Cairo University  
Faculty of Computers and Information



**CS251**

**Software Engineering I**

Software Design

Youssef Salah mohammed

Youssef Maher Danial

Ahmed Mohsen Abd El Rasig

Ahmed Hassan El Doma

Dec,2019

Contents

[Team 3](#_Toc25570061)

[Document Purpose and Audience 3](#_Toc25570062)

[System Models 3](#_Toc25570063)

[I. System Decomposition 3](#_Toc25570064)

[II. Class diagrams 6](#_Toc25570065)

[Important Algorithm 7](#_Toc25570066)

[III. Sequence diagrams 7](#_Toc25570067)

[Class - Sequence Usage Table 9](#_Toc25570068)

[Ownership Report 10](#_Toc25570069)

[Policy Regarding Plagiarism: 10](#_Toc25570070)

[References 10](#_Toc25570071)

[Authors 10](#_Toc25570072)

# Team

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Name** | **Email** | **Mobile** |
| 20170344 | Youssf Salah Mohammed | Ys2339692gmail.com | 01124075089 |
| 20170347 | Youssef maher Danial | Youssedmaher42@gmail.com |  |
| 20170373 | Ahmed Mohsen Abd El Rasig |  |  |
| 20170379 | Ahmed hassan el doma |  |  |

# 

# Document Purpose and Audience

This Document is a Software Design Specification document which describe the design stage which include System Decomposition [, System Decomposition](#_Toc25570064) and sequence digrams of our Social Network Back-End API.

Audience of this document is supposed to be:

