Lab File

(Object Oriented Software Engineering)

Submitted by

Utkarsh Sharma 2K21/SE/186

Shubham Ladha 2K21/SE/169

Submitted to

Prof. Ruchika Malhotra

Head Of Department

Software Engineering

Delhi Technological University

Bawana Road, Delhi - 110042

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Problem Statement

News and trend website is a site devoted to delivering the news in a different format than television, print or radio.

This project intends to create an online news and trend website for worldwide consumers with the intention to provide them with latest and authentic global news and buzzing trends.

The limitations of primitive system were as under:

1. Content is limited to Domestic News in Newspaper because of lack of resources available.
2. It causes wastage of paper, resources and manpower.
3. Real time news is not updated and is non-interactive.
4. Lack of in-depth information and additional cost is incurred for newspaper service.

To overcome the stated limitations, it has the following features:

1. It provides free access to global news and trends.
2. It is environment friendly and 24X7 minute to minute coverage and updates of each news is available.
3. Users can subscribe to the newsletter to get regular updates regarding news and trends of their interest.
4. A discussion portal will also be available to users to discuss regarding upcoming and latest trends.

Initial Requirement Document

Title of the Project	News and Trend
Stakeholders involved in capturing requirements	News Reporters, Users, Project Leader, Project staff
Techniques used for requirement capturing	Interviewing and Brain Storming
Name of the persons along with designations	Utkarsh Sharma Shubham Ladha
Date	Jan 2023
Version	1.0

Consolidated List of initial requirements:

1. A system is to be implemented which can run on any device of the user.
2. The system shall be able to generate login id and password to the system operator.
3. The administrator and the team shall be able to maintain details of latest and upcoming trends.
4. The administrator and the team shall be able to maintain live news.
5. The minimum number of interest fields that user can select is two.
6. The system shall recommend news to the user according to his selection.
7. The system shall be able to provide discussion forum for users to discuss on a particular trend or news.
8. The system shall regularly update users with notifications
9. The system shall allow all users to subscribe to the newsletter.
10. The news editors shall be able to update the news.
11. The system shall be able to calculate the number of live readers.
12. The system shall allow the user to read in their preferred language
13. The user shall be able to give feedback in regular intervals.
14. The user shall be able to share the news with others on social media.
15. The system shall be able to maintain a column dedicated for breaking news.

Software Requirements Specification Document

Contents

Introduction

The News and Trend Website will be a web-based platform that will provide users with the latest news articles across various categories, including but not limited to politics, sports, entertainment, science, and technology. In addition, the website will also offer users the ability to browse and stay updated with the latest trends in various fields, such as fashion, lifestyle, and health.

The website will be designed with a user-friendly interface that will allow users to easily navigate and find the news articles and trends they are interested in. The website will also have a search function to help users quickly find specific articles or trends. Furthermore, users will be able to share articles and trends on social media or via email, as well as leave comments on articles.

The development of this News and Trend Website will require the integration of various technologies, such as web development frameworks, database management systems, and web hosting platforms. The website will be designed with scalability in mind, to ensure that it can handle a large number of users and news articles. Users will also be able to participate in group discussion using discussion forum.

Purpose

The purpose of a News and Trend website is to provide users with up-to-date and relevant information on current events, trends, and popular topics. These websites typically feature articles, videos, and other media content that cover a wide range of topics, such as politics, business, sports, entertainment, technology, and lifestyle.

Scope

Some of the key functions that a news and trend website must perform are:

1. Content management: The website must manage and publish various types of content such as news articles, videos, and images. This includes creating and editing content, tagging it appropriately, and publishing it in a timely manner.

2. User management: The website must manage user accounts, including registration, authentication, and authorization. This allows users to personalize their experience on the website, such as by saving articles and creating custom feeds.
3. Search and filtering: The website must provide search and filtering options to allow users to find content based on specific topics, keywords, or dates.

4. Social media integration: The website must integrate with social media platforms to allow users to share content on their own social media channels and to interact with the website's social media accounts.

5. Performance and scalability: The website must be able to handle a large amount of traffic and provide a fast and reliable user experience, even during peak usage periods.

6. Advertising and monetization: The website must be able to display ads and sponsored content to generate revenue while also maintaining the quality and integrity of its content.

7. Analytics and tracking: The website must track user behaviour and website performance through analytics tools to identify trends, improve the user experience, and optimize content.

Definitions, Acronyms and Abbreviations:

SRS: Software Requirement Specification

System Operator: System administrator, staff, data entry operator, editors.

User: Any candidate accessing news the system.

System Administrator/Administrator: User having all the privileges to operate the News and Trend System.

Data Entry Operator (DEO): User having privileges to maintain and update news.

Staff: User having privileges to delete, update and ban content and users.

Reporter: Person who reports the authentic news to the editor.

References:

(a) Software Engineering by K.K. Aggarwal & Yogesh Singh, New Age Publishing House, 3rd Edition, 2008.

(b) IEEE Recommended Practice for Software Requirements Specifications—IEEE Std. 830-1998.

(c) IEEE Standard for Software Test Documentation—IEEE Std. 829-1998.

Overview:

The rest of the SRS document describes various system requirements, interfaces, features and functionalities.

Overall Description:

A news and trend website is a digital platform that delivers timely, accurate, and informative content about current events and emerging topics. It is designed to keep readers informed and up-to-date on the latest developments in various fields, including politics, business, science, technology, sports, entertainment, and more.

The website typically features a mix of news articles, opinion pieces, feature stories, and multimedia content such as videos, podcasts, and infographics. It may also incorporate

interactive features, such as polls, quizzes, and user-generated content, to engage with readers and foster a sense of community.

The administrator/DEO will have to maintain the following information:

- Article details
- user subscription details
- Editor and reporter access details

The administrator/Editor will perform the following functions:

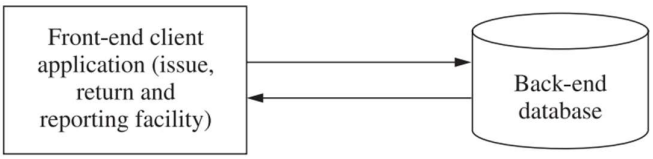
- Update Article
- Delete Article
- Hide Article
- Subscription Details
- Newsletter updates
- Discussion Portal Monitoring and Managing

The administrator/Editor requires the following information from the system:

- List of articles
  - ♦ Author-wise
  - ♦ Article title-wise
  - ♦ Subject-wise

Product Perspective:

The News and Trend System shall be developed using client/server architecture and be compatible with Microsoft Windows Operating System. The front-end of the system will be developed using Visual Basic 6.0 and the back-end will be developed using MS SQL Server 2005.



System Interfaces:

None

User Interfaces:

The LMS will have the following user-friendly and menu-driven interfaces:

(a) Login: To allow the entry of only authorized users through valid login ID and password in discussion portal.

(b) Article Details: To maintain article details.

(c) User Membership Details: To maintain user membership details.

(d) Update Article: to allow the editor to update an article.

(e) Delete Article: to allow the editor to delete an article.

(f) Merge Article: to allow the editor to merge an article.

(g) Discussion Portal: to allow users to discuss on various topics of their interest.

The software should generate the following information:

(a) Details of article updating.

(b) Details of trendy topics on discussion portal.

(c) Details of user subscriptions.

Hardware Interfaces:

(a) Screen resolution of at least 640 × 480 or above.

(b) Support for printer (dot matrix, deskjet, laserjet).

(c) Computer systems will be in the networked environment as it is a multi-user system.

Software Interfaces:

(a) MS-Windows Operating System

(b) Microsoft Visual Basic 6.0 for designing front-end

(c) MS SQL Server 2005 for back-end

Communication Interfaces

Communication is via local area network (LAN).

Memory Constraints:

At least 512 MB RAM and 500 MB space of hard disk will be required to run the software.

Operations:

None

Site Adaptation Requirements:

The terminal at the client site will have to support the hardware and software interfaces specified in sections 2.1.3 and 2.1.4, respectively.

Product Functions:

The News and Trend System will allow access only to authorized users with specific roles (system administrator, staff, DEO and customer). Depending upon the user's role, he/she will be able to access only specific modules of the system. A summary of major functions that the News and Trend System will perform is given as follows:

- A login facility for enabling only authorized access to the system.
- The system administrator/DEO will be able to add, modify, delete or view article, customer and login information.
- The system administrator/editor will be able to edit, update, delete an article.
- The system administrator/library staff will be able to block some users from the discussion portal if they violate system policy.
- The system administrator, staff, editor or customer will be able to search an article of any topic from the article catalogue (author-wise, title-wise and date-wise).

User Characteristics:

- Qualification: At least matriculation and comfortable with English.
- Experience: Should be well versed/informed about the registration process.
- Technical Experience: Elementary knowledge of computers.

Constraints:

- The software does not maintain records of periodicals.
- There will be only one administrator.
- The delete operation is available to the administrator and DEO. To reduce the complexity of the system, there is no check on delete operation. Hence, the administrator/DEO should be very careful before deletion of any record and he/she will be responsible for data consistency.
- User will not be allowed to update the primary key.

Assumptions and Dependencies:

- The availability section of the website will provide the lists of the articles available on a specific topic.
- The subscription section will provide the lists of fields for which user can get notification.
- The discussion section will provide the list of trendy topics in which a user can participate.
- The login ID and password must be created by the system administrator and communicated to the concerned user confidentially to avoid unauthorized access to the system.

Apportioning of Requirements:

Not required

Specific Requirements

This section contains the software requirements in detail along with the various forms to be developed.

External Interface Requirements

User Interfaces

The following user interfaces (or forms) will be provided by the system.

(i) Login

This will be the first form, which will be displayed. It will allow the user to access the different forms based on his/her role. Various fields available on this form will be:

- Login ID: Alphanumeric of length in the range of 4 to 15 characters. Special characters and blank spaces are not allowed.

- Password: Alphanumeric of length in the range of 4 to 15 characters. Blank spaces are not allowed. However, special characters are allowed.

(ii) Manage User Details

This form will be accessible only to the system administrator, DEO and user. It will allow him/her to add/update/delete/view information about existing user. Various fields available on this form will be:

- Name: Alphanumeric, with length 3 to 50 characters. Blank spaces are allowed. Special characters are not allowed.

- Age: Numeric number with lower limit 1 and upper limit 200.

- Interest: Alphanumeric, with length 3 to 75 characters. Blank spaces are allowed. Special characters are not allowed.

- Email: Alphanumeric and can have length up to 50 characters. Email must have one '@' and '.' symbol.

- Telephone: Numeric and can have length up to 11 digits.

(iii) Subscription for discussion portal

This facilitates user to subscribe to discussion portal. Various fields available on this form will be:

- Username: Alphanumeric, with length 3 to 50 characters. Blank spaces and special characters are not allowed.

- Email: Alphanumeric and can have length up to 50 characters. Email must have one '@' and '.' symbol.

(iv) Change Interest

This form will be accessible to the user. It will allow him/her to add/update/delete/view interests of existing user. Various fields available on this form will be:

Interest: Checkbox.

