ShareList

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Iteration 3

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Software Engineering 1
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Agenda

1. Project Description
2. Overall Design Approach
3. Requirements
4. Use Cases
5. Domain Diagram
6. RUCTM
7. Increment Matrix
8. Expanded Use Cases with User Interface Prototypes

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10. Design Class Diagram
11. App Demo
12. Summary
13. Q/A

Project Description

ShareList is designed to allow users the ability to create, delegate, and track tasks that are shared among users in a group.

Our goal is to allow teams in virtual workspaces the ability to have better collaboration via shared/delegated tasks.

Think of each group as a 'project' in which members contribute towards the tasks they are assigned. It is a similar concept to a Whatsapp group. The messaging is replaced with tasks that can have users assigned to them.

Features include: group admins, group summary reports, database storage, and wireless synchronization of database.

Overall Design Approach
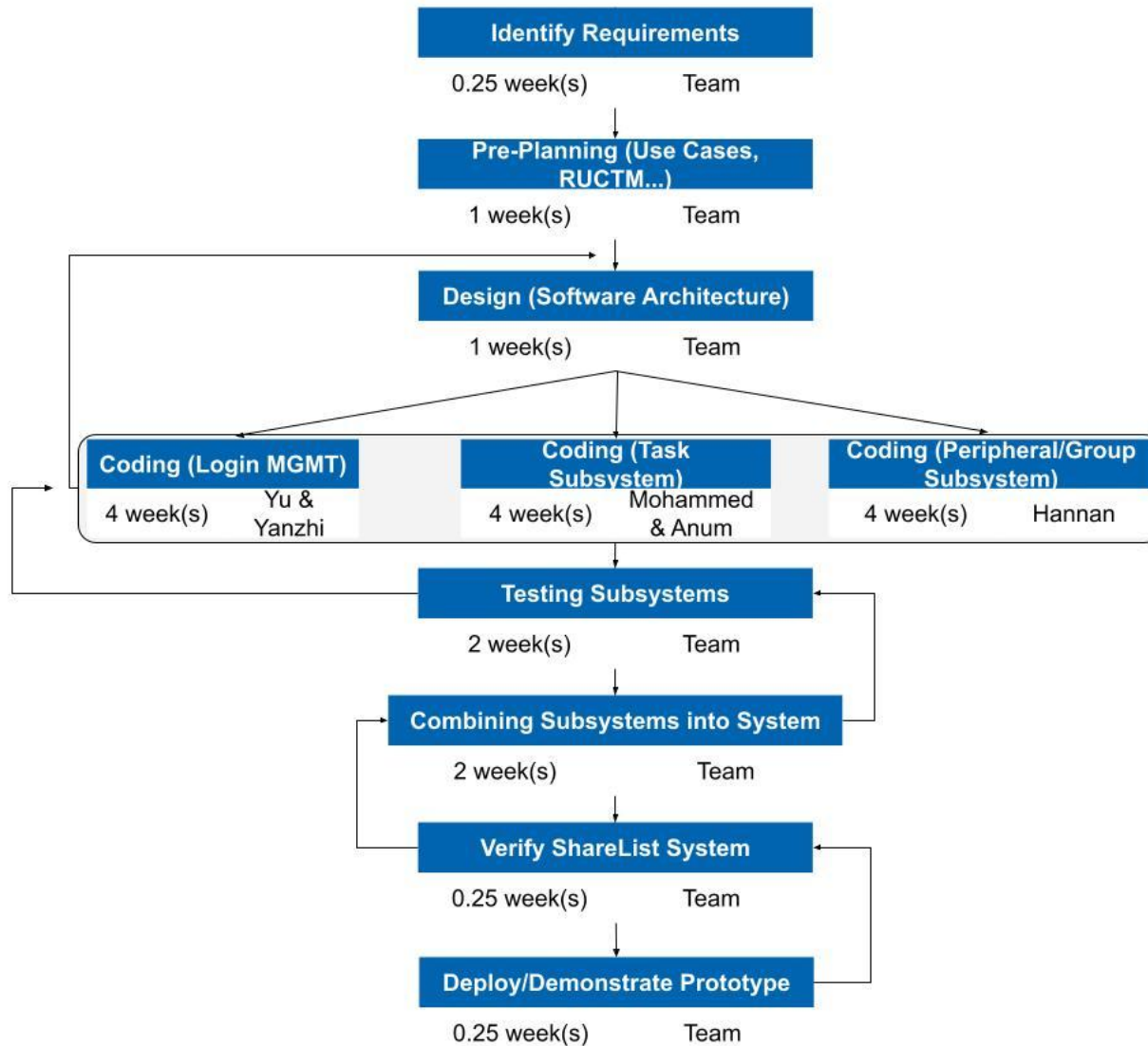
| Req ID	Req Statement	Line #
R1	The system shall provide for authenticated login to the ShareList app.	
R1.1	Register.	
R1.2	Login.	40
R1.3	Log Off.	
R1.4	Reset password.	
R2	The system shall provide admins the ability to:	
R2.1	Add tasks.	
R2.2	Remove tasks.	41,42
R2.3	Edit tasks.	
R2.4	Assign tasks.	
R2.5	Add users to group.	46,47
R2.6	Remove users from the group.	34,35
R2.7	Add new Admins to group.	18,47
R2.8	Delete group	48,49
R2.9	Edit group.	46,47
R3	The system shall provide users/admins the ability to:	
R3.1	Mark task as completed.	44,45
R3.2	Create groups.	46,47
R4	The system shall provide the ability to search by keywords.	43
R5	The system shall provide tasks the ability to:	
R5.1	Be visible to all members in that group.	22,23
R5.2	Have users assigned to it.	41,42
R5.3	Have assigned users mark it as completed.	44,45
R6	The system shall provide tasks the following properties: start time, completion time, due date, time spent, title, description, users assigned	50
R7	The system shall provide users the ability to create groups, and have admin status when they do.	46,47
R8	The system shall provide a database used for storing information related to tasks, groups, users.	59
R9	The system shall provide wireless resources used for syncing between each user's device and the database.	60
R10	The system shall provide a group summary function, which will accomplish:	50
R10.1	Calculating and reporting the tasks completed.	52
R10.2	Calculating and reporting the in-progress tasks.	53
R10.3	Calculating and reporting the tasks not completed.	54

