

Software Requirements Specification

1. Introduction

Online college magazine is a platform for students to exhibit their talent through the online college magazine website by submitting their articles. We appreciate the power of social media in this digital era. Online College magazines are a boon to students as hard copies lead to wastage of paper and are cumbersome to carry. It's the age where people prefer writing blogs and staying in touch through the internet. It provides our youngsters to speak their mind out and thus instils in them a sense of independence and individuality.

1.1 Purpose

Every student has access to the internet. Hence, it becomes imperative to create an online college magazine for students to share their own articles, read various articles, thus promoting literary insight.

All students do not have access to the printed magazine, and it is not eco-friendly as it leads to wastage of paper. An online college magazine can completely replace the printed version and all students can have complete access to it in this age of the internet. It creates a user-friendly interactive place where students/faculty can share their ideas. Ratings on articles create a healthy competition amongst students. It will be an open website, and everybody will have access to view articles.

1.2 Scope

Different users like students, faculty, administrators and moderators have corresponding privileges. A centralized database of all profiles and articles is created and only the administrator has access to it. Separate moderators for each category to categorize the articles. Students/Faculty have their own profiles where they can submit articles, view all articles, comment on articles, report articles and them. All submitted articles are received by the moderator first where he can review and then post is successfully created on the website. A message is immediately sent to the user with the reason once his article is rejected with the reason for rejection. The website has a dynamic search engine for articles and posts. Archives are maintained for all articles till date. Articles are classified into various categories based on tags and scope for easier navigation through the website. The homepage consists of the most read articles, most rated articles, the recent articles, editors pick, article of the month, college news and latest arrivals in the Library.

1.3 Definitions, Acronyms, Abbreviations

Admin – Administrator (super user), he is the controller of all the students, faculty, guests and maintaining all records of the students and faculty.

Moderator – Editor-a person who reviews all articles, takes suggestions about the website and mark articles as spam.

Users – End users, those who only registered in this site.

Guests – Guests who visit the website-Users who are not registered.

HTML – Hypertext Markup Language is to create static websites.

J2EE – Java 2 Enterprise Edition is a programming platform and it is the part of the java platform for developing and running distributed java applications.

DB2 – Database 2 is the database management system that provides a flexible and efficient database platform to erect strong on demand business applications.

XML - Extensive Markup Language used for data transfer and XML is stored naturally in DB2.

EJB – Enterprise java bean, it is architecture for the development and deployment of transactional, distributed object applications-based, server-side software components.

HTTP – Hypertext transfer protocol is a transaction oriented client/server protocol between web browser and a web server.

HTTPS – Secure hypertext transfer protocol is a hypertext transfer protocol over secure socket layer.

TCP/IP – Transmission control protocol/internet protocol is the communication protocol used to connect hosts on the internet.

2. OVERALL DESCRIPTION

2.1 PRODUCT PERSPECTIVE

The E-Magazine System allows the registered members to submit articles which will be validated and posted by the moderator. Guests can view the posted articles and members can view, comment, rate and buy the articles.

2.2 SOFTWARE REQUIREMENT

Front end:

- Java
- HTML
- CSS
- JavaScript

Back end:

- MySQL

2.3 HARDWARE REQUIREMENT

Client Side			
	Processor	RAM	Disk Space
Internet Explorer or Google Chrome	Intel Pentium 3 or AMD 800 MHz	128 MB	100 MB

Server Side			
	Processor	RAM	Disk Space
RAD	Intel Pentium 3 or AMD 800 MHz	1 GB	4 GB
DB2-9.5		256 MB	500 MB (excluding database)

2.4.1 FUNCTIONAL REQUIREMENT

Register

- Description: First the user will have to register/ Sign up. There are three different types of user.
 - ADMIN: The Admin has to provide his/her name, address, phone number and email id.
 - MEMBER: The Member has to provide his/her name, address, enrollment no, phone number and email id.

Login

- Input: Enter the id and password provided.
- Output: User will be able to use the features of software.

Read, rate and comment article:

- Description: All kinds of users will be able to read, rate and comment articles. Users are:
 - Guests
 - Moderators
 - Admin
 - Members

Submit article

- Description: Members can submit their articles.
- Input: Articles can be: Written Articles/pictures/short stories/poems
- Output: Articles will be submitted to the moderator.