(v) Manage News

This form will be accessible only to the system administrator and DEO. It will allow him/her to add/update/delete/view article about existing news and trend.

- Article ID: Alphanumeric of length in the range of 4 to 15 characters. Special characters and blank spaces are not allowed.

- Article Title: Alphanumeric, with length 3 to 75 characters. Blank spaces are allowed. Special characters are not allowed.

- Author Name: Alphanumeric, with length 3 to 75 characters. Blank spaces are allowed. Special characters are not allowed.

- Field Name: Alphanumeric, with length 3 to 50 characters. Blank spaces are allowed. Special characters are not allowed.

(vi) Manage access given to staff

This form will be accessible only to the system administrator. It will allow him/her to manage access given to each staff.

- Designation: Alphanumeric, with length 3 to 25 characters. Blank spaces are allowed. Special characters are not allowed.

- Name: Alphanumeric, with length 3 to 75 characters. Blank spaces are allowed. Special characters are not allowed.

- Access Type: Alphanumeric, with length 3 to 25 characters. Blank spaces are allowed. Special characters are not allowed.

(vii) Searching for specific news

This form will be accessible to the system user.

- search: Alphanumeric, with length 3 to 75 characters. Blank spaces are allowed. Special characters are not allowed.

(viii) Subscribing to News Letter

This form will be accessible to user. It will allow him/her to subscribe to a newsletter.

(ix) Share on social media

This will have an option to share the news on social media and will be accessible to the user . There will be no interface associated since the page will be redirected to external website.

Hardware Interfaces

(a) Screen resolution of at least 640 × 480 or above.

(b) Support for printer (dot matrix, deskjet, laserjet).

(c) Computer systems will be in the networked environment as it is a multi-user system.

Software Interfaces

(a) MS-Windows Operating System

(b) Microsoft Visual Basic 6.0 for designing front-end

(c) MS SQL Server 2005 for back-end 2.1.5 Communication Interfaces Communication is via local area network (LAN).

Communication Interfaces

None

Functional Requirements

3.2.1 Login

Introduction	Login to system
Actors	Admin, Editor, Customer
Pre-condition	System is active and user has opened the website
Post-condition	The actor gets login-ed to the website.
Flow of Events: Basic Flow: 1. To access the website's main functions, the user must input his or her credentials. The user then completes their profile and sets a password of their choice 2. Once completed, the user can now access all the features of the website such as access the news and the latest trends etc.	
Alternate Flow: Alternate Flow 1: User already exists • If the user does not have an account with the same credentials, an error will be displayed. Alternate Flow 2: Incorrect Credentials such as wrong username and wrong password • If the set password doesn't satisfy the constraints, the login is held invalid and re-login page opens. • After three attempts account freezes for ten minutes. Alternate Flow 3: User closes the website • The user exits from the Website.	
Associated Use Case	
Special Requirements	None

B) Validity check

(i) Every user will have a unique login ID.

(ii) Login ID cannot be blank.

(iii) Login ID can only have 4 to 15 characters.

(iv) Login ID will not accept special characters and blank spaces.

(v) Password cannot be blank.

(vi) Length of password can only be 4 to 15 digits.

(vii) Alphabets, digits, hyphen and underscore characters are allowed in the password field.

(viii) Password will not accept blank spaces.

C) Sequencing Information

None

D) Error Handling/Response to Abnormal Situations

If any of the validation flows does not hold true, appropriate error message will be prompted to the user for doing the needful.

3.2.2 Manage User Details

Introduction	Manages the user details
Actors	Admin
Pre-condition	The admin should be logged into the website
Post-condition	The admin gets access to manage the account details of the users.
Flow of Events: Basic Flow: The admin has to enter his/her credentials to access the accounts of the users and editors. The user can then manage details about the editors and users.	
Alternate Flow: Alternate Flow 1: User doesn't exist If the user doesn't have an account, then an error will be displayed. Alternate Flow 2: Invalid Credentials like incorrect Username and wrong password If the set password doesn't satisfy the constraints, the login is held invalid Alternate Flow 3: User closes the website The user details shall be stored in the draft.	
Associated Use Case	Manage account
Special Requirements	None

B) Validity check

(i) Every user will have a unique login ID.

(ii) Login ID cannot be blank.

(iii) Login ID can only have 4 to 15 characters.

(iv) Login ID will not accept special characters and blank spaces.

(v) Password cannot be blank.

(vi) Length of password can only be 4 to 15 digits.

(vii) Alphabets, digits, hyphen and underscore characters are allowed in the password field.

(viii) Password will not accept blank spaces.

C) Sequencing Information

None

D) Error Handling/Response to Abnormal Situations

If any of the validation flows does not hold true, appropriate error message will be prompted to the user for doing the needful.

3.2.3 Discussion Portal Subscription

Introduction	If customer wants to subscribe for the discussion portal
Actors	Admin, Editor, Customer
Pre-condition	System is active and user has opened the website
Post-condition	The actor gets login-ed to the website.

Flow of Events:
Basic Flow:

1. User will click to discussion portal tab on the navigation bar.
2. Login page will be opened and user will fill credentials
3. Discussion forum will be opened and user will choose field of discussion.

Alternate Flow:

Alternate Flow 1: Invalid Password or Email ID.

- If the user does not have an account with the same credentials, an error will be displayed.

Alternate Flow 2: After three attempts, account freezes for 10mins.

- If the set password doesn't satisfy the constraints, the login is held invalid

Alternate Flow 3: User closes the website

- The user exits from the Website.

Associated Use Case	Login
Special Requirements	None

B) Validity check

(i) Username should be unique

(ii) email should be unique

(iii) Field of Discussion portal cannot be left blank.

C) Sequencing Information

None

D) Error Handling/Response to Abnormal Situations

If any of the validation flows does not hold true, appropriate error message will be prompted to the user for doing the needful.

3.2.4 Change Interest

Introduction	If user wants to change his/her interest
Actors	Admin, Editor, user
Pre-condition	System is active and user has opened the website
Post-condition	User interest modified

Flow of Events:
Basic Flow:

1. User will click on modify interest tab on the navigation bar.
2. Login page will be opened and user will fill credentials.
3. Dropdown menu for different fields of interest will be displayed.
4. User will select or deselect fields.

Alternate Flow:

Alternate Flow 1: Invalid Password or Email ID.

- If the user does not have an account with the same credentials, an error will be displayed.

Alternate Flow 2: After three attempts, account freezes for 10mins.

- If the set password doesn't satisfy the constraints, the login is held invalid

Alternate Flow 3: If user choose less than 3 fields of interest.

- A prompt message will be displayed informing user to select at least 3 fields.

Alternate Flow 4: User closes the website

- The user exits from the Website.

Associated Use Case	Login
Special Requirements	None

B) Validity check

(i) Interest can’t be left alone.

(ii) Login ID cannot be blank.

(iii) Login ID can only have 4 to 15 characters.

(iv) Login ID will not accept special characters and blank spaces.

(v) Password cannot be blank.

(vi) Length of password can only be 4 to 15 digits.

(vii) Alphabets, digits, hyphen and underscore characters are allowed in the password field.

(viii) Password will not accept blank spaces.

(viii)Field of Interest can’t be left empty.

C) Sequencing Information

None

D) Error Handling/Response to Abnormal Situations

If any of the validation flows does not hold true, appropriate error message will be prompted to the user for doing the needful.

3.2.5 Manage News and Trends

Introduction	Manage News and Trends
Actors	Admin, Editor
Pre-condition	System is active and Admin/ Editor is logged-in to the system.
Post-condition	News is modified

Flow of Events:
Basic Flow:

1. Admin/ Editor will click on modify news tab on the navigation bar.
2. Dropdown menu for different fields will be displayed.
1. Admin/ Editor will select fields to modify.
2. Admin/ Editor will modify the content of the field.
3. Content will be checked for redundant data and corresponding modification will be made once verification process completes.
4. "Modified successfully" message will be displayed.

Alternate Flow:

Alternate Flow 1: Redundant data

- If the Admin/ Editor enters some redundant data, an error will be displayed.

Alternate Flow 2: Admin/Editor closes the website

- The Admin/Editor exits from the Website.

Alternate Flow 3: If simultaneous changes made by Admin and Editor

- The changes made by admin will be updated and an error message will be displayed on the editor side.

Associated Use Case	Login
Special Requirements	None

B) Validity check

(i) News Id cannot be left blank.

(ii) News Field can’t be left blank.

(iii) NewsDesc Field cannot be left blank.

C) Sequencing Information

None

D) Error Handling/Response to Abnormal Situations

If any of the validation flows does not hold true, appropriate error message will be prompted to the user for doing the needful.

3.2.6 Manage Staff Access

Introduction	Manage access given to staff
Actors	Admin
Pre-condition	System is active and Admin is logged-in to the system.
Post-condition	Access given to a staff is modified.

Flow of Events:
Basic Flow:

1. Editor will click on modify access rights tab on the navigation bar.
2. Dropdown menu for different position of staff will be displayed.
3. Admin will select one of the fields and will enter corresponding empID.
4. Dropdown menu for different access rights like editing, deleting, adding will be displayed.
5. Admin will select and deselect different access rights for each/particular staff member.
6. "Modified Successfully" message will be displayed.

Alternate Flow:

Alternate Flow 1: Redundant data

- If the Admin/ Editor enters some redundant data, an error will be displayed.

Alternate Flow 2: Admin/Editor closes the website

- The Admin/Editor exits from the Website.

Alternate Flow 3: If simultaneous changes made by Admin and Editor

- The changes made by admin will be updated and an error message will be displayed on the editor side.

Associated Use Case	Login
Special Requirements	None

B) Validity check

(i) EmpID must be unique for all.

(ii) EmpId cannot be blank.

(iii) Modify Field can’t be left blank.

C) Sequencing Information

None

D) Error Handling/Response to Abnormal Situations

If any of the validation flows does not hold true, appropriate error message will be prompted to the user for doing the needful.

3.2.7 Search for Specific news

Introduction	Searching For specific news
Actors	User
Pre-condition	System is active and User has opened the website.
Post-condition	User gets the specific news.

Flow of Events:
Basic Flow:

1. User opens the news website.
2. User navigates to the search bar.
3. User enters the keywords or topic they want to search for.
4. User clicks on the search button.
5. The relevant news articles matching the search query are displayed.

Alternate Flow:

Alternate Flow 1: No Matching result

- If the user enters an invalid search query or no matching results are found, the website displays an error message and prompts the user to try a different search query.

Alternate Flow 2: Sensitive keywords

- If the user's search query includes keywords that are flagged as sensitive, the website filters the search results and displays a disclaimer on the top of the page.

Alternate Flow 3: If system becomes deactivate

- If the system becomes Deactivate, the website is unable to process the search results.

Associated Use Case	Login *
Special Requirements	None

B) Validity check

(i) Keyword can’t be left blank.

(iii) Keywords can only have 4 to 15 characters.

(iv) The keyword language should be same as of selected version.