Use Cases

Use Case #	Use Case Name
UC1	Login
UC1.1	Register.
UC1.2	Login.
UC1.3	Log Off.
UC1.4	Reset password.
UC2	Manage task
UC2.1	Add tasks.
UC2.2	Remove tasks.
UC2.3	Edit tasks.
UC2.4	Assign tasks.
UC3	Manage group
UC3.1	Add users.
UC3.2	Remove users.
UC3.3	Add admins.
UC3.4	Delete groups.
UC3.5	Edit groups.
UC4	Mark task as completed
UC5	Create groups.
UC6	Search by keywords.
UC7	Generate summary

Use Case Diagram
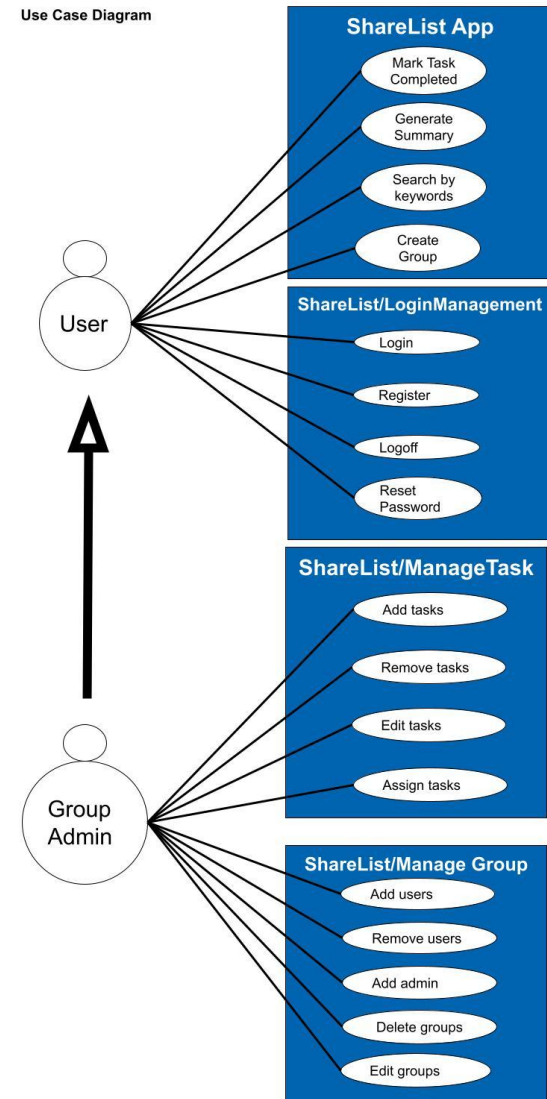
Domain Diagram
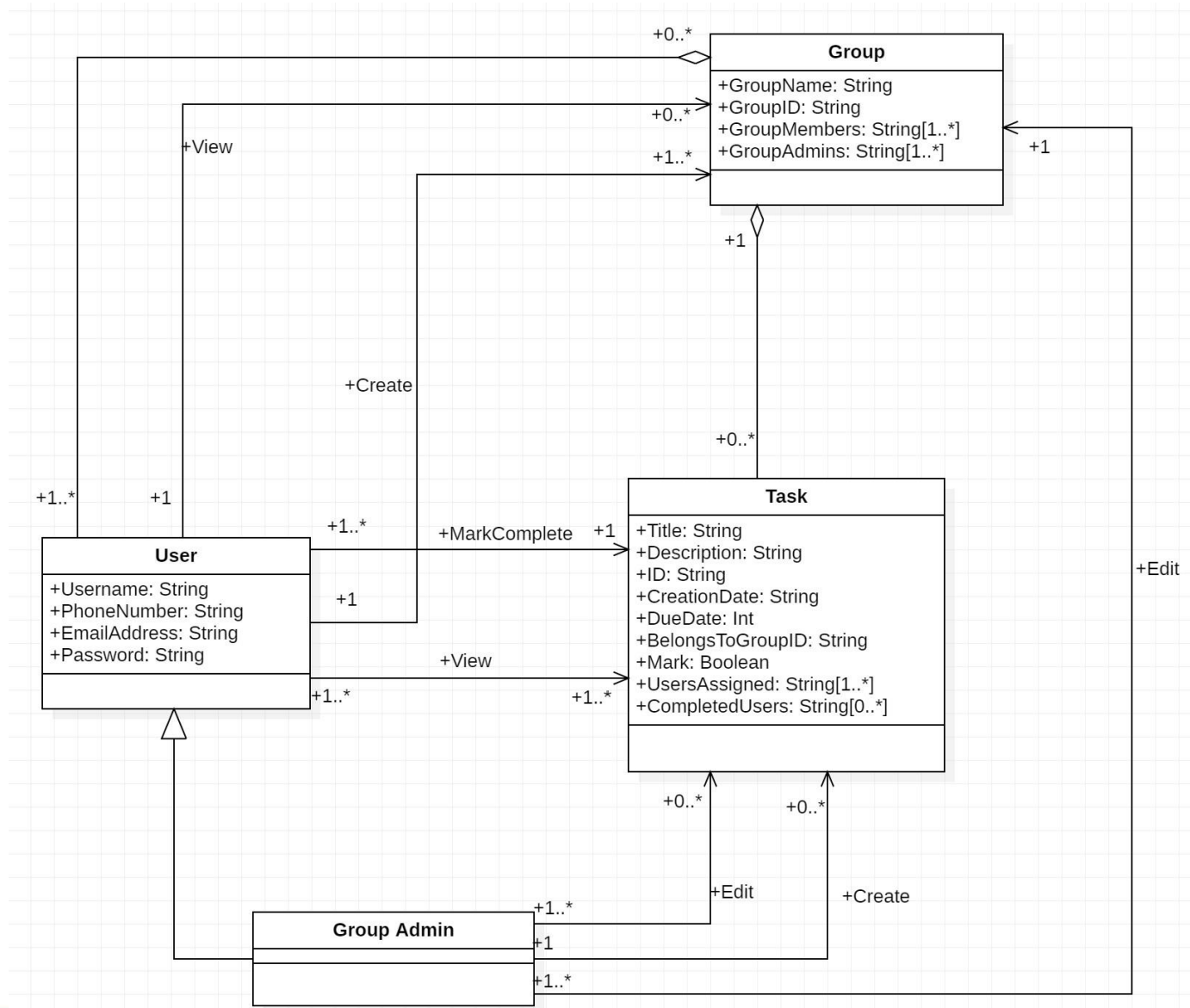
Req ID	Priority Weight	UC 1	UC 1.1	UC 1.2	UC 1.3	UC 1.4	UC 2	UC 2.1	UC 2.2	UC 2.3	UC 2.4	UC 3	UC 3.1	UC 3.2	UC 3.3	UC 3.4	UC 3.5	UC 4	UC 5	UC 6	UC 7
R1	3	X																			
R1.1			X																		
R1.2				X																	
R1.3					X																
R1.4						X															
R2	1						X														
R2.1								X													
R2.2									X												
R2.3										X											
R2.4											X										
R2.5												X									
R2.6													X								
R2.7														X							
R2.8															X						
R2.9																X					
R3																					
R3.1																			X		
R3.2																				X	
R4	6																				X
R5	1						X														
R5.1								X													
R5.2									X												
R5.3										X											
R6																					
R7	1													X							
R8	2																				
R9	4																				
R10	5																				X
R10.1																					X
R10.2																					X
R10.3																					X
Score		3	3	3	3	3	2	2	2	2	1	1	1	1	1	1	1	1	1	7	24

