

SOCIAL MEDIA WEBSITE AND APPLICATION

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1. Introduction

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS purpose, scope, definitions, acronyms, abbreviations, references and overview of SRS. A Software Requirements Specification (SRS) - a requirements specification for a software system - is a complete description of the behaviour of a system to be developed. It includes a set of use cases that describe all the interactions the users will have with the software. Use cases are also known as functional requirements. In addition to use cases, the SRS also contains non-functional (or supplementary) requirements. Non-functional requirements are requirements which impose constraints on the design or implementation (such as performance engineering requirements, quality standards, or design constraints). The aim of this document is to gather and analyse and give an in-depth insight of the complete social media world and websites that are used in our daily life. This is a documentation of the project Social Media website and applications done sincerely and satisfactorily by my group members.

1.1. Objective:

- ☒ **Marketing** - Businesses use social media to promote themselves and their products.
- ☒ **Learning** - The immediacy of the information flow allows you to get the gist of the latest news almost as it happens.
- ☒ **Interacting** - Social media break the traditional barriers of time and distance between people.
- ☒ **Sharing** - Ability to share information and ideas in a variety of ways.

1.2. Scope:

The name of the application is Social Media Application. It is a social network that connects people worldwide. The aim of Social Media Application is to provide information to the user about the events and the people whom they know. The users of this app can add friend, post pictures, share videos, chat with their friends set privacy and profile settings and can block unwanted people in their contacts and be informed about their friends. People can create social media groups for different purpose in school, colleges, universities, even at work and can be informed about the events.

- ☒ Faster, Easier Communication
- ☒ Social Media makes your Brand more relatable
- ☒ Social Media is Great for Promoting Content
- ☒ Reputation Management
- ☒ Generate Leads Directly & Indirectly

1.3 Glossary:

This should define all technical terms and abbreviations used in the document.

Overview:

The remaining sections of this document provide a general description, including characteristics of the users of this project, the product's hardware and the functional and data requirements of the product. General description of the project is discussed in section 2 of this document. Section 3 gives the functional requirements, data requirements and constraints and assumptions made while designing the E-Store. It also gives the user view point of product. Section 3 also gives the specific requirements of the product. Section 3 also discusses the external interface requirements and gives detailed description of functional requirements. Section 4 is for supporting information.

2. Overall Description

This document contains the problem statement that the current system is facing which is hampering the growth opportunities of the company. It further contains a list of the stakeholders and users of the proposed solution. It also illustrates the needs and wants of the stakeholders that were identified in the brainstorming exercise as part of the requirements workshop. It further lists and briefly describes the major features and a brief description of each of the proposed system.

2.1 Product Perspective:

DRAWBACKS:

Social media has become essential to our lives, especially for kids. This is because it provides a platform to learn new things and interact with people worldwide. However, there are some downsides as well. Here are some disadvantages of social media:

- ☒ Spending a lot of time on social media.
- ☒ Decrease in Communication skills.
- ☒ Fake news.
- ☒ Social media can cause sleeplessness
- ☒ Content on social media is not appropriate for children.
- ☒ Cyber attacks are becoming more prevalent in today's world.
- ☒ No privacy
- ☒ Getting close to Depression
- ☒ Lack of confidence

The social networking website allows users to connect with their family and friends all over the globe. It gives a global platform for users around the world to connect with each other. Users can also share photos, videos, and blogs and engage themselves in chatting. Besides, it provides scope for advertisement. This is an independent product and will be the first release of the product.

2.1. Project Functions:

Reliability:

The social media platform and services must be reliable. An unreliable infrastructure is likely to detract from the learning experience and obstruct the educator. It will become a frustration to learners, educators, managers and administrators alike if devices, applications and services cannot be relied upon.

Coherence:

With the variety of competing platforms, it is important that an institution ensures coherence by implementing platforms that work together and fit with the overall ICT strategy.

Eg.: Yammer integrates with students O365 offering.

Accessibility:

On-screen text cannot be seen by those with serious visual impairment; it may be hard to interpret for those with dyslexia, learning or language difficulties; and users with physical or neurological problems may be unable to use a keyboard or mouse or touch screen.

The Equality Act outlines duties on educational institutions with respect to the provision they offer to learners with special educational needs and/or disabilities. This requires 'reasonable adjustments' to ensure that these learners are not put at a substantial disadvantage in using any facilities or resources.

Affordability and sustainability:

All services need to support energy conservation and wider environmental sustainability. They should be energy efficient in themselves by offering a range of devices, applications and services that incorporate energy-saving technology, management and other measures. Learners, educators and administrators should have a clear understanding of the impact the technology has on the environment, in particular carbon emissions.

While institutions can often identify the immediate costs of a new ICT resource, the total cost of ownership (TCO) must be considered in order for the institution to be able to sustain a resource. Consideration should therefore be given not just to purchase price and running costs but also decommission and transition costs to future services.