Get submitted article status

- Description: Moderators will provide the Status to the Members.
- Input: Approve/Reject Articles posted by members
- Output: Send the status to member

Buy or sell article

- Description: All the users can buy an article of their choice. But only members can sell Articles.
- Input: Buy Article Feature
- Output: Redirect to payment gateway, display the total amount and checkout.

Moderator module

- Description: The moderator will validate Articles posted by the member.
- Input: Approve/Reject Articles posted by members
- Output: Send the status to member

Validate submitted article

- Input: Approve/Reject Articles posted by members
- Output: Send the status to member
- Processing: If the moderator approves the article then the article is Validated.

Post article:

- Input: Moderators posts the validated articles in the magazine.
- Output: Posted articles will be displayed in the magazine.

Admin module:

- Description: The Admin's function is to Add Moderators.
- Input: Add Moderators from the list.
- Output: Added Moderators will be able to validate Articles.

Update moderator list:

- Input: Admin will Add Moderator.
- Output: Moderator list will be Updated.

Guest module:

- Description: Guests are the user who can freely browse the magazine without the need for signing up/logging in.
- Input: Read/Rate/Comment/Buy article
- Output: Article will be displayed and bought articles will be delivered.

2.4.2 Non Functional Requirements

- **Usability Requirement**

The system shall allow the users to access the system from the Internet using HTML or its derivative technologies like XML and CSS. The system uses a web browser as an interface. Since all users are familiar with the general usage of browsers, no special training is required. The system is user friendly and online help makes using the system easy.

- **Availability Requirement**

The system is available 100% for the user and is used 24 hrs a day and 365 days a year. The system shall be operational 24 hours a day and 7 days a week.

- **Accuracy**

The system should accurately provide real time information taking into consideration various concurrency issues.

- **Performance Requirement**

The information is refreshed at regular intervals depending upon whether some updates have occurred or not. Performance of the system should be fast and accurate.

- **Maintainability and Portability Requirements**

Changes (new members addition, password changes, database changes) must be verified once per day at least. The system should provide automatic notification to members by email about the article's acceptance or rejection.

- **Security**

Members should be authenticated and validated using their unique IDs. Only moderator will post the articles if he/she finds it appropriate. Reviews on the articles should be made only by the registered members.

2.5 USER CHARACTERISTICS

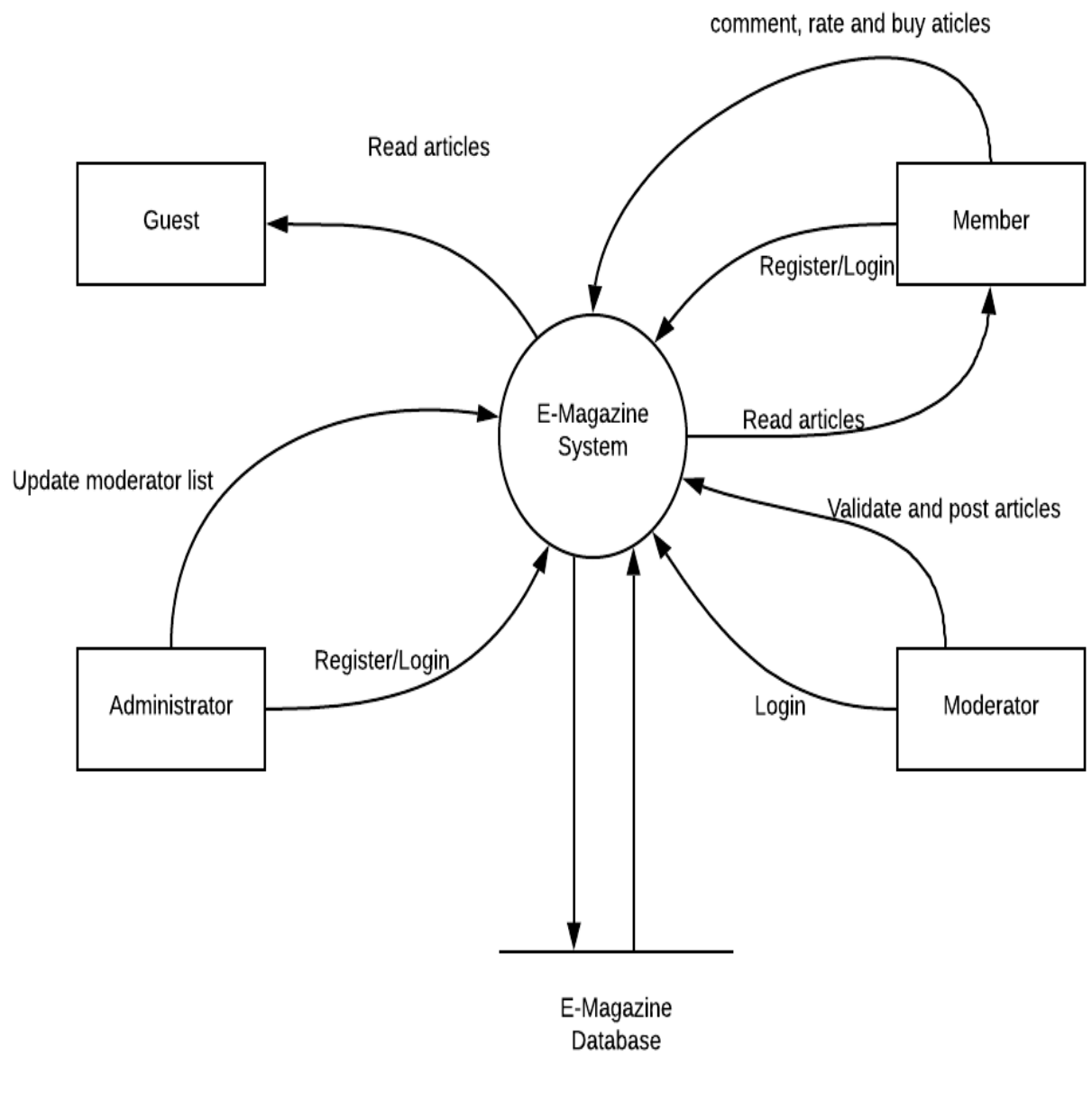
We have 3 levels of users :

