Cairo University  
Faculty of Computers and Information



**CS251**

**Software Engineering I**

**Social Network**

Software Design

Abdelrahman Bahig Mahmoud 20170143

Saeed Mohamed Saeed 20170114

Shehap Ahmed Mohamed 20170129

Seif Mostafa Abobaker 20170123

December 2019

Contents

[Team 3](#_Toc25570061)

[Document Purpose and Audience 3](#_Toc25570062)

[System Models 3](#_Toc25570063)

[I. System Decomposition 4](#_Toc25570064)

[II. Class diagrams 5](#_Toc25570065)

[Important Algorithm 6](#_Toc25570066)

[III. Sequence diagrams 7](#_Toc25570067)

[Class - Sequence Usage Table 16](#_Toc25570068)

[Traceability Matrix 17](#_Toc25570069)

[Ownership Report 18](#_Toc25570069)

[References 18](#_Toc25570071)

[Authors 18](#_Toc25570072)

# Team

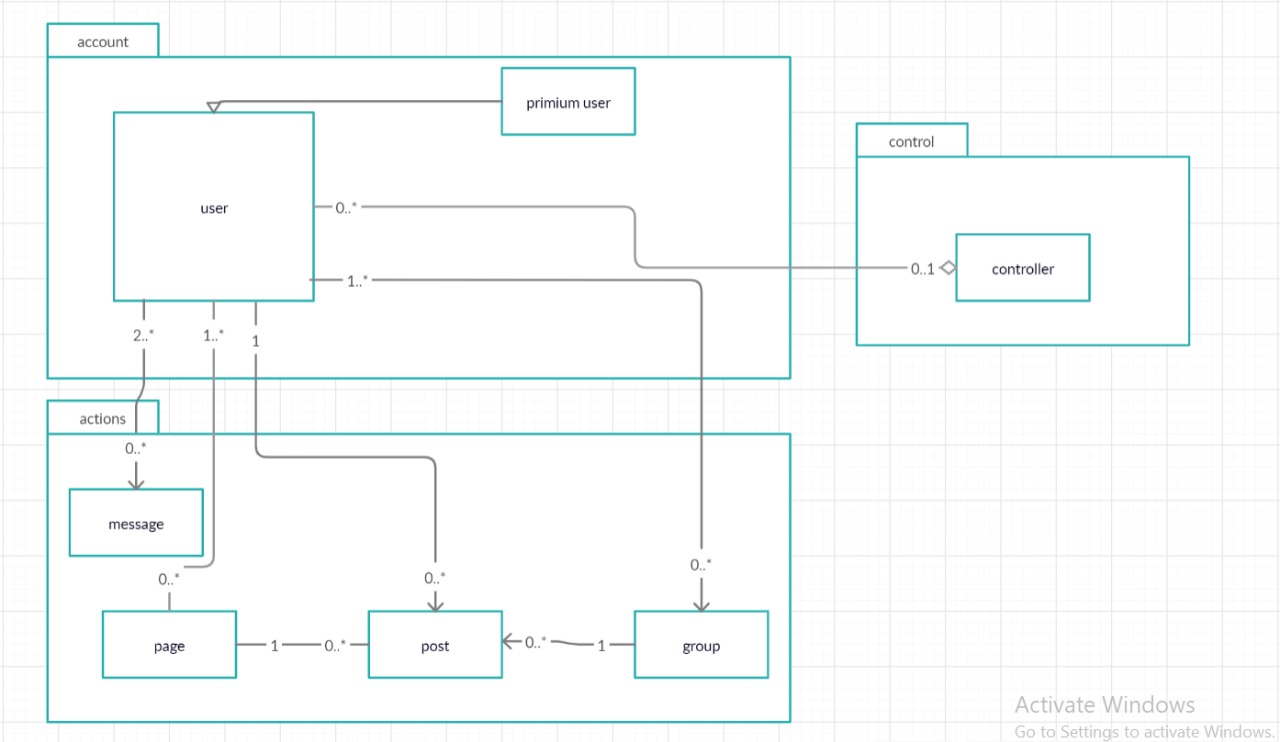
|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Name** | **Email** | **Mobile** |
| 20170143 | Abdelrahman Bahig Mahmoud | abdelrahmanbahig04@gmail.com | 01115675674 |
| 20170114 | Saeed Mohamed Saeed | saidmsaid2011@gmail.com | 01116908081 |
| 20170129 | Shehap Ahmed Mohamed | Shihap.amara@gmail.com | 01005674525 |
| 20170123 | Seif Mostafa Abobaker | se.seifzzzz@gmail.com | 01550448069 |