The cheapest solution may not always be the most cost effective when taking these into consideration.

Ideally a social media user should be able to communicate with other staff and learners and be confident that they will be protected from access to or distribution of inappropriate content and from unsolicited contacts.

The platform would allow sharing and exchange information in different formats and with different people – other staff, learners and colleagues.

USER CHARACTERISTICS

At least user of the system should be comfortable with English language.

☒ **TECHNICAL EXPERTISE**

User should be comfortable using general purpose applications on the computer system.

2.1 **Constraints: Software constraints**

The system will run under windows 98 or higher platforms of operating system.

2.2 **Assumptions and Dependencies:**

Booking Agents will be having a valid username and password to access the software.

The software needs booking agent to have complete knowledge of railways reservation system. Software is dependent on access to internet.

3 **Requirement Specification**

3.1. **Function Requirements**

3.1.1. **Performance requirements:**

User Satisfaction: The system is such that it stands up to the user expectations.

Response Time: The response of all the operation is good. This has been made possible by careful programming.

Error Handling: Response to user errors and undesired situations has been taken care of to ensure that the system operates without halting.

Safety and Robustness: The system is able to avoid or tackle disastrous action. In other words, it should be fool proof. The system safeguards against undesired events, without human intervention.

Portable: The software should not be architecture specific. It should be easily transferable to other platforms if needed.

User friendliness: The system is easy to learn and understand. An active user can also use the system effectively, without any difficulties.

Design constraints:

There are a number of factors in the client's environment that may restrict the choices of a designer. Such factors include standards that must be followed, resource limits, operating environment, reliability and security requirements and policies that may have an impact on the design of the system. An SRS (Software Requirements Analysis and Specification) should identify and specify all

such constraints.

Standard Compliance:

This specifies the requirements for the standards the system must follow. The standards may include the report format and accounting properties.

Hardware Limitations: The software may have to operate on some existing or predetermined hardware, thus imposing restrictions on the design. Hardware limitations can include the types of machines to be used, operating system available on the system, languages supported and limits on primary and secondary storage.

Reliability and Fault Tolerance: Fault tolerance requirements can place a major constraint on how the system is to be designed. Fault tolerance requirements often make the system more complex and expensive. Requirements about system behavior in the face of certain kinds of faults are specified. Recovery requirements are often an integral part here, detailing what the system should do if some failure occurs to ensure certain properties. Reliability requirements are very important for critical applications.

Security:-Security requirements are particularly significant in defence systems and database systems. They place restrictions on the use of certain commands, control access to data, provide different kinds of access requirements for different people, require the use of passwords and cryptography techniques and maintain a log of activities in the system.

3.1.2. Hardware requirements:

The most common set of requirements defined by any operating system or software application is the physical computer resources, also known as hardware. A hardware requirements list is often accompanied by a hardware compatibility list (HCL), especially in case of operating systems. An HCL lists tested, compatible, and sometimes incompatible hardware devices for a particular operating system or application. The following sub-sections discuss the various aspects of hardware requirements.

Architecture

All computer operating systems are designed for a particular computer architecture. Most software applications are limited to particular operating systems running on particular architectures. Although architecture-independent operating systems and applications exist, most need to be recompiled to run on a new architecture. See also a list of common operating systems and their supporting architectures.

Processing power

The power of the central processing unit (CPU) is a fundamental system requirement for any software. Most software running on x86 architecture define processing power as the model and the clock speed of the CPU. Many other features of a CPU that influence its speed and power, like bus speed, cache, and MIPS are often ignored. This definition of power is often erroneous, as different makes and models of CPUs at similar clock speed often have different throughput speeds.

Memory

All software, when run, resides in the random access memory (RAM) of a computer. Memory requirements are defined after considering demands of the application, operating system, supporting software and files, and other running processes. Optimal performance of other unrelated software running on a multi-tasking computer system is also considered when defining this requirement.

Secondary storage

Data storage device requirements vary, depending on the size of software installation, temporary files created and maintained while installing or running the software, and possible use of swap space (if RAM is insufficient).

Display adapter

Software requiring a better than average computer graphics display, like graphics editors and high-end games, often define high-end display adapters in the system requirements.

Peripherals

Some software applications need to make extensive and/or special use of some peripherals, demanding the higher performance or functionality of such peripherals. Such peripherals include CD-ROM drives, keyboards, pointing devices, network devices, etc.

3.1.3. Software requirements:

Software requirements deal with defining software resource requirements and prerequisites that need to be installed on a computer to provide optimal functioning of an application. These requirements or prerequisites are generally not included in the software installation package and need to be installed separately before the software is installed.

Platform

A computing platform describes some sort of framework, either in hardware or software, which allows software to run.[2] Typical platforms include a computer's architecture, operating system, or programming languages and their runtime libraries.