-Project Manager

-Software Engineers

# 

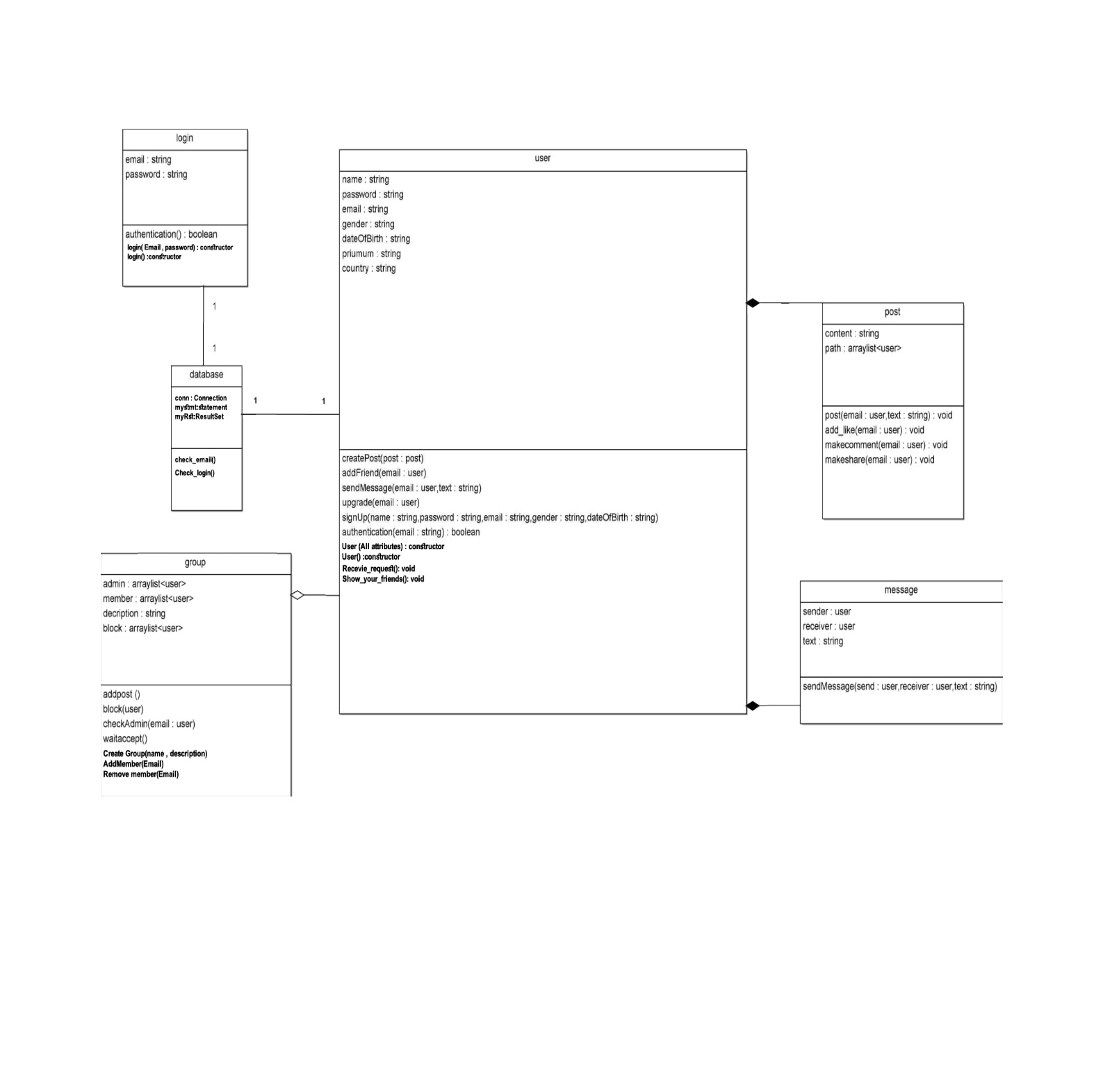
# System Models

## I. System Decomposition

## 

## 

## II. Class diagrams



**Classes description:**

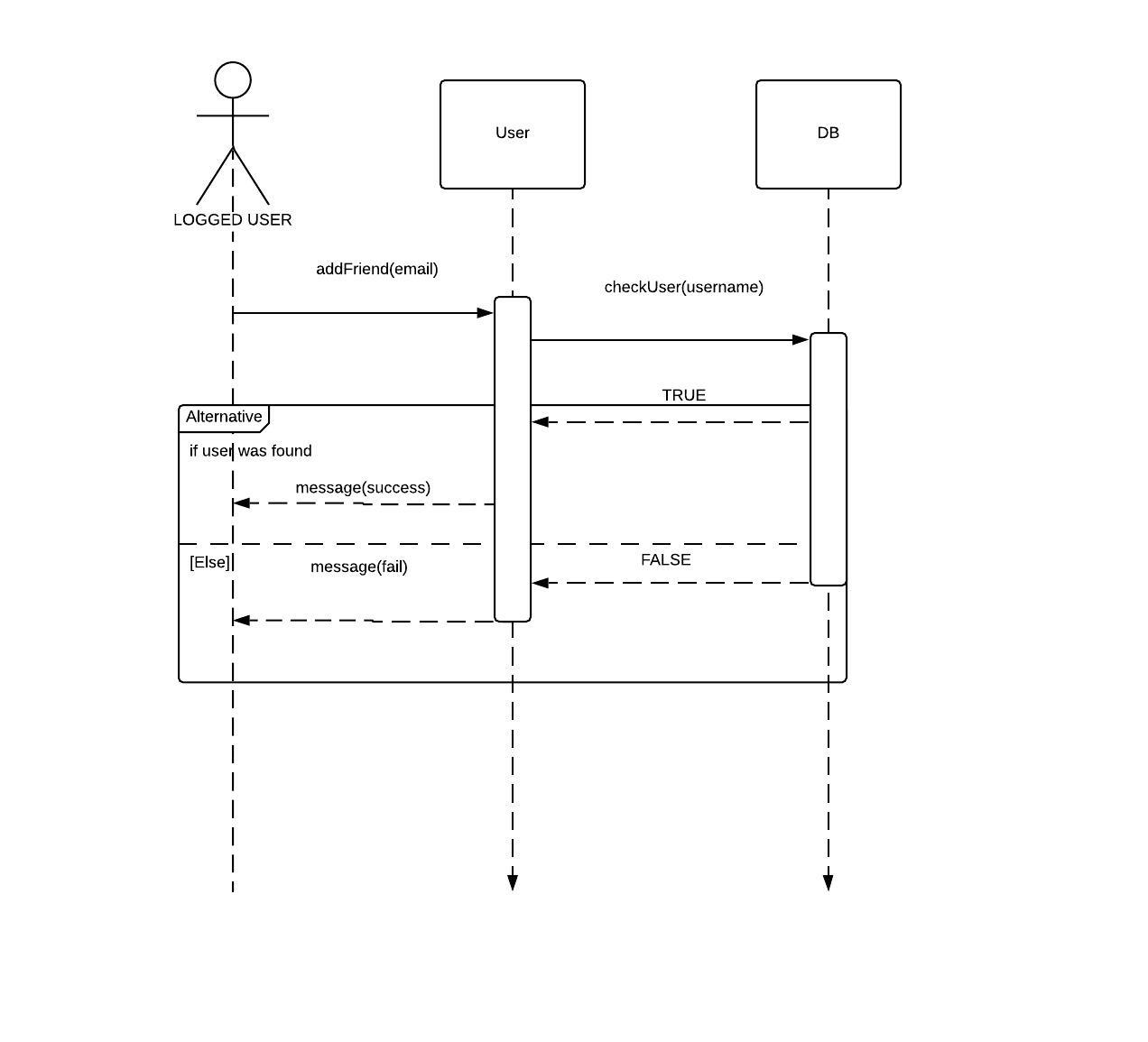
| **Class ID** | **Class Name** | **Subsystem ID** | **Description & Responsibility** |
| --- | --- | --- | --- |
| 1 | Log In | ID.1 | Responsible for log in process with all its actions. |
| 2 | Sign UP | ID.2 | Responsible for Sign Up process with all its actions. |
| 3 | Post | ID.3 | Responsible for making a post and managing it . |
| 4 | Group | ID.4 | Responsible for making a group and managing it. |
| 5 | Message | ID.5 | Responsible for create chat groups , sending messages , receive them and chatting with friends. |
| 6 | Database | ID.6 | Responsible for connection with database |

