Cairo University  
Faculty of Computers and Information



**CS251**

**Software Engineering I**

Project Name

Software Design

Team Names

Month & Year

Contents

[Instructions [To be removed] 3](#_Toc25570060)

[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

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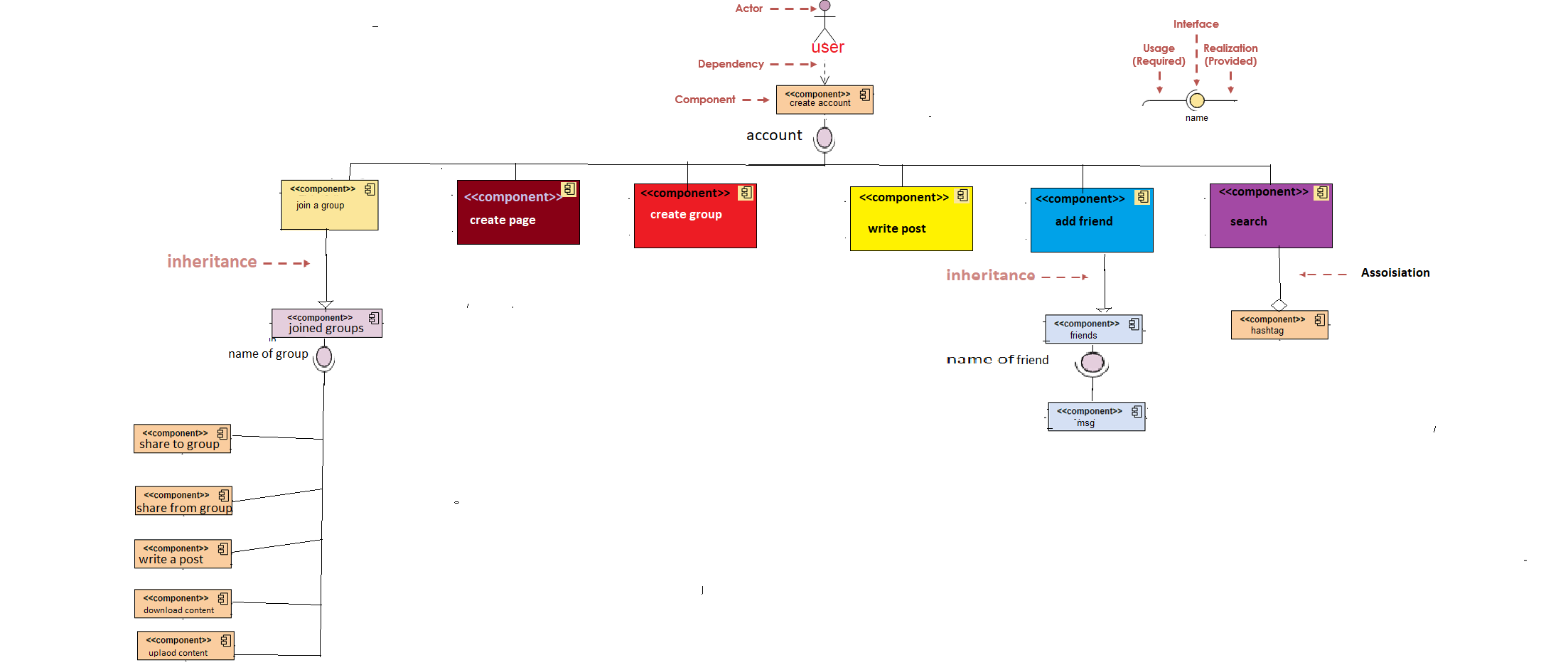
# Document Purpose and Audience

* **This document describes the system decomposition, class diagram and sequence diagrams for a specific system to be illustrated.**
* **Mainly the targets of that document are: Developers – Analysts.**