Legend: 1 is highest priority. Work 1 First.

Increment Matrix

Use Case #	Priority	Effort (Person-weeks)	Depends on	Iteration 1 (03/12)	Iteration 2 (04/09)	Iteration 3 (05/03)
UC1						
UC1.1	3	6	None		6	
UC1.2		6			6	
UC1.3		6			6	
UC1.4		6				6
UC2						
UC2.1	2	2	None	2		
UC2.2		2				2
UC2.3		2			2	
UC2.4		3			3	
UC3	1					
UC3.1		4	UC 1		4	
UC3.2		4			4	
UC3.3		4				4
UC3.4		4				4
UC3.5		4				4
UC4		3	UC 2		3	
UC5		4	UC 3		4	
UC6	5	2	UC 2		2	
UC7	4	1				2
Total Effort		63		2	40	22
1 PW = 5 hrs				10	200	110

Expanded Use Case - Create Group

EUC5: Create Group

| **Precondition:** *This use case requires that the user is logged in to the ShareList App, and seeing the 'Create Group' activity.*	
Actor: User	System: ShareList
	0. System displays the Create Group activity.
1. TUCBW user clicks on the Create Group button.	2. System displays text field to enter group name.
3. The user fills in the text field and clicks the save button.	*4. System checks for errors and processes the save request.
5. TUCEW the user sees a confirmation "The group has been added".	
Postcondition: *The group is created, stored in the database, and available to be acted upon immediately.*	
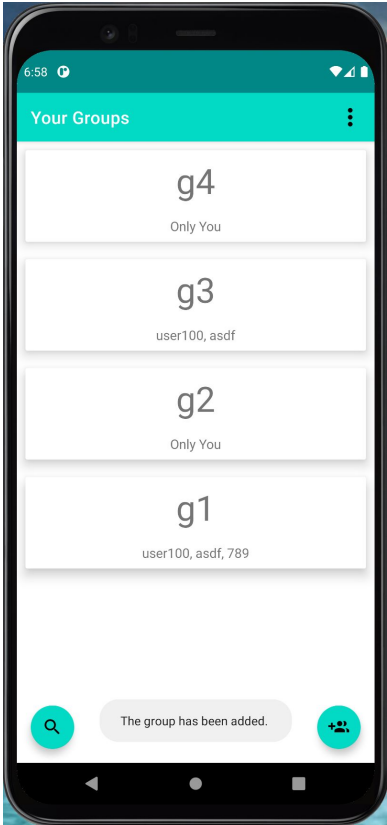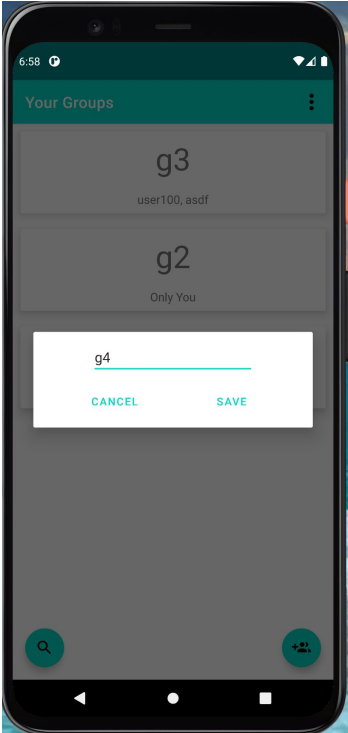
Expanded Use Case - Add Task