C) Sequencing Information

None

D) Error Handling/Response to Abnormal Situations

If any of the validation flows does not hold true, appropriate error message will be prompted to the user for doing the needful.

3.2.8 Newsletter Subscription

Introduction	Subscribing to Newsletter
Actors	User
Pre-condition	System is active and User has opened the website.
Post-condition	User gets subscribed to the newsletter.

Flow of Events:
Basic Flow:

1. User opens the news website.
2. User navigates to the subscription section on the homepage.
3. User enters their email address in the subscription form.
4. User clicks on the subscribe button.
5. The website confirms the subscription and sends a confirmation email to the user.

Alternate Flow:

Alternate Flow 1: Invalid Email Address

- If the user enters an invalid email address or the subscription form encounters an error, the website displays an error message and prompts the user to enter a valid email address or try again later.

Alternate Flow 2: If system becomes deactivate

- If the system becomes Deactivate, the website is unable to process the request.

Associated Use Case	Login *
Special Requirements	None

B) Validity check

(i) Email ID can’t be left empty.

(ii)Email ID should have @ in between.

C) Sequencing Information

None

D) Error Handling/Response to Abnormal Situations

If any of the validation flows does not hold true, appropriate error message will be prompted to the user for doing the needful.

3.2.9 Sharing News on social media

Introduction	Sharing News on social media
Actors	User
Pre-condition	System is active and User has opened the website.
Post-condition	User is able to share the news on social media.
Flow of Events: Basic Flow: 1. User opens the news website. 2. User selects the news article they want to share. 3. User clicks on the social media sharing icon (e.g. Facebook, Twitter, LinkedIn). 4. The website prompts the user to log in to their social media account. 5. User logs in and shares the news article on their social media account.	
Alternate Flow: Alternate Flow 1: Issues in social media • . If the social media platform is not available or experiencing technical issues, the website displays an error message and prompts the user to try again later. Alternate Flow 2: If system becomes deactivate • If the system becomes Deactivate, the website is unable to process the request.	
Associated Use Case	Login *
Special Requirements	None

B) Validity check

None

C) Sequencing Information

None

D) Error Handling/Response to Abnormal Situations

If any of the validation flows does not hold true, appropriate error message will be prompted to the user for doing the needful.

Performance Requirements

(a) Should run on 500 MHz, 512 MB RAM machine.

(b) Responses should be within 2 seconds.

Design Constraints

None

Software System Attributes

Usability

The application will be user-friendly and easy to operate and the functions will be easily understandable.

Reliability

The applications will be available to the students throughout the registration period and have a high degree of fault tolerance.

Security

The application will be password protected. Users will have to enter correct login ID and password to access the application.

Maintainability

The application will be designed in a maintainable manner. It will be easy to incorporate new requirements in the individual modules.

Portability

The application will be easily portable on any windows-based system that has SQL Server installed.

Logical Database Requirements

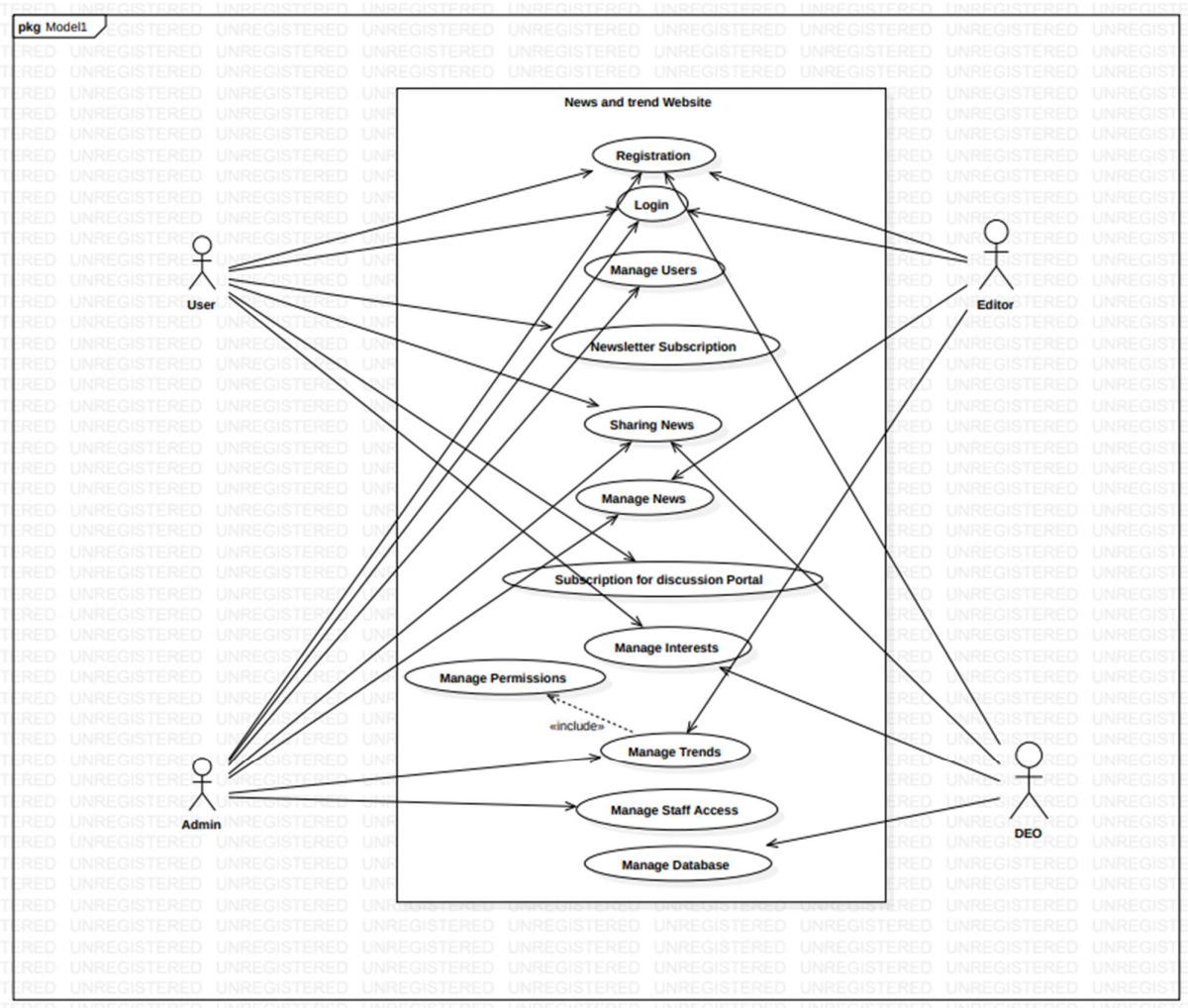
The following information will be placed in a database: Table name Description Login Records the login details of the user. Book Records the details of the books in the library. Member Stores the details of the members in the library. Transaction Stores the details of transactions in the library. Fine Status Records the fine status details of the book. Student Records student details. Faculty Records faculty details. Employee Records employee details. Reserve Records the reservation details of the book.