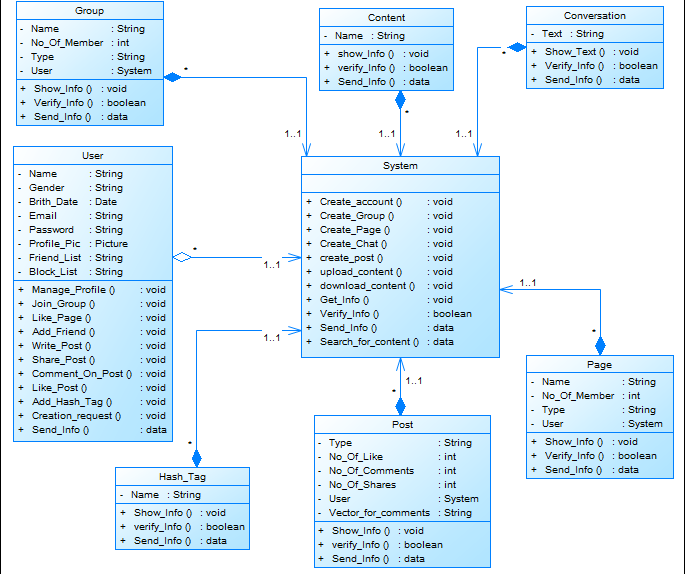
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# System Models

## I. System Decomposition



## II. Class diagrams

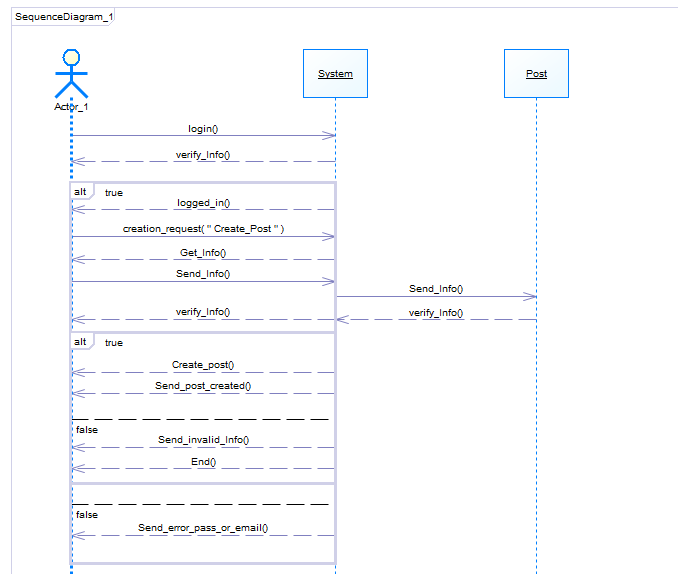


| **Class ID** | **Class Name** | **Subsystem ID** | **Description & Responsibility** |
| --- | --- | --- | --- |
| 1 | System | None | The only class that the user interacts with.  It should do all the user’s commands. |
| 2 | User | None | This class devoted for the user. It provides the most functions that the user wants to interact with the system. |
| 3 | Content | None | This class used by the system when the user wants to search for anything. |
| 4 | Group | None | The group class contains information about groups and validation function in case of creating a new group |
| 5 | Hash\_Tag | None | The hashtag responsibility is to categorize posts in any kind. Used by the user in case of searching for a specific thing. |
| 6 | Conversation | None | Its responsibility is to show text messages among users. |
| 7 | Page | None | The page class contains information about created pages and validation function in case of creating a new page with given audience and purpose. |
| 8 | Post | None | Mainly it shows the content of specific post to the user to interact with. |