# Document Purpose and Audience

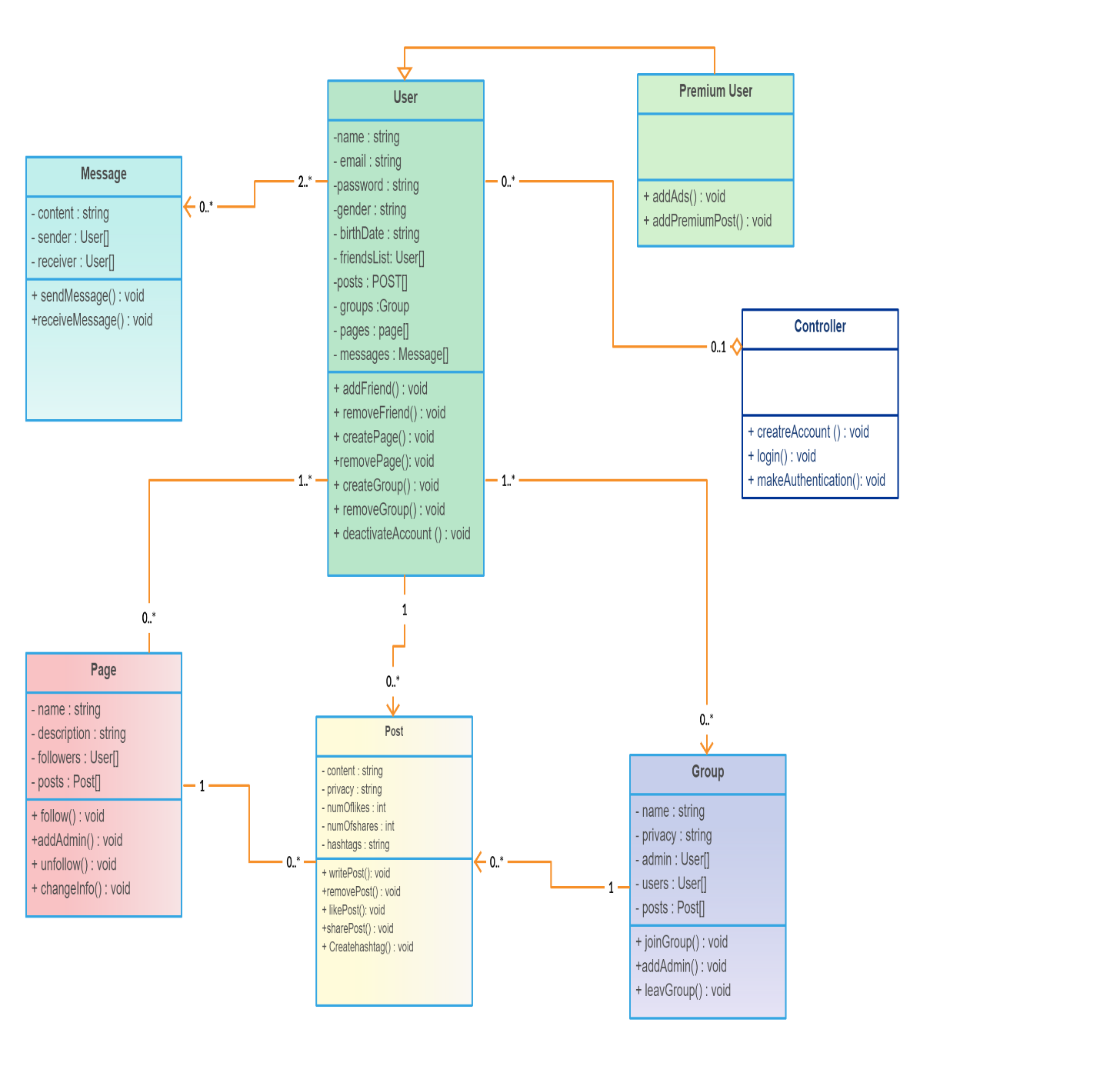
The Purpose of document: explaining the Function of The System as System Decomposition , class Diagram , sequence Diagram The Audiences are: Project Manager, Customer, System Designer and System Analyst.