Other Requirements

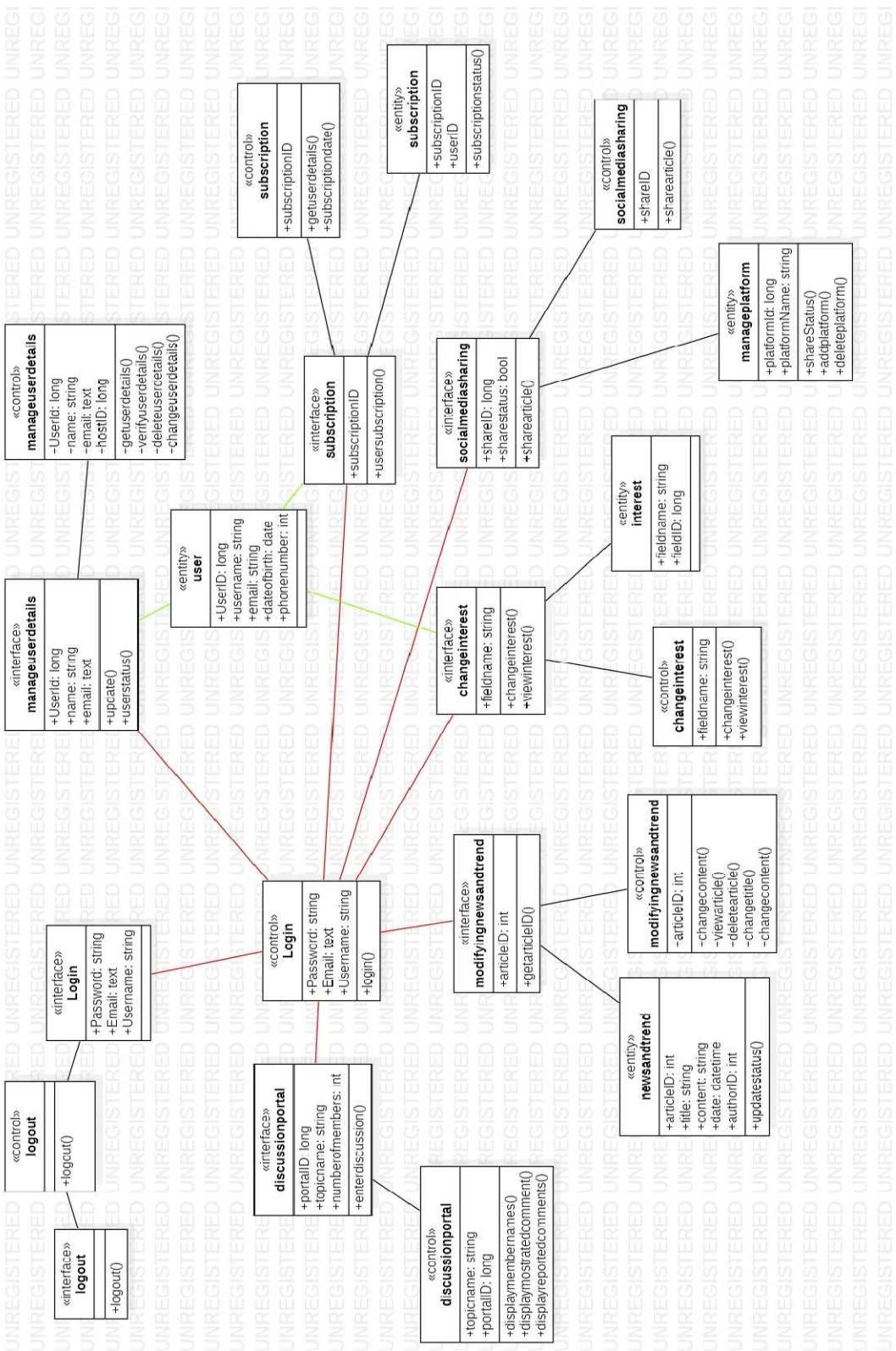
None

Appendix

Use Case Diagram

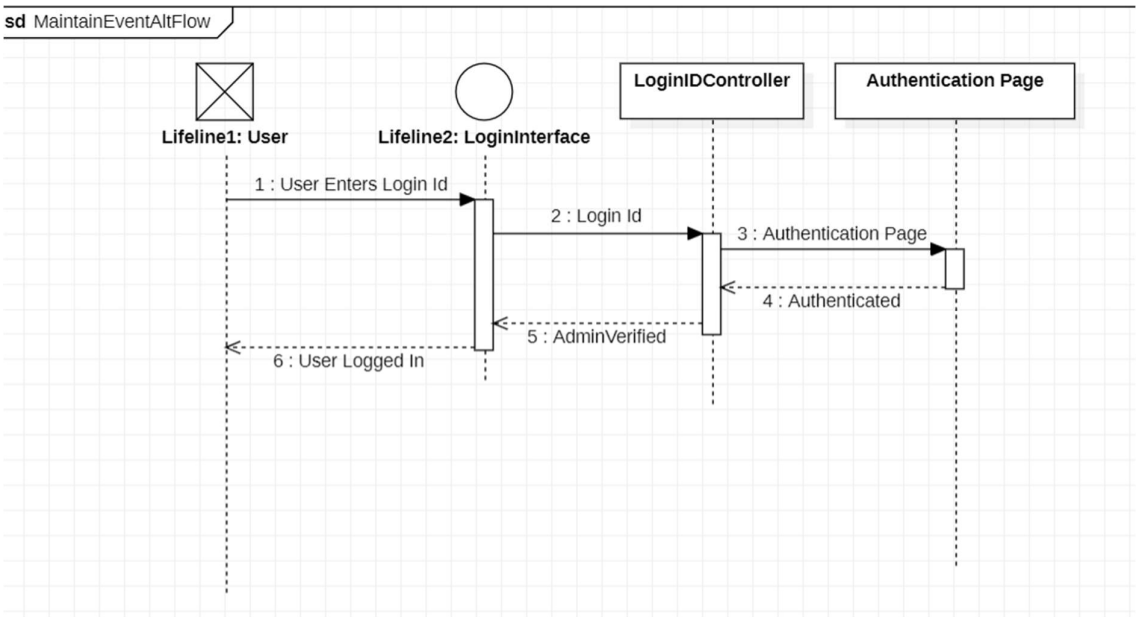


Class Diagram

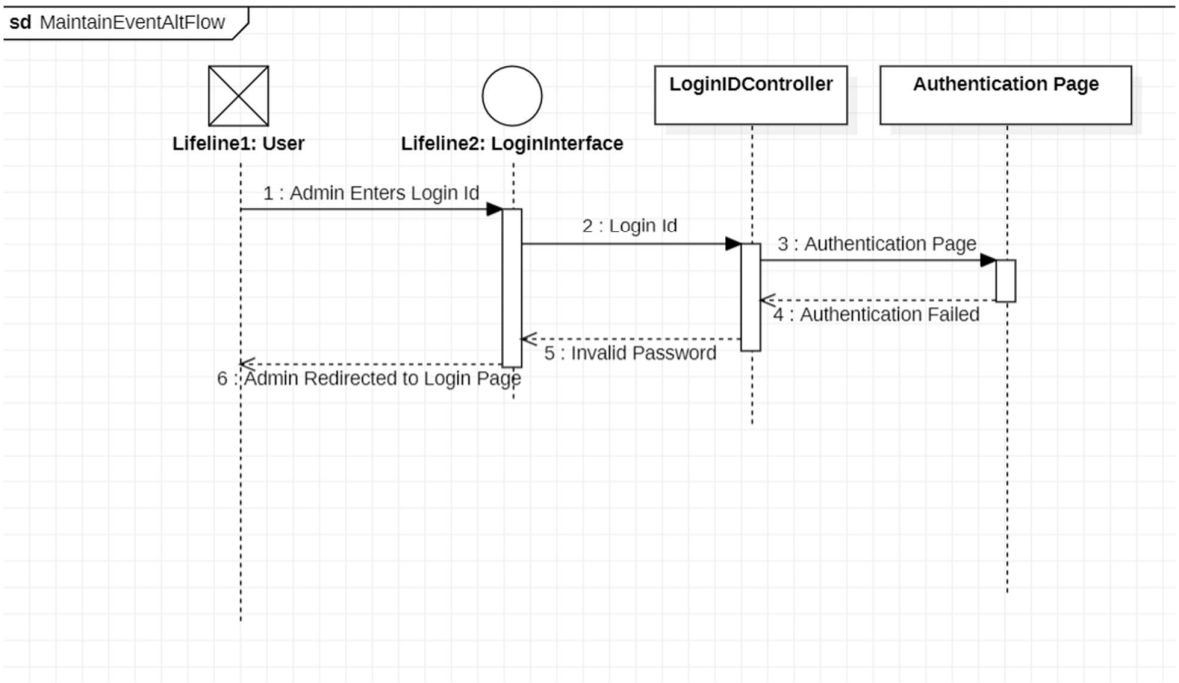


Sequence Diagrams

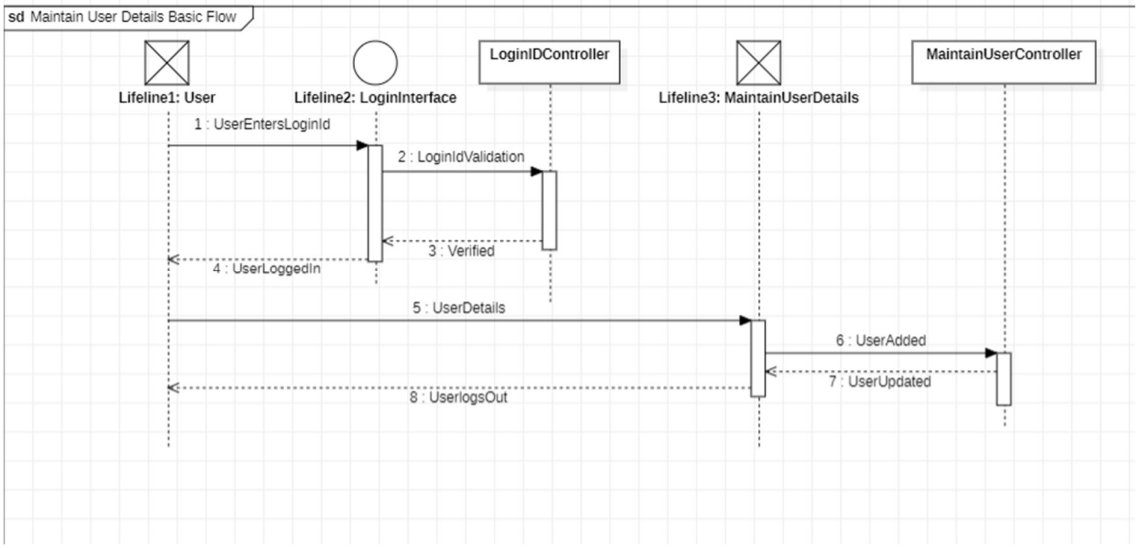
1. Login



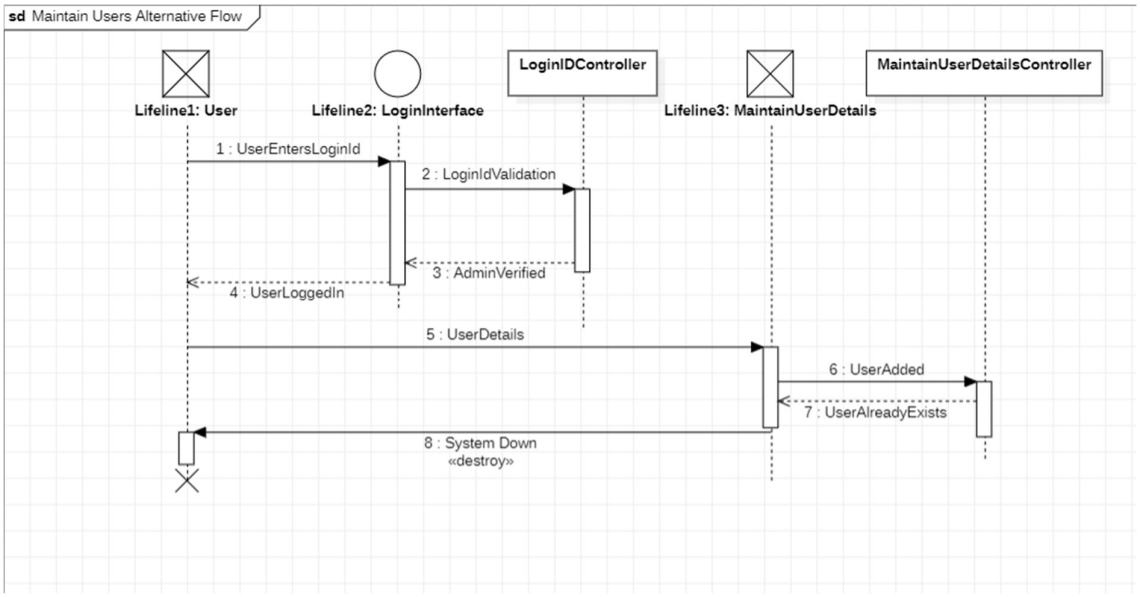
2. Login Alternate Flow