Operating system is one of the requirements mentioned when defining system requirements (software). Software may not be compatible with different versions of same line of operating systems, although some measure of backward compatibility is often maintained. For example, most software designed for Microsoft Windows XP does not run on Microsoft Windows 98, although the converse is not always true. Similarly, software designed using newer features of Linux Kernel v2.6 generally does not run or compile properly (or at all) on Linux distributions using Kernel v2.2 or v2.4.

APIs and drivers

Software making extensive use of special hardware devices, like high-end display adapters, needs special API or newer device drivers. A good example is DirectX, which is a collection of APIs for handling tasks related to multimedia, especially game programming, on Microsoft platforms.

Web browser

Most web applications and software depend heavily on web technologies to make use of the default browser installed on the system. Microsoft Edge is a frequent choice of software running on Microsoft Windows, which makes use of ActiveX controls, despite their vulnerabilities.

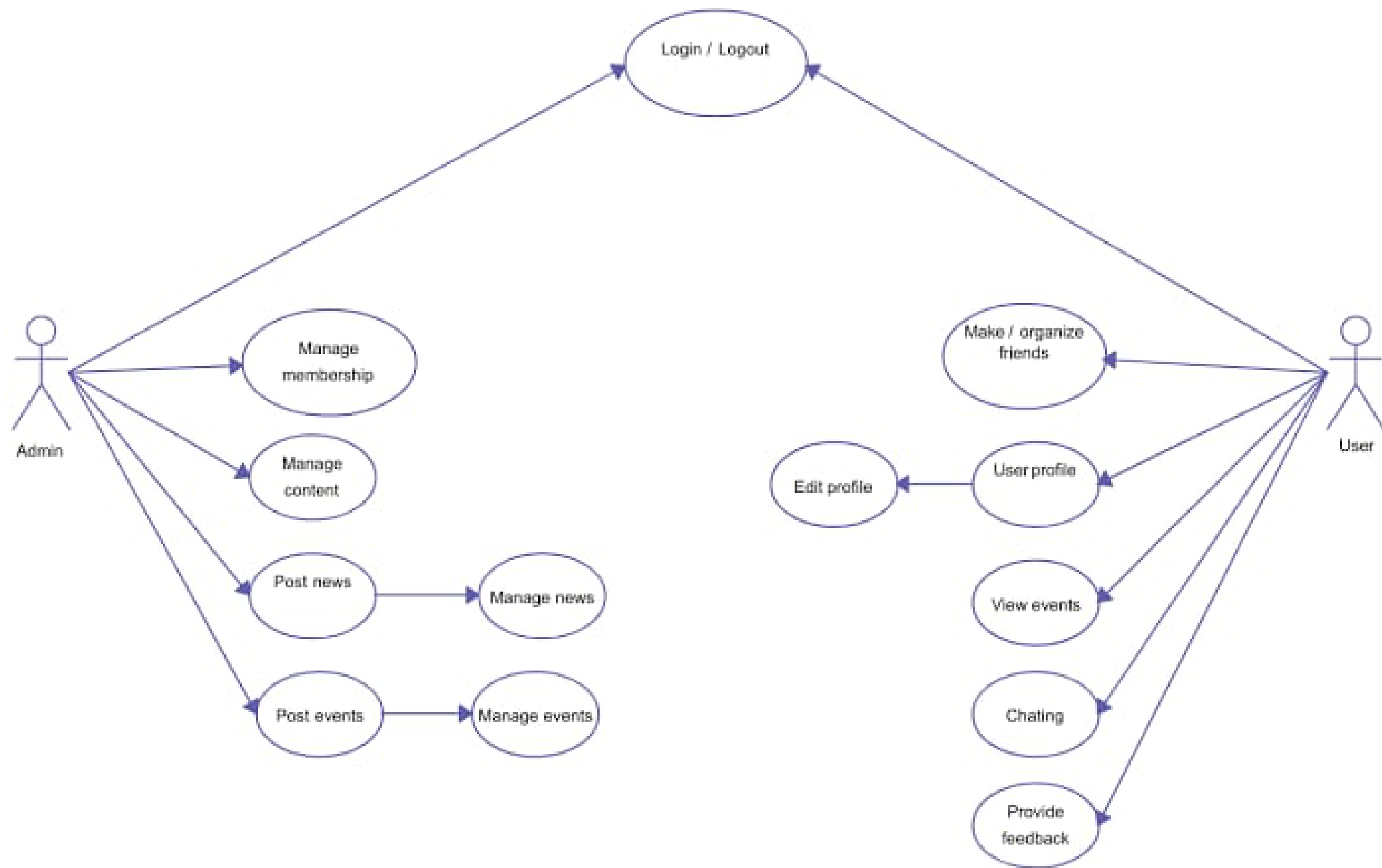
3.1.4 Other Requirements:

Software should satisfy following requirements as well:-

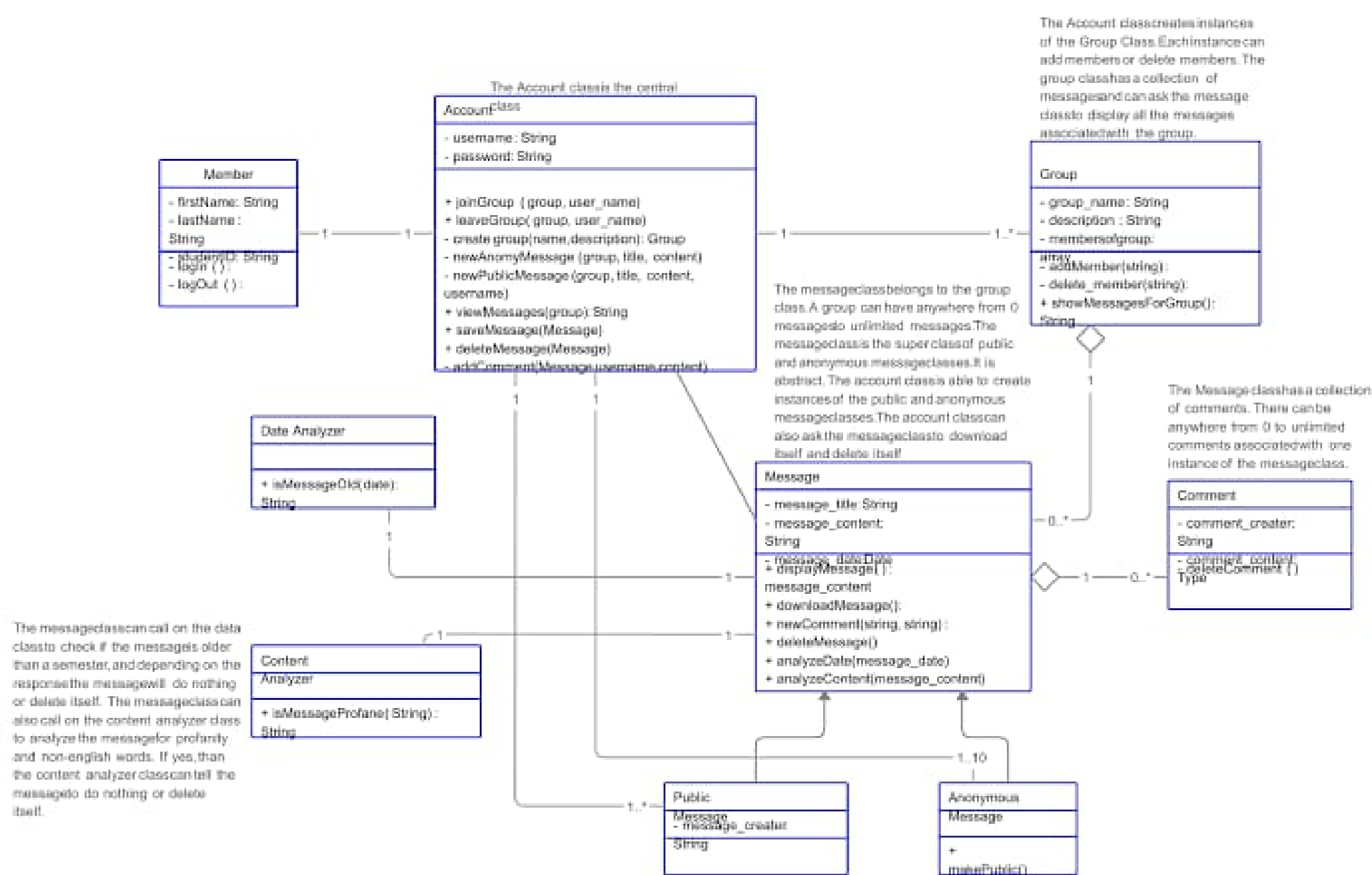
- SECURITY