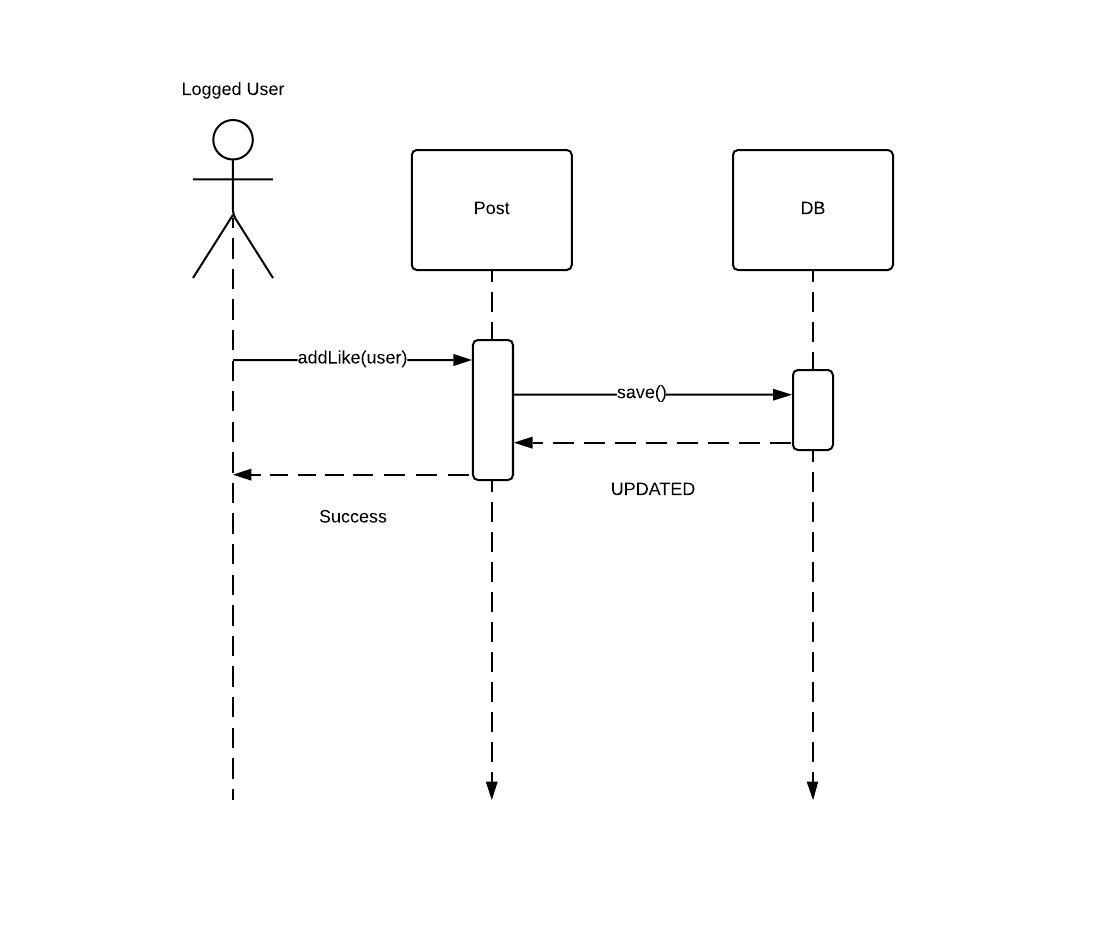
### Important Algorithm

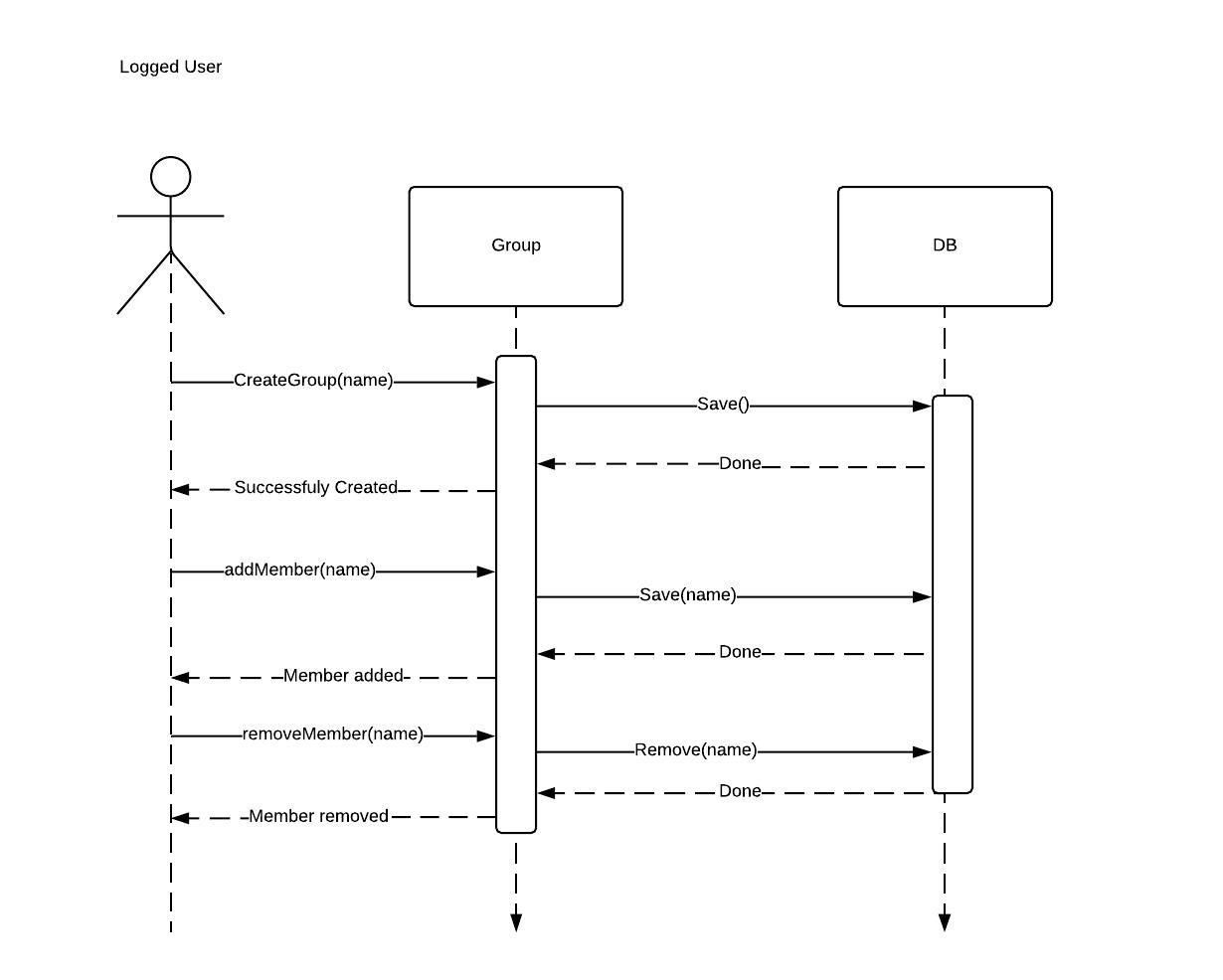
* **There is no** **any method in a class is implementing a complex algorithm.**