# System Models

## I. System Decomposition

****

## II. Class diagrams



| **Class ID** | **Class Name** | **Subsystem ID** | **Description & Responsibility** |
| --- | --- | --- | --- |
| 1 | User | account | Save information of any user , |
| 2 | Premium User | account | Do special function from normal user such as add Advertisements |
| 3 | Page | Action | Save information of page and number of users who followed it and posts of this page |
| 4 | Post | action | Make functions related of post such as write , remove , like and share |
| 5 | Group | action | Save users numbers and posts of this Group Make functions related of Group such as create Group , leave Group , and join Group |
| 6 | Message | action | Send and receive Message between two users or many users like group chat |
| 7 | Controller | control | Make authentication of users who want to signup and login in this system |

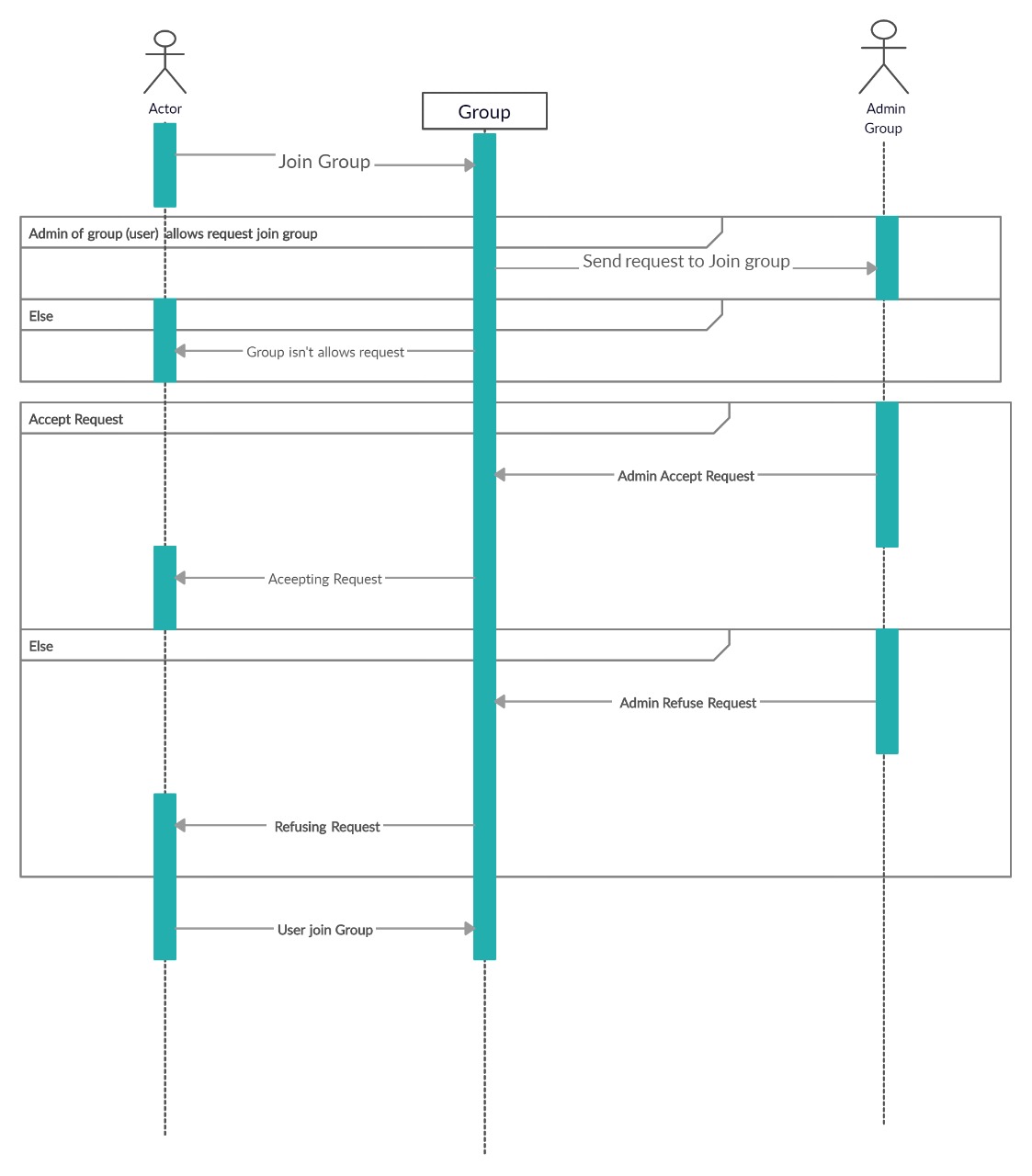
### 

### Important Algorithm

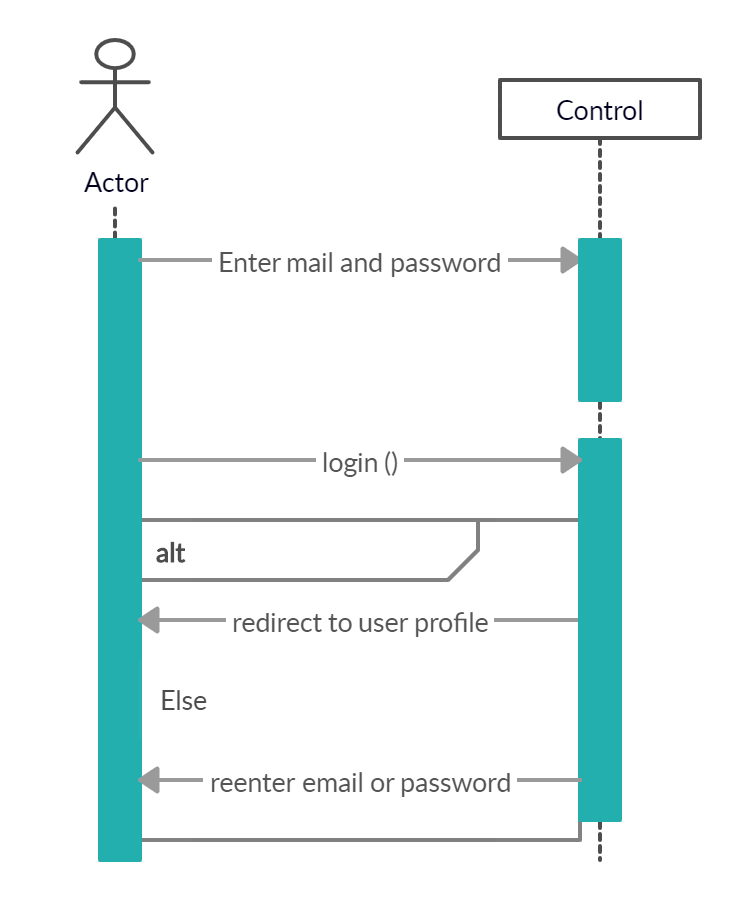
## III. Sequence diagrams

## 1-Follow Page

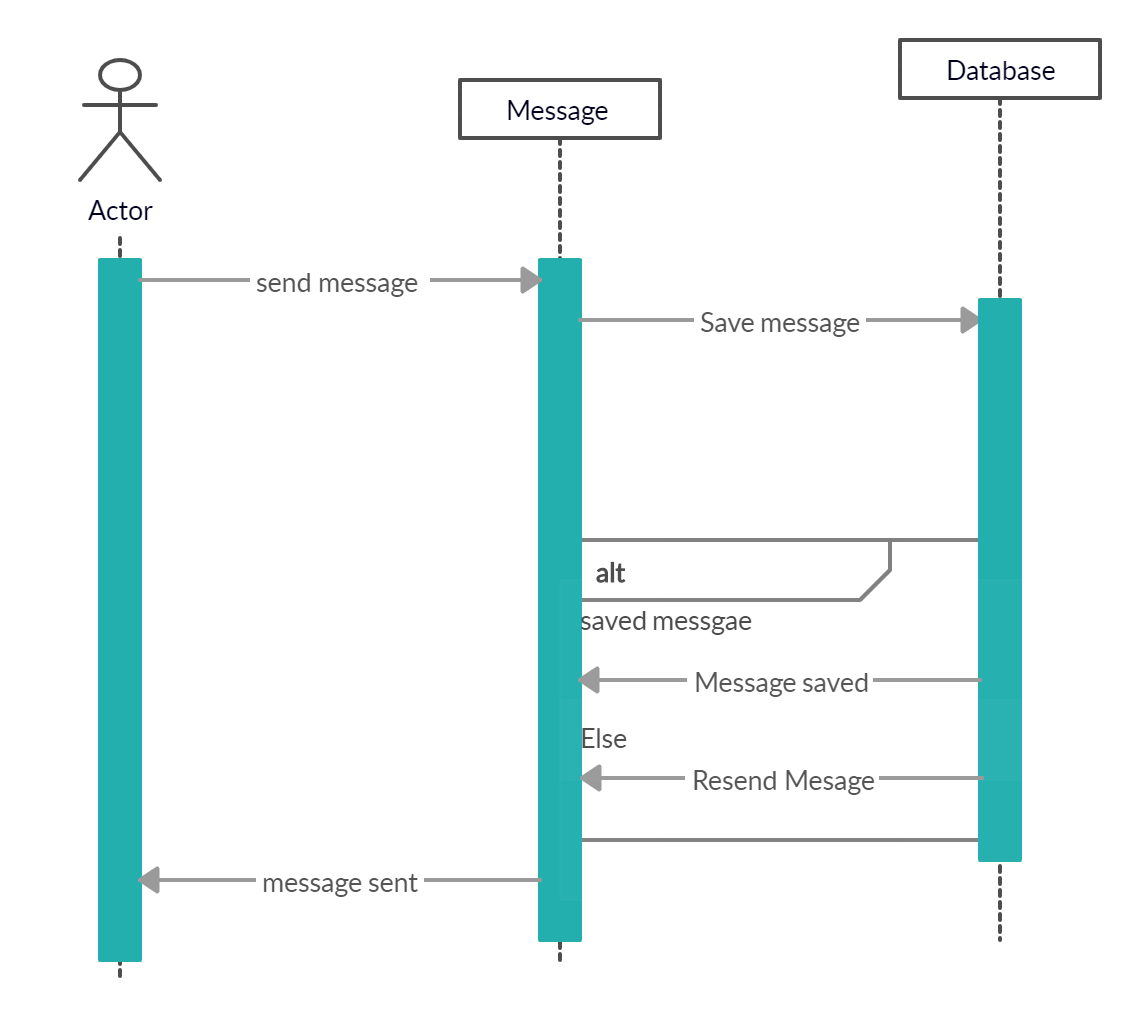
**2-Join Group**



### 3-Login



### 4-Send Message



### 5-Deactivate Account