- PORTABILITY
- CORRECTNESS
- EFFICIENCY
- FLEXIBILITY
- TESTABILITY

REUSABILTY

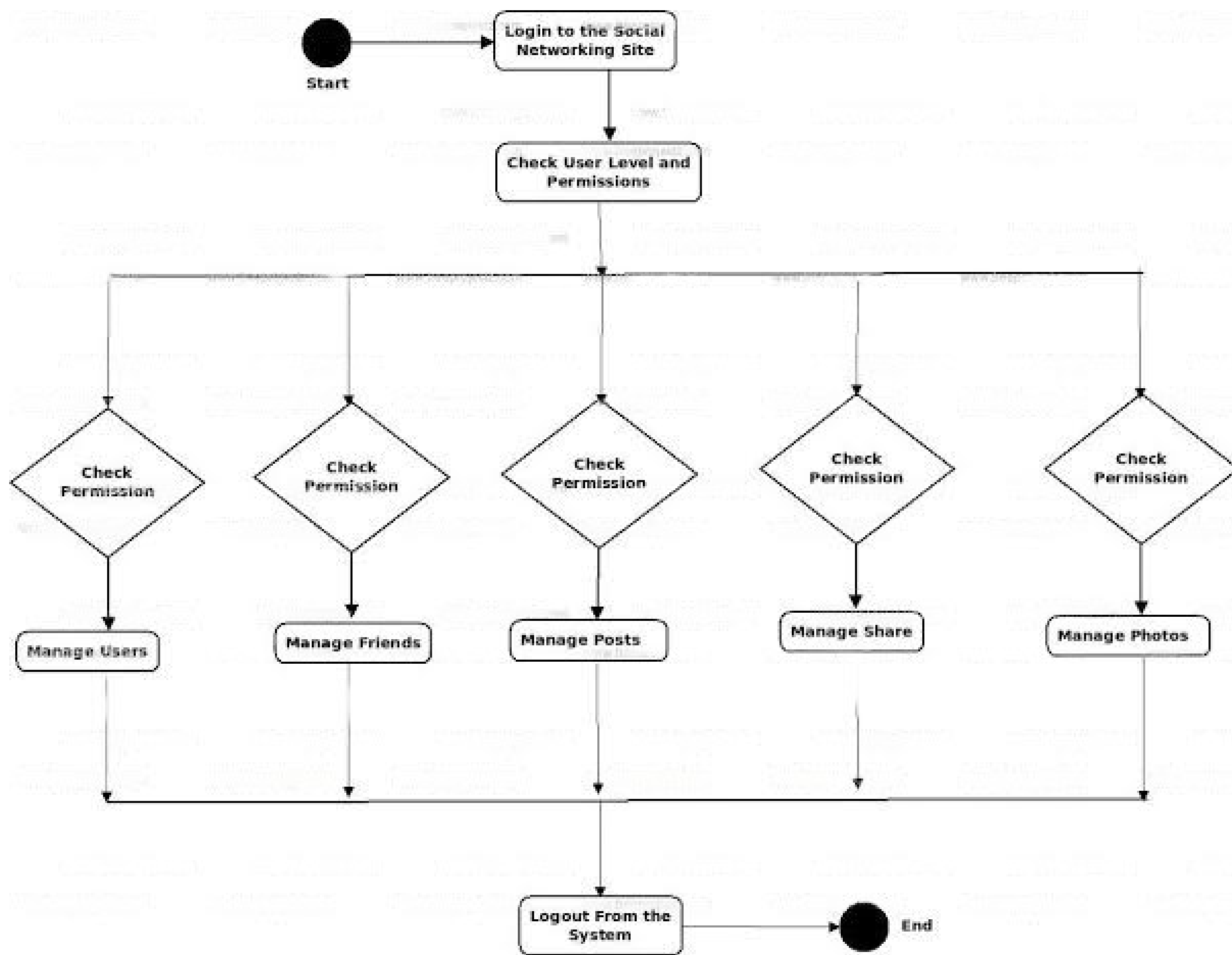
