flow of		User Action	System Response	
Events:	1.	Go to "Register New User" page	Show prompt for setting new username and password	
	2.	Set new username		
	3.	Set new password		
	4.	Click on register button	Show 'Welcome New User' page	
Variations:			Show Register page when username does not meet all valid requirements/already exists  Redirect to Register page when	
			password does not meet all valid requirements	
Notes and Issues:				
Developer Notes:				

Use Case ID:	UC - 07
Use Case Name:	Add user to contact list

Description:	A user of the service can add a new user to his/her contact list
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Actors:	Use	er	
Pre- conditions:	The user must login to the system, and should know the username of the user he/she wishes to add to the contact list		
Post- conditions:			
Frequency of Use:	On	ce daily	
Flow of		User Action	System Response
Events:	1.	Click on Manage Contacts	Show Manage Contacts page
	2.	Click "Add User"	Prompt for username of user to be added
	3.	Enter <username> of new user that exists in system database</username>	
	4.	Click "Add"	Add user to Contact List
			Show "User <username> added to your contact list"</username>
Variations:	_	Enter username that does not	Show "Username not recognized"
	exi	st in System database	Show page that prompts for username of user to be added
Notes and Issues:			
Developer Notes:			

Use Case ID:	UC – 08
Use Case Name:	Remove user from Contact List
Description:	A user of the service can remove an user who exists in his/her
	contact list

Actors:	Use	r		
Pre-	The	The user must login to the system		
conditions:				
Post-				
conditions:				
Frequency of	One	Once a month		
Use:				
Flow of		User Action	System Response	
	1.	Click on Manage Contacts	Show Manage	

Events:				Contacts page
	2.	Click on Remove User		Redirect to Contact
				List
	3.	Select User to be removed		
	4.	Click "Remove"		Prompt for
				Confirmation of
				removal
	5.	Verify confirmation of remova	ıl	Remove user from
				Contact List
				Show "Success!
				User Removed
				from Contact List"
Variations:	5. E	Deny confirmation of removal	Show Manag	e Contacts page
Notes and				
Issues:				
Developer				
Notes:				

Use Case ID:	UC – 09
Use Case Name:	Accept request to add user
Description:	When user 1 adds a new user (user 2) to his/her contact list, user 2 can accept the request.

Actors:	User				
Pre-	Both user 1 and user 2 should login to the system, and user 1 should				
conditions:	req	uest to add user 2 to his/her co	ntac	ct list	
Post-					
conditions:					
Frequency of	One	ce a week			
Use:					
Flow of	User Action System Response		System Response		
Events:	1.	Click on Manage Contacts		Show Manage Contacts page	
	2.	Click on "Approve Requests"	Show add request from other user(s)		
	3.	Select Request			
	4.	Click "Approve"	Add user to contact List		
				Show "Request approved and User added!"	
Variations:			2. Show "No requests pending!"		
	4. 0	Click "Reject"	Show Manage Contacts page		
			Remove pending request list		

Notes and	
Issues:	
Developer	
Notes:	

Use Case ID:	UC – 10
Use Case Name:	View Contact List
Description:	A user of the service can view the list of contacts that he/she has
	already added to contact list

Actors:	Use	er		
Pre-	Use	User should login to the system		
conditions:				
Post-				
conditions:				
Frequency of	Eve	Every hour		
Use:				
Flow of		User Action	System Response	
Events:	1.	Click on Manage Contacts	Show Manage Contacts page	
	2.	Click on "View Contact List"	Show contact list	
Variations:			2. Show "No contacts added yet!" when there are 0 contacts in the contact list	
Notes and				
Issues:				
Developer				
Notes:				

Use Case ID:	UC - 11
Use Case Name:	Select a Contact
<b>Description:</b> An user can select a contact from his/her contact list	

Actors:	User
Pre-	User should login to the system, and there should be at least one
conditions:	contact in the user's contact list
Post-	
conditions:	
Frequency of	Once every 15 minutes