EUC2.1: Add Tasks

| Precondition: This use case requires that the user is logged in and is an admin of the group.	
Actor: Group Admin	System: ShareList
	0. System displays the Add task button.
1. TUCBW group admin clicks on the Add Task button.	2. System prompts the group admin to enter the Task name, Task Description and Due date.
3. The group admin enters the information and clicks on the Save button.	*4. System checks for errors, and processes the save request.
5. TUCEW the group admin sees a confirmation "The task has been added" on the app	
Postcondition: The task is created successfully and stored in the database.	
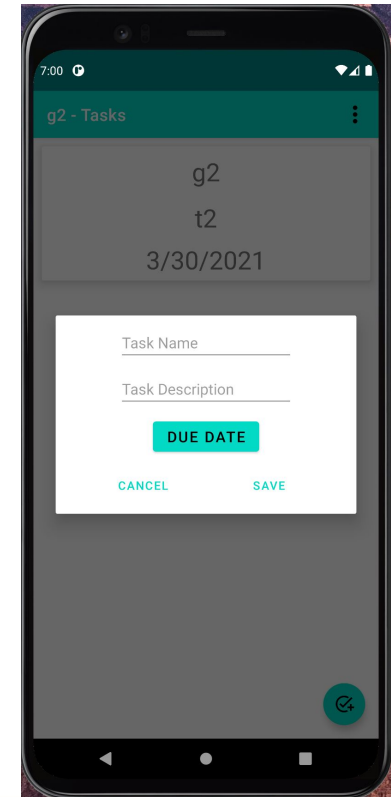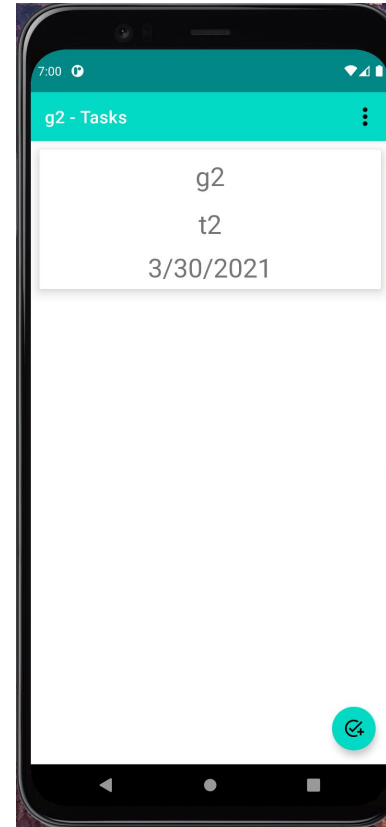
Sequence Diagram - Create Group
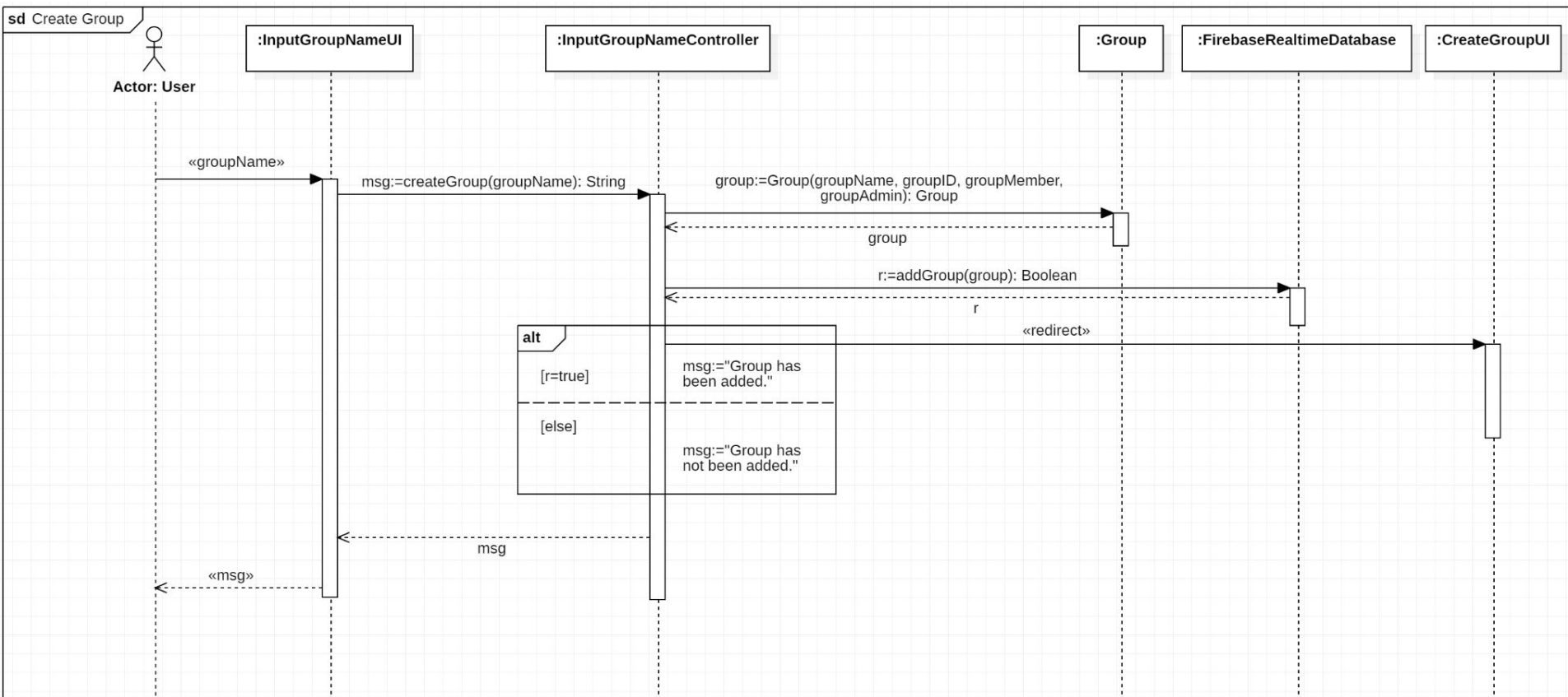
Sequence Diagram - Add Task