Use-caseDiagram



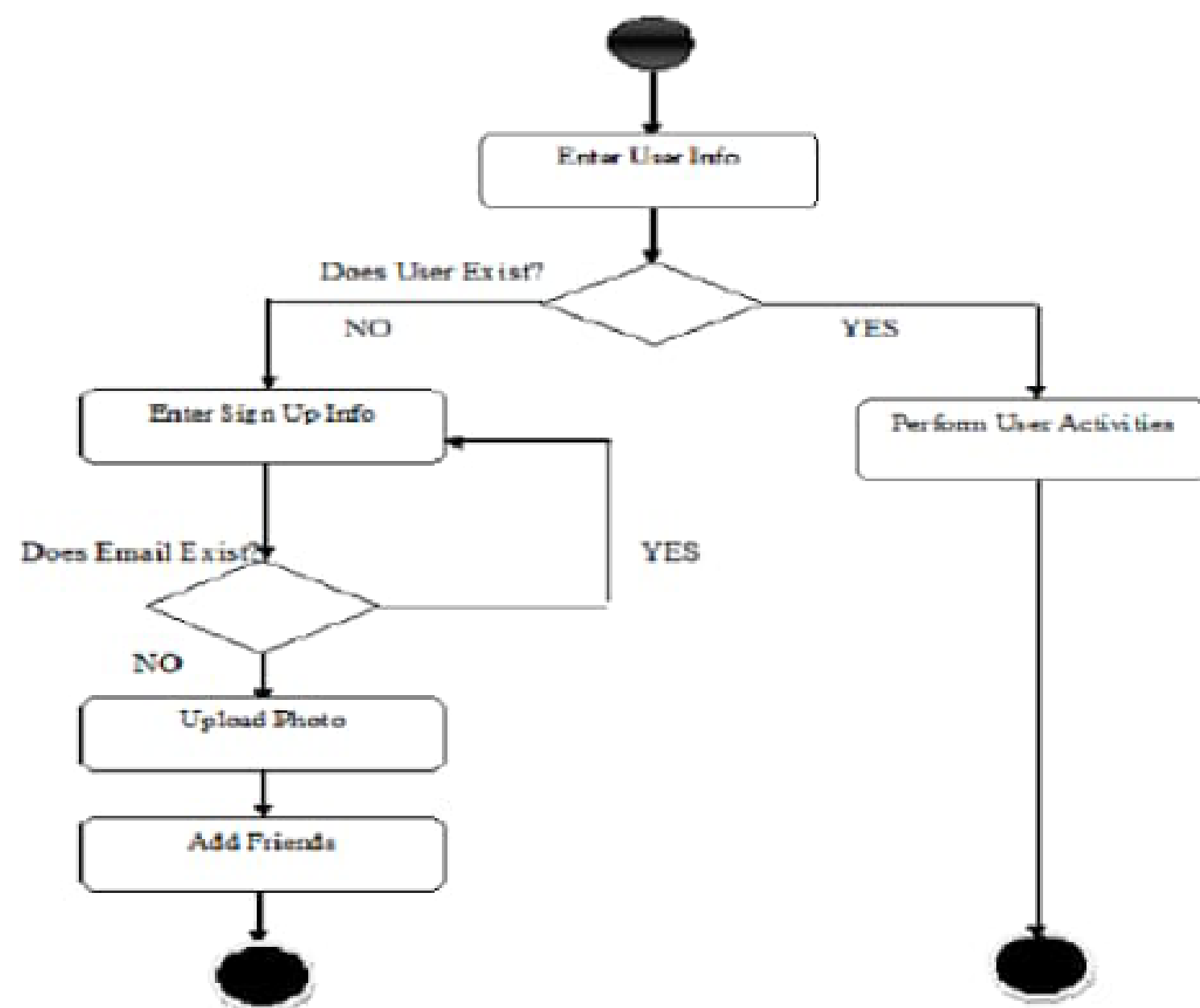
ClassDiagram