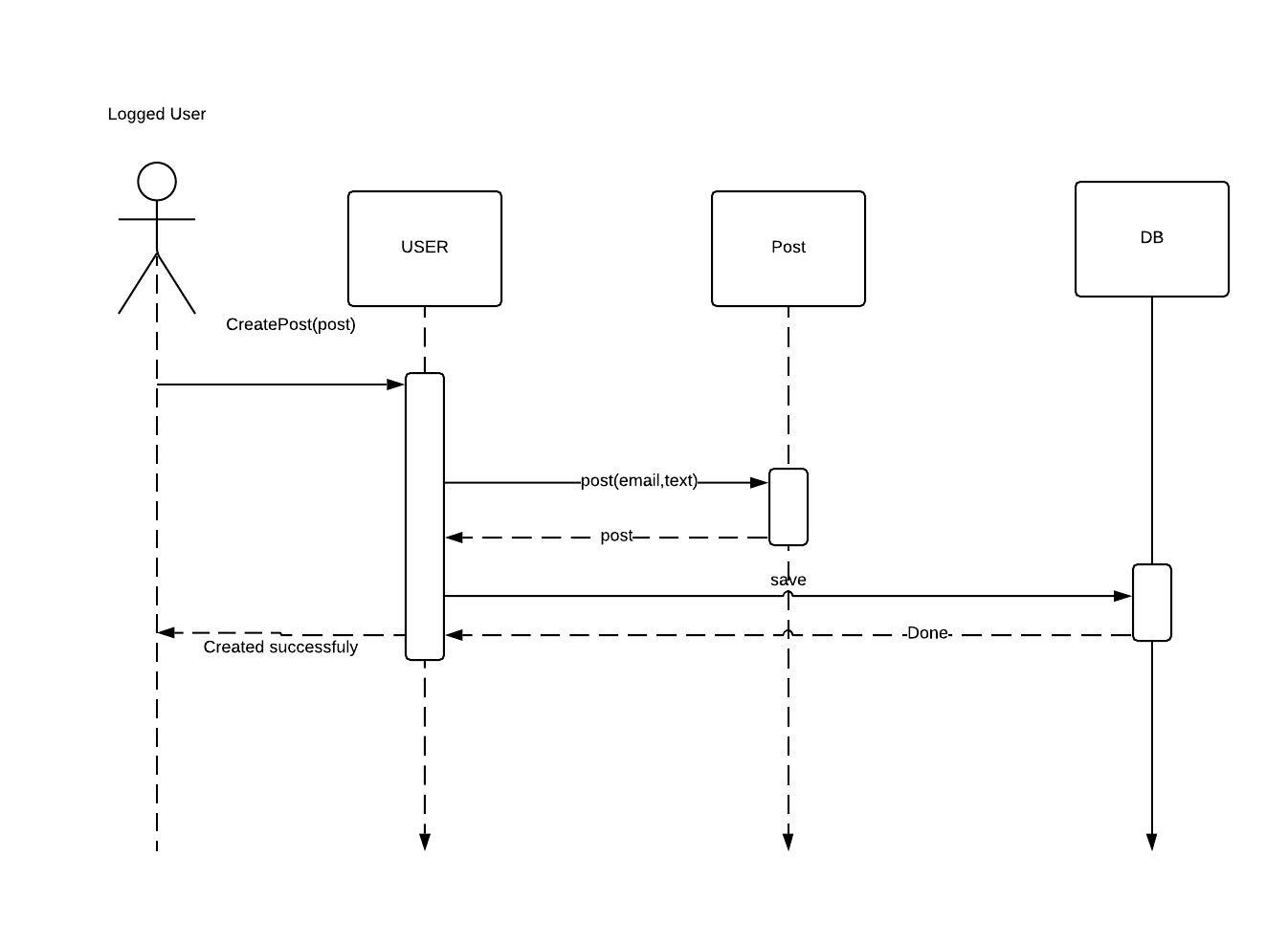
## III. Sequence diagrams

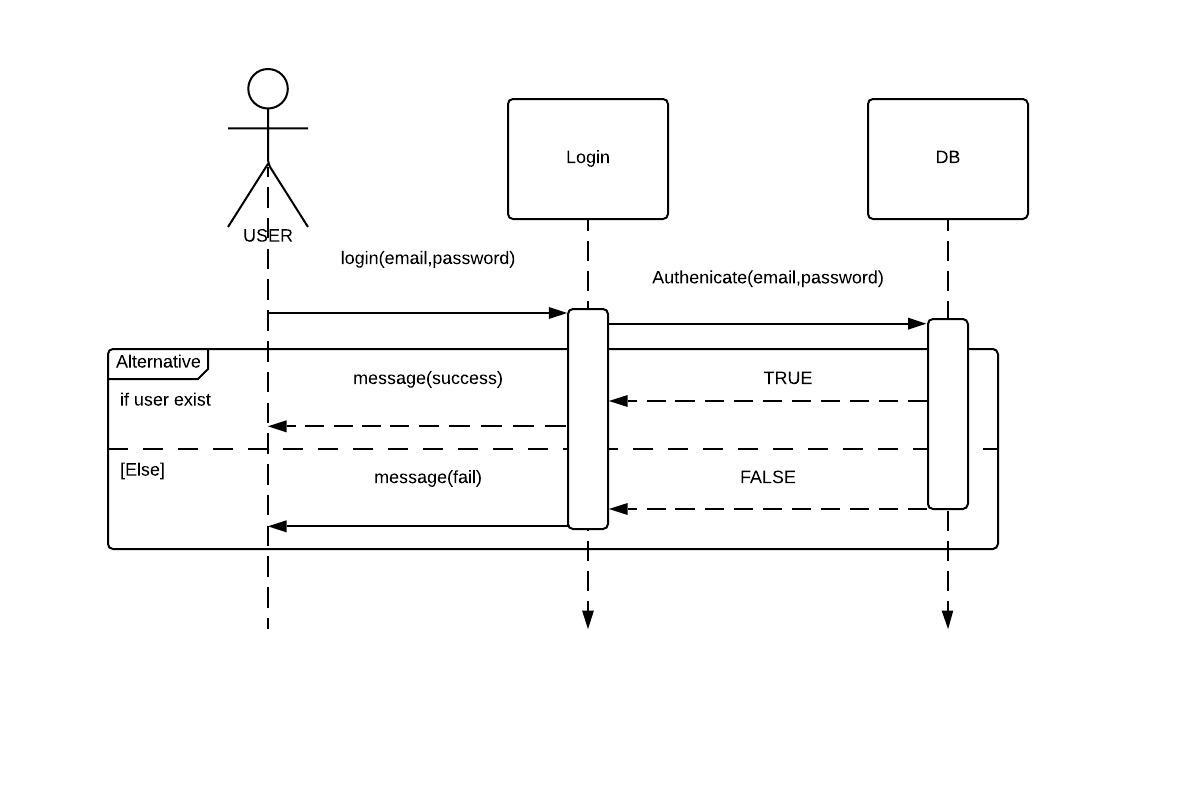
1

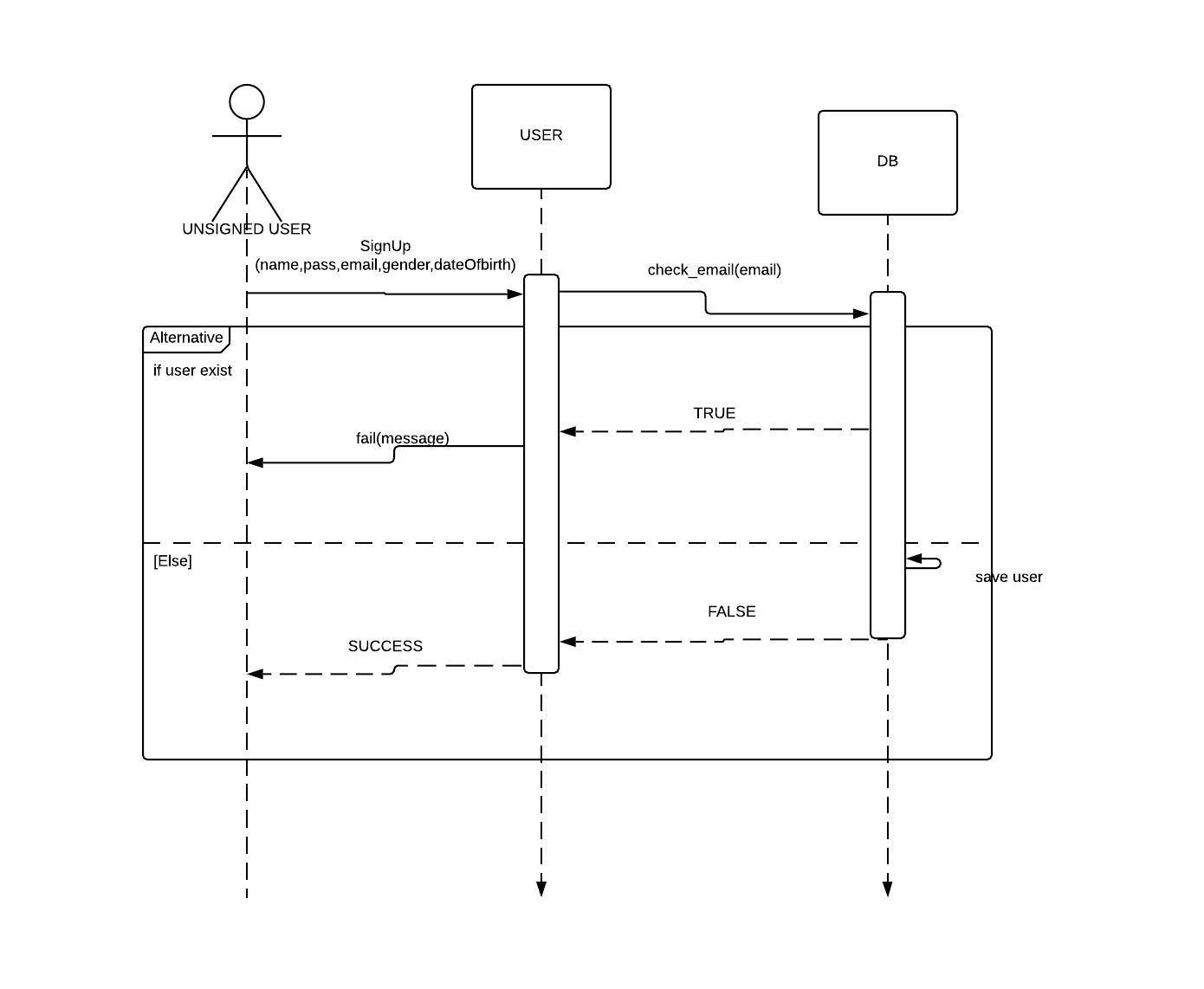


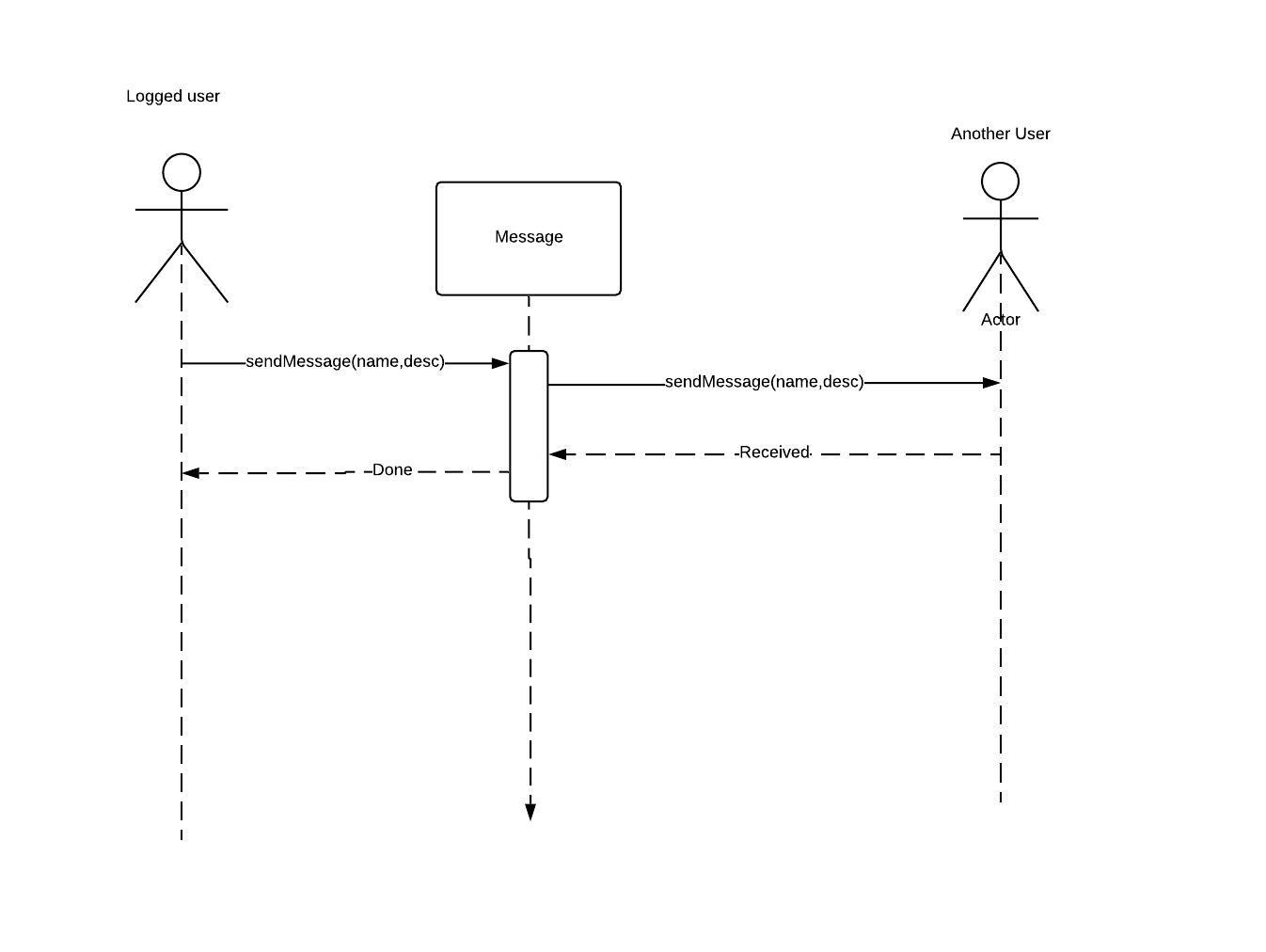
2

3

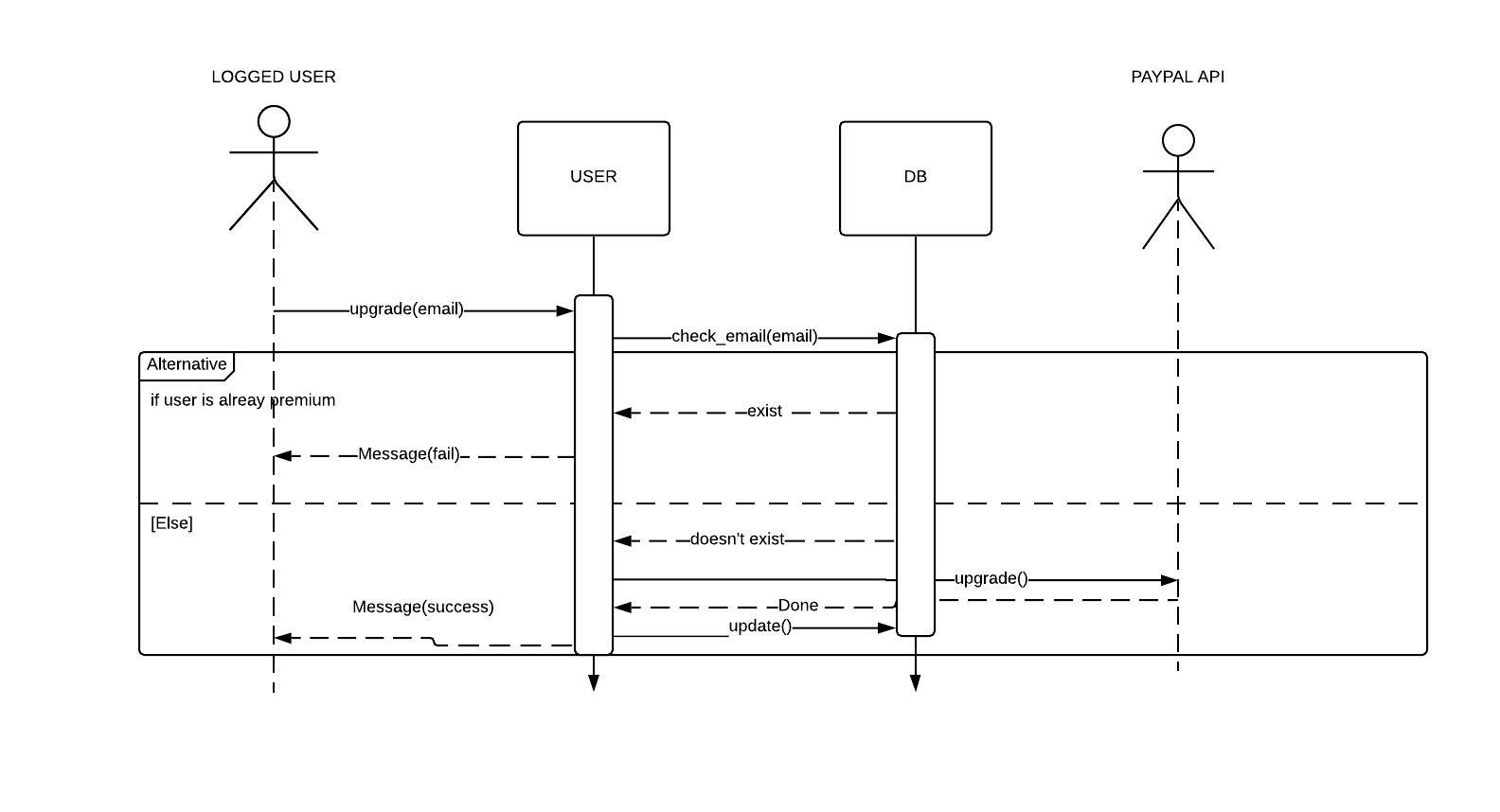
4

5

6

7

8



|  |  |  |
| --- | --- | --- |
| Class Name | Sequence Diagrams | Overall used methods |
| Post | 2,4 | Create, addLike ,deletePost |
| Login | 5 | Login |
| DB | 1,2,3,4,5,6,8 | Check\_User, save , remove ,Authenicate , Check\_email , update |
| Group | 3 | createGroup, addMember,  removeMember |
| Message | 7 | sendMessage |
| User | 1,4,6,8 | addFriend ,createPost ,signUp ,upgrade |

# Ownership Report

|  |  |
| --- | --- |
| **Item** | **Owners** |
| Sequence diagrams | *Youssef Maher* |
| Class Diagram | *Youssef Salah* |
| System Decomposition | *Ahmed Mohsen, Mohamed Hassan* |

# Policy Regarding Plagiarism:

# Students have collective ownership and responsibility of their project. Any violation of academic honesty will have severe consequences and punishment for ALL team members.

# References

* Youtube.com
* Google.com

# Authors

* Youssef Salah
* Youssef Maher
* Ahmed Mohsen
* Ahmed Hassan