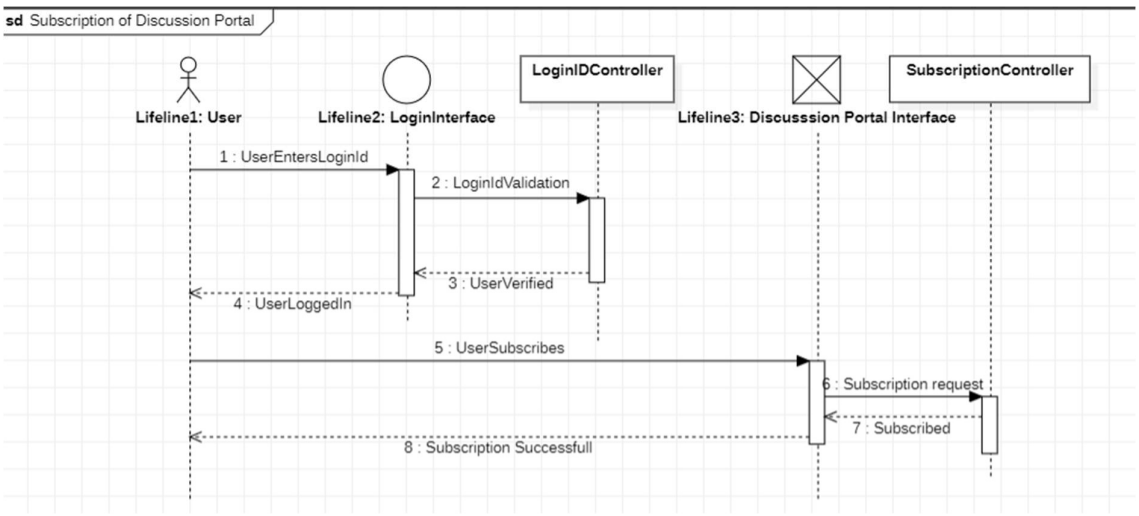
3.Manage User Details



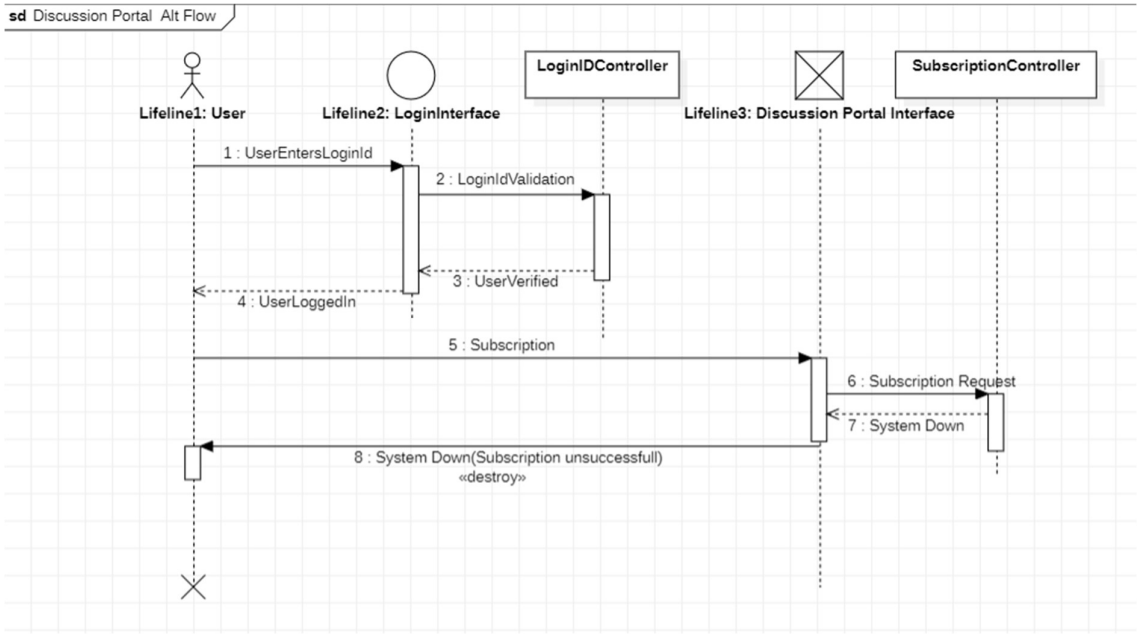
4.Manage user details (Alternate Flow)



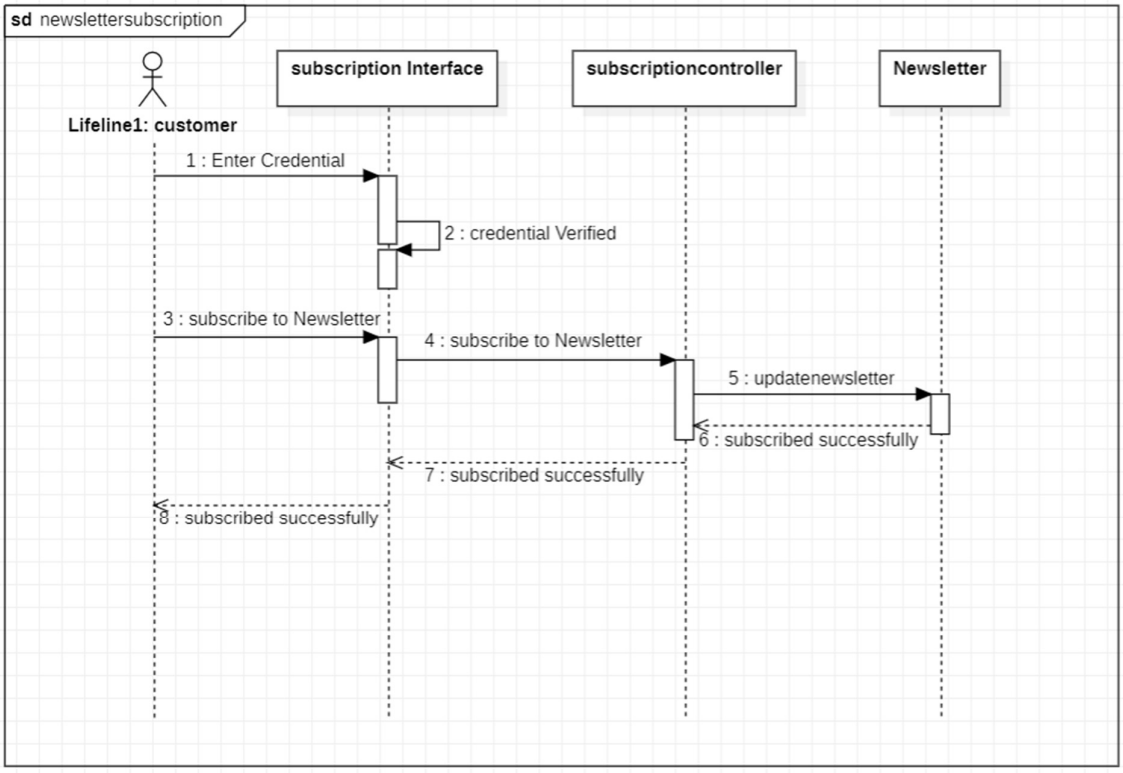
5. Subscription of Discussion Portal



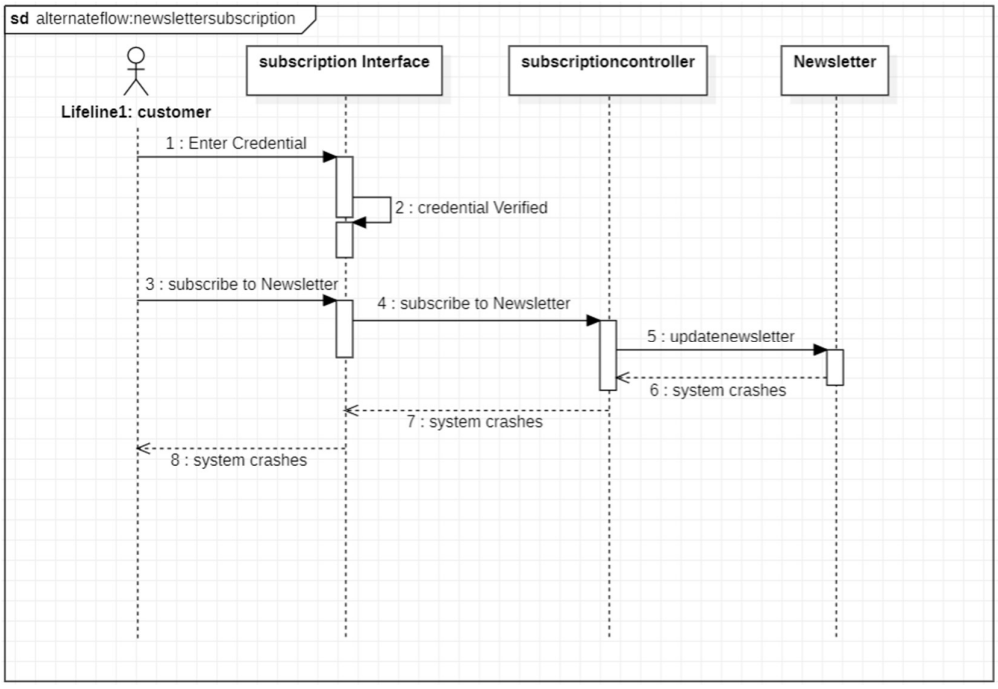
6.Subscription of Discussion Portal (Alternate Flow)