- Member module
 - Register
 - Log in
 - Submit article
 - Get submitted article status
 - Read, rate and comment article
 - Buy or sell article
- Moderator module
 - Validate submitted article
 - Post article
- Administrator module
 - Update moderator list
- Guest module
 - Read articles

2.6 CONSTRAINTS

- GUI is only in English.
- Login and password is used for the identification of users.
- Only registered members(students and faculty) will be authorized to comment, rate and buy the articles.
- Expiry date of each article will be 1 year

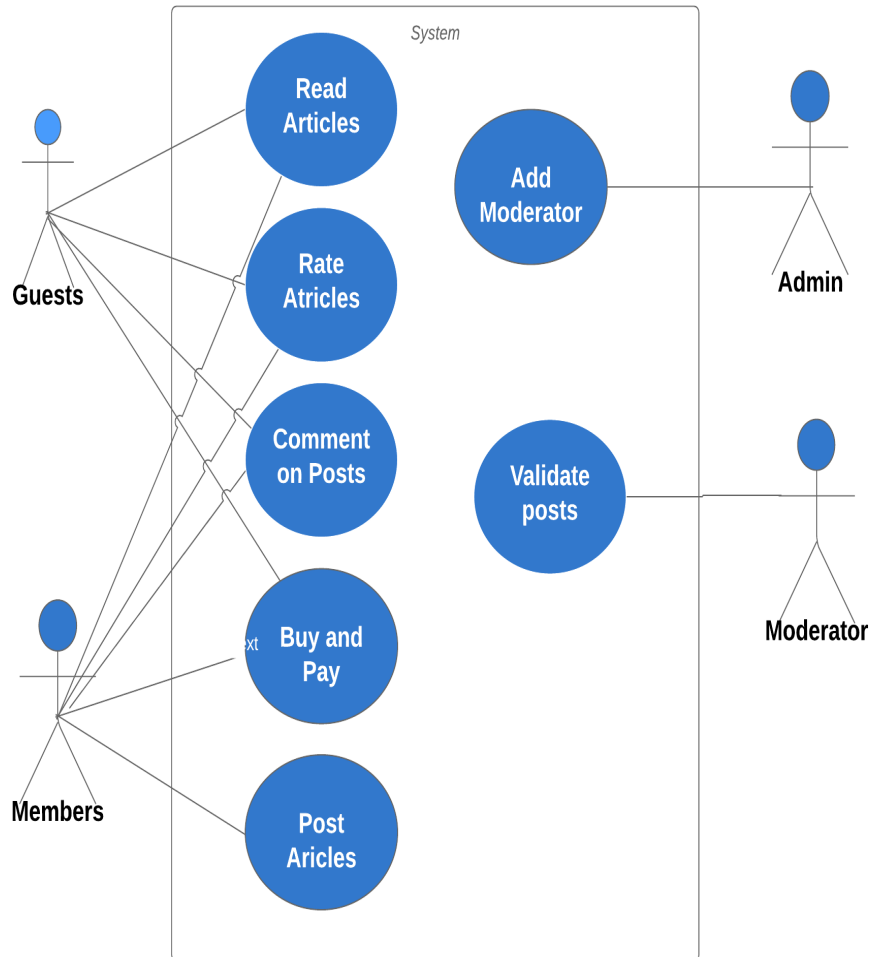
2.7 FLOW DIAGRAM



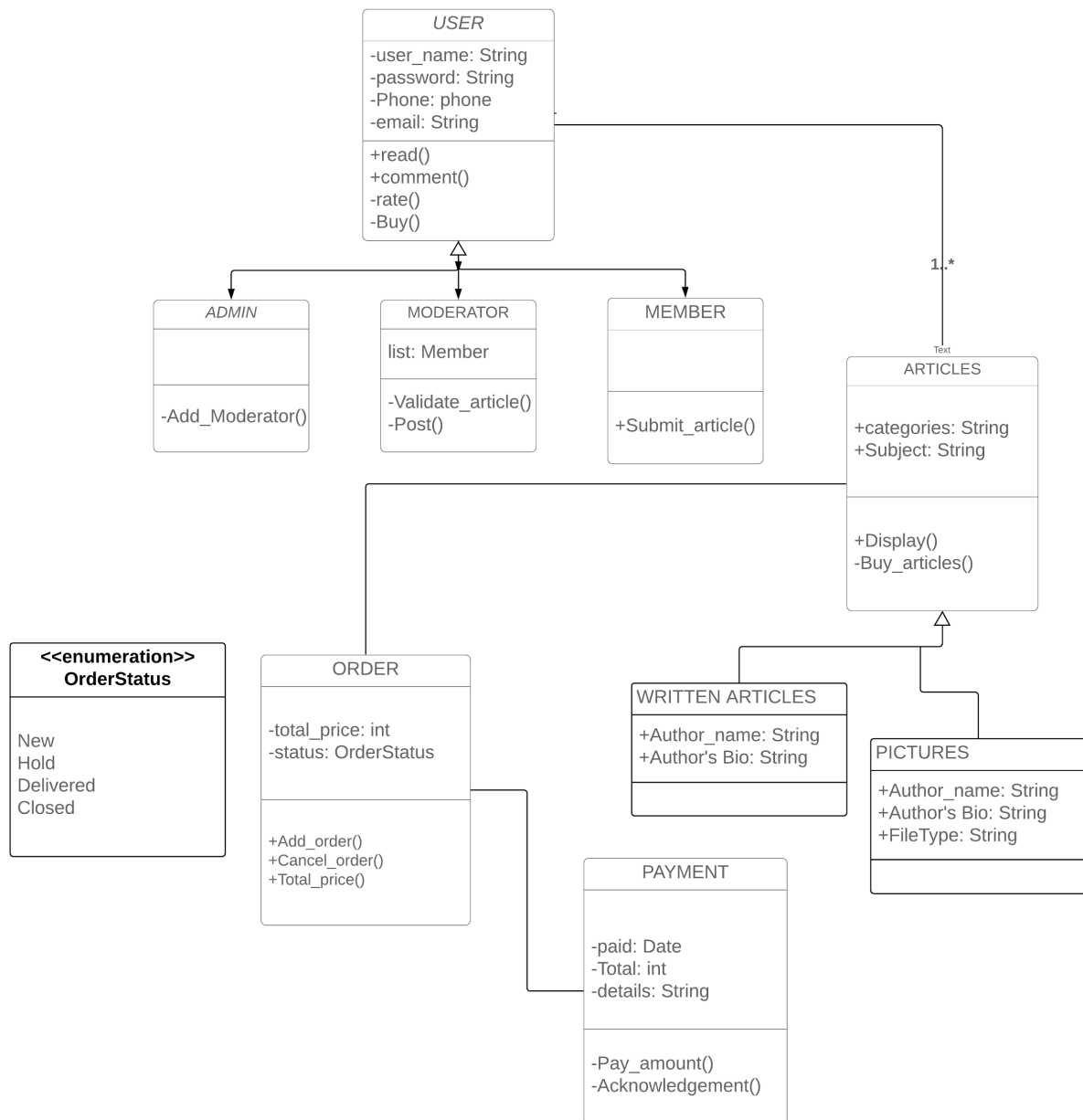
2.8 USE CASE MODEL DESCRIPTION

Use Case selection	Description
Use Case name	E-Magazine System
Level	Sub-Functional level
Primary actor	Member, Moderator, Admin, Guest
Stakeholders and interest	Member: to read, comment, rate, buy and sell articles Moderator: to validate and post articles Admin: to update moderator list Guest: to read articles
Pre-condition	Members have to submit the registration form
Post-condition	Members have submitted the articles
Main success scenario	1. Member registers in the system 2. Registered member logs in the system and submits the article 3. Moderator logs in the system and validates the submitted post which is then posted 4. Guest can read the article and registered members can read, comment, rate, buy articles
Alternative flow	1. Member/Moderator opens the application in the browser 2. He/She tries to sign-up 3. He/She tries to sign-up 4. He/She will report an error and the error will be rectified as soon as possible.
Specific requirement	Moderator has to check the articles for validation regularly