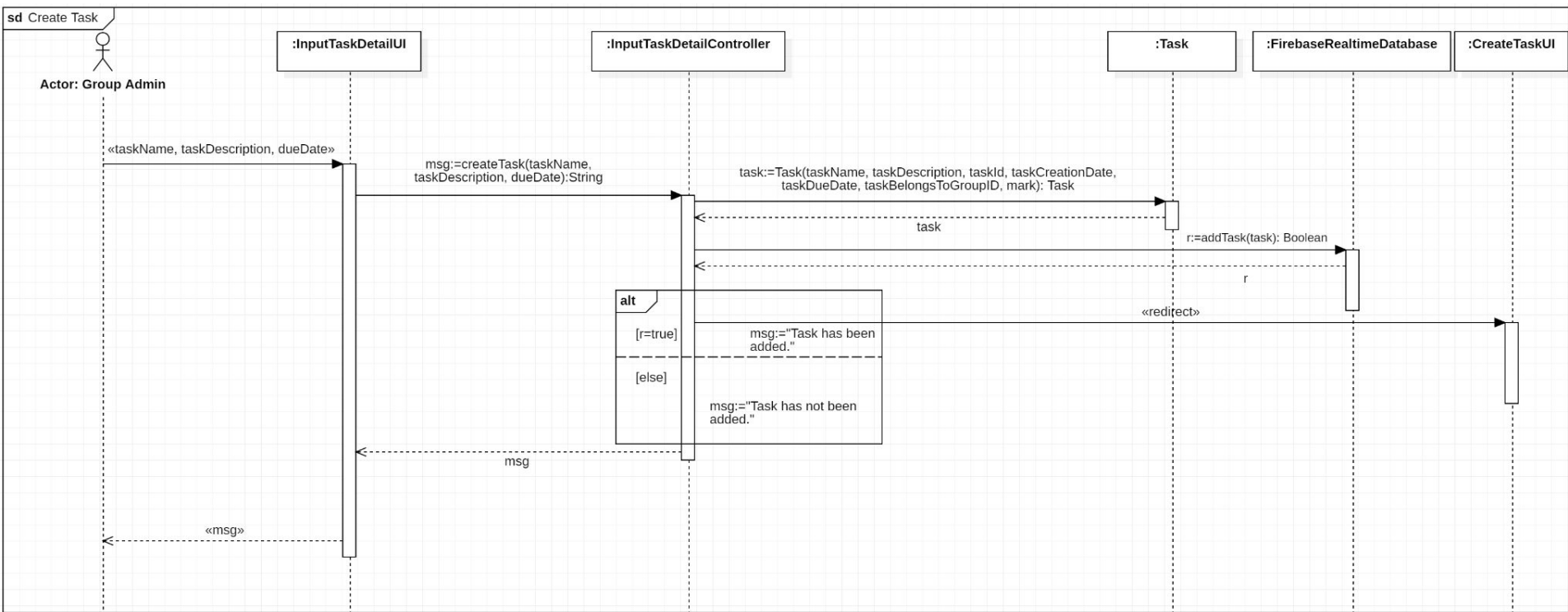
Design Class Diagram
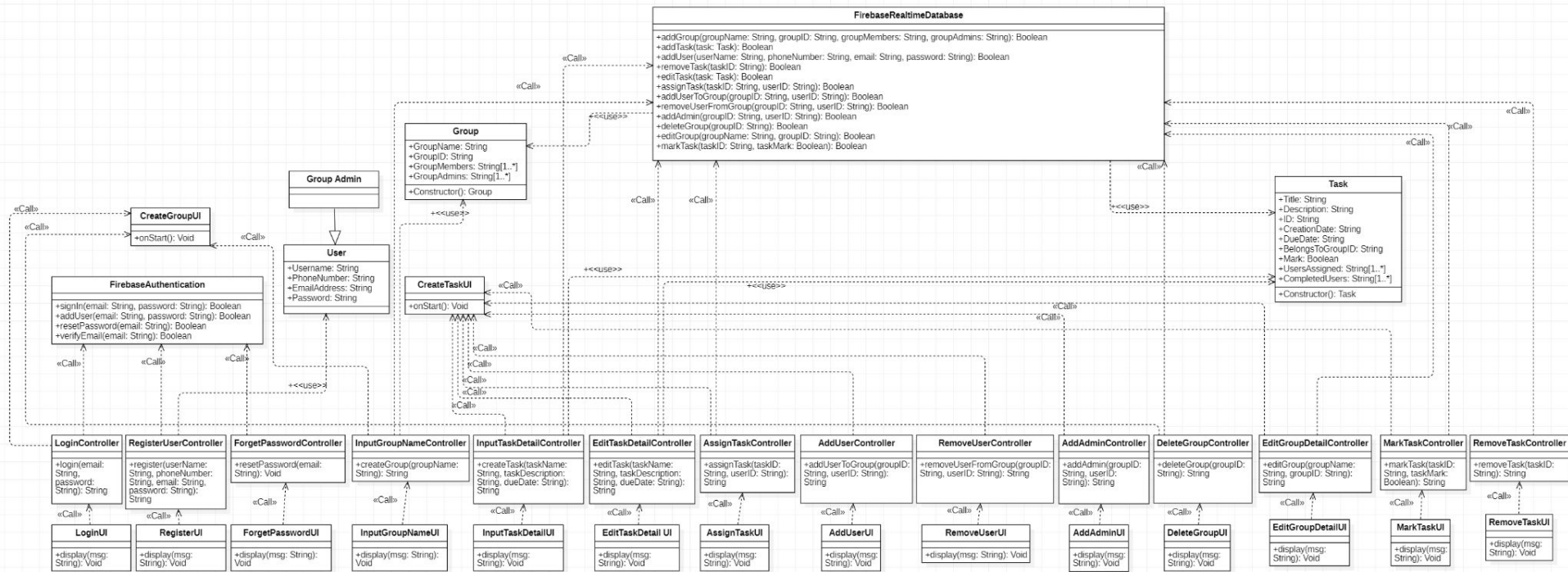
App Demo

Summary

Today we discussed the ShareList App

- How it enables better collaboration between users.

- Overall design approach and requirements

- Use Cases and Domain Diagram

- RUCTM and Increment Matrix

- Expanded UCs/User Interface Prototypes

- Updated Sequence Diagrams

- Design Class Diagram

- App Demo