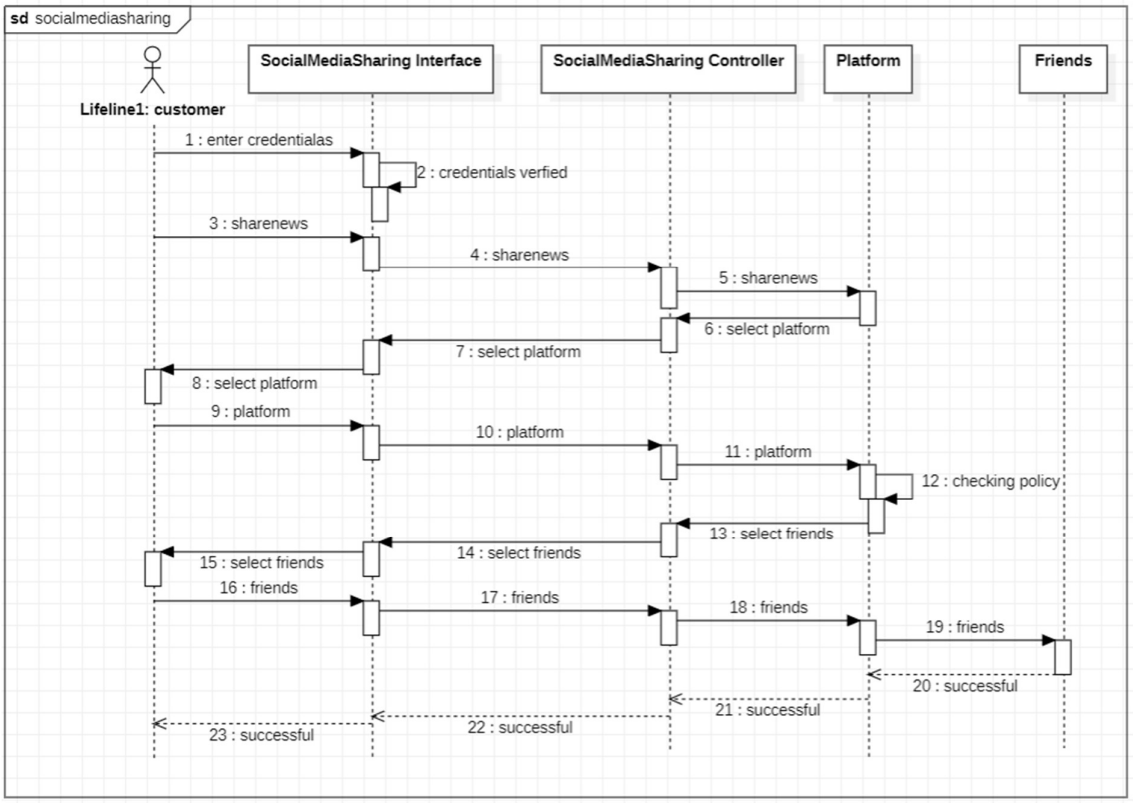
7. Newsletter Subscription



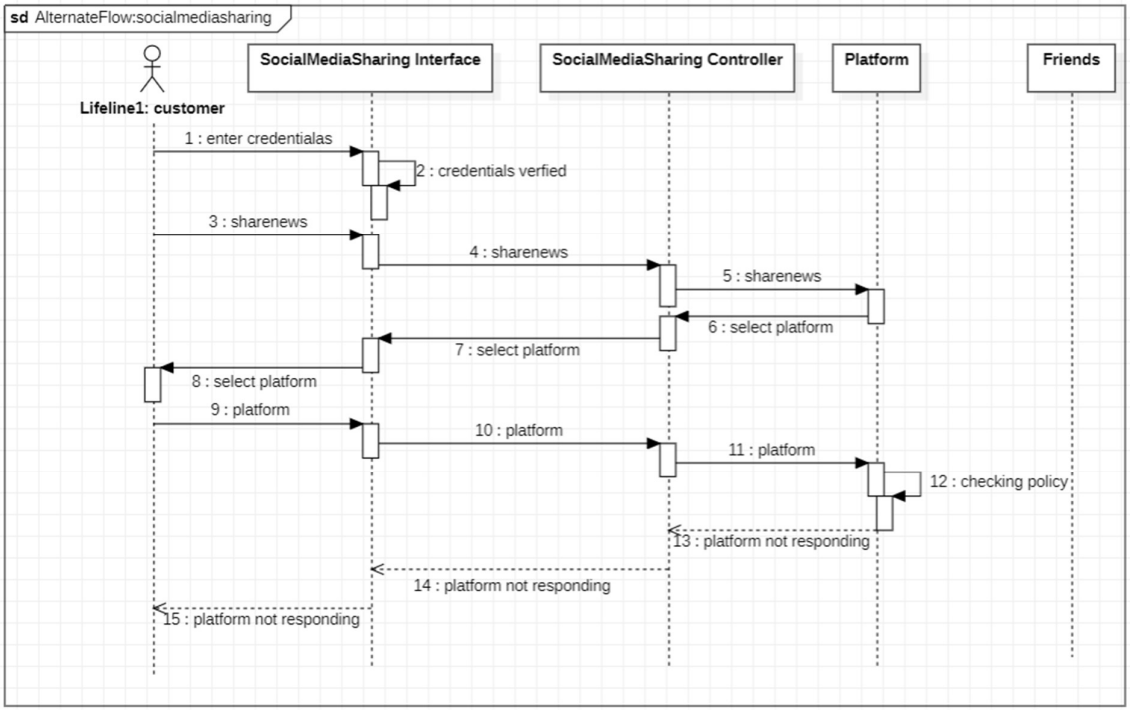
8. Newsletter Subscription (Alternate Flow)



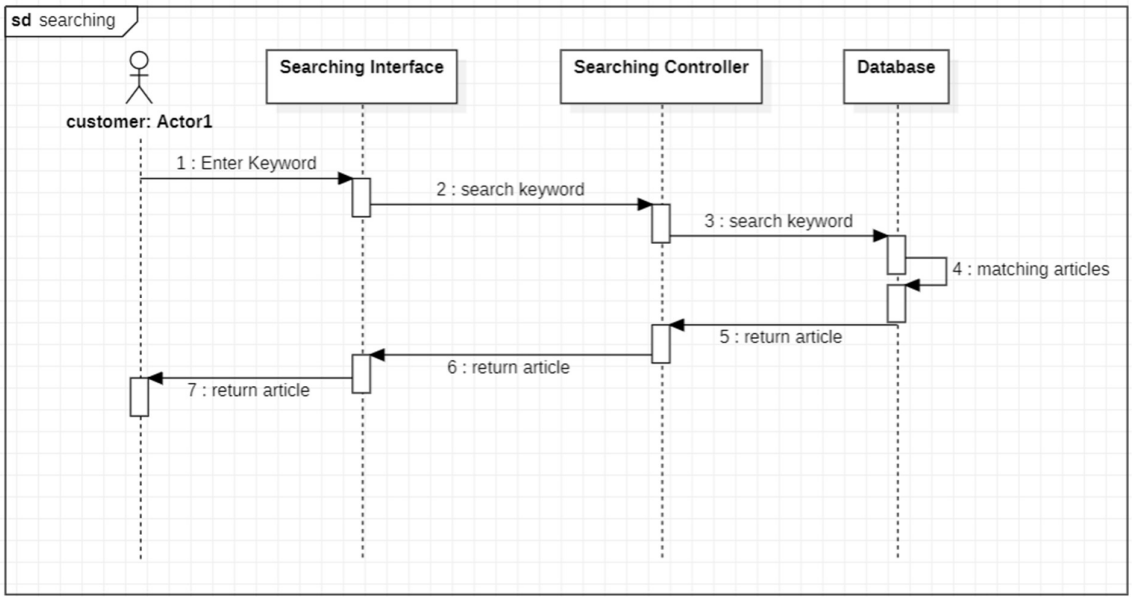
9. Social Media Sharing



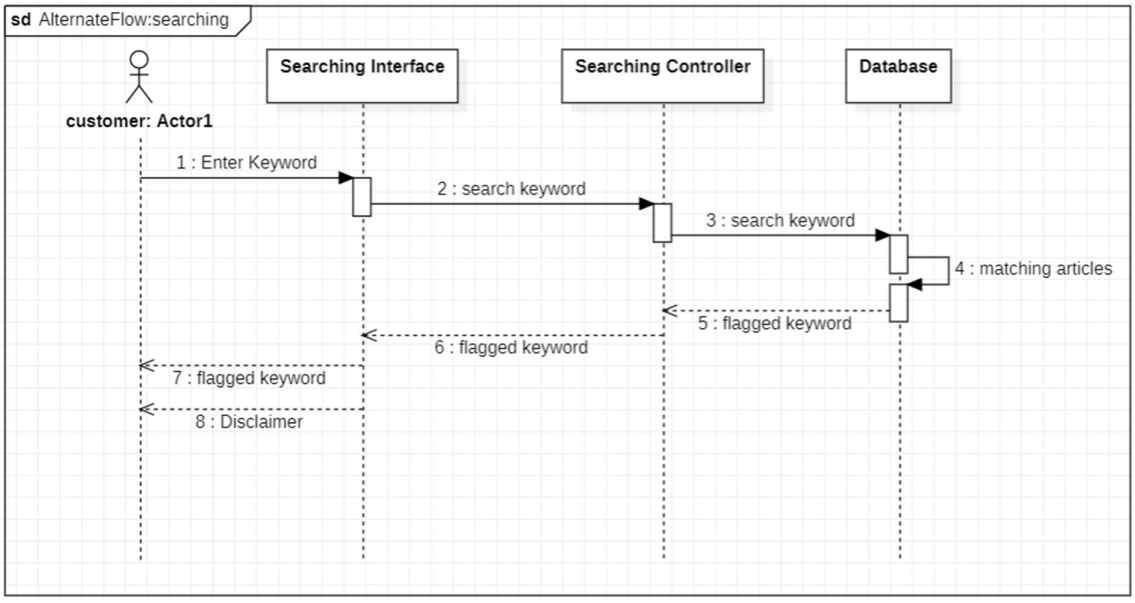
10. Social Media Sharing (Alternative Flow)