Use:			
Flow of		User Action	System Response
Events:	1.	Click on Manage Contacts	Show Manage Contacts page
	2.	Click on "View Contact List"	Show Contact List
	3.	Click on a particular contact in the contact list	
	4.	Click "Select Contact"	Show page containing the option Start Chat (when a chat has not been started with that contact)
Variations:			4. Show page containing the following options: "Resume Chat" and "Delete Chat" (when a chat has been started with that contact)
Notes and Issues:			
Developer Notes:			

Use Case ID:	UC – 12	
Use Case Name:	Search a contact	
Description:	A user of the service can search for a contact from his/her contact list	

Actors:	Use	User		
Pre-	Use	User must login to the system		
conditions:				
Post-				
conditions:				
Frequency of	One	Once every hour		
Use:				
Flow of		User Action	System Response	
Events:	1.	Click on Manage Contacts	Show Manage Contacts page	
	2.	Click on "Search a Contact"	Prompt for name of contact	
	3.	Type name of contact		
	4.	Click "Search"	Show existing contact in	
			Contact List when contact exists	
Variations:			3. Show "Contact does not	
			exist!" when contact isn't there	
			in the list	

Notes and	
Issues:	
Developer	
Notes:	

Use Case ID:	UC – 13
Use Case Name:	Start a Chat
<b>Description:</b> An user can start a chat with a selected contact	

Actors:	Use	User		
Pre- conditions:		User should login to the service, and select a contact from the Contact List. Also a chat should not have been started with selected contact.		
Post- conditions:				
Frequency of Use:	One	ce every day		
Flow of		User Action	System Response	
Events:	1.	After selecting a contact from Contact list, click on "Start Chat"	Show empty message window with selected user	
	2.	Type a message in the message bar at the bottom of window		
	3.	Click on "Send Message"	Show sent message in the window	
Variations:				
Notes and				
Issues:				
Developer				
Notes:				

Use Case ID:	UC – 14
Use Case Name:	Resume a Chat
Description:	An user can resume a chat (that has been started) with a selected
	contact

Actors:	User
Pre-	User should login to the service, and select a contact from the Contact
conditions:	List. Also a chat should have been started with selected contact.

Post-				
conditions:				
Frequency of	Once every minute			
Use:				
Flow of		User Action	System Response	
Events:	1.	After selecting a contact from Contact list, click on "Resume	Show message window with selected user containing	
		Chat"	previous messages	
	2.	Type a message in the message bar at the bottom of window		
	3.	Click on "Send Message"	Show sent message in the window	
Variations:				
Notes and				
Issues:				
Developer				
Notes:				

Use Case ID:	UC – 15
Use Case Name:	Delete a Chat
Description:	An user can delete a chat with a selected contact

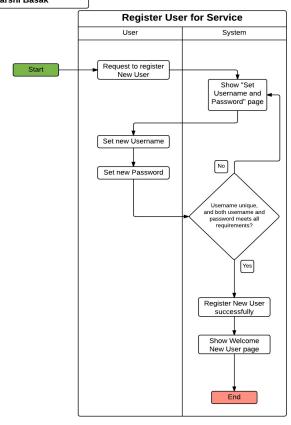
Actors:	User				
Pre- conditions:	User should login to the service, and select a contact from the Contact List. Also a chat should have been started with selected contact.				
Post- conditions:					
Frequency of Use:	Once a month				
Flow of		User Action	System Response		
Events:	1.	After selecting a contact from Contact list, click on "Delete Chat"	Show "Are you sure you want to delete chat with this contact?"		
	2.	Confirm Deletion by clicking on "Delete this Chat"	Remove chat with selected contact from database		
			Show empty message window with selected chat		
Variations:					

Notes and	
Issues:	
Developer	
Notes:	

• Activity Diagram:

Requirement ID: US - 01
Use Case ID: UC - 01
Use Case name: Register user for service
Name of Person: Rajarshi Basak