## 

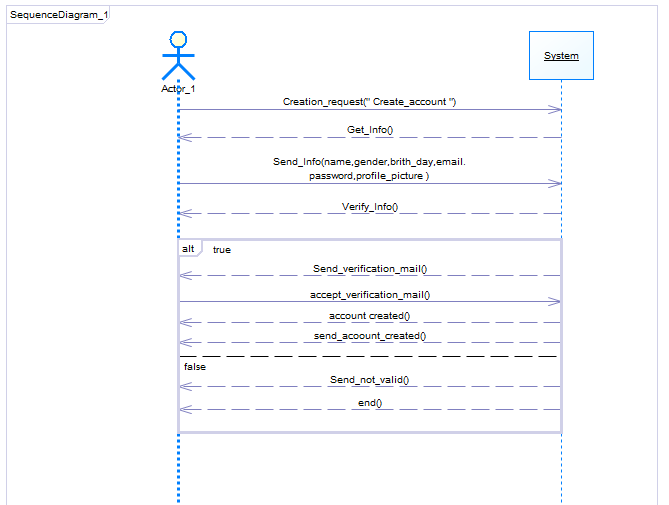
## III. Sequence diagrams

**ID = 1, Use Case: Write a post.**

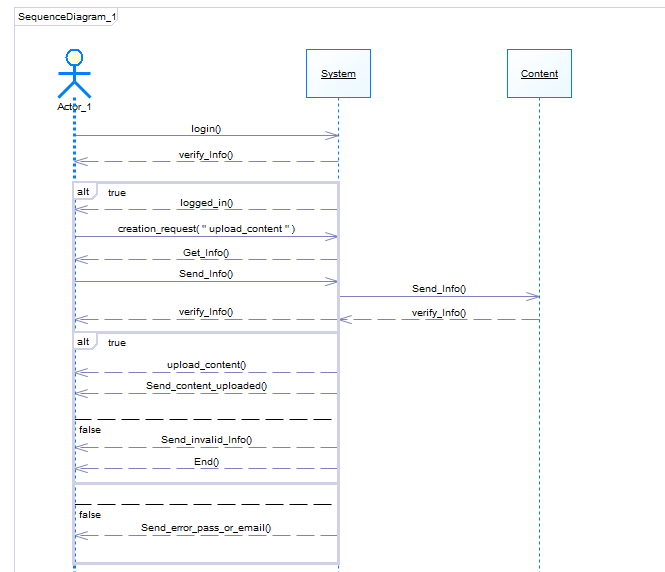


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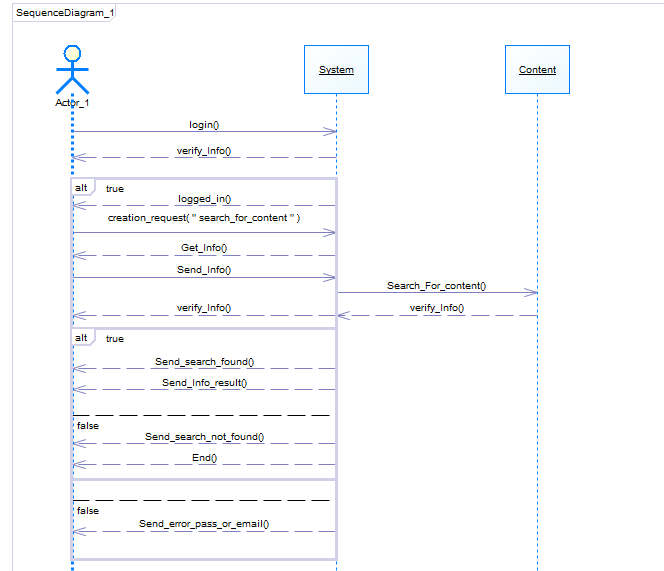
**ID = 2, Use Case: Create Account.**



