

**CS251: SOFTWARE ENGINEERING-1-**  
**2014**

**SOCIAL NETWORK**

**TA-MOHAMED SAMIR**

**SRS Doc TITLE: SN-API**

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## Contents

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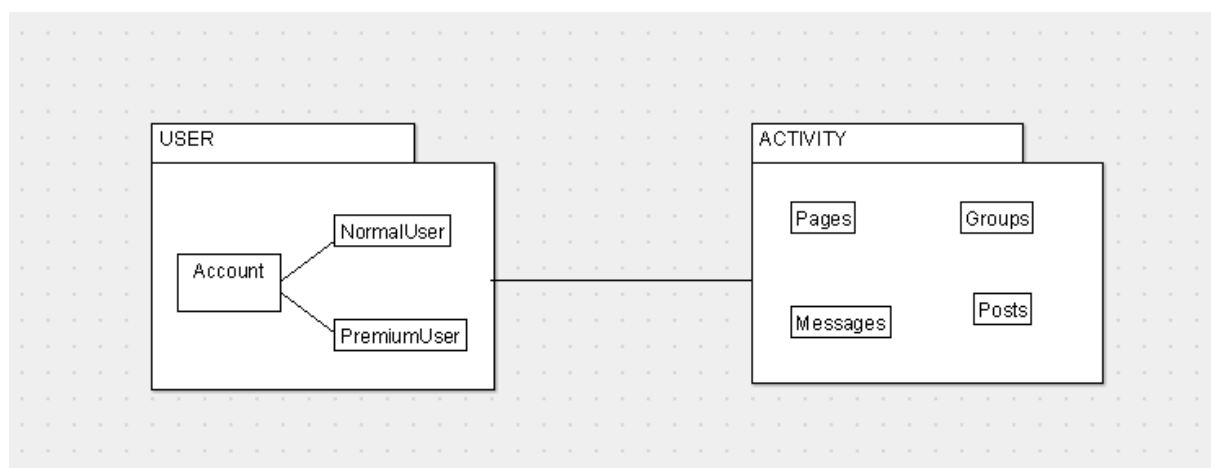
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## Document Purpose and Audience

- This document has a description of a back-end API software, which is able to manage interactions between users, create and manage groups and pages, manage different type of posts and retrieve current posts in specific hashtag and sort these posts according to the most important post
- Audience of this document are developers-TAs-, and project managers.

## System Models

### System Decomposition



### Class diagrams

UML class diagram for a Social Network Website. The diagram is divided into three main sections: User, Activities, and a central area for other entities.

**User Section:**

- Account** (Base Class):
  - Attributes: #FirstName: string, #LastName: string, #DateOfBirth: int, #Gender: string, #Password: string, #Username: string
  - Operations: +GetInfo(): string, +GetDOB(): int, +Signup(): boolean, +login(): boolean, +Validation(): boolean
- Normal User** (Subclass of Account):
  - Attribute: #Email: string
  - Operations: +GetEmail(): string, +GetUsername(): string, +GetPassword(): string, +ToString(): string
- Premium User** (Subclass of Account):
  - Attributes: #Mobile: int, #Email: string, #SenaCredNum: int
  - Operations: +GetEmail(): string, +GetMobile(): int, +GetPassword(): string, +GetSena(): string, +ToString(): string

**Activities Section:**

- Post**:
  - Attributes: #Post: string, #comment: string, #viewLikes: int, #viewComments: int, #Privacy: string, #Hashtag: string
  - Operations: +WritePost(): string, +WriteComments(): string, +ClickLike(): void, +Share(): void, +GetPrivacy(): string, +ShowDate(): string, +WriteHashtag(): string, +Search(): string
- Page**:
  - Attributes: +PageName: string, +PageAdmin: string, +DateOfCreation: string, +NumOfLikes: int, +PageType: string, +NewsFeed: string, +Post: string, +Member: string
  - Operations: +CreatePage(): void, +GetName(): string, +GetAdmin(): string, +GetDate(): string, +ShowLikes(): int, +GetType(): string, +WritePost(): string, +LikePage(): void, +ShowNewsFeed(): void, +ShowMembers(): void, +BlockMember(): string
- Group**:
  - Attributes: +GroupName: string, +GroupOwner: string, +NumOfMembers: int, +Members: string, +GroupType: string, +NewsFeed: string, +Post: string, +Privacy: string
  - Operations: +CreateGroup(): void, +GetName(): string, +GetOwner: string, +GetDate(): string, +AddMembers(): string, +ShowMembers(): void, +GetType(): string, +GetPrivacy(): string, +WritePost(): string, +ShowNewsFeed(): void, +KickMembers(): string
- Message**:
  - Attributes: +Type: string, +NumOfChatters: int, -Message: string
  - Operations: +SetType(): string, +GetNumberChatters(): int, +CreateMessage(): void, +SendMessage(): boolean