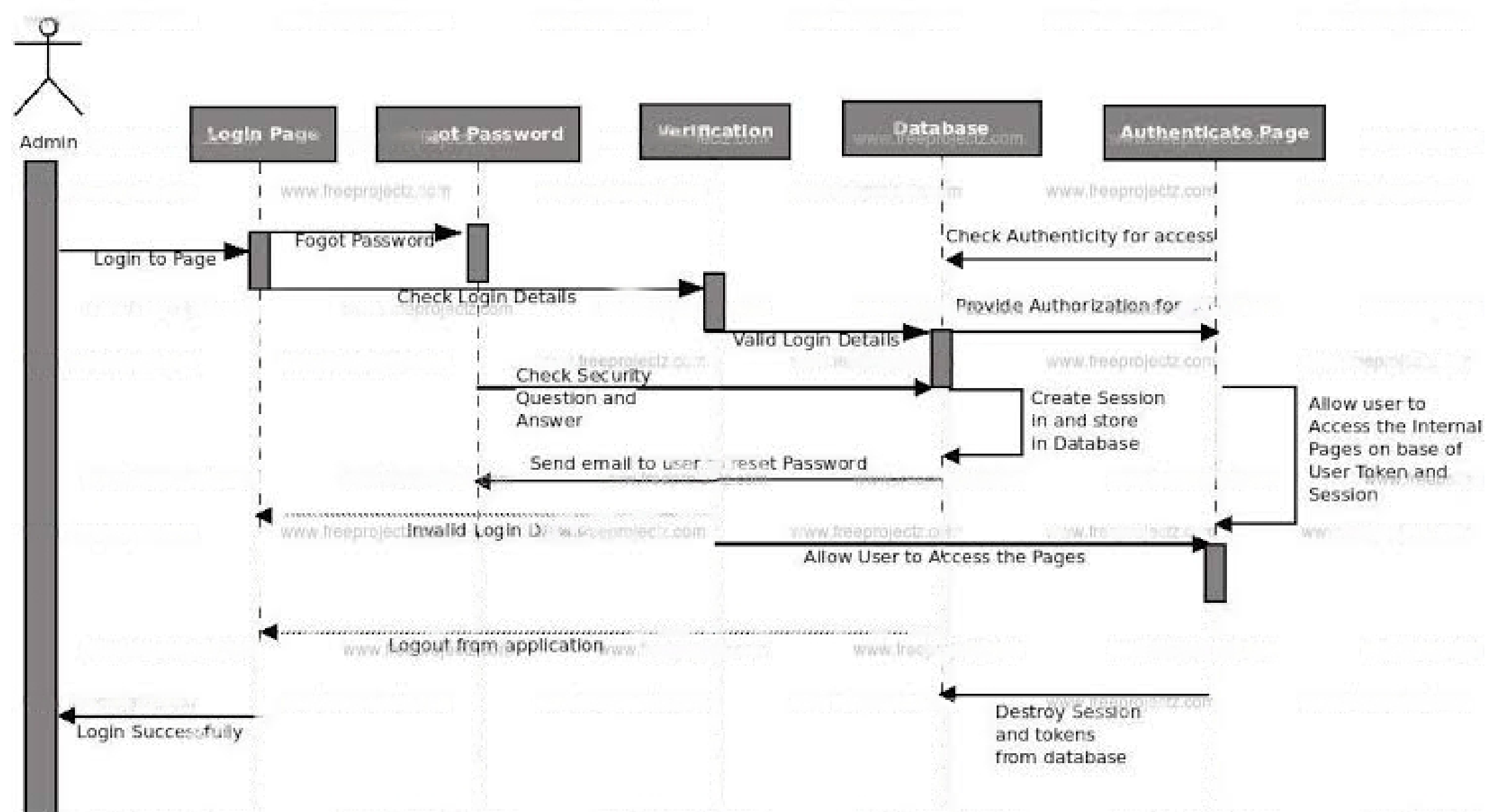
StateDiagram



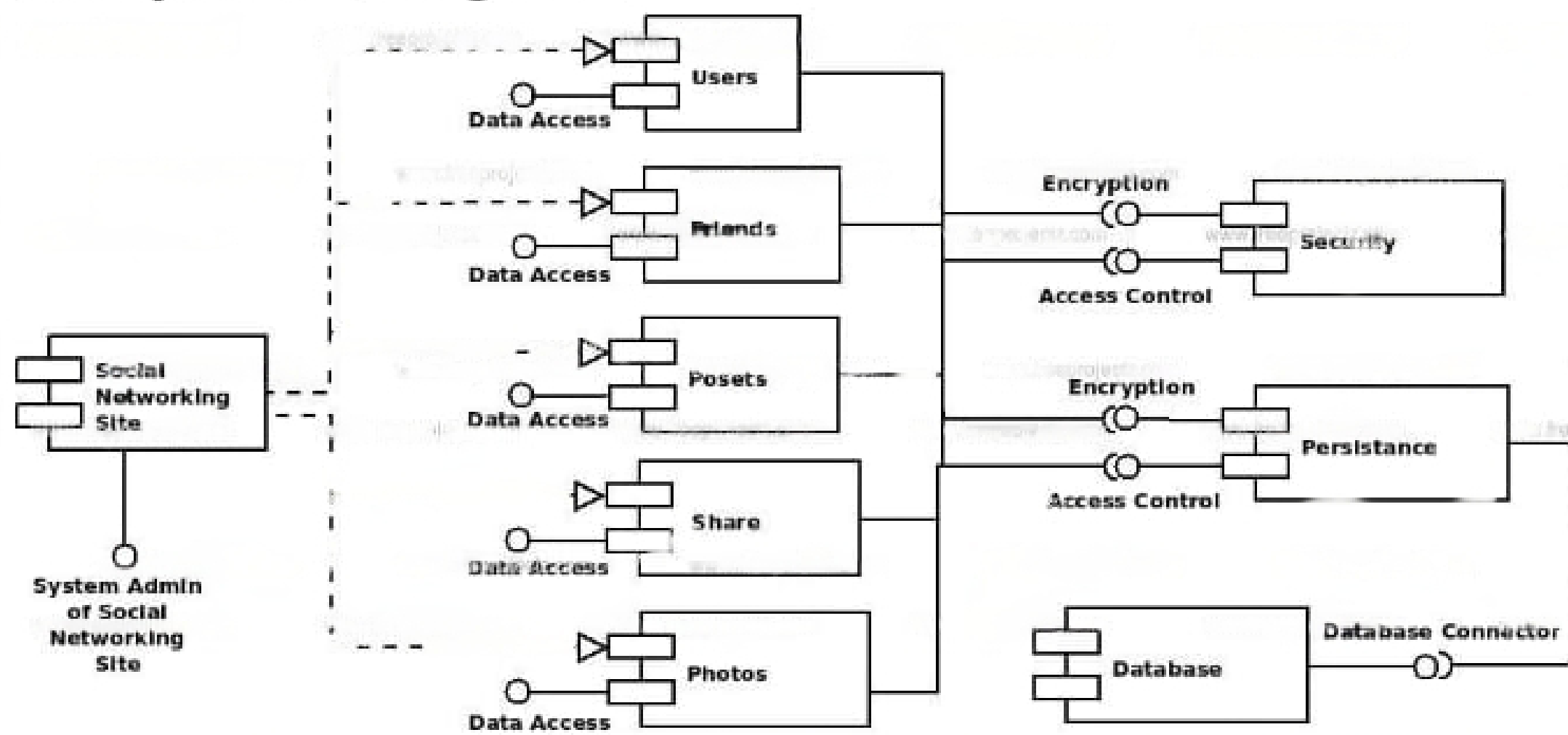
Activitydiagram:



SequenceDiagram:

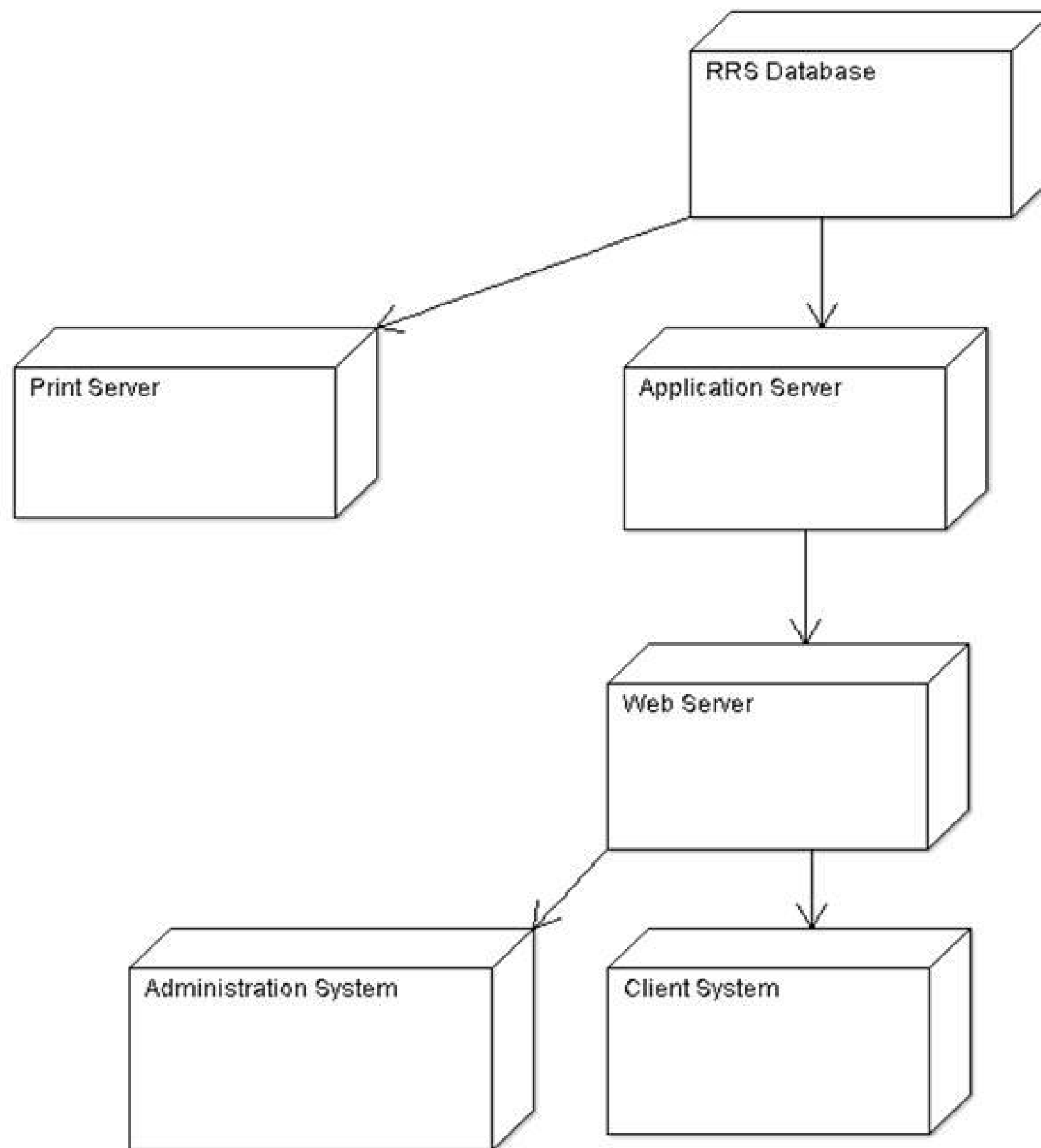


Component Diagram:



Component Diagram of Social Networking Site

DeploymentDiagram:



References:

1. IEEE SRS Format
2. Yatra.com
3. Irctc.co.in
4. Indianrail.gov.in
5. www.google.com