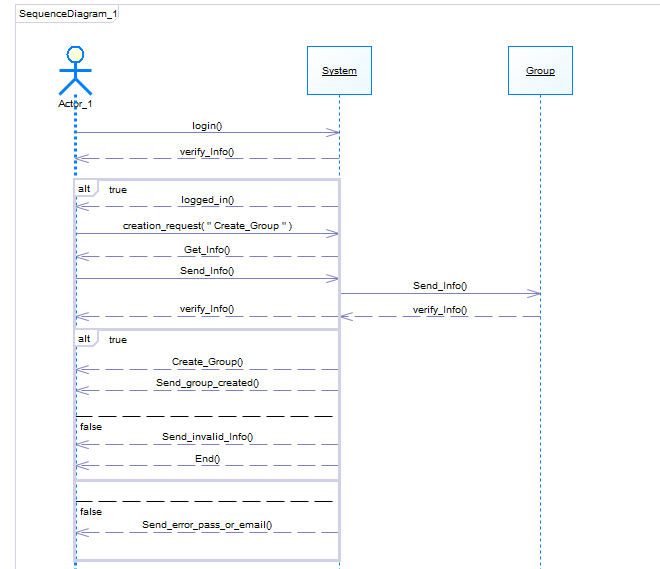
**ID = 3, Use Case: Upload Content.**



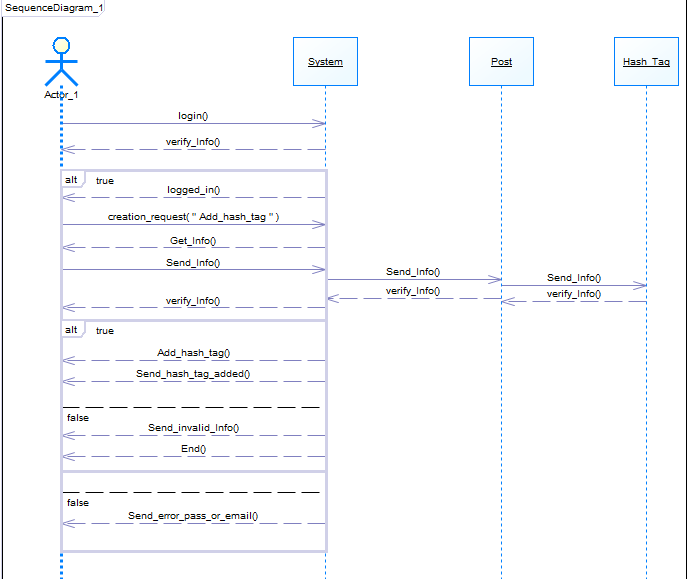
**ID = 4, Use Case: Search for Content.**



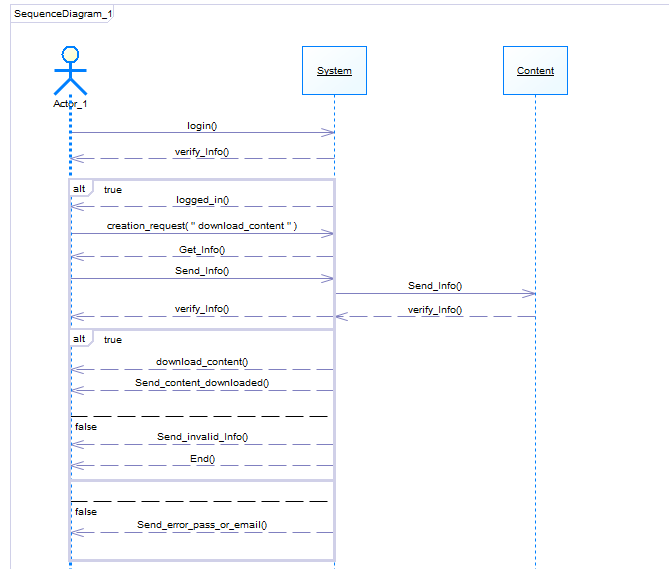
**ID = 5, Use Case: Create Group.**



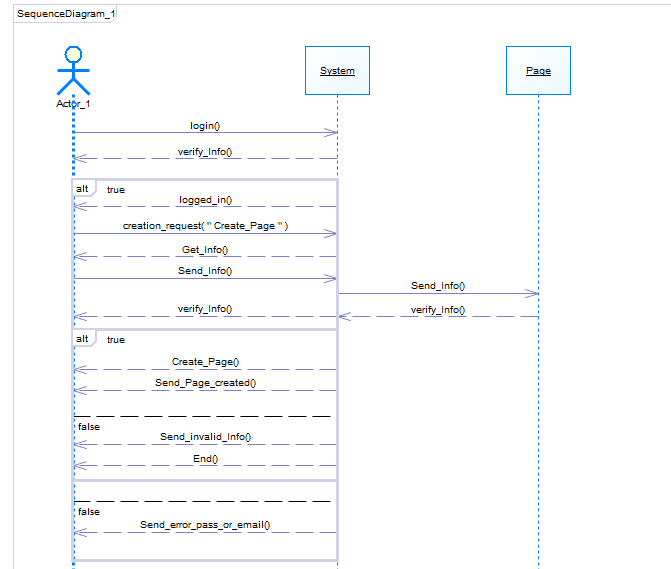
**ID = 6, Use Case: Using Hash Tag.**



**ID = 7, Use Case: Download Content.**



**ID = 8, Use Case: Create Page.**



### Class - Sequence Usage Table

| **Class Name** | **Sequence Diagrams** | **Overall used methods** |
| --- | --- | --- |
| User | 1,2,3,4,5,6,7,8 | Creation request, send data, add\_Hash\_tag, send\_info, write\_post. |
| System | 1,2,3,4,5,6,7,8 | Create\_page , create\_ group , create\_post, Verify\_info, upload\_content, download\_content, send\_info and get\_info. |
| Post | 1\_6 | Verify\_info |
| Page | 8 | Verify\_info |
| Group | 5 | Verify\_info |
| Content | 3-4-5 | Verify\_info |
| Hash\_Tag | 6 | Verify\_info |

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# Ownership Report

|  |  |
| --- | --- |
| **Item** | **Owners** |
| Component diagram | *Ahmed Alsaket and Ahmed Ayman* |
| Class Diagram and sequence diagrams | *Abotaleb Khaled, Osama Tarek* |

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