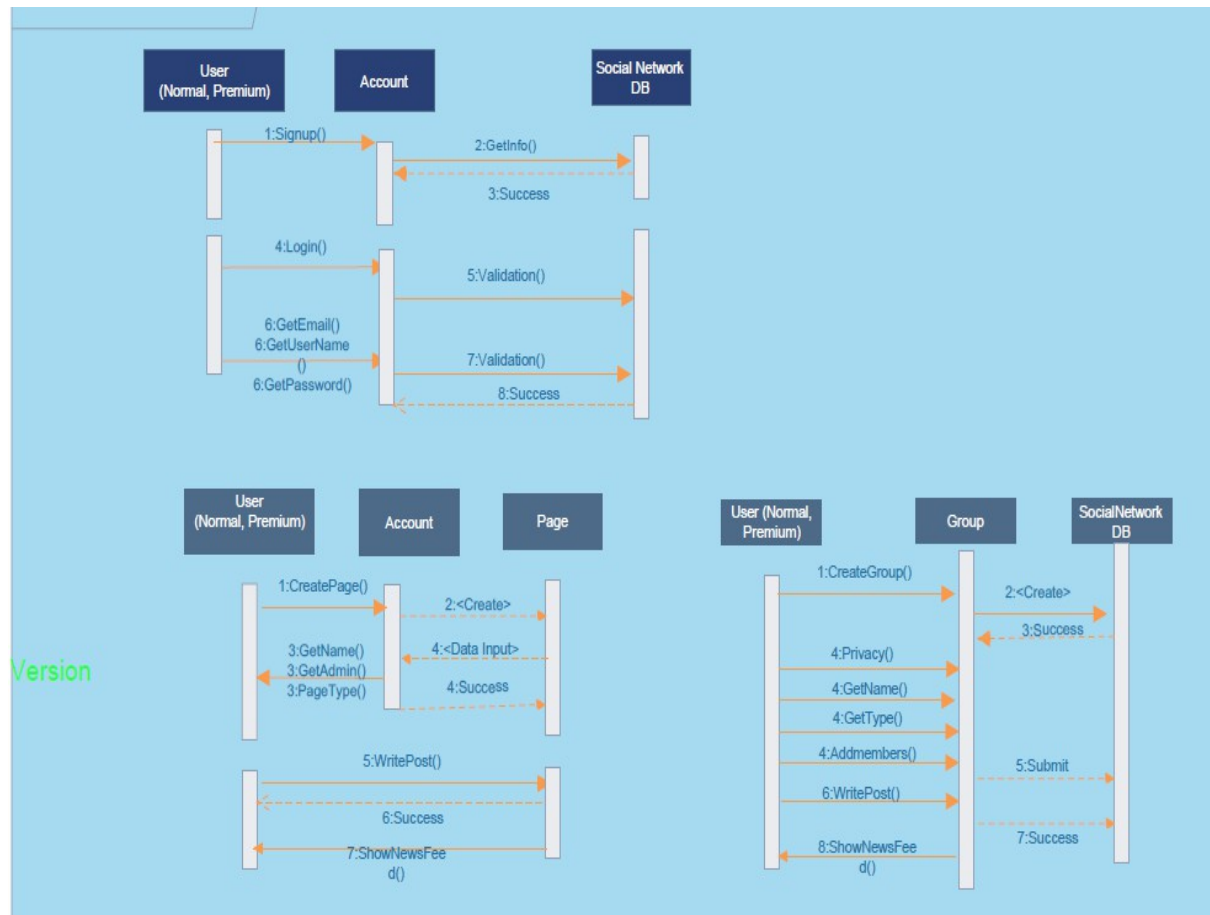
**Relationships:**

- Account** (1) to **Post** (1..\*): **Create** relationship.
- Account** (1) to **Page** (1..\*): **Create** relationship.
- Account** (1) to **Group** (1..\*): **Create** relationship.
- Account** (1) to **Message** (1..\*): **Write** relationship.
- Normal User** to **Post**: **WritePost** relationship.
- Premium User** to **Post**: **WritePost** relationship.
- Premium User** to **Page**: **WritePost** relationship.
- Premium User** to **Group**: **WritePost** relationship.
- Premium User** to **Message**: **WritePost** relationship.