#### Register user for service - Activity Diagram



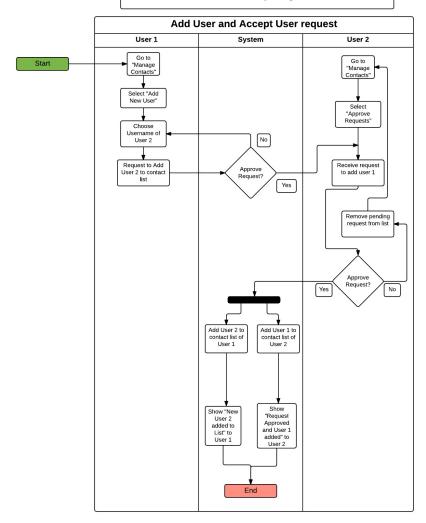
Requirement ID: US - 07, US - 09

Use Case ID: UC - 07, UC - 09

Use Case name: Add User to Contact List, Accept Request to Add User

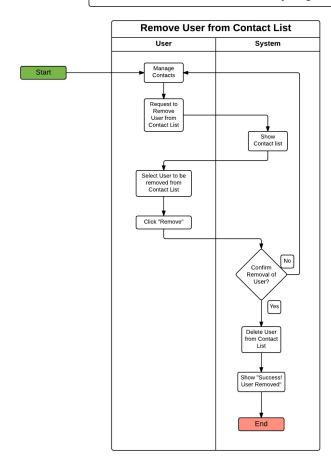
Name of Person: Rajarshi Basak

# Add User to Contact List, Accept User Request to Add User - Activity Diagram



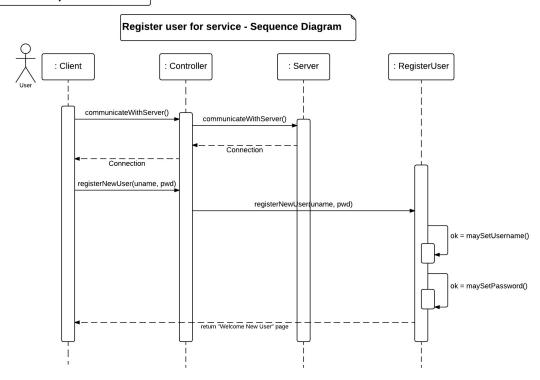
Requirement ID: US - 08 Use Case ID: UC - 08 Use Case name: Remove User from Contact List Name of Person: Rajarshi Basak

### Remove User from Contact List - Activity Diagram

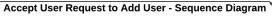


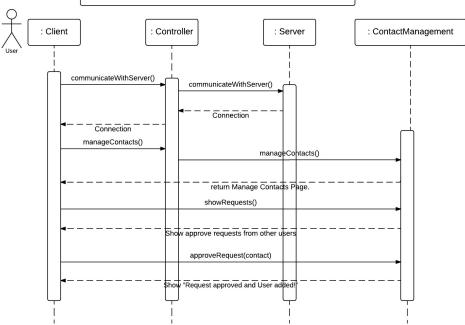
### **User Interactions:**

Requirement ID: US - 01 Use Case ID: UC - 01 Use Case name: Register user for service Name of Person: Rajarshi Basak

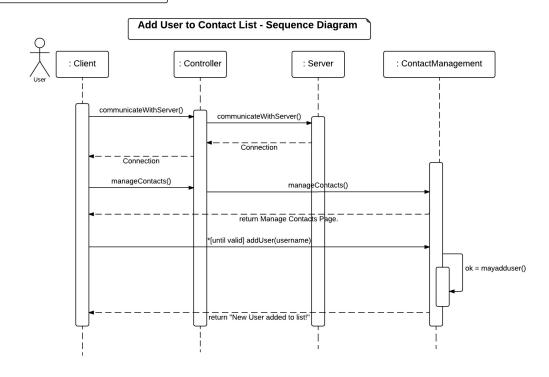


Requirement ID: US - 09 Use Case ID: UC - 09 Use Case name: Accept Request to Add User Name of Person: Rajarshi Basak





Requirement ID: US - 07 Use Case ID: UC - 07 Use Case name: Add User to Contact List Name of Person: Rajarshi Basak



Requirement ID: US - 08 Use Case ID: UC - 08 Use Case name: Remove User from Contact List Name of Person: Rajarshi Basak

## Remove User from Contact List - Sequence Diagram : Controller : Client : Server : ContactManagement communicateWithServer() communicateWithServer() Connection Connection manageContacts() manageContacts() return Manage Contacts Page. removeUser(username) return "Confirm User removal? confirmRemoval(username) ername> removed successfully from contact list!" return "User