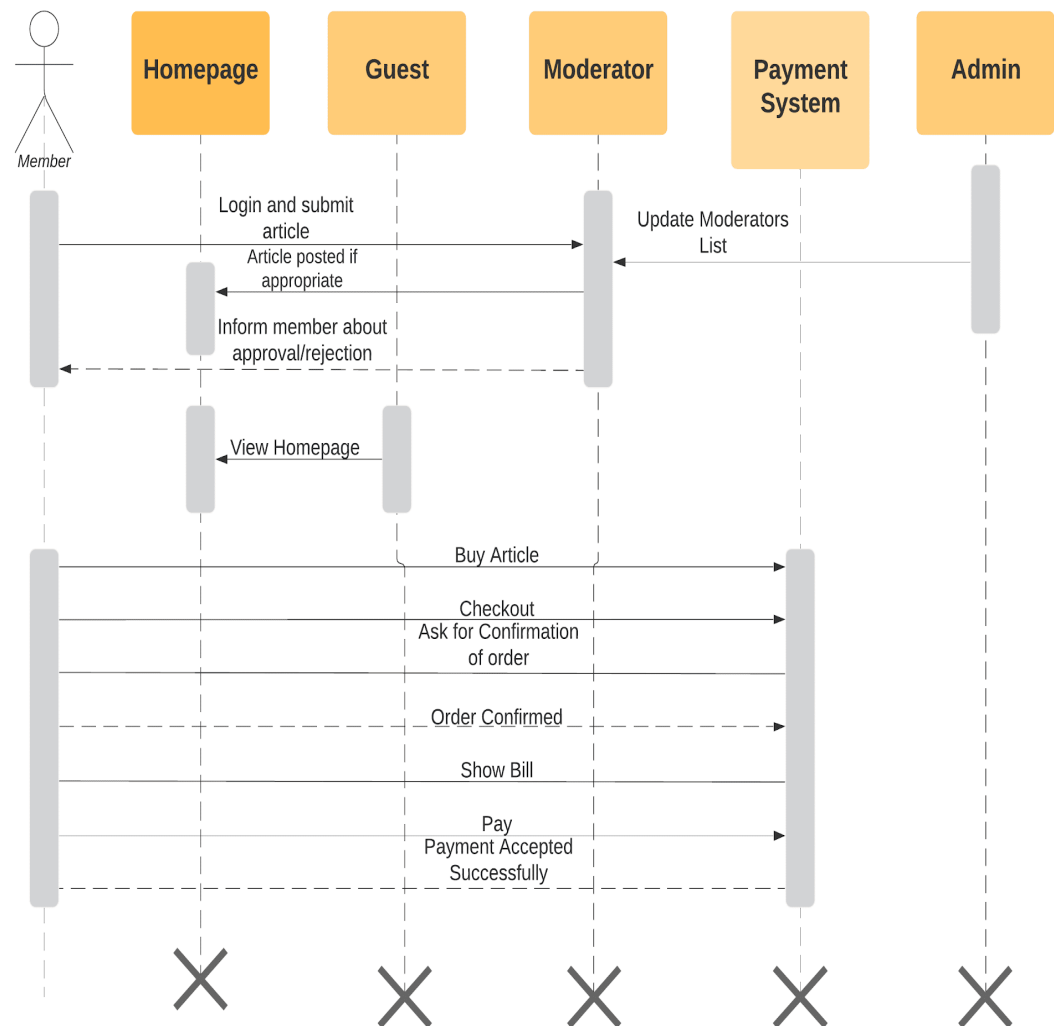
2.9.1 USE CASE DIAGRAM



2.9.2 CLASS DIAGRAM

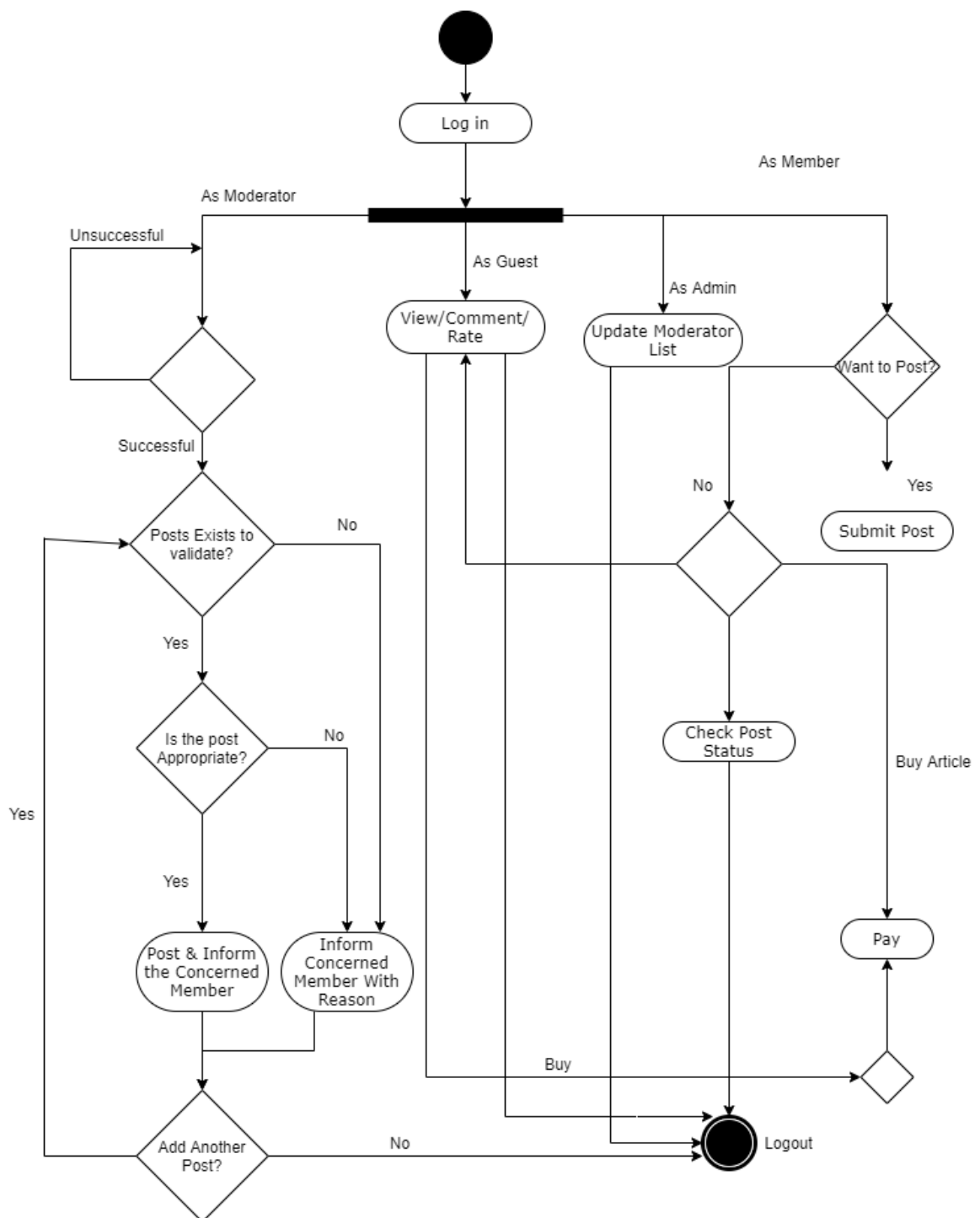


2.9.3 SEQUENCE DIAGRAM

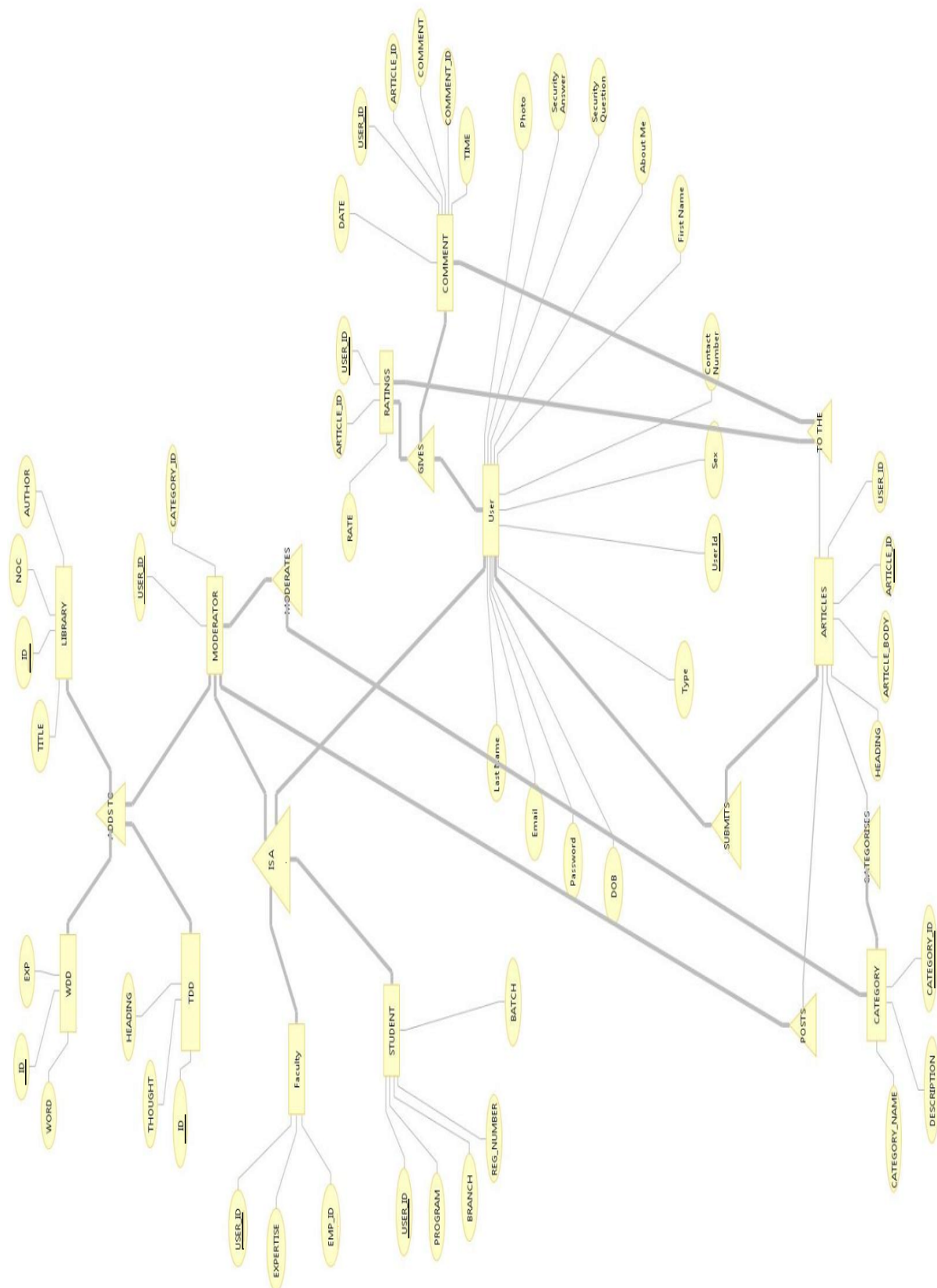


2.9.4 ACTIVITY DIAGRAM

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2.10 ER diagram



2.11 Assumptions and Dependencies

Assumption:

- Once the moderator rejects the article, it can not be validated again.

Dependency:

- Photoshop (for editing layouts, icons, buttons, etc)
- Visual Studio IDE

3. References

- <https://partheniumprojects.com/free-student-on-online-college-magazine-system-project/>
- <https://stanfordmag.org/magazine>
- <https://www.college.ucla.edu/college-magazine/>