**Notes:**

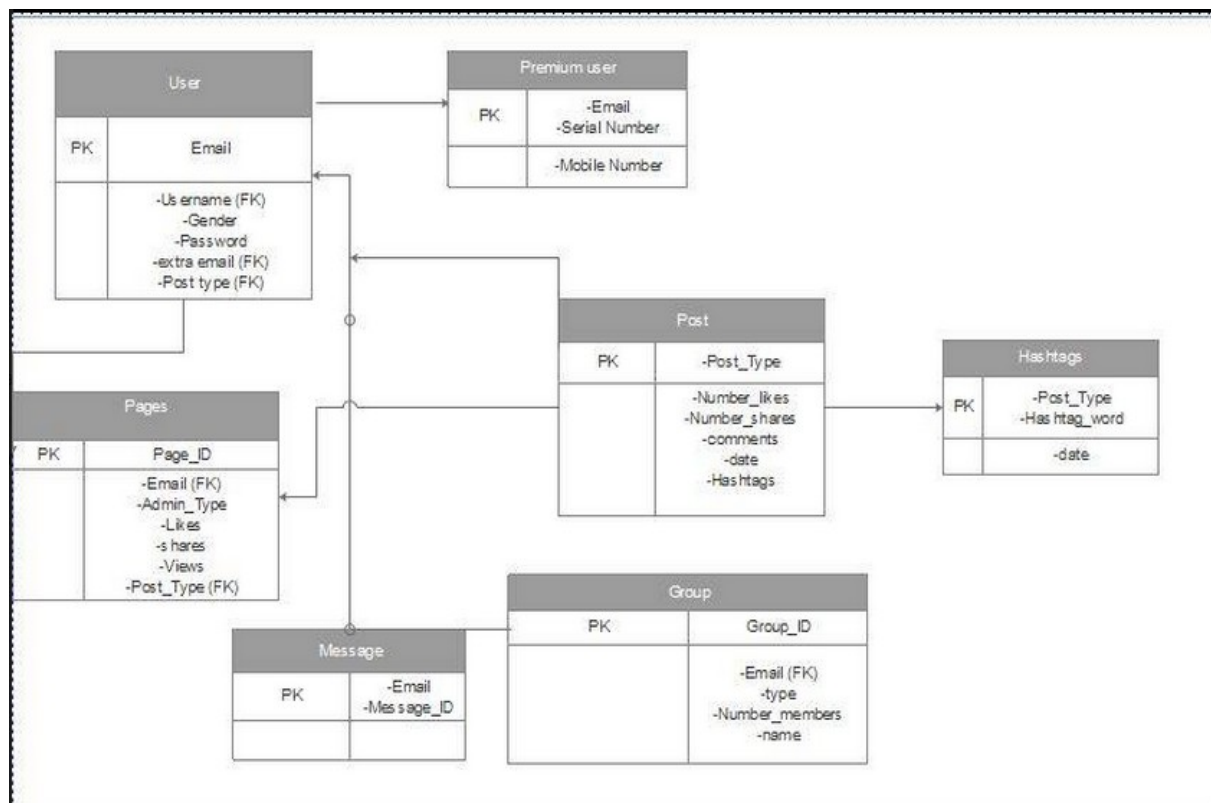
- Account is a Class with Two Children classes: Normal, Premium.
- Created by Trial Version

## Sequence diagrams



Class Name	Sequence Diagrams	Overall used methods
Account	1,2,3	GetInfo(), Validation()
User(Normal, Premium)	1,2,3	Signup(), login(), createpage(), creategroup()

## Physical Entity-Relationship Diagram



## USER INTERFACE

First Name	<input type="text"/>
Last Name	<input type="text"/>
Date Of Birth	<input type="text"/>
User Name	<input type="text"/>
Password	<input type="text"/>
Gender	<input type="text"/>
Email	<input type="text"/>

## Ownership Report

Item	Owners
Decomposition Diagram And Purpose	Nada Abdelkader Khaled
User Interface	Raghda Mohamed Ahmed
Class Diagram	Lobna Mostafa El-Shazly And Raghda Mohamed
Sequence Diagram And ERD	Lobna Mostafa El-Shazly