11. Searching

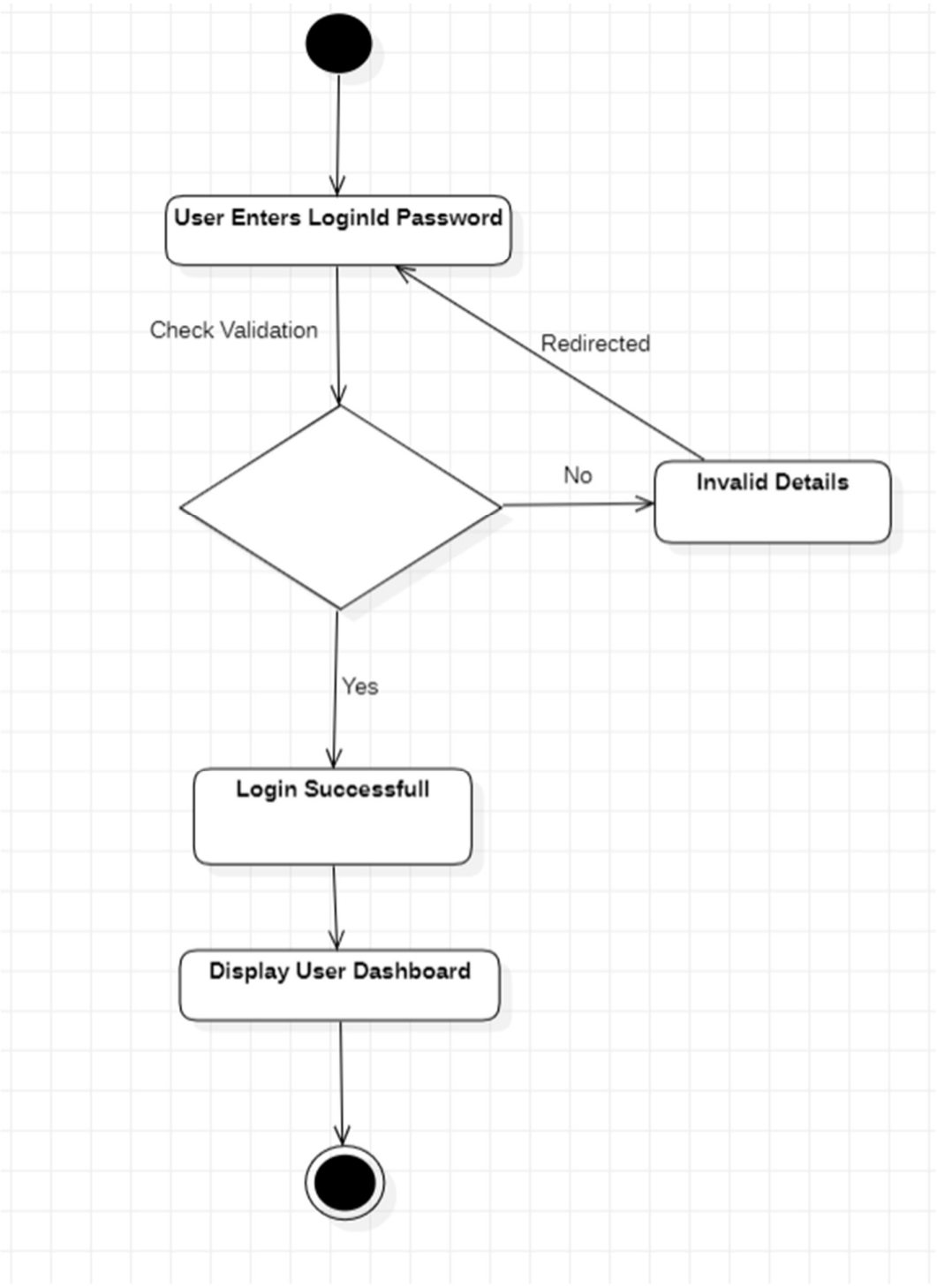


12. Searching (Alternative Flow)

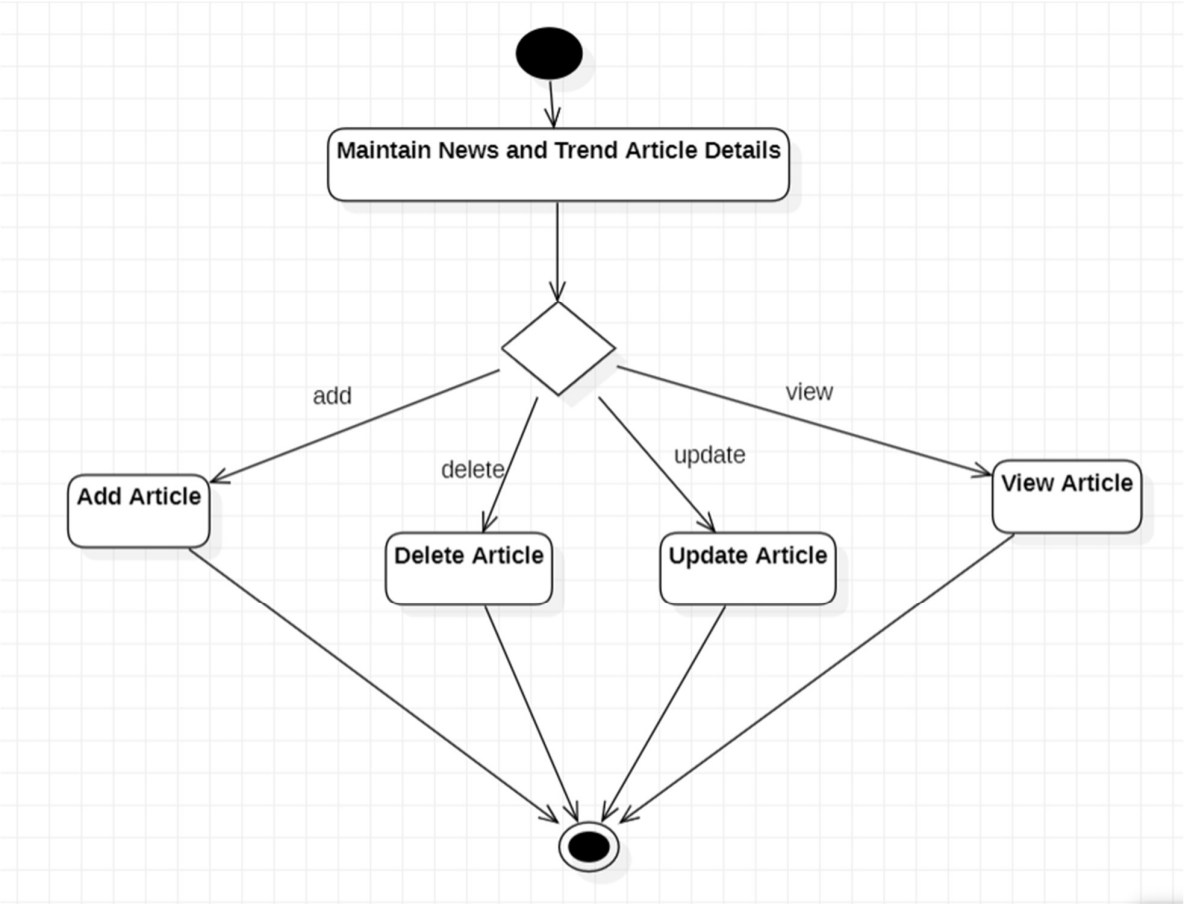


Activity Diagrams

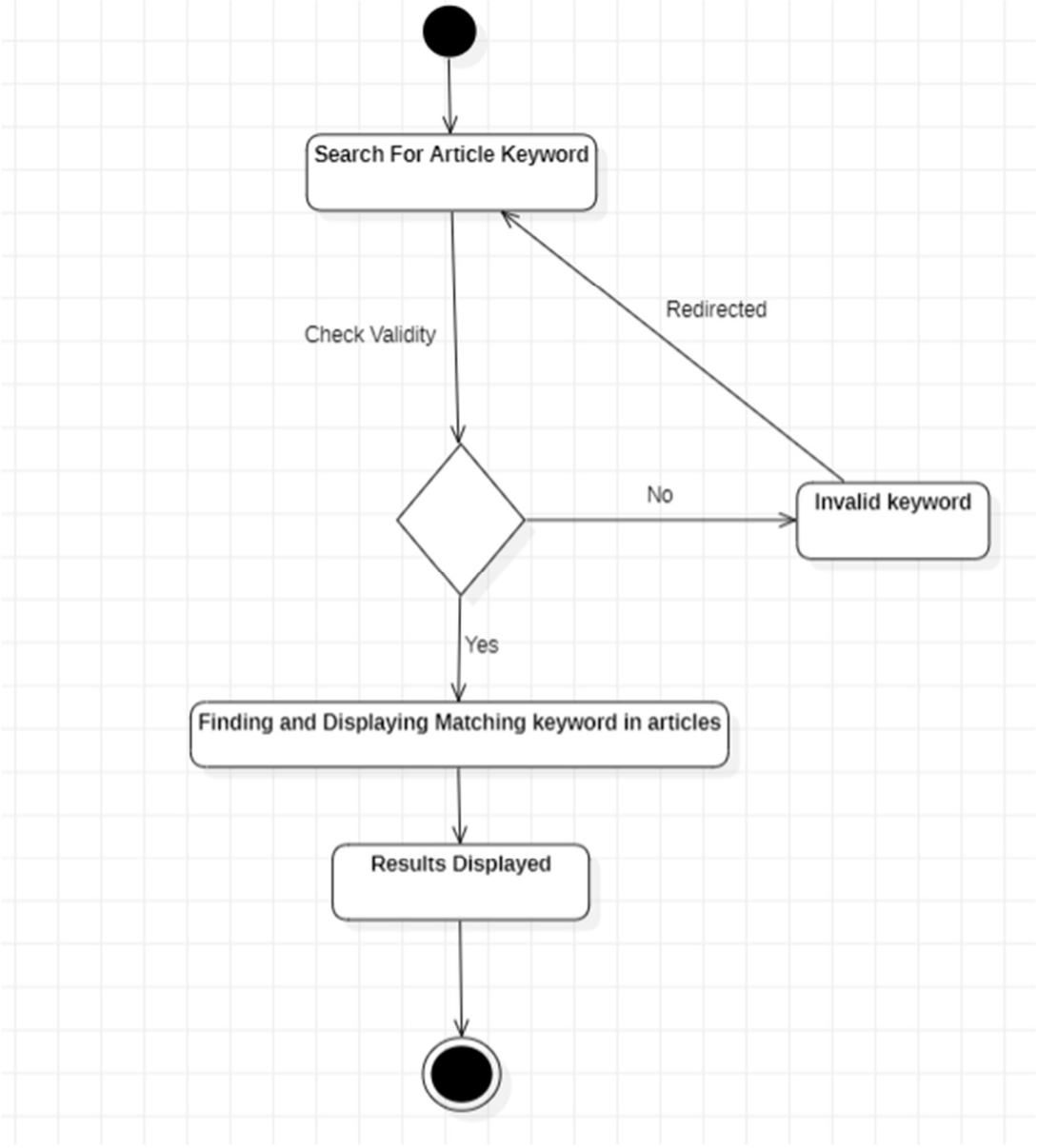
1. Login



2. Manage Article Details

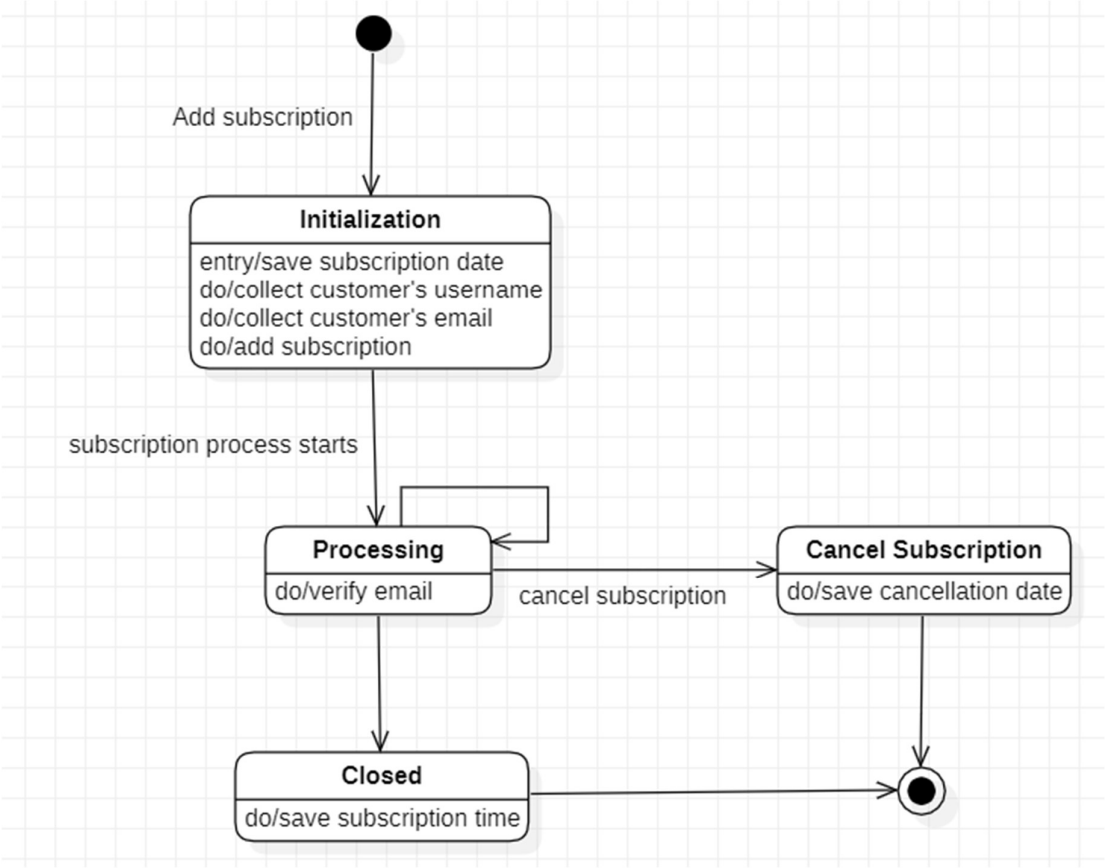


3. Search

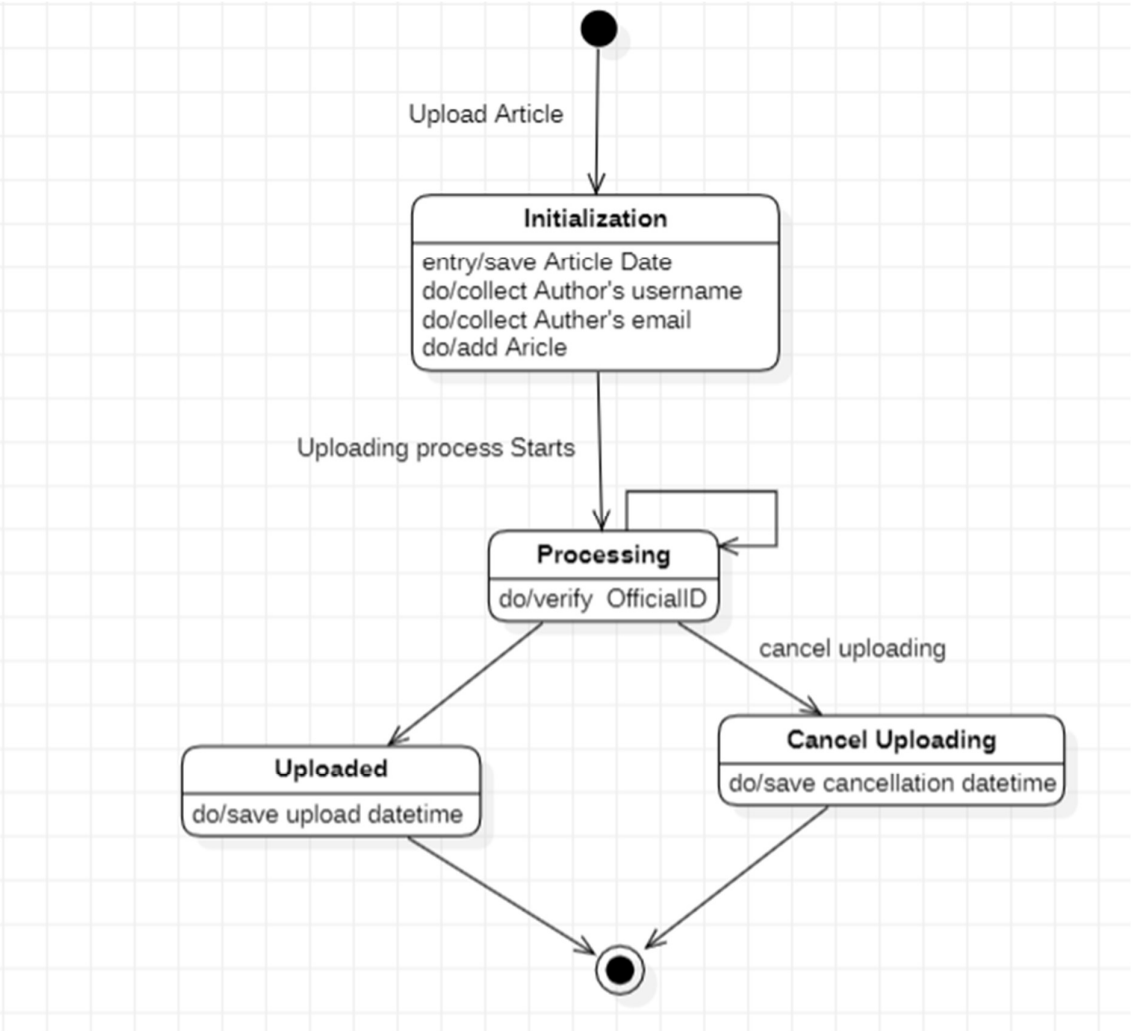

Search For Article Keyword
Check Validity
Redirected
No
Invalid keyword
Yes
Finding and Displaying Matching keyword in articles
Results Displayed

State Chart Diagrams

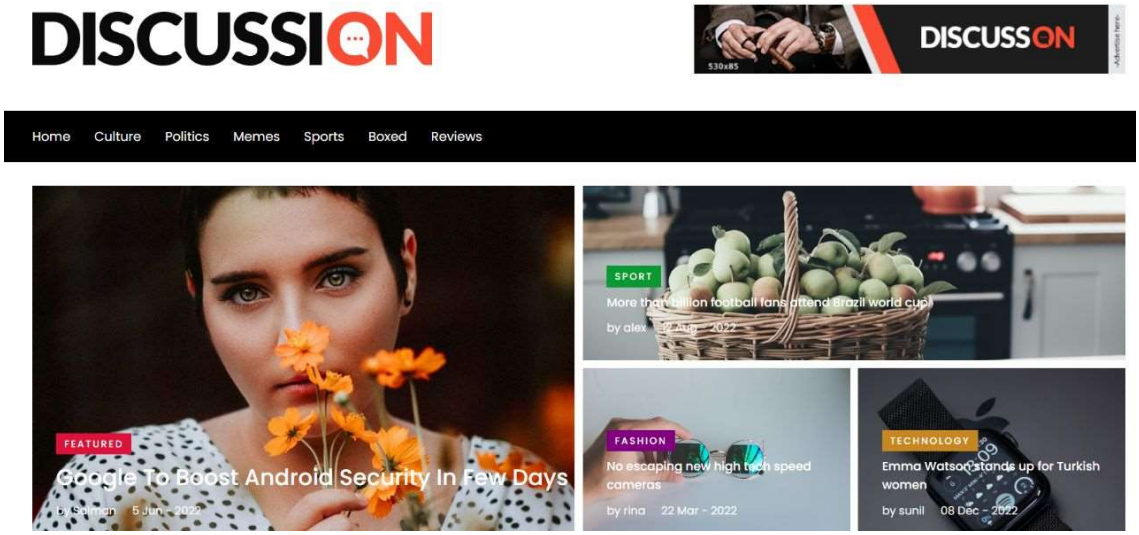
1. Subscribe To Newsletter

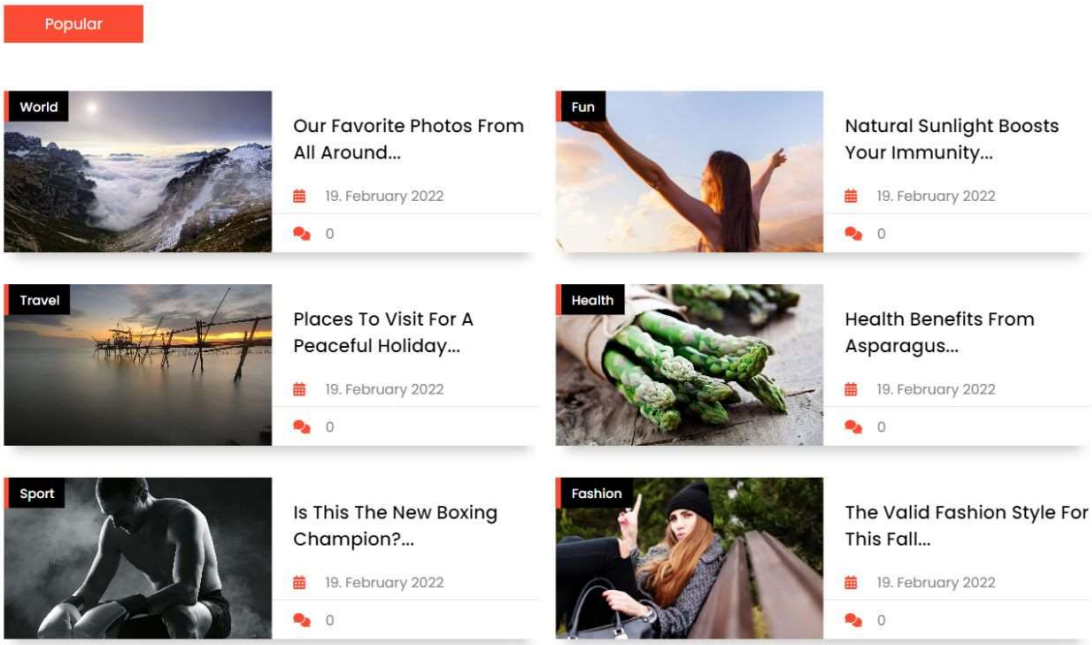


Upload Article



Website Screenshots





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Test Case Matrix's

Login

Case ID	Scenario case and description	Input 1 LoginId	Input 2 Password	Expected Output	Remarks
TC1	Scenario 1 - Login	Valid	Valid	Login successfully	-
TC2	Scenario 2 – Login Alternative flow: Invalid entry	Valid	Invalid	Login unsuccessful	Password does not match with Login ID
TC3		Invalid	Valid	Login unsuccessful	Login ID does not exist in database.
TC4		Invalid	Invalid	Login unsuccessful	Login ID does not exist in database
TC5		Valid		Password field is blank	Password field cannot be blank.
TC6			Valid	LoginID field is blank	LoginID field cannot be blank
TC7	Scenario 3 – Login Alternative flow: User Exits	*	*	User Comes out of the system	-

Registration

Case ID	Scenario case and description	Input 1 Username	Input 2 Password	Input 3 Email	Expected Output	Remarks
TC1	Scenario 1: Registration	Valid	Valid	Valid	Registered successfully	-
TC2	Scenario 2: Register Alternative flow: Invalid entry	Valid	Valid	Invalid	Registration Unsuccessful	Email Id doesn't exist
TC3		Valid	Invalid	Valid	Registration unsuccessful	Password is not in the specified format.
TC4		Valid	Invalid	Invalid	Registration unsuccessful	Password is not in the specified format.
TC5		Invalid	Valid	Valid	Registration Unsuccessful	Username Already exists in database.
TC6		Invalid	Valid	Invalid	Registration Unsuccessful	Username Already exists in database.
TC7		Invalid	Invalid	Valid	Registration Unsuccessful	Username Already exists in database.
TC8		Invalid	Invalid	Invalid	Registration unsuccessful	Username Already exists in database.
TC9	Scenario 3: Register Alternative flow: User Exits	*	*	*	User Comes out of the system	-

Adding Article

Case ID	Scenario case and description	Input 1 Accession Number	Input 2 Author	Input 3 Title	Expected Output	Remarks
TC1	Scenario 1: Add an article	Valid	Valid	Valid	Article added successfully	-
TC2	Scenario 2: Register Alternative flow: Invalid entry	Invalid	Valid	Invalid	Invalid Title	Article Title not in specified format.
TC3		Valid	Invalid	Valid	Invalid author name	Author Name not in specified format.
TC4		Valid	Invalid	Invalid	Invalid format	Author Name/article title not in specified format.
TC5		Valid	Valid	Invalid	Invalid Title	Article Title not in specified format.
TC6		Invalid	Invalid	Valid	Invalid author name	Author Name not in specified format.
TC7		Invalid	Invalid	Invalid	Invalid details	Author Name/title not in correct format
TC8	Scenario 3: Register Alternative flow: User Exits	*	*	*	User Comes out of the system	-

Newsletter Subscription

Case ID	Scenario case and description	Input 1 Email	Input 2 Password	Expected Output	Remarks
TC1	Scenario 1: Subscribe To Newsletter	Valid	Valid	Subscribed successfully	-
TC2	Scenario 2: Subscribe To Newsletter Alternative flow: Invalid entry	Valid	Invalid	Subscription Unsuccessful	Password is incorrect
TC3		Invalid	Valid	Subscription unsuccessful	Email Id doesn't exist
TC4		Invalid	Invalid	Subscription unsuccessful	Password is not in the specified format.
TC5			Valid	Subscription Unsuccessful	Email field cannot be blank.
TC6		Valid		Subscription Unsuccessful	Password field cannot be blank.
TC7	Scenario 3: Subscribe To Newsletter Alternative flow: User Exits	*	*	User Comes out